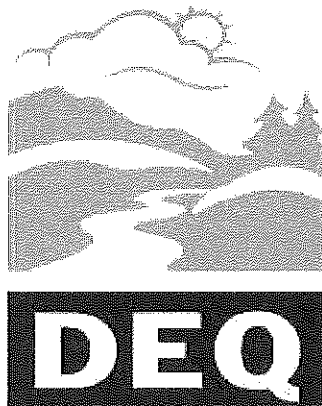


**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS 02/18/1992**



**State of Oregon  
Department of  
Environmental  
Quality**

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**State of Oregon**  
**ENVIRONMENTAL QUALITY COMMISSION**  
**A G E N D A**

**SPECIAL MEETING -- February 18, 1992**  
Old Armory - Miller B Room  
Fourth and Lyons (104 Fourth Street)  
Albany, Oregon

- 9:30 a.m. A.** James River Recycle Facility: Approval of Proposed Waste Load Allocation
- 1:00 p.m. B.** Pollution Control Facility Tax Credit Program: (1) General Discussion of Criteria for Tax Credit Eligibility and (2) Consideration of Chemical Waste Systems Application

*Because of the uncertain length of time needed for the scheduled agenda items, the Commission may use any extra time available for informal work session discussion with staff.*

*The next Commission meeting will be Thursday, March 12, 1992, at the Auditorium of the Public Services Building, 155 N. First Street, Hillsboro, Oregon.*

*Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.*

*February 5, 1992*

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

RESPONSE TO PUBLIC COMMENT ON THE PROPOSED  
JAMES RIVER PAPER COMPANY EFFLUENT DISCHARGE FROM THE HALSEY  
SECONDARY FIBER DE-INKING MILL

This document summarizes the major issues raised in public comment and provides a Department responses. Considerable testimony was provided to the Department on both technical permit and public policy issues.

The commenting agency or person is identified followed by a summary of the comment presented and the Department's response.

**Permit Issues**

**Oregon Association of Clean Water Agencies  
P.O. Box 8434  
Portland, OR 97207**

Comment:

DEQ staff have repeatedly told municipal dischargers that highest and best treatment as required by OAR 340-41-445(1) has no economic limits. The material James River and the Evaluation Report prepared by Department staff proposes that "best conventional treatment" is being used. An existing mill identified as WDD in Table 5 is apparently producing effluent at 2.8 lb BOD/ton and two other mills are producing only 4.1 and 4.2 lbs BOD/ton while the proposed James River permit is based on 5.7 lbs BOD/ton of pulp produced.

Response:

OAR 340-41-455(1) requires the highest and best practicable treatment. The term practicable does include an economic component. Other than on water quality limited streams, and where more stringent treatment requirements may be imposed, Oregon requires municipalities to provide "efficient" secondary treatment. Requirements for industries are equivalent. The existing design criteria included in the rules for the Willamette basin require new or modified sewage treatment facilities to be designed to achieve an effluent concentration of 10 mg/l BOD and TSS in the summer time. This is based on the assumption that raw waste strength of typical sewage is 200 mg/l and that conservatively designed (or efficient) secondary treatment is capable of removing 95% of the BOD and achieving a 10 mg/l effluent concentration.

The Department understands that there may be de-inking mills that discharge less BOD per ton of pulp produced than the proposed permit limits for the James River Recycle Facility. The raw wasteload from the waste paper recycling process is a function of the types and grades of waste paper recycled, and the de-inking process used. The Department notes that James River is proposing a mechanical de-inking process rather than the traditional process which uses chemicals and heat. The types of paper recycled also affects the wasteload produced. The published figures for pounds of BOD per ton of pulp produced may not present a reasonable comparison for the mechanical process and the types and grades of paper proposed by James River.

The Department is satisfied that the proposed permit limits reflect highest and best practicable treatment for this source, with total BOD removal efficiencies approaching 97%.

Action:

Comment noted.

Comment:

The method used to calculate the summertime daily mass discharge limits in the James River permit is statistically based and more generous than the method used to calculate limits for municipal permits. This results, in the case of the James River permit, with a ratio of daily to monthly BOD limits of 2.6, compared to 2.0 in the municipal permits.

Response:

As the comment noted, the ratio of daily to monthly average BOD limit in the proposed James River permit is calculated from statistical assumptions about the variability of the effluent.

The ratio used for TSS limits is the same as that in EPA's NSPS guidelines and thus reflects the variability found in the plants used to set the guidelines.

The limits ratios for municipal dischargers have been set in the past based on what a well designed and operated sewage treatment plant and sewerage collection system should be able to achieve (technology based). The Department has committed to reviewing how mass load limits for new municipal plants are established, and this commitment has been discussed with the commenting organization.

Action:

Comment noted.

Comment:

Six bioassay tests during the first year of operation with the typical feed stocks would be an appropriate (comparable to municipal dischargers) permit requirement.

Action:

The Department proposes to change the proposed permit to require bi-monthly biomonitoring (six times per year) for the first two years of the permit, with a reduction in the frequency of testing after two years, if appropriate.

Comment:

The permit contains no monitoring requirements for toxics even though the evaluation report notes the likelihood that small amounts of heavy metals and other toxics will be present.

Action:

The Department proposes to add a monitoring requirement for heavy metals to the proposed permit. Other toxics will be monitored by the required whole-effluent toxicity biomonitoring.

**U.S. Environmental Protection Agency  
Oregon Operations Office  
Portland, Oregon**

Comment:

pH samples should be collected as grab samples rather than as composite samples, to prevent changes with time.

Action:

The Department agrees, and will modify the proposed permit accordingly.

Comment:

If the color and nutrient content of the wastewater causes bioassay problems with Selenastrum, the Department may want to consider Lemna.

Action:

Comment noted.

Comment:

Wording of the TIE/TRE "trigger" statement should be changed. A violation of a toxicity test cannot be confirmed by testing a second sample taken at a later time.

EPA has been encouraging states to review but not approve TIE/TRE plans because the appearance may be given that the plan is the final initiative needed when indeed it may not be. The schedule for study and completion of the plan can and should be approved.

Action:

The proposed permit will be modified to reflect this suggestion.

Comment:

Appropriate limits must be in the permit if standards are violated or if there is a "reasonable potential" for standards to be violated. The permit can be reopened if there is a violation or reasonable potential for violation.

Action:

Comment noted.

Comment:

Evaluation report should discuss the potential for discharge of dioxin that might be released from the paper that is being pulped.

Response:

The Willamette River is classified as water-quality limited with respect to 2,3,7,8 TCDD (tetrachloro-dibenzo-p-dioxin). The loading capacity of the Willamette River for TCDD (as determined by EPA Region X) at Harrisburg is 0.24 mg/day and the Pope & Talbot permit limit for TCDD is based on a long-term average of 0.19 mg/day, which is  $(0.19/0.24)*100$  or 79 percent of the river's capacity. TCDD waste load allocations have not been determined for other dischargers to the Willamette river.

James River does not propose to use chlorine compounds in the recycling process, and therefore will not produce any 2,3,7,8 TCDD in their manufacturing process. However, TCDD may be released to the river from this facility, depending upon the amount of TCDD in the recycled waste paper, the amount of TCDD going out in the finished pulp and the amount of TCDD removed in the wastewater treatment process and retained in the sludge from the wastewater treatment plant. The difference in the amounts of TCDD coming in with the paper and going out with the pulp and sludge can be assumed to be going to the river.

The Department has attempted to estimate the magnitude of the potential TCDD discharges that could result if TCDD is present in the waste paper recycled. Very limited data is available on levels of TCDD in waste paper, and the levels vary widely. Limited data is also available on TCDD levels in sludge from pulp mill secondary treatment systems, and the levels vary widely. No data is available on potential TCDD levels in the pulp produced from recycled paper. No data is available specifically for mechanical de-inking recycling operations such as is proposed by James River. Recognizing the lack of data, the following table presents estimates the mass of TCDD that might be discharged to the river as a function of assumed concentration of TCDD in the recycled paper, pulp and sludge.

Assumptions:

500 adt/day input waste paper  
300 adt/day finished pulp  
175 adt/day sludge

TCDD concentration range in the waste paper = 1-5 ppt\*  
 TCDD concentration range in the pulp = no data available  
 (assumed in this estimate to be one-half that in the waste paper)  
 TCDD concentration range in the sludge = 7-12 ppt\*\*  
 (ppt = parts per trillion)

\* NCASI Technical Bulletin No. 546 (May 1988)  
 EPA/Pulp Industry 104 Mill Study

\*\* NCASI Technical Bulletin No. 613 (Sept. 1991)

Table 1 Mass Balance Estimate of TCDD Discharge

Assumed Conc. in Paper (ppt)	Assumed Mass in Paper (mg/d)	Assumed Conc. in Pulp (ppt)	Assumed Mass in Pulp (mg/d)	Assumed Conc. in Sludge (ppt)	Assumed Mass in Sludge (mg/d)	Assumed Mass in Disch. (mg/d)
1	0.45	0.5	0.14	5	0.79	(0)*
3	1.36	1.5	0.41	5	0.79	0.16
3	1.36	1.5	0.41	10	1.59	(0)*
5	2.27	2.5	0.68	10	1.59	(0)

\* indicates negative (zero) amount in discharge  
 Conc. = concentration  
 ppt = parts per trillion  
 mg/d = milligrams per day

As can be seen, the amount of TCDD calculated to be in the effluent varies greatly, depending on the assumptions made for the levels in the pulp and sludge. Information is not sufficient to feel comfortable making assumptions for the proposed facility.

The Department notes that other regulatory actions are expected to result in progressively less TCDD in paper products as a result of changes in pulp bleaching technology to reduce or eliminate the use of free chlorine and chlorine compounds. Thus, the levels of TCDD in waste paper to be recycled will decline over time. Also, since different grades of paper will have different levels of TCDD, the TCDD levels entering the process can potentially be controlled to a degree by careful selection of types of paper selected for recycling.

Action:

The Department's proposed permit does not grant a waste load allocation for TCDD to James River. The Department proposes to include a TCDD discharge limit of zero in the permit and require monitoring by James River of the paper, pulp and sludge to determine whether the discharge is in compliance with the limit. The Department will propose that the compliance determination be based on a mass balance calculation because the

concentration of TCDD in the effluent wastewater may be too small to be directly measurable. (Note: The concentration of TCDD in the wastewater would be approximately 7.5 ppq (parts per quadrillion) for every 0.1 mg/d of TCDD discharged. The current detection level for TCDD in wastewater is approximately 5 ppq.)

**City of Albany**  
**250 Broadalbin SW**  
**P.O. Box 490**  
**Albany, OR 97204**

Comment:

We find it troubling that our current 20 mg/l BOD treatment standard will likely be stiffened to 10 mg/l with our next expansion project while the new industrial permit for James River is being proposed at an allowable level of 70 mg/l for BOD.

Response:

James River is being required to remove 95 percent or more of the BOD present in the wastewater entering the biological secondary treatment plant. The total BOD removal rate will be greater than 95 percent. The raw waste strength of the James River waste will be approximately 10 times that of normal sewage: 2,000 mg/l compared to 200mg/l for normal sewage. BOD removal rates of 95 percent or greater are equivalent to the requirements for a potential expansion at Albany or other municipal treatment plants, even though the concentration and amount of BOD in the pulp mill discharge may be greater than that for a given municipal plant.

Action:

Comment noted.

**Northwest Environmental Defense Center**  
**10015 S.W. Terwilliger Blvd.**  
**Portland, OR 97219**

Comment:

Neither the information provided by James River nor the DEQ Evaluation Report specifies what types of toxic pollutants may be present in the discharge or what their individual concentrations or combined toxicity may be.

Response:

More detailed information on the nature of the proposed discharge is available in the files of the DEQ, Water Quality Division, 811 S.W. Sixth Avenue, Portland. The Evaluation Report was intended as an analysis rather than a full reporting of the data.



James River is proposing a mechanical de-inking process rather than the more traditional chemical processes. This choice was made to specifically eliminate the addition of potentially toxic chemicals in the recycling process. Toxic pollutants that would be in the effluent, if any, would be the portion of those in the recycled paper that are not removed in the recycling and treatment processes.

Action:

The Department proposes to add monitoring requirements for metals to the proposed permit. Biomonitoring is also required.

Comment:

The permit should specify that samples for bioassay of the combined James River/Pope & Talbot discharge should be taken at a point immediately prior to being discharged into the river.

Response:

The intent of bioassay monitoring of the combined discharge is to determine the potential toxicity of the discharge as it reaches the river.

Action:

The proposed permit will be modified to require sampling at the end of the pipe.

Comment:

The initial monitoring schedule for the bioassays is not adequate to protect the river and the public from the combining of dissimilar effluents with unknown consequences. Until the Department can demonstrate that the level of toxicity of the proposed effluent will routinely pass the required bioassay tests for Outfall B, monitoring by bioassay should be much more frequent than once every three months.

Response:

Bioassay data from similar mills indicates that James River's effluent should not have a high toxicity potential; however, until the mill begins discharging, the actual toxicity will not be known. The Department assumed that quarterly testing would be sufficient to check on the whole-effluent toxicity but a higher level of testing may be more appropriate during the first two years.

Action:

The Department will modify the proposed permit to require bi-monthly biomonitoring (six times per year) for the first two years of the permit, with a reduction in the frequency of testing after two years, if appropriate.

**Office of the Mayor  
City of Corvallis  
501 S.W. Madison  
P.O. Box 1083  
Corvallis, OR 97339-1083**

**City of Corvallis  
Public Works  
P.O. Box 1083  
Corvallis, OR 97339-1083**

Comment:

Letters from Rolland Baxter, Public Works Director to DEQ Director Fred Hansen, dated January 8, 1992 and written comment from R. Charles Vars, Jr., Mayor of Corvallis.

Response:

Letters and Department response are attached.

**Northwest Environmental Advocates  
302 Haseltine Bldg.  
133 S.W. 2nd Ave.  
Portland, OR 97204-3526**

Comment:

Permit has no limits or monitoring for dioxins, furans, nutrients, color and metals.

Response:

The Department does not normally include discharge limits or monitoring for specific pollutants in its industrial permits unless there is evidence that they will be or may be present in sufficient amount to cause an adverse effect on the receiving stream.

The draft permit requires monitoring for nutrients (ammonia and phosphorous). Nutrients are typically deficient in this kind of wastewater; they will have to be added to promote proper bacterial action in the activated sludge plant. Discharge of excessive quantities of the nutrients would be expected only if too much were added by the plant operators.

James River has provided information on the expected levels of toxic metals in their application (EPA Form 3510-2D). The estimated in-stream concentrations of the metals are less than the appropriate acute and chronic aquatic toxicity standards with a dilution factor of approximately ten or more, which is available in the mixing zone.

Chlorinated organics are not expected to be generated by the mill because no chlorine compounds will be used in the re-pulping and bleaching processes. The Department

anticipates, however, that the raw waste paper may contain some amount of chlorinated organics, including dioxins and perhaps furans, and that some of these pollutants may end up in the wastewater.

Action:

The Department will modify the proposed permit to include a permit discharge limit of zero for 2,3,7,8 TCDD, with appropriate TCDD and 2,3,7,8 TCDF (tetrachloro-dibenzo-furan) monitoring (see discussion under EPA's comment).

The Department will modify the proposed permit to include a permit requirement to monitor toxic metals that may be discharged.

**Marys Peak Group, Sierra Club  
P.O. Box 863  
Corvallis, OR 97330**

Comment:

James River's proposed discharge is not a new discharge; it should be considered part of Pope & Talbot's discharge and should be included in Pope & Talbot's permit.

Response:

The Department considers James River's de-inking mill to be a new source because;

1. by 40 CFR 122.29(b)(1)(iii) its processes are substantially independent of the existing source,
2. by 122.29(b)(2) new source performance standards are independently applicable and,
3. by 122.29(b)(3) a new plant will be constructed.

In addition, the waste paper recycling plant is a new manufacturing facility. The majority of the wasteload from James River's operations will come from that new facility. A small part of the wasteload will come from the portion of the existing paper mill waste that is not used as water supply for the new Recycle Facility.

Action:

None required.

Comment:

No new or increased discharges should be granted until TMDLs have been set.

Response:

The Willamette River is designated as water quality limited only for TCDD.

As discussed in the evaluation report, the Department regards the proposed permit limits as being adequately protective of the river's beneficial uses and does not consider that TMDLs must be established for any of the wastewater constituents. (Also see prior discussion regarding TCDD.)

Action:

Comment noted.

Comment:

Landfilling of JR's sludge in the Coffin Butte Landfill will raise disposal costs for other users of the landfill.

Response:

The Department regulates the environmental aspects of the Coffin Butte Landfill through its solid waste permit. The permit allows acceptance of this type of waste. The Department believes that it is up to the permittee to determine what wastes are accepted for disposal, subject to any restrictions or limitations in the permit. The Department has no basis for concluding that acceptance of waste from one customer will result in an increase of disposal costs for other customers. The Department generally encourages landfill operators to establish disposal rates in a manner such that all users pay their fair share of costs for the capacity utilized. The Department is aware of the increased load that would be sent to the landfill and will be reviewing its potential environmental effects.

Action:

Comment noted.

**Oregon Water Utilities Council  
Pacific Northwest Section  
American Water Works Assn.  
P.O. Box 19581  
Portland, OR 97280**

Comment:

James River should investigate the possibilities of more innovative treatment practices that may be available to enable the return water to be of even better quality than represented in the evaluation report. Increasing demands on the river, including use as a source of drinking water, make us believe that improvement and enhancement of disposal systems is now appropriate.

Response:

The Department regards the wastewater treatment proposed by James River as representing "highest and best practicable treatment". The Willamette River Study that is currently underway will be assessing the future treatment needs and developing strategies, as necessary, for assuring the ability to protect beneficial uses, including the drinking water use, while accommodating inevitable growth and development in the basin.

Action:

Comment noted.

**US Department of the Interior  
Fish and Wildlife Service  
Portland Field Station  
2600 S.E. 98th Avenue, Suite 100  
Portland, OR 97266**

Comment:

Section V P. of the report states that chemical analysis of river water near the Pope & Talbot diffuser did not identify any organic priority pollutants above the level of detection or any other organic compounds at the 0.01 mg/l detection limit. Numerous organic compounds are known to be toxic at concentrations below this detection level. If the potential exists for highly toxic compounds to be discharged, we believe that detection levels should be adjusted to discern toxic concentrations.

Response:

Water quality standards do not exist for many potentially toxic organic pollutants and it is generally difficult to analyze organics at very low concentrations. Rather than attempt to set standards for hundreds of specific compounds that may be present at low concentrations, EPA has developed the WET (whole effluent toxicity) concept which determines toxicity of the whole effluent by bioassay. The Department also notes that detection levels are a function of analytical techniques and technology. Technology is continuously being developed to detect at lower concentrations. The Department makes an effort to stay current with the state of the art in pollutant detection.

Action:

The Department is requiring biomonitoring of James River's effluent to determine its whole-effluent toxicity.

Comment:

Aquatic life within the mixing zone may not be protected from toxics. Pollutants listed in the EPA Quality Criteria for Water (1986) should be specified and their concentrations determined.

Action:

As discussed above, the Department will rely on bioassays to assess the potential toxicity of the many chemicals that are present in the effluent at low concentrations.

## **Public Policy Issues**

**Oregon Association of Clean Water Agencies**

**P.O. Box 8434**

**Portland, OR 97207**

Comment:

Municipal dischargers to the Willamette have been told repeatedly by DEQ staff (most recently in lengthy discussions during the Triennial Review of dissolved oxygen standards) that no increased waste loads would be allowed for their discharges to accommodate new development and that advanced treatment capacity would have to be installed to keep the mass loads discharged at current levels regardless of the expense. If industrial facilities were being permitted in a similar fashion, the new James River plant would have to be accommodated within the mass discharge limits that exist for the already operating paper plants.

Response:

There appears to be a misunderstanding regarding possible waste load increases that might be granted in the future for municipalities located on the Willamette River. OAR 340-41-026 states as a general policy that future growth at existing sources is to be accommodated within existing mass loads by means of improved treatment. The Environmental Quality Commission (for major dischargers) or the Department (for minor dischargers) have the authority to approve new source discharges or grant waste load increases for existing sources, however, if they meet the criteria listed in that same regulation. One of the criteria to be considered is "Economic Effects" and is described in OAR 340-41-026(3)(b)(B). Four mass load increases were requested by municipalities on the Willamette River in recent years, and were granted by the Commission with the Department's support, or by the Department. These cities receiving a waste load increase are the cities Halsey, Adair Village, Harrisburg, and Grand Ronde (to tributary of the Willamette). In addition, the Brooks sewerage system was granted permission to discharge to the Willamette within recent years.

Action:

The Department will continue to look at each request for approval of a new discharge or increase in an existing discharge and recommend approval or denial on the individual merits consistent with the criteria set forth in the rules established by the Commission.

Comment:

The proposed discharge has not been evaluated by the Department for compliance with the new anti-degradation policy, OAR 340-41-026(1), adopted by the EQC on September 18, 1991.

We find no scientific basis for the "no observable effects" value used in the Evaluation Report. If a similar load increase was granted to other dischargers on the Willamette (several new Salems for example), it may not be possible to maintain dissolved oxygen water quality standards. Clearly there is a distinction between "no observable effects" and the cumulative effect of the repeated application of an arbitrary value. This also points out the serious limitations of the current incremental approach to load increases.

Response:

The "no observable effects" criterion was only one of several criteria the Department considered to determine an appropriate BOD discharge limit for this proposed new source. The proposed limit is less than the "no observable effects" value by at least 800 lb BOD/day.

The Department recognizes that repeated application of "no observable effect" may lead to an "observable effect" and that eventually the portion of the assimilative capacity of the River that is reserved for future growth may be used up. The review and approval procedures in the current rules were developed and adopted in light of this fact.

The evaluation report was being developed during the period when the new antidegradation policy was being developed and adopted. The Department has since considered the revised antidegradation rule. Pursuant to that rule, the Willamette River is classified as High Quality Waters with respect to all parameters except TCDD. The Department has also concluded that the proposed discharge will not cause a violation of any water quality standards, and will comply with the new antidegradation rule.

Action:

The Commission is required by rule to consider the assimilative capacity when approving new discharges.

Comment:

ACWA has long argued that the Department's application of the highest and best treatment policy to municipal permits is economically damaging and is not justified by the water quality on the Willamette River.

Revise or clarify the definition of highest and best treatment to include some consideration of cost-benefit.

Establish comparable and scientifically based methods for the calculation of daily mass limits for municipal and industrial permits.

Response:

The Department disagrees with ACWA's position on the setting of discharge limitations. The Department interprets the "highest and best practicable treatment and control" rule to require the design, construction, and efficient operation of "state of the art" secondary treatment for municipal sources, and equivalent control for industrial sources (after maximum inplant recycling and control). The Department believes it is appropriate and reasonable to use practicable technology to keep discharges to a practicable minimum -- even if it costs slightly more for construction and operating costs.

The presence of reserve assimilative capacity in a stream does not justify less than highest and best practicable treatment, which in Oregon for municipalities generally translates to "good" secondary treatment plants. The Department does not agree that this level of treatment is "economically damaging". The Department does agree that unused assimilative capacity is "an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally" (OAR 340-41-026(3)(b)).

Regarding establishing a scientific basis for mass loads for municipalities, these have been set in the past based on what a well designed and operated sewage treatment plant and sewerage collection system should be able to achieve (technology based). Mass loads for municipalities are set on assimilative capacity only when the discharge is to a water quality limited stream, where more stringent limits are required.

Action:

The Department has committed to reviewing how mass load limits for new municipal plants are established, and has discussed this with the commenting organization.

**City of Albany  
250 Broadalbin SW  
P.O. Box 490  
Albany, OR 97204**

Comment:

DEQ records (1989) indicate that six industrial dischargers contributed approximately 42 percent of the total BOD load to the Willamette River while 11 municipal dischargers contributed only 17 percent. The policy of allocating significant portions of remaining assimilative capacity to a few industries may very well have the effect of tremendous cost increases for water and wastewater treatment within each of the municipalities.

Response:

The Environmental Quality Commission recognized this as a concern and adopted OAR-340-41(026) which requires consideration of the value and uses of the assimilative capacity remaining in the river when approving new discharges or wasteload increases for existing dischargers.



Action:

Comment noted.

Comment:

An industrial user can discharge directly to a receiving water and obtain a significant economic advantage over a similar industrial user locating within a city and discharging through the municipality's treatment system. This has land use policy implications that we feel have not been adequately addressed by the State.

Response:

It is certainly possible that it may be economically advantageous to some industrial sources to provide their own treatment and disposal facility rather than discharge to a municipal sewerage system. In general, the Department would expect that small sources of industrial waste can be accommodated in a municipal system at less cost than for a separate discharge. Certainly, the permitting, monitoring and reporting costs associated with a separately permitted discharge are significant, and would tend to push small sources to a municipal facility. The Department is aware of no basis for attempting to control the decision by an industry regarding where it locates its plant and whether it chooses to seek industrial waste treatment service from a municipality. The Department has discouraged municipalities from assuming the responsibility (and liability) for treatment and disposal of large volumes of industrial waste. Experience has shown that operation of facilities within permit limits can be difficult, particularly if the industrial waste is subject to substantial fluctuations in volume and strength.

With respect to land use, the Department has a coordination agreement with the Land Conservation and Development Commission. This agreement provides that a permit will not be issued unless the proposed facility is found to be in compliance with the acknowledged land use plan.

Action:

Comment noted.

**Bruce Black**  
**850 NW Antelope Place**  
**Corvallis, Oregon 97330**

Comment:

The river should not be further degraded but ways should be found to improve on water quality by using, for example, a system of ponds such as is done by the City of Arcata, California to treat its sewage prior to discharge into Humboldt Bay. Paper recycling should be supported but it should be done in a way to enhance other environmental conditions.

**Response:**

The applicant identified three wastewater treatment alternatives which were evaluated. One was Tertiary Treatment using Wetlands Treatment. This alternative would have used some of the basic concepts behind the Arcata system. This option was not considered practicable at this site at this time. The Department believes that the proposal of James River employs state of the art technology to reuse wastewater, minimize the quantity of waste generated, limit the use of chemicals that would add pollutants, and provide best practicable treatment to reduce the amount of pollutants discharged.

**Action:**

Comment noted.

**Northwest Environmental Advocates  
302 Haseltine Bldg.  
133 S.W. 2nd Ave.  
Portland, OR 97204-3526**

**Comment:**

The EQC, not the DEQ has discretion to maintain water quality in the Willamette River or to allow its degradation. No action should be taken on this or any other application until the policy question has been referred to the EQC for a policy determination.

**Response:**

Approval of significant new or increased discharges by the EQC is required before the Department can issue a permit. The Commission has adopted rules to establish the procedure for considering and evaluating such proposals.

**Action:**

Comment noted.

**Comment:**

DEQ has neither gathered nor evaluated the data that are necessary to allow it and the Commission to make reasoned decisions about the future of the Willamette River and the surrounding lands. Perhaps, for phosphorous as well as some other parameters, it would be more appropriate for the Department to put a freeze on new sources and load increases until it has the information that shows conclusively that there is no problem. A novel approach, but one consistent with DEQ's mandate under the Clean Water Act.

**Response:**

The Department has identified the need for additional water quality information on the Willamette, and has initiated a study in cooperation with others to enhance the knowledge of the system. The Department does not believe it is necessary, however, to defer decisions

on existing and proposed sources pending such a study. More information will always be desirable. Current information will always be less than one would like. The Department attempts to conservatively evaluate proposals and make appropriate recommendations in light of the available information. The Department does not have any information that would justify a freeze on evaluation of permit applications.

Action:

Comment noted.

Comment:

(With regard to dissolved oxygen) Multiple "no measurable decreases" will eventually be both measurable and significant. DEQ will be forced to squeeze municipal dischargers or other industrial dischargers of BOD, in part because it made a decision to allow the James River discharge. These are choices that should be made out in the open, with a full discussion of the policy implications for the future. Using ad hoc strategies, as the DEQ is now doing, is no substitute for comprehensive management of such a significant resource.

Response:

(See prior response to the similar issue.)

Action:

Comment noted.

**Oregon Water Utilities Council  
Pacific Northwest Section  
American Water Works Assn.  
P.O. Box 19581  
Portland, OR 97280**

Comment:

The public benefit to be derived by allowing this increase in pollution load is not clear to us. We believe that the public at large would have other views in that our streams and rivers ought not to be used for carrying pollutants if other means are available. The materials submitted by James River have not shown leadership in trying to find the best available treatment technology or in innovative ways to handle their pollutant loads beyond the secondary treatment that they are recommending.

The increased demand for the limited resource of our streams and rivers will result in continual decreases in stream flows. This resulting pressure to improve and enhance disposal systems we believe is now appropriate. By granting this application we are encouraging continued "business as usual" that will only lead to lower quality waters for all purposes.

Response:

The applicant's proposal is innovative. They propose to reuse what is presently a waste being disposed of to landfills. They propose to use mechanical de-inking processes, which to date, have not been used in Oregon. The traditional approach of the industry is to use chemicals and heat, with resultant concerns about the potentially toxic chemicals introduced into the process. They propose to extensively treat and reuse water within the plant -- a pollution prevention approach strongly encouraged by the Department. They evaluated alternative treatment and disposal systems, and selected a proposed alternative based on environmental factors. The Department does not agree with the "business as usual" label for this proposal.

Action:

Comment noted.

**Office of the Mayor  
City of Corvallis  
501 S.W. Madison  
P.O. Box 1083  
Corvallis, OR 97339-1083**

Comment:

The portion of assimilative capacity allocated to James River in the proposed permit is large in comparison to existing dischargers on the river. It is our concern that this allocation may result in the City prematurely having more stringent permit limitations placed on it if Total Maximum Daily Loads are established on the river. The City already has one of the most stringent permits on the river (10/10 BOD and SS). Treatment facilities to make further reductions would be very expensive, and, arguably, an untimely expense, for the citizens of Corvallis.

Response:

(See attached letters from Corvallis, and the Department's response.)

Action:

Comment noted.

Comment:

The City is concerned that the sludge waste from the James River wastewater treatment facility disposed of at the Coffin Butte regional landfill may have an adverse impact on landfill operations and landfill costs. James River waste will use up landfill volume at a faster rate, thus requiring new cell development. The citizens of Corvallis should not have to pay the cost of premature cell development because of James River's waste.

Response:

This issue was addressed in part earlier in this document. The Department notes that the existing cell at the Coffin Butte landfill was not developed to meet the same standards that a new cell will have to meet. Thus, when the existing cell is full, and a new cell is opened, costs per ton of waste will probably go up -- for all users. The landfill operates under permit from the Department. It is up to the permittee to decide what wastes it accepts into the landfill, subject to the provisions of the operating permit. In short, this is an issue between the City and the Landfill Owner.

Action:

Comment noted.

**Oregon Department of Fish and Wildlife  
2501 S.W. First Avenue  
PO Box 59  
Portland, OR 97207**

Comment:

The Willamette River contains steelhead and cutthroat trout, coho and chinook salmon as well as a wide variety of warm water fish species. Coho are listed by ODFW as sensitive species. These fish depend on excellent water quality for survival. Until the cumulative effect of additional pollutant discharge...raises a substantial public interest issue. Accordingly, while the effect of such discharge on the river ecosystem remains undetermined, DEQ should not issue this permit.

Response:

Water quality standards for the Willamette River were set to protect beneficial uses including fish and aquatic life. The Department of Fish and Wildlife has not suggested that the standards are inadequate to protect the resource. The Department has determined that the proposed discharge will not cause standards to be violated or adversely affect the recognized beneficial uses.

Action:

Comment noted.

**Rep. Bob Shiprack  
House of Representatives  
Salem, Oregon**

**Comment:**

The intent of the Legislature in passing SB 66 was to encourage the establishment of new markets for recyclable materials. The new plant at Halsey will do just that. This is a good economic and sound environmental project for Oregon that should be approved.

**Action:**

Comment noted.

**Linn County  
Planning and Building Department  
P.O. Box 100  
Albany, OR 97321**

**Comment:**

The recycling plant is consistent with the Linn County Comprehensive Plan which specifically supports the expansion of the paper mill. The paper mill and surrounding undeveloped land have been zoned Heavy Industrial in anticipation of the plant expansion.

Recently, the county amended the Industrial Land Section of the comprehensive plan to recognize the importance of resource related industry. The plan states that a rural location is appropriate for certain industries such as the Halsey paper plant.

**Action:**

Comment noted.

**Lane County, Waste Management Division  
Public Works Department  
125 East 8th Avenue  
Eugene, OR 97401**

**Comment:**

We can assert that the availability of markets for recyclable material is of paramount importance in establishing the recycling loop. From a solid waste management perspective too, the failure to recycle clearly cuts short the number and extent of a community's disposal options.

While we lack the technical expertise to testify about the efficacy of the environmental controls and practices proposed, we do know that not approving the application involves significant environmental costs as well.

**Action:**

Comment noted.

2/11/92

January 31, 1992

Rolland Baxter  
Public Works Director  
City of Corvallis  
P.O. Box 1083  
Corvallis, OR 97339-1083

Re: JAMES RIVER NPDES PERMIT  
Application No. 998046

Dear Mr. Baxter:

Thank you for your two letters of January 8, 1992.

One of your letters requested that the Department include several provisions in its NPDES permit for James River that would require James River to evaluate alternatives to landfilling of their sludge with emphasis on finding beneficial uses.

The Department supports beneficial use of wastes, wherever possible. James River has several significant incentives for finding ways to use the sludge beneficially, not the least of which is the considerable expense they incur by using the Coffin Butte landfill. James River has publicly acknowledged their intent to pursue other uses for the sludge.

The Department feels, however, that the NPDES permit, which is a wastewater discharge permit, is not an appropriate vehicle for regulating disposal of James River's sludge.

The Department regulates the Coffin Butte landfill through its permit with our Solid Waste Section. We are aware of the significant increase in solid waste going to the landfill that James River will cause and will be reviewing the effect of the increased load on the landfill. We also recognize that in most regards, the shipment of this sludge, or any other waste, once it has fully complied with environmental regulations, is an arrangement between the private businesses.



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1

City of Corvallis  
January 31, 1992  
Page 2

Public Works  
P.O. Box 1083  
Corvallis, OR 97339-1083

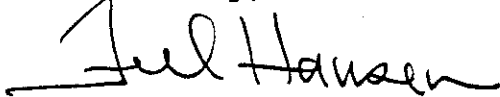
Your other letter described your understanding of the Department's actions regarding its proposed permit and the effect of the discharge on the Willamette River and the City of Corvallis. You specifically asked for certain assurances on the part of the Department that the river, other dischargers and the City of Corvallis will not be adversely affected by this new discharge.

The Department cannot give guarantees for future potential effects of the discharge. The Department is satisfied that it has made an adequate evaluation of the potential for adverse impacts resulting from the proposed new discharge and it does not anticipate any significant adverse effects.

The Department does not anticipate that this new discharge will require any adjustments at this time by other dischargers under the present river loadings. The Department will review the results of the Willamette River Study when it is completed and will consider what, if any, actions are appropriate relative to all dischargers.

The Department has the responsibility and authority to reopen and modify James River's permit if future problems arise from its discharge, to continue to assure that there is no adverse impact on the beneficial uses of the river.

Sincerely,



Fred Hansen  
Director

jt:

Attachments:

Two letters dated January 8, 1992

cc:

Willamette Valley Region, DEQ  
Office of the Major, City of Corvallis





*JES*

Public Works  
1245 NE 3rd Street  
P.O. Box 1083  
Corvallis, OR 97339-1083  
(503) 757-6916

January 8, 1992

Fred Hansen  
Department of Environmental Quality  
811 S.W. 6th Street  
Portland, OR 97204-1390

**JAMES RIVER NPDES PERMIT**

The City has reviewed the draft NPDES permit and determined that the James River plant will produce a significant volume of solid waste. The vast majority of this waste will be sludge produced as a by-product of the wastewater disposal system. James River proposes to dispose of this sludge at Coffin Butte, a regional landfill north of Corvallis. James River waste will constitute 25% or more of the total volume disposed at the landfill. As a major landfill user, James River may have a dramatic impact on the landfill and on the costs associated with operating and constructing landfill facilities.

James River recognizes the need for a long term strategy for solid waste disposal and has represented to the City of Corvallis that feasibility studies will be undertaken to evaluate alternate waste disposal schemes.

The City of Corvallis requests, and James River concurs, that commitments made by James River be included in the waste discharge permit. Consequently the following wording should be added to Schedule D:

4. The permittee shall evaluate alternatives to landfilling the wastewater treatment plant sludge with the emphasis of finding a beneficial use for the waste material according to the following schedule:

By no later than January 1, 1994, a Solid Waste Feasibility Study and Solid Waste Plan shall be completed and submitted to the Department.

By no later than January 1, 1996, laboratory studies and/or pilot scale studies shall be completed. A written report summarizing the results of these studies shall be submitted to the Department.

*Sent copy  
of this to  
Eric Schmitt  
for comment.*

FRED HANSEN  
JAMES RIVER NPDES PERMIT  
January 8, 1992  
Page 2

By no later than January 1, 1997, a program and time schedule to implement the selected alternative(s) shall be submitted to the DEQ for review and approval.

Public meetings will be held at each stage of this process to share information and provide an opportunity for public input.

Respectfully,



ROLLAND BAXTER  
PUBLIC WORKS DIRECTOR

RB/eao

attachment

cc: Gerald Seals, City Manager  
Charles Vars, Mayor and City Council  
Virginia Sixour, James River  
Jerry Turnbaugh, ODEQ



Public Works  
1245 NE 3rd Street  
P.O. Box 1033  
Corvallis, OR 97339-1083  
(503) 757-6916

January 8, 1992

Fred Hansen  
ODEQ  
811 S.W. Sixth Street  
Portland, OR 97204-1390

#### JAMES RIVER NPDES PERMIT

The City of Corvallis operates under one of the tightest permits on the Willamette River and compliance requires extensive wastewater treatment. The City is concerned about its continued ability to serve its wastewater customers in an environment of increasing standards and moderate community growth.

It is the understanding of the City of Corvallis that DEQ intends to issue a new waste discharge (NPDES) permit for a secondary fiber plant which James River is adding at their Halsey, Oregon operation. It is further our understanding that:

- DEQ has thoroughly evaluated the permit application
- DEQ will not issue a permit which is detrimental to other existing wastewater dischargers
- DEQ has evaluated the results of this action (issuing permit) and has concluded that approval of the permit will not be detrimental to permits held by others
- DEQ has evaluated the Willamette River and has concluded that the River is not water quality limited in terms of the primary waste constituents to be discharged by James River
- DEQ has considered the NPDES permit held by Corvallis and has confirmed that no changes in the permit will be required as a result of the issuance of the James River permit. Specifically, it has been determined that no reduction in waste loads currently permitted will be required.
- DEQ has concluded that issuance of the permit will not jeopardize the ability of other wastewater dischargers to effectively serve their customers.

FRED HANSEN  
JAMES RIVER NPDES PERMIT  
January 8, 1992  
Page 2

The City of Corvallis respectfully requests written, formal DEQ confirmation that the City's understanding is accurate and that Corvallis' continued use of the river at permitted discharge levels is assured.

Respectfully,



ROLLAND BAXTER  
PUBLIC WORKS DIRECTOR

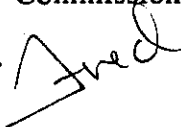
RB/eao

cc: Gerald Seals, City Manager  
Charles Vars, Mayor and City Council  
Virginia Sixour, James River  
Jerry Turnbaugh, ODEQ

State of Oregon  
**Department of Environmental Quality**

**Memorandum**

Date: February 11, 1992

To: Environmental Quality Commission  
From: Fred Hansen, Director   
Subject: Agenda Item A, February 18, 1992 Special EQC Meeting

**James River Recycle Facility: Approval of Proposed Waste Load Allocation**

Summary of the Issue

James River has applied to the Department for a permit to discharge highly treated wastewater to the Willamette River from a new facility that will receive waste paper, process it to remove ink and other contaminants, and use it as a source of pulp for production of new paper. The proposed facility is referred to as the Halsey Secondary Fiber De-Inking Mill (Recycle Facility).

Before the Department can issue a permit, rules adopted by the Commission require that the Commission approve the allocation of currently unused wasteload assimilative capacity of the river for the proposed new source. (OAR 340-41-026)

The Department has evaluated the application, evaluated potential water quality effects and concluded that the proposed discharge will not cause water quality standards to be exceeded, determined that it would be appropriate to recommend that the Commission authorize a new discharge to the Willamette River, drafted a proposed permit, and held three public hearings on the Department's evaluation and permit proposal.

The Department has evaluated public comments received at the three hearings and in response to the public notice. Summary response to public comments is attached as Attachment B. The Department's evaluation report for the permit application is Attachment C. Attachment A presents the Department's proposed findings in support of approval of the new source discharge. This document cites the applicable rules, states the proposed findings relative to each applicable rule, and presents discussion in support of the proposed finding.

Recommendation

It is recommended that the Commission adopt the Findings contained in Attachment A and approve a new discharge to the Willamette River near Halsey with the monthly average BOD, not to exceed 2,000 lbs/day during the summer months, and 3,120 lbs/day during the winter months.

PROPOSED ENVIRONMENTAL QUALITY COMMISSION FINDINGS  
REQUIRED BY OAR 340-41-026 FOR APPROVAL OF A NEW DISCHARGE  
FOR THE JAMES RIVER WASTEPAPER RECYCLE FACILITY AT HALSEY

OAR 340-41-026 presents basic water quality management policies and guidelines that are generally applicable to all river basins in Oregon. Several of the provisions of this rule have specific application to a proposed new or expanded wastewater source. The following discussion cites each applicable rule provision, presents the proposed finding regarding the rule provision, and provides discussion of the proposed finding.

340-41-026(1)(a)

*340-41-026(1) In order to maintain the quality of waters in the State of Oregon, the following is the general policy of the EQC:*

*(a) Antidegradation Policy for Surface Waters.*

*The purpose of the Antidegradation Policy is to guide decisions that affect water quality such that unnecessary degradation from point and nonpoint sources of pollution is prevented, and to protect, maintain, and enhance existing surface water quality to protect all existing beneficial uses. The standards and policies set forth in OAR 340-41-120 through 962 are intended to implement the Antidegradation Policy.*

*A. HIGH QUALITY WATERS POLICY: Where existing water quality meets or exceeds those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, and other designated beneficial uses, that level of water quality shall be maintained and protected. The [Environmental Quality] Commission, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, and with full consideration of OAR 340-41-026 (2), (3) and (5), however, may allow a lowering of water quality in these high quality waters if they find:*

*(i) no other reasonable alternatives exist except to lower water quality; and*

*(ii) the action is necessary and justifiable for economic or social development benefits and outweighs the environmental costs of lowered water quality; and*

*(iii) all water quality standards will be met and beneficial uses will be protected.*

*B. The Director or a designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare.*

C. *WATER QUALITY LIMITED WATERS POLICY: For water quality limited waterbodies, the water quality shall be managed as described in OAR 340-41-026(3).*

D. *OUTSTANDING RESOURCE WATERS POLICY: Where existing high quality waters constitute an outstanding state or national resource such as those waters designated as extraordinary resource waters, or as critical habitat areas, the existing water quality and water quality values shall be maintained and protected, and classified as "Outstanding Resource Waters of Oregon". The Commission may specially designate high quality waterbodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those waterbodies. The Department will develop a screening process and establish a list of nominated waterbodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305 (b) Report). The priority waterbodies for nomination include:*

- (i) National Parks;*
- (ii) National Wild and Scenic Rivers;*
- (iii) National Wildlife Refuges;*
- (iv) State Parks; and*
- (v) State Scenic Waterways.*

*The Department will bring to the Commission a list of waterbodies which are proposed for designation as Outstanding Resource Waters at the time of each Triennial Water Quality Standards Review.*

*In designating Outstanding Resource Waters, the Commission shall establish the water quality values to be protected and provide a process for determining what activities are allowed that would not affect the outstanding resource values. After the designation, the Commission shall not allow activities that may lower water quality below the level established except on a short term basis to respond to emergencies or to otherwise protect human health and welfare.*

### Finding

The Willamette River downstream from the proposed point of discharge is appropriately classified as "High Quality Waters" with respect to all potential pollutant parameters except 2,3,7,8 TCDD. For 2,3,7,8 TCDD, the Willamette River has been classified as "Water Quality Limited".

Existing water quality in the Willamette River downstream from the proposed point of discharge supports recognized beneficial uses including propagation of fish and wildlife and recreation. The proposed discharge will not measurably lower water quality.

### Discussion

The Department has evaluated compliance with each water quality standard, and has evaluated public comments received regarding the proposal. The evaluation is detailed in the permit application Evaluation Report, and in the summary and response to public comment. In addition, specific issues are further discussed in the following sections of these findings.

As noted in the permit application evaluation report, the Department has designated the mill's stretch of the river (RM 109-150) as only "partially" supporting aquatic life because of periodic reductions of DO below the standard of "not less than 90 percent of saturation". Measured DO values below 90 percent saturation reflect the low point of the naturally occurring diurnal variation. Another provision of the standards specifies that where natural water quality exceeds a water quality standard, the natural quality becomes the applicable standard. Thus it is possible to interpret the combination of the rules to conclude that the 90% saturation standard for DO is not violated. While no information is available that suggests this diurnal variation is harmful to aquatic life, the Department has elected to flag the issue for study. The level of chlorophyll a and phosphorous are two other parameters that appear to warrant further study. These issues have been included in the Willamette River Study for further study. This study involves gathering additional data and conducting a more detailed evaluation of water quality. Potential outcomes of the study include refinement of water quality standards to clarify intent and assure future protection of beneficial uses, and/or development of future source control strategies to assure that existing and future discharge loads can be accommodated while protecting beneficial uses. If it is determined appropriate to designate the river as water quality limiting for other parameters based on new data collection and additional evaluation, future actions and schedules for implementation will be prescribed as appropriate.

340-41-026(2) & (5)

(2) *In order to maintain the quality of waters in the State of Oregon, it is the general policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) of this rule.*

....

(5) *For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved subject to the criteria in Section 3 of this rule.*

Finding



The proposed wastewater discharge is from a new manufacturing facility that will receive and process waste paper for use as a pulp source for production of marketable paper products. Therefore, the proposed wastewater discharge is deemed to be a new waste source and is subject to review pursuant to paragraph (5).

The total volume of wastewater to be disposed of will be minimized by pollution prevention technologies including use of mechanical means of contaminant removal (de-inking) rather than the traditional chemical means, and extensive reuse of process water within the plant including reuse of existing paper machine whitewater as the water source for the wastepaper pulping process. These steps will result in waste water quantities which are one-third of the industry average for this type of plant.

Alternatives for wastewater treatment and disposal including Tertiary Treatment Using Filtration Technology, Tertiary Treatment Using Wetlands Treatment, and Conservatively Designed Secondary Treatment were evaluated by James River. The selected alternative, Conservatively Designed Secondary Treatment Technology, was found to be the most practicable and consistent with overall environmental goals. DEQ reviewed James River's evaluation and concurs with the result. The wastewater treatment system, consisting of primary treatment followed by a high rate activated sludge treatment system will achieve 95-97% removal of BOD and is equivalent to the level of technology generally required as "highest and best practicable treatment of wastes" for other municipal and industrial sources in the basin.

James River also evaluated irrigation utilization of treated wastewater effluent as an alternative to stream discharge and concluded that this option was not practicable for their location and the quantity of wastewater involved. DEQ reviewed the evaluation and concurs with the conclusion.

### Discussion

James River currently owns and operates an existing paper mill at the site. Pulp to supply the paper mill is imported to the site from the nearby Pope and Talbot Pulp Mill and other sources. Paper mill wastewater (paper machine "whitewater") has been piped to the Pope and Talbot Pulp Mill treatment facility for biological treatment and river discharge. James River and Pope and Talbot are separate and independent companies. James River proposes to use the paper machine whitewater from the existing Paper mill as 90% of the water supply for the new Wastepaper Recycle Facility (also referred to as the Recycle Facility or Secondary Fiber De-Inking Mill). The balance of the whitewater will be sent to the new Recycle Facility treatment units. The major part of the waste load to the proposed new wastewater treatment facility will come from the waste paper recycling process.

The James River Recycle Facility meets the federal definition of a new source and must meet requirements defined for new sources. Specifically, the Recycle Facility

processes are substantially independent of existing sources at the site [40 CFR 122.29(b)(1)(iii)]; new source performance standards are independently applicable [40 CFR 122.29(b)(2)]; and a new plant will be constructed [40 CFR 122.29(b)(3)].

Based on the federal rule provisions, and the fact that the substantial part of the wasteload will be from the new Recycle Facility, the Department concludes that it is most appropriate to view the proposed discharge as a new source discharge to the Willamette River.

James River has proposed state-of-the-art technology to minimize the potential environmental effects from the proposed Recycle Plant. First, they propose to use the existing paper mill wastewater as 90% of the water supply for the new mill. Second, they propose to use a mechanical process rather than the more common chemical and heat intensive processes for removing ink and other contaminants from the recycled paper. Third, they propose to use a color stripping and bleaching process that does not use chlorine and therefore will not produce chlorinated organic compounds. Finally, they propose to treat and extensively reuse water within the Recycle Facility itself. As a result of these pollution prevention steps, the quantity of wastewater to be disposed of from the Recycle Facility is expected to be about one-third of the quantity expected for a more traditional waste paper de-inking facility. In addition, the proposals to eliminate the use of chlorine and other chemicals for de-inking, contaminant removal, and bleaching is considered to be the environmentally preferred approach.

James River evaluated three options for wastewater treatment that would reduce BOD loading in the final effluent to levels that would be significantly less than the applicable New Source Performance Standards established by EPA. All of the treatment options assumed use of primary treatment technology to remove settleable solids as the first step. Primary treatment would be expected to remove 99% of the suspended solids and 45-65% of the BOD in the wastewater from the Recycle Facility. Additional treatment options evaluated included (1) Tertiary Treatment Using Filtration Technology, (2) Tertiary Treatment Using Wetlands Treatment, and (3) Conservatively Designed Secondary Treatment.

Tertiary Treatment Using Filtration Technology involves sand or other media filtration following the conventional biological secondary treatment required by the federal new source performance standards. This technology would be expected to reduce the BOD in the secondary treatment facility effluent by 25-35%. Frequent backwashing would be necessary to restore and maintain filter operation. Disposal of the filter "mud" from the backwashing process would be an added environmental problem. Chemical addition would likely be needed to prevent slime formation that would prematurely plug the filter. Capital costs would be in the range of \$2-3 million for construction. Additional operating costs would also be significant.

Tertiary Treatment Using Wetlands Treatment is an emerging technology that has not been implemented on a full-scale basis for pulp and paper effluent. In this system, effluent from the conventional secondary treatment facility would be discharged to a natural or constructed wetland area for "effluent polishing". The wetland area would ultimately discharge to the stream. Pope and Talbot is currently studying this technology on a pilot scale level. Preliminary indications are that such a system would achieve additional BOD reductions similar to the Filtration Technology. Potential concerns include availability of suitable land for construction of a wetlands, crop and bed maintenance, and potential groundwater impacts. This option is not considered practicable for full scale use at this time.

Conservatively Designed Secondary Treatment is the term used to describe enhanced conventional secondary treatment technology. This approach uses high rate activated sludge treatment with extended aeration, high sludge recycle rates, and conservative secondary clarifier design parameters. BOD removal is about 35% better than that expected from the conventional secondary treatment system required by the new source performance standards. This technology results in BOD removal efficiencies across the secondary system of about 94% and 97% across both the primary and secondary systems. The added capital costs are estimated to be about one million dollars. Operating costs are expected to be higher than the conventional secondary treatment system.

James River concluded that the Conservatively Designed Secondary Treatment system is the preferred alternative. The Department concurs. This option achieves about 35% additional BOD removal over what would be required under EPA's new source performance standards. The type of treatment and level of wastewater treatment technology (BOD removal efficiency) proposed by James River is equivalent to that required for municipal and industrial sources in the Willamette Basin. Reuse of wastewater within the production facilities to the extent practicable, followed by primary and "efficient" or "conservatively designed" secondary treatment technology is what has been accepted as "highest and best practicable treatment and control of wastes" for industrial facilities. This level of technology will generally result in BOD removal efficiencies in the range of 95-97%. The Department has been reluctant to encourage or require use of additional treatment technologies that involve chemical addition and filtration unless necessary to meet water quality standards because such facilities use additional energy, and produce large volumes of chemical sludges which can be difficult to dispose of in an environmentally acceptable manner.

James River evaluated two options for disposal of effluent from the treatment facility: irrigation utilization, and stream discharge. The following is their analysis of the irrigation alternative.

"Wastewaters used for irrigation of crops must be applied at an agronomic rate, i.e., equal to the consumptive use of the crop. This limitation is applied such that there will be no impact (i.e., no statistical increase above background) on groundwater quality. Since the treated effluent contains low levels of some parameters that have drinking water limitations, application must be limited to crop uptake. This crop uptake value varies depending on crop selection. An average value of 0.2 inches per day was chosen for the typical crops grown in the Willamette Valley. An application rate based on this value and the average effluent flow rate of 3.5 mgd results in an average land use requirement of 640 acres per day, 360 days per year. The land can only be irrigated on days that receive no rainfall and when the soil is capable of absorbing this quantity, such that no ponding or runoff result. Since these conditions are potentially met only 4-6 months per year in the Willamette Valley, sufficient storage capacity would need to be available to hold the effluent during the winter months. This will double or triple the land use requirement for irrigating during the summer months (1200-2000 acres per day). The cost for this non-discharge alternative would include capital costs for a storage lagoon and infrastructure for piping to nearby farmland, and operating costs for the irrigation operation. The capital for installing a lagoon capable of storing the required volume of effluent (600-800 mg) is approximately \$20-25 million. The availability of land, types of crops, and soil conditions have not been thoroughly investigated to determine the potential capital cost for piping and pumping the effluent for irrigation. The operating costs for the irrigation operation have been estimated to be \$4-6 million per year. Due to the high cost and potential environmental risk associated with this non discharge alternative, further evaluation was not conducted. It was determined that improved treatment and limited discharge to the Willamette River could be accomplished with no measurable impact on water quality."

The Department generally concurs with this evaluation. Experience has shown that irrigation utilization can be effectively managed and accomplished for wasteloads that occur during the summer dry weather months. Irrigation utilization as the sole means of disposal for substantial waste flows in the area west of the cascades presents significant environmental problems, and requires very careful site-specific study and design before implementation.

The Department also considered the potential for discharge of wastewater to a municipal system for treatment. No suitable municipal facility exists in proximity to the industrial site. The Department, based on years of observation and experience, does not encourage municipalities to assume the responsibility for treatment of large volumes of high strength industrial waste. In this case, the BOD concentration of the raw waste from the proposed recycle facility would be about 2,000 mg/l. This is approximately 10 times the strength of normal municipal sewage. A conservatively designed secondary municipal treatment system would be expected to remove about 95% of the BOD, resulting in an effluent concentration of about 100 mg/l. The facilities proposed by James River will result in an effluent BOD concentration of about 70 mg/l. Disinfection of sewage wastes is generally required to control potential pathogenic bacteria and protect public health. Disinfection is currently accomplished in nearly all cases by use of chlorine.

Chlorine addition to industrial effluents is generally discouraged because of the potential to form chlorinated organic compounds.

340-41-026(3)(a)(A)

(3) *The Commission or Department may grant exceptions to sections (2) and (6) and approvals to section (5) for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2).*

(a) *In allowing new or increased discharged loads, the Commission or Department shall make the following findings:*

(A) *The new or increased discharged load would not cause water quality standards to be violated;*

Finding

The proposed new source is properly classified as a major source for permit fee purposes in OAR 340-45-075(2).

The new discharge will not cause water-quality standards to be violated.

Discussion

The Department evaluated the water quality impact of the proposed discharge on each of the adopted water quality standards for the Willamette River. This evaluation is documented in the Evaluation Report for the permit application. The overall conclusion was that the discharge would not cause water quality standards to be violated.

The level of dissolved oxygen (DO) in the river has historically been the water-quality parameter of most concern with respect to a new discharge of waste. Biochemical oxidation of organic matter in the stream can cause a reduction in the level of dissolved oxygen if the rate of oxygen removal for waste stabilization occurs at a greater rate than re-oxygenation occurs (through re-aeration). For wastewaters containing organic matter, the amount of five-day biochemical oxygen demand (BOD<sub>5</sub>) that may be discharged is regulated as a means of assuring that dissolved oxygen is not unacceptably reduced.

The dissolved oxygen standard for the Willamette River varies with the reach of the river as follows:

Mouth to Willamette Falls	not less than 5 mg/l
Willamette Falls to Newberg	not less than 6 mg/l

Newberg to Salem  
Salem to [Springfield]

not less than 7 mg/l  
not less than 90% of saturation

The Department reviewed and commented on computer modeling analysis presented by the applicant and independently evaluated the potential impact of the proposed wastewater discharge on Dissolved Oxygen. In this process, a series of conservative assumptions were made as follows:

- The flow of the Willamette River and all of its tributaries was assumed to be the seven day consecutive low flow that occurs during the warm summer months on a statistical frequency of once every 10 years (the 7Q10 critical low flow).
- A calculated change in Dissolved Oxygen of less than 0.1 mg/l was assumed to be unmeasurable. This assumption is based on review of the Department's quality assurance monitoring data for the Willamette River. Standard Methods notes that precision may be expressed as a standard deviation, and that the presence of appreciable interferences, even with proper modification, may result in the standard deviation being as high as 0.1 mg/l. 0.1 mg/l is equivalent to 1.1 percent of saturation at 68°F.

Based on these very conservative assumptions, the Department calculated that a BOD<sub>5</sub> discharge of between 2800 and 3500 lb/day would not cause a measurable decrease in DO in the Willamette River between the point of discharge and the Willamette Falls. Aeration over the Willamette Falls acts to reduce the oxygen deficit incurred upstream. The DO levels in the slower, deeper portion of the river below the falls may be reduced by additional loads of BOD<sub>5</sub>. The reach below the falls is more difficult to model because it is tidal influenced, however, analysis suggests that the decrease in dissolved oxygen under the same assumptions would likely be less than 0.1 mg/l and would almost certainly be less than 0.2 mg/l. The dissolved oxygen standard for the reach below the Willamette Falls is 5.0 mg/l and was set to protect fish passage rather than the rearing and spawning uses that justified more stringent standards upstream. At present, the dissolved oxygen levels in the reach below the falls range from 7 to 8 mg/l during the summer. Thus, the margin of safety relative to standards compliance is the largest in this reach.

The Department has proposed a monthly average limit for BOD<sub>5</sub> at 2000 lb/day during the summer low-flow period (May 1-Oct. 31). This discharge limit is consistent with the capability of the wastewater minimization, reuse and treatment facilities proposed for the Recycle Facility. This proposed discharge limit also provides an additional margin of safety beyond that inherent in the conservative modeling assumptions used. The Department also proposes to allow a greater BOD<sub>5</sub> discharge during the remainder of the year when the Willamette River flow rate is sufficient to accept the BOD<sub>5</sub> load and not decrease DO. However, the installed

wastewater reduction and control facilities would be required to be operated at maximum efficiency at all times to minimize the magnitude of discharges.

The reach of greatest potential concern with respect to the DO standard is the reach between Salem and the point of discharge where the standard is 90% of saturation. Available data suggests that measured DO values at the diurnal low occasionally fall below 90% of saturation. Most measured values are above 90% saturation, and are near saturation. The measured values below 90% saturation appear to be a result of natural diurnal fluctuation and not a result of discharges. The proposed discharge would not be expected to cause the natural diurnal variation to be measurably altered. As noted previously, this issue will be evaluated in greater detail as part of the Willamette River Study. The results of this study may provide the basis for refinement of the standard and/or development of future source control strategies to assure that existing and future discharge loads can be accommodated while protecting beneficial uses.

The Willamette River, as previously noted, is classified as water quality limited for 2,3,7,8 TCDD. This means that the concentration of 2,3,7,8 TCDD in the river already meets or exceeds the established water quality standard. The only documented discharge of TCDD is the Pope and Talbot Pulp Mill which produces TCDD in its pulp bleaching process which uses chlorine compounds. The James River Recycle Facility will not use chlorine compounds in its process, and will not produce any TCDD in the process. There is a potential that trace amounts of TCDD could be in the plant effluent, however, because part of the waste paper used as the fiber source may have been bleached using chlorine compounds when originally produced. It is estimated that potential TCDD levels, if any, in the wastewater discharged from the Recycle Facility will be well below the level of detection. The permit is proposed to contain a dioxin (2,3,7,8 TCDD) discharge limit of zero, and require monitoring of TCDD levels in the incoming and outgoing pulp and levels in the solids removed from the treatment process to assure, by mass balance calculation, that the TCDD standard is met.

340-41-026(3)(a)(B)

- (B) *The new or increased discharged load would not unacceptably threaten or impair any recognized beneficial uses. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;*

Finding

The new discharge will not unacceptably threaten or impair any recognized beneficial uses.

Discussion

The recognized beneficial uses for the Salem to Springfield stretch of the Willamette River are:

- Public Domestic Water Supply
- Private Domestic Water Supply
- Industrial Water Supply
- Irrigation
- Livestock Watering
- Anadromous Fish Passage
- Salmonid Fish Rearing
- Salmonid Fish Spawning
- Resident Fish & Aquatic Life
- Wildlife & Hunting
- Fishing
- Boating
- Water Contact Recreation
- Aesthetic Quality
- Hydro Power
- Commercial Navigation & Transportation

The Department prepared a separate Evaluation Report for the permit application submitted by James River. This evaluation was available prior to three public hearings held by the Department on the permit application. The Evaluation report presents the results of the Department's review and evaluation relative to each applicable water quality standard and rule provision. The evaluation was based on review of materials submitted by James River in support of its permit application, review of water quality data, modeling analysis performed by the applicant and DEQ staff, and Department staff knowledge and observations of water quality conditions and the effects of discharges. In this report, the Department concluded that the proposed discharge would not cause water quality standards to be exceeded and would not adversely affect recognized beneficial uses.

The Department has received substantial public testimony on the evaluation report and proposed permit that were presented at public hearing. Some testimony strongly supported the proposed Recycle Facility and urged approval and issuance of the permit. Some Testimony opposed issuance of permit or urged delay pending further study. The Department has prepared separate brief responses to significant points raised in testimony. In addition, the most significant points are addressed in these findings and discussion.



As indicated in the rule, compliance with the standards is presumptive evidence of protection of beneficial uses. The information presented in public hearings has not caused the Department to alter its initial conclusion that the proposed discharge would not cause water quality standards to be violated. Further, the Department has no evidence upon which to conclude that this proposed discharge would otherwise adversely affect beneficial uses of the Willamette River.

The Department of Fish and Wildlife expressed concern about the "insufficiency of information", the potential cumulative effect of multiple approvals each with "no measurable effect", and the potential for the additional discharge to adversely affect dissolved oxygen in the lower Willamette which "...already fall below the 90% saturation level required by OAR 340-41-445." These concerns were shared by others. The Department understands and shares the concerns expressed by the Department of Fish and Wildlife. The Department has initiated a Willamette basin water quality study. Results of this study will be used to review existing management strategies for the basin. However, the Department does not believe it is necessary to delay action on this proposal pending completion of the study. No evidence has been submitted demonstrating violations of water quality standards or negative impacts on beneficial uses. The Department notes that the water quality standards and rules specifically allow approval of discharges that have small effect on water quality. The rules seek to minimize any such effects by requiring highest and best practicable treatment and control of wastes. The rules prohibit approval of a discharge if the discharge would cause water quality standards to be violated. The Fish and Wildlife testimony, while expressing general concerns about lack of desirable information, did not suggest that water quality standards are inadequate to protect fish and wildlife. As previously noted, the standard in the lower Willamette (below the falls) is 5 mg/l and observed values during the summer are close to 8 mg/l most of the time with values occasionally dropping to 7 mg/l.

The discharge is also not expected to cause taste, color, odor or toxicity that would adversely affect use of the water as a drinking supply or for water contact recreation. The City of Corvallis has expressed concern about the potential effect of the proposed discharge on their use of the Willamette River as a source of drinking water. The Department of Fish and Wildlife and others called attention to the color and odor in the reach of the Willamette below the proposed point of discharge that is the result of the current discharge of Kraft Pulp Mill wastewater from the Pope and Talbot Mill. The assumption by many seems to be that since James River is proposing to produce pulp at the site, similar color and odor effects will result. James River is not proposing a process that will result in any increase in the typical Kraft Mill color and odor problems. In order to minimize any potential impact on the drinking water use of the Willamette, James River has proposed a more costly mechanical de-inking and pulp contaminant removal process rather than the traditional process that uses chemicals. The Department concludes that the James River proposed discharge will not adversely affect beneficial uses downstream from

the discharge, and will not add to the problems that result from the Pope and Talbot Kraft Pulp Mill discharge. The Department notes that Pope and Talbot is undertaking a major compliance program and mill reconstruction that is expected to result in a significant reduction in the current observed color effects in the river.

In order to further assure that the proposed discharge will not adversely affect fish or aquatic life, the Department is proposing to require biomonitoring of the effluent with three organisms (fathead minnow, water flea and green alga) as a means of detecting potential whole-effluent toxicity which could adversely affect beneficial uses. The proposed permit will require corrective action if potential toxicity is detected.

340-41-026(3)(a)(C)

- C) *The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited under OAR 340-41-006(30)(a), unless:*
- (i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or*
  - (ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream; and compliance plans, under which enforcement action can be taken have been established; and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or*
  - (iii) Under extraordinary circumstances to solve an existing, immediate, and critical environmental problem that the Commission or Department may consider a waste load increase for an existing source on a receiving stream designated water quality limited under OAR 340-41-006(30)(a) during the period between the establishment of TMDLs, WLAs and LAs and their achievement based on the following conditions:*
    - (I) That TMDLs, WLAs and LAs have been set; and*
    - (II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and*
    - (III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses; and*

*(IV) That any waste load increase granted under subsection (iii) of this rule is temporary and does not extend beyond the TMDL compliance deadline established for the waterbody. If this action will result in a permanent load increase, the action has to comply with subsections (i) or (ii) of this rule.*

### Finding

The Willamette River has been designated as Water Quality Limited for 2,3,7,8 TCDD (dioxin).

No 2,3,7,8 TCDD will be produced as a byproduct of the production processes proposed by James River.

The proposed permit will establish a discharge limit for 2,3,7,8 TCDD of zero, and require monitoring of TCDD levels in the incoming and outgoing pulp and levels in the solids removed from the treatment process to assure, by mass balance calculation, that the TCDD standard is met. The company will require actions including but not limited to regulation of the quality of incoming waste paper, as necessary, to assure that the standard is met.

### Discussion

As noted in previously, the Willamette River has been designated as Water Quality Limited for 2,3,7,8 TCDD (dioxin).

The 2,3,7,8 TCDD loading capacity of the Willamette River at Harrisburg has been calculated by EPA to be 0.24 mg/day. By permit action, a limitation of 0.19 mg/day on a long term average has been placed in the Pope & Talbot Pulp Mill Permit. The remainder has been allocated as a margin of safety for Non Point Sources and unidentified point sources. The TMDL from EPA focuses on regulating sources which known to produce significant amounts of TCDD. EPA recognized that municipal effluents may contain trace amounts of TCDD and considered these to be among the "unidentified point sources". Pope and Talbot is the only identified source in or above this stream segment using processes which produce TCDD and result in a TCDD discharge to the river. A program has been incorporated in a permit and stipulated compliance order establishing a program and time schedule for achieving compliance with the TCDD permit limit. Pope & Talbot is pursuing a control strategy that seeks to ultimately eliminate the use of chlorine for pulp bleaching. Implementation of this strategy would reduce the load to this segment of the river allowing modification to the waste load allocations.

James River does not propose any production process or use of chlorine that would result in the production of 2,3,7,8 TCDD in its facility. Thus, they have not

proposed to discharge 2,3,7,8 TCDD, and have not requested a discharge allocation for this compound.

Waste paper proposed for use as a source of fiber for the Recycle Facility would reasonably be expected to contain traces of 2,3,7,8 TCDD as a result of the bleaching process used during original pulp production. It is reasonable to assume that any 2,3,7,8 TCDD entering the facility in the waste paper would leave in different ways: some would leave in paper products produced, some would be removed in the wastewater treatment system and leave in the sludge, and some could be contained in the wastewater effluent discharged. Quantities of 2,3,7,8 TCDD in the effluent would be expected to be analytically non-detectable with current detection technology.

Production of pulp from waste paper will inevitably pose the potential for release of minute quantities of 2,3,7,8 TCDD and other chlorinated organics that were produced previously in the production and bleaching process. Production of virgin pulp using current production techniques would result in far greater releases of TCDD to the environment. Technology does not exist to specifically remove this contaminant from the waste paper. Public policy strongly encourages reuse rather than landfilling of waste paper. SB 66, passed by the 1991 legislature, established goals for such reuse and recycling. As chlorine based pulp bleaching diminishes through replacement with alternative technology, the levels of TCDD in waste paper would be expected to diminish. Therefore, any potential problem with unintended and uncontrollable TCDD discharges would correct itself over time.

The Department proposes to place a wastewater discharge limit in the permit for 2,3,7,8 TCDD of zero, and require compliance to be determined by use of an averaged mass balance technique. The Department also proposes to require the company, if necessary, to take special actions including but not limited to regulation of the quality of incoming waste paper to assure that the standard is met.

340-41-026(3)(a)(D)

- (D) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as evidenced by a statement of land use compatibility from the appropriate local planning agency.*

Finding

The proposed facility is allowed as an outright use and is consistent with the Linn County Comprehensive Land Use Plan.

## Discussion

The applicant submitted a completed Land Use Compatibility Statement confirming land-use compatibility. Information provided by Linn County indicates that the use proposed by James River is allowed outright by their acknowledged plan. By letter, the County Planning Manager stated the following:

"The recycling plant is consistent with the Linn County Comprehensive Plan which specifically supports the expansion of the paper mill. The paper mill and surrounding undeveloped land have been zoned Heavy Industrial in anticipation of the plant expansion. Expansion of the paper plant was discussed at the time the Linn County Comprehensive Plan was first amended (1980). Policies in support of future plant expansion were written into the plan and subsequently adopted by the Linn County Planning Commission and Board of Commissioners. After the land use plan was adopted, adjacent property was redesignated Heavy Industrial to accommodate plant expansion.

Recently, the county amended the Industrial Land Section of the comprehensive plan to recognize the importance of resource related industry. The plan states that a rural location is appropriate for certain industries such as the Halsey paper plant. The rural location of the plant and its proximity to transportation facilities and nearby water supply establish comparative advantages that are not found in other locations. It would be difficult to find a location better suited for paper production than the Halsey site."

### 340-41-026(3)(b)(A)(i)

*340-41-026(3)(b) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the Commission or Department shall consider the following:*

*(A) Environmental Effects Criteria.*

*(i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes.*

## Finding

The potential for adverse out-of-stream effects was considered. Storage and land application of wastewater was considered as an alternative to stream discharge. The combined factors of cost for implementation, potential for adverse affects on groundwater, and practical difficulties in implementation of such an alternative on a large scale led to the conclusion that the option was not practicable.

### Discussion

As noted in previous discussion, alternatives were explored for utilization and disposal of wastewater in a manner that did not involve stream discharge. Land application of the wastewater would have required large land areas for storage ponds and irrigation utilization. The potential effects on groundwater levels and groundwater quality were not specifically evaluated but are a potentially significant concern. The storage and irrigation utilization alternative was determined to be not practicable.

### 340-41-026(3)(b)(A)(ii)

*(ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, as appropriate.*

### Finding

The potential for instream effects was considered in the evaluation. The applicant has proposed to maximize reuse and recycling of wastewater and selected production and treatment process to minimize the discharge of pollutants to the stream.

### Discussion

The applicant proposes to use an existing source of wastewater as the primary water supply for the new Recycle Facility. Further, the applicant proposes to extensively treat and recycle wastewater within the production facility and to use a production process that does not use chemicals for de-inking. Finally, the applicant proposes to use a waste treatment system that achieves a greater level of reduction of BOD than is required by EPA's New Source Performance Standards. The Department has proposed a conservative effluent limit during the summer months when stream flows are the lowest. A higher level of discharge is proposed to be allowed during the cooler winter months when biological treatment systems are less efficient, when

stream flows are higher and the capacity of the river to receive treated wastes is substantially greater.

340-41-026(3)(b)(A)(iii)

*(iii) Beneficial Effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.*

Finding

No beneficial effects have been identified that would justify requiring land application or another alternative method of wastewater treatment and disposal.

Discussion

Neither the Department nor James River have identified any beneficial effects associated with the various alternatives for waste disposal that would justify selection of an option other than the proposed treatment and discharge system. Concerns were previously noted regarding potential pollutant effect on groundwater resulting from land application of wastewater, and the lack of demonstrated full scale success for wetlands treatment.

340-41-026(3)(b)(B)(i)

*(B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loadings will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:*

*(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams are finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading.*

Finding

The proposed use of a limited portion of the potential wastewater assimilative capacity of the Willamette River to support the public policy goal of promoting recycling and reuse of waste paper is appropriate.

## Discussion

The proposed recycle facility can provide a direct environmental benefit because it will recycle waste paper that would otherwise be disposed of in landfills. This position is supported by SB 66 passed by the 1991 legislature. This bill establishes goals for such recycling. In order to reduce the potential impact from the proposed discharge, James River has proposed more costly technology treat and recycle wastewater within the plant and to mechanically de-ink and remove contaminants from the waste paper to be recycled (rather than the more traditional chemical de-inking process). They also propose to use a more costly process for pulp bleaching that does not use chlorine compounds and therefore prevents formation of chlorinated organic compounds within the production process. The summer-time BOD<sub>5</sub> discharge limits have been made as conservative as possible, not only to protect the DO level but also to use as little of the river's remaining assimilative capacity as possible. The applicant proposes a more costly wastewater treatment process than would be required to meet EPA's New Source Performance Standards. Permit limits proposed by the Department will require this level of control. For comparison, the summer-time BOD<sub>5</sub> limit will be approximately two-thirds of the applicable EPA effluent guideline.

### 340-41-026(3)(b)(B)(ii)

- (ii) *Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives shall be evaluated.*

## Finding

Cost of alternative treatment and disposal alternatives was evaluated. Selection of proposed options was based on environmental factors.

## Discussion

Alternatives for treatment and disposal of waste water from the proposed new Recycle Facility were evaluated by James River, and reviewed by the Department. The technologies selected and the level of treatment proposed and required was chosen for environmental reasons. Costs were evaluated and did not result in any reduction of the levels determined to be needed and appropriate.

1  
2/11/92



# PUBLIC NOTICE

## EVALUATION REPORT

for the

Application for  
NPDES Wastewater Discharge Permit .

for the

PROPOSED SECONDARY FIBER PLANT  
JAMES RIVER CORPORATION  
HALSEY, OREGON

Oregon Department of Environmental Quality  
Water Quality Division  
Portland, Oregon  
(503) 229-5425

November 29, 1991

*Attachment C*

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## **I. INTRODUCTION**

James River Corporation (James River) has filed an application with the Department of Environmental Quality (Department) for a National Pollutant Discharge Elimination System (NPDES) permit to discharge process effluent from a new recycled-fiber de-ink mill in Halsey, Oregon, to the Willamette River. James River intends to produce about 300 air-dried tons per day of de-inked pulp from wastepaper. The pulp will be used in the production of paper towels, tissue, napkins and communication paper grades.

NPDES permits are issued by the Department pursuant to Section 402 of the Federal Clean Water Act, ORS 468.740, and rules adopted by the Environmental Quality Commission (Commission). This report summarizes the application presented by the applicant, presents the Department's evaluation of the project's estimated compliance with applicable water quality standards and requirements.

## **II. DESCRIPTION OF CURRENTLY PERMITTED FACILITIES**

James River owns a tissue mill located near Halsey, Oregon. The James River mill currently produces tissue using bleached kraft pulp generated at the adjacent Pope & Talbot, Inc., (Pope & Talbot) mill. Both mills are located two miles west of Halsey and eight miles north of Harrisburg. The Halsey mill site is about three and one-half miles east of the Willamette River and approximately five miles west of the north/south arterial highway, Interstate 5.

The Halsey site includes the Pope & Talbot pulp mill, the existing James River paper mill and the future James River Secondary Fiber Site. Prior to 1989, James River managed and operated both the pulp mill and the paper mill under contract with Pope & Talbot. The two companies have since canceled this management contract and the site is now managed as two separate facilities.

Pope & Talbot currently has a contract with James River to supply bleached pulp in slurry form to be used in the production of towel and tissue grades of paper, and to treat James River effluent in their wastewater treatment system.

With the installation of the secondary fiber recycling facility and dedicated wastewater treatment plant, James River will operate independently of Pope & Talbot. All of the paper mill effluent currently discharged to Pope & Talbot will be reclaimed as process water for the secondary fiber operation. Pope & Talbot will dewater its pulp for off-site shipping. The James River facility will become an integrated operation, from secondary fiber processing through tissue papermaking and converting. The Pope & Talbot mill is a separate bleached kraft market pulp business. The companies have jointly agreed to treat and discharge their respective process effluents separately, as the facilities will represent two unique and separate processes.

The effluent from James River's Secondary Fiber Recycling Facility and dedicated wastewater treatment system is a new discharge to the Willamette River.

### **III. DESCRIPTION OF PROPOSED FACILITIES**

#### **A. Layout**

The secondary fiber processing plant, warehouse, and wastewater treatment system occupy approximately 20-acres directly west of the existing James River paper mill finished goods warehouse. The property is currently owned by James River.

A 60,000 ft<sup>2</sup> warehouse will provide covered storage for baled wastepaper as well as housing a wet lap machine, control room and testing laboratory. A rail siding is located at the south side of the building and truck ports are located on the east and west sides. The adjacent process building is a 29,000 ft<sup>2</sup>, two-story building. Two clarifiers are located on the roof. Raw material and chemical storage areas are located inside, wherever possible. A pipebridge connects the new plant with the existing paper mill. The wastewater treatment system, sludge dewatering area, and associated equipment are located northwest of the process building.

#### **B. Process Description**

##### **1. Process Technology**

James River has designed the secondary fiber plant to use state-of-the-art equipment, which will allow the processing of a wide range of wastepaper grades while producing a pulp of uniform quality. A major focus in the design was the incorporation of extensive contamination separation and removal by mechanical means. The use of dispersion technology followed by flotation deinking equipment will enable the plant to process waste containing UV-cured coatings and non-impact inks (laser print), typically known as difficult-to-process materials.

The bleaching/color stripping process will utilize a peroxide/hydrosulfite sequence to remove color and brighten the pulp. Although not as effective as the more widely used hypochlorite on some colored grades, and more expensive, both from a capital and an operating standpoint, this choice of sequence can produce a quality product without using chlorine-based bleaching.

Water use is minimized by the extensive use of dissolved air flotation clarification equipment. Removal of suspended solids from process streams and incoming paper mill white water allows their reuse in the process.

## 2. Raw Materials

The Halsey facility will produce a high quality pulp substitute from a wide variety of waste paper commonly found in an office. Unbleached paper, corrugated boxes, newsprint and other specific contaminated paper would be excluded. At the design production rate, a total of 500 tons per day of waste paper will be required. Since this volume of post-consumer waste paper is currently not available, an anticipated grade mix based on availabilities studies is as follows:

- 25% post-industrial coated book (slick paper)
- 32% post-consumer colored ledger
- 32% post-consumer office waste (mostly white)
- 11% post-industrial coated groundwood

Over time, the grade mix would shift towards post-consumer office waste.

Initially, approximately 25% of the anticipated waste paper will come from the Northwest and Northern California. The remainder will be transported from the Midwest and Southern California. Over time, as collection methods are developed to capture more post-consumer office waste, the amount supplied locally will increase.

## 3. Products

The Halsey secondary fiber plant will have the capacity to produce 300 air dried tons of pulp. About half of the pulp produced will be piped to the paper mill in slurry form to be used in the production of towel and tissue grades. The remainder will be dried on a wet lap machine to 50% solids, baled and transported to James River's Camas, Washington and Wauna, Oregon mills to be used in the production of communication and towel and tissue grades. These mills will, in turn, ship pulp to Halsey, thereby eliminating the Halsey paper mill's dependance on purchased pulp.

## C. Water Use

The makeup water requirement for the secondary fiber plant is approximately 1.5 million gallons per day (mgd). The source of this makeup water supply will be excess process sewer white water from the paper mill. Less than 200 gpm of fresh water will be required for very specific applications, such as mechanical seals, selected packing glands and peroxide makedown. Pope & Talbot holds the water right, and will supply fresh water to James River. Water is taken from the Willamette River through a 30-inch pipeline approximately four miles in length.

James River estimates that approximately 3.5 mgd or 5.4 cfs will be needed to conduct plant process operations. The water intake structure is at approximately river mile 148. James River will obtain treated process water from the Pope & Talbot mill, the holder of the water right. James River will discharge process effluent into the Pope & Talbot effluent line, subsequent to the secondary treatment facilities at the Pope & Talbot mill.

**D. Sources of Wastewater**

Wastewater flow to the secondary treatment plant is a combination of clarified effluent from two points in the process.

**1. Excess Paper Machine White Water**

Current process water requirements are projected to be less than the quantity available in the form of paper machine white water. Approximately 2.3 mgd of excess clarified white water from the No. 3 Process Clarifier will be sent to the wastewater treatment plant. Approximately 2,100 lbs/day Biochemical Oxygen Demand (BOD) and 790 lb/day Total Suspended Solids (TSS) is associated with this clarified white water.

**2. Purge from First Washer Loop**

To control the concentration of dissolved solids in the process water, a certain portion of the recycled water must be continuously purged from the system. Approximately 845 gpm, or 1.2 mgd will be purged from the first washer loop (No. 1 Process Clarifier). This source will contain approximately 25,000 lb/day BOD and 5500 lb/day TSS.

The Secondary fiber plant will employ 50 additional employees and will be operated 24 hours a day, 7 days a week. The sanitary sewage generated will be combined with that from the existing paper mill and sent to Pope & Talbot for treatment in their existing package plant. This treatment plant has sufficient capacity to handle the additional load.

**E. Wastewater Treatment Facilities**

Process effluent from the proposed mill will be treated biologically through secondary treatment to reduce the organic loads and suspended solids. Treated effluent will then be discharged to the Pope & Talbot effluent line prior to ultimate disposal to the Willamette River. The diffuser outfall is located near river mile 147 of the Willamette River, approximately six miles west of Halsey, Oregon.



The proposed wastewater treatment system is a high rate activated sludge plant. Primary clarification to remove suspended solids will be accomplished within the process in dissolved air flotation clarifiers. Sanitary sewage will continue to be treated by Pope & Talbot's treatment system, located adjacent to the site.

Clarified effluent will flow by gravity to the inlet of the 6.5 million gallon aeration tank. This will allow 45 hours of detention time at the design effluent flow rate of 3.5 MGD.

To conserve space and to eliminate the need for effluent lift pumps, the aeration tank and secondary clarifier are designed to be concentric (tank within a tank). The overall diameter of the tank system is 280 feet. Aeration of the effluent will be achieved with mechanical surface aerators such that a residual dissolved oxygen concentration greater than zero is maintained in the effluent. Biological solids will be separated from the treated effluent in a 130 ft diameter secondary clarifier and recycled back to the inlet of the aeration tank. A portion of these solids will be wasted in order to maintain an appropriate sludge age.

The final effluent from the secondary wastewater treatment system will join with the treated effluent from Pope & Talbot's aerated stabilization basin in an existing common pipeline. The combined effluent will flow by gravity approximately four miles to river mile 148 of the Willamette River. An existing diffuser will discharge the effluents below the water surface.

#### **F. Stormwater Management**

Stormwater falling on the 20 acre site will be managed to minimize the potential for contamination of that portion being discharged to the receiving stream. Seventy-five percent of the site will initially be covered with an impervious surface. The design of the stormwater collection system is to handle flow from a completely paved site.

The process building roof drain, and paved areas around the unloading stations, solid waste transfer area and chemical storage will be graded towards the process u-drain. The chemical storage areas include secondary containment that is designed to contain 110% of the volume of the largest container.

The dewatered sludge is conveyed from the presses to a paved slab prior to being loaded on trucks for transfer off-site. This paved area is large enough to accommodate a front end loader and a truck and is graded toward a process sump.

The remaining areas not associated with industrial activity will be graded away from the process area. Stormwater falling on these areas will be collected separately and discharged to the main drainage ditch. This drainage ditch flows east to Muddy Creek.

The existing Spill Prevention Control and Countermeasure (SPCC) Plan for the Paper mill will be revised to include all processes and chemical storage areas associated with the secondary fiber facility. This plan includes information on the location, type and amount of all hazardous materials stored at the site, preventative measures, and emergency response procedures. Training of all employees on the elements of the plan will be conducted prior to startup.

The Department will issue a separate stormwater permit for this facility which is separate from the wastewater discharge permit.

**G. Solid Waste Management Plan**

The quantity of solid waste generated is dependant upon the wastepaper grades used and their associated yield. Based on the anticipated grade mix, the estimated yield of the Halsey process is 65%. This equates to a solid waste generation rate of 175 dry tons per day from four main process areas: unloading and sorting; coarse and fine cleaning and screening; process water clarification (primary sludge); and secondary wastewater treatment (secondary or biological sludge).

Rejects from the unloading and sorting areas include baling wire, cardboard, pallets and miscellaneous materials. Where possible, this material will be segregated and recycled.

Rejects from the multiple stage coarse cleaning and screening process includes mostly bits of plastic and metal. This material will be collected in a trash bin and disposed of at an approved off-site landfill. This source constitutes less than 1% (1-2 dry tons per day) of the total solid waste stream from the plant.

The primary sludge consists of solids removed by the dissolved air flotation (DAF) clarifiers, rejects from the flotation cells, and rejects from fine cleaning and screening. Wash water from the double nip washers is clarified in the DAF units to allow its reuse in the process. Polymers are used to coagulate and flocculate the solids (ash, small dispersed ink particles and fiber fines). The flotation cell rejects include larger particles that stayed with the pulp through the washing stages. The solids removed from the clarifiers and the flotation cells are combined in a continuously agitated rejects tank. These areas account for greater than 95% (180 dry tons per day) of the solid waste stream.

Biological (secondary) sludge will be wasted from the wastewater treatment system as necessary (approximately 5-10 tons per day) to achieve the desired sludge age. The combined primary and secondary sludge will be dewatered on belt presses. This material consists mainly of degraded fiber and inorganics (such as clay).

Hazardous characteristic analyses (TCLP) done on a similar material generated from James River's Green Bay facility indicates that the material is non hazardous. Initially, the dewatered material will be disposed of at an approved off-site landfill. Alternatives, including beneficial reuse options and construction of an on-site monofill are under consideration.

#### **H. Construction Schedule**

The Halsey secondary fiber project is scheduled to begin operation in early March, 1992. The site development work for the wastewater treatment system began in March, 1991 with an expected completion by December, 1991.

#### **I. Environmental Impacts During Construction**

All construction activities will be managed to minimize the potential for contamination of stormwater runoff. Temporary ditches will be constructed to direct runoff to a central location. The collected stormwater will flow through a gravel matrix to remove silt, and be pumped through an existing groundwater well into a nearby drainage ditch.

The construction site is located in a relatively remote area. Construction activity will only occur during daylight hours to minimize the impact of noise on the surrounding area. To facilitate project completion in a timely manner, James River will expand to a two-shift operation on December 2, 1991.

#### **IV. STATUS OF OTHER REQUIRED PERMITS/APPROVALS**

The proposed project is located in an area zoned by the Linn County Planning Department for heavy industrial uses. Under the existing county land use plan, the proposed mill expansion is consistent with statewide planning goals. James River has obtained an approved Land Use Compatibility Statement, and has submitted it with the permit application.

There will be no point source emissions from the secondary fiber process. Impacts on current plant site emissions are expected to be negligible. Based on the Department's review of the Notice of Intent to Construct, it is assumed an Air Contaminant Discharge Permit will not be required.

Solid waste will initially be disposed of at Coffin Butte Landfill in Corvallis, Oregon. A solid waste permit is therefore not required.

#### **V. EVALUATION OF THE APPLICATION**

Oregon's water quality regulations are based on water quality standards that may not be exceeded, minimum design criteria for treatment and control of wastes, special policies and guidelines (where applicable), and policies and guidelines generally applicable

statewide. In the sections which follow, the applicant's proposal will be reviewed against each applicable standard and policy.

#### Water Quality Standards Compliance Evaluation

OAR 340-41-445 lists the specific water quality standards applicable to the Willamette Basin, including the reach of the Willamette River in the vicinity of the applicant's proposed project.

In the sections which follow, the applicant's proposed project will be reviewed against each of the standards in OAR 340-41-445 that are applicable to the Willamette River in the project vicinity. The general format for this review will be:

1. The applicable standard will be quoted.
2. The interpretation or application of the standard will be discussed when appropriate.
3. The existing water quality and any unique influencing factors relative to the specific standard will be discussed.
4. The applicant's claims regarding the project's water quality impacts on the standard will be summarized.
5. The Department's evaluation of the project impact relevant to the specific standard will be presented. This discussion will focus on receiving water quality.

#### A. Dissolved Oxygen -- OAR 340-41-445(2)(a)(A-D)

##### 1. Applicable Standard

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

##### (a) Dissolved oxygen (DO)

- (A) Multnomah Channel and main stem Willamette River from mouth to the Willamette Falls at Oregon City, river mile 26.6: The DO concentrations shall not be less than 5 mg/l.
- (B) Main stem Willamette River from the Willamette Falls to Newberg, river mile 50: The DO concentrations shall not be less than 6 mg/l.
- (C) Main stem Willamette River from Newberg to Salem, river mile 85: The DO concentrations shall not be less than 7 mg/l.
- (D) Main stem Willamette River from Salem to confluence of Coast and Middle Forks, river mile 187: The DO

concentrations shall not be less than 90% of saturation.

## **2. Application of Standard**

Dissolved oxygen is essential for maintaining aquatic life. Historically, the depletion of dissolved oxygen was one of the most frequent water pollution problems. Its effect on aquatic organisms, especially at low concentrations, has been studied extensively. Sensitivity to low dissolved oxygen concentrations differs between species, between various life stages (egg, larvae, and adults), and between different life processes (feeding, growth, reproduction, and migration).

Oregon's current dissolved oxygen (DO) standard for the Willamette River was adopted in 1967 by the Oregon State Sanitary Authority (now the Environmental Quality Commission). In early 1977, the standard was recodified into its current form.

The dissolved oxygen (DO) standard was initially set on the basis of information provided by the Oregon Department of Fish and Wildlife (ODFW) and the then US Federal Water Pollution Control Administration (FWPCA). ODFW recommended 95% of saturation to accommodate salmonid fish spawning and rearing of juveniles in the mainstream of the Willamette River upstream from Salem. FWPCA recommended full saturation as being ideal for salmonid spawning, but set a lower limit of 7.0 mg/l, which amounted to about 75% of saturation under summer ambient conditions. The Sanitary Authority noted that the existing minimum daytime DO saturation in July, August, and September for that river zone ranged from 87 to 91%. Thus, they adopted 90% of saturation as the standard.

## **3. Current Conditions**

Water quality data for dissolved oxygen (DO) in the Willamette River is available from the Department river monitoring programs. Other data, including temperature, BOD, and the concentration of various nutrients and other dissolved minerals are also available from the regular river monitoring activities, and these monitoring parameters are available from the STORET database.

Daily DO saturation levels at Harrisburg during the summer months range from a night minimum of 75% to an afternoon maximum of 122%. Fall, winter, and early spring levels have ranged from 92 to 102% of saturation over the past years.

On those occasions when a DO level less than 90% of saturation is observed, it is without exception a very early morning sample. More detailed analysis of the data reveals a

strong diurnal effect at Harrisburg and Corvallis. This probably results from diurnal variations in algal respiration and photosynthesis. The time-averaged DO levels for these stations is well above 90% of saturation.

#### 4. Applicant's Claim

James River is proposing to install primary and secondary wastewater treatment facilities to treat the proposed de-ink plant effluent. The applicant predicts no substantial difference between summertime and wintertime BOD raw-waste loadings to the wastewater treatment plant, and believes the proposed project will not significantly alter the existing dissolved oxygen regime in the river.

The applicant has used simulation modeling to determine dissolved oxygen conditions that are most likely to result in the river at various flow and discharge conditions. Computer predictions of Willamette River water quality were made using the stream water quality model QUAL2E. This model is used to study the impact of waste loads on instream water quality. The Willamette River was modelled from the confluence of the Coast and Middle Forks at river mile 187 to just above Oregon City, at river mile 28.

Model predictions were calibrated against actual river flows, effluent loadings, and tested water quality parameters for August 8, 1986. Predicted dissolved oxygen levels compared very well with actual river conditions from Springfield to Salem.

The maximum allowable permitted BOD loadings for the other municipal and industrial sites that discharge to the river were used for simulation modelling. The results of the modelling show that the projected increase in BOD load from the combined James River/Pope & Talbot outfall would have a negligible effect on dissolved oxygen in the river. The predicted James River discharge was tested for the Willamette River and its tributaries flowing at the 7Q10 and at the median flow levels.

Computer predictions are presented in a separate report submitted to the Department, entitled "Impacts of Secondary Fiber Plant Effluent Discharge on the Willamette River: Water Quality Modelling Predictions" dated February, 1991.

The effluent from the combined James River/Pope & Talbot outfall was estimated to be composed of 3.5 mgd James River effluent and 11.34 mgd Pope & Talbot effluent. With Pope & Talbot discharging at its summertime permit limit of 2,500 lb/day and James River discharging at the EPA NSPS (New

Source Performance Standard) rate of 3,120 lb/day, the BOD loading of the combined outfall represents 5,620 lb/day, or, with a total flow rate of 14.84 mgd, a BOD concentration of 45.4 mg/l.

## 5. Evaluation

The Department performed its own analysis of the effect on DO of various BOD discharges from James River to determine the maximum BOD5 discharge that would not reduce DO in the river by more than 0.1 mg/l. The Department determined, considering the error in the analysis, that a discharge of between 2800 and 3500 lb/day of BOD5 at the 7Q10 river flow rate would result in a reduction of DO of 0.1 mg/l or less as far downstream as Willamette Falls (See Appendix B).

The computer model cannot predict the effect on the river below Willamette Falls, although the Department assumes there will be a corresponding decrease in DO in the lower river, also.

James River also submitted a second analysis ("Impacts of Secondary Fiber Plant Effluent Discharge on the Willamette River: Water Quality Modelling Predictions" dated October, 1991). Their conclusion was that 3800 lb/d of BOD5 would reduce the river DO by no more than 0.1 mg/l.

## B. Temperature -- OAR 340-41-445(2)(b)(A) and (B)

### 1. Applicable Standard

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

#### (b) Temperature

- (A) Multnomah Channel and the main stem Willamette River from mouth to Newberg, river mile 50: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 70°F or greater; or more than 0.5°F increase due to a single source discharge when receiving water temperatures are 69.5°F or less; or more than 2°F increase due to all sources combined when stream temperatures are 68°F or less, except for specifically limited duration activities which may be authorized by The Department under such conditions as The Department and the Department of

Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

- (B) Willamette River from Newberg to confluence of Coast and Middle Forks, river mile 187: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 64°F or greater; or more than 0.5°F increase due to a single source discharge when receiving water temperatures are 63.5°F or less; or more than 2°F increase due to all sources combined when stream temperatures are 62°F or less, except for specifically limited duration activities which may be authorized by The Department under such conditions as The Department and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

## **2. Application of Standards**

Oregon's water temperature standard for the Willamette River, between Newberg and the confluence of the Coast and Middle Forks, was initially established by the Sanitary Authority (forerunner to the Department) in 1967. On the basis of information provided by the Oregon Game Commission (now ODFW) and the Federal Water Pollution Control Administration (now EPA), an upper cut-off limit of 64°F (18°C) for man-caused temperature increase was adopted to protect the spawning and rearing of anadromous fishes. In addition, no more than 2°F cumulative increase from all man-caused sources would be allowed when river water temperatures are less than 62°F (17°C). This basic standard was reaffirmed and continued in effect by an act of the Environmental Quality Commission in 1977.



The rationale for setting the Willamette River water temperature standard in 1967 reads as follows: "An upper temperature limit must be set for the benefit of anadromous fishes; they show definite sign of physiological insult at temperatures above 68°F (20°C). The prime aim in setting temperature standards is to keep water temperatures as low as possible and to maintain the normal seasonal variation to accommodate fish, and still allow for other reasonable water uses."

As temperatures increase above the optimal range, spawning and egg development become rapidly impaired, thus limiting reproduction. With increasing temperature, salmonid fish species experience sublethal effects of impaired feeding, decreased growth rates, reduced resistance to disease and parasites, increased sensitivity to toxics, intolerance with migration, reduced ability to compete with more temperature resistant species, and increased vulnerability to predation. If temperatures are high enough for sustained periods, mortality occurs. In addition, other water quality parameters (such as dissolved oxygen) may also be adversely affected by elevated temperatures.

The Department has traditionally applied the temperature standard to activities which cause a change in temperature as well as to discharges which cause a change in temperature. The intent is to protect the fishery values that the standard was adopted to protect. Thus, if natural temperatures are above 64°F, a point source discharge will not be approved if it will cause a measurable increase in temperature outside of a limited size "mixing zone" which is established in the waste discharge permit for the source. The mixing zone size and shape is established to assure that beneficial uses are not impaired, including fishery uses.

Another consideration in applying the existing temperature standard is a determination of what is measurable in terms of a temperature increase. The wording of the standard itself implies that something less than 0.5°F is measurable. Since temperature in water naturally varies due to influence of sunlight and air temperatures, effective measurement of temperature changes in the stream can be difficult. Evaluation of temperature impacts of proposed discharges or activities generally is done using a variety of modeling techniques. In interpreting model results, The Department has typically assumed that a calculated temperature increase of less than 0.25°F would not be measurable in the stream.

A final aspect of importance in applying the temperature standard is the relationship with OAR 340-41-445(3) which reads "Where the natural quality parameters of waters of the Willamette basin are outside the numerical limits of the above assigned water quality standards, the natural quality

shall be the standard." The temperature standard is written to recognize the potential for natural temperatures to exceed noted numerical limits and in fact established a "no measurable increase" standard in those cases.

### **3. Current Conditions**

Water temperatures in the Willamette River, as with most other natural river systems, are influenced by local meteorological conditions. However, the Willamette River is also highly influenced in summer months by the regulated flows from many upstream reservoirs. For instance, the Willamette River flow at Albany is regulated by twelve upstream dams. River temperatures vary on a diurnal basis, i.e. according to the time of day, in addition to varying on a seasonal basis.

### **4. Applicant's Claim**

The temperature of treated process wastewater from the proposed James River secondary fiber mill is expected to be approximately 96°F in the summertime and 93°F in the winter. Maximum temperatures of the effluent subsequent to secondary treatment and prior to mixing with the Pope & Talbot effluent are predicted to be no higher than 98°F at anytime. Upon merging the James River effluent with the Pope & Talbot effluent, the temperature of the combined effluent will be much lower than this anticipated maximum.

Pope & Talbot's lowest wintertime effluent temperatures are about 18°C, or 64°F, while the typical summertime temperatures can be as high as 29°C, or 84°F. Given a James River effluent flow rate of 3.5 mgd and a Pope & Talbot effluent flow rate of 11.34 mgd, the expected temperatures of the mixed effluent will be about 87°F in the summertime and 72°F in the wintertime.

Computer predictions of summertime river temperature were simulated with QUAL2E. The effluent from the combined outfall was assumed to have a temperature of 88°F. At the low river flow of the 7Q10, the combined effluent was estimated to raise the average river temperature no more than 0.2°F.

### **5. Evaluation**

The Department concurs with the findings from the computer simulations. The small increase of the river temperature, (approximately 0.2°F) at the extreme low flow conditions would not cause any significant stress to the aquatic species in the Willamette River.

C. Turbidity -- OAR 340-41-445 (2) (c)

1. Applicable Standard

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(c) Turbidity (Nephelometric Turbidity Units, NTU):

No more than a 10% cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

- (A) Emergency Activities: Approval coordinated by The Department with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare.
- (B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85 to 100 et. seq. (Removal and Fill Permits, Division of State Lands), with limitations; and conditions governing the activity set forth in the permit or certificate.

2. Application of Standard

Turbidity in water results from particulate matter being held in suspension. The standard is designed to minimize the addition of soil particles or any other suspended substances that would cause significant increases in the river's normal, seasonal turbidity pattern; i.e. do not make the river "muddy".

Particulate matter can be described as suspended and settleable solids of organic and inorganic nature. Particulate matter can cause adverse effects when suspended

in the water column or when deposited on the substrate. Some of the common measurements of particulate matter are turbidity, suspended solids, settleable solids, and percent accumulated fines.

Turbidity can be described as the measurement of the optical property which causes light to be scattered and absorbed.

Suspended solids can be defined as the portion of the total solids which are retained by a filter. Total solids can be defined as the amount of residue left following evaporation and subsequent drying in an oven. Total solids are the combination of suspended solids and dissolved solids found in a water sample. Particulate matter would affect the concentration of suspended solids.

There is not a direct correlation between turbidity and suspended solids. Turbidity measures the light scattering capabilities of a sample while suspended solids is a measure of the solids content. Size, shape, and refractive characteristics effect the light scattering characteristics which can not be directly converted to a weight measurement.

Turbidity of 25 to 70 NTUs would impair salmonid sight feeding and reduces growth. Fish exposed to 25 NTUs for 5 to 7 days exhibited effects on gill tissue. Levels of 50 NTUs caused displacement of salmonid juveniles (Harvey, 1989).

Suspended solids can cause adverse effects to aquatic life. Cutthroat trout cease feeding at suspended solids concentrations of 35 ppm (Bachmann, 1958 cited in Peterson, 1985). Rainbow trout exhibited effects at the following suspended solids concentrations (EIFAC, 1965 cited in Peterson, 1985):

50 ppm	Reduced growth
90 ppm	20% mortality in 2 to 6 months
100 to 270 ppm	Fin rot
200 ppm	50% mortality in 16 weeks
1000 to 2500 ppm	100% mortality in 20 days

Suspended solids should not have an adverse effect on fisheries when concentrations are less than 25 mg/l. Good to moderate fisheries should be possible to maintain (with somewhat lower yields as compared to the previous category) at suspended solids concentrations of 25 to 80 mg/l. Waters with suspended solids of 80 to 400 mg/l are unlikely to support good fisheries with poor fisheries likely to be found in waters with suspended solids greater than 400 mg/l (EIFAC, 1965 cited in Garton, 1979).

### 3. Current Conditions

The Willamette River has several sources of turbidity-causing substances before it reaches the Halsey mill outfall at river mile 148. Suspended fragments of aquatic vegetation and algae are the major sources through much of the year. During seasonal periods of heavy snow melt or rainfall there are surges of eroded soil and associated plant matter entering the river. The turbidity of the Willamette River can vary significantly with season. Except for major storm events, the Willamette River at Harrisburg generally measures less than 10 turbidity units.

Another measure of turbidity includes the suspended solids level carried by the river. Ambient monitoring has shown TSS levels to generally be between 40 and 80 mg/l along the upper stretch of the Willamette River.

### 4. Applicant's Claim

Turbidity in water is normally caused by suspended materials or other matter normally referred as suspended solids. Since the mill site is about three miles from the river, turbidity impacts on the river as a result of construction activities are not expected.

Effluent turbidity levels for de-ink facilities are not well known or documented. In fact, turbidity is not a commonly tested parameter in wastewaters. One recent test of de-ink mill effluent turbidity provided a value of 105 NTU. Because this value represents only one test of the effluent from a mill on the East Coast, it is not clear that this number is valid for rigorous predictions of receiving water quality. This claim will instead focus on the more widely known and documented parameter, Total Suspended Solids (TSS).

With operation of the de-ink facility and accompanying tissue mill and wastewater treatment facilities, an increase in the total solid load or TSS in the combined effluent is expected.

Based on a Pope & Talbot effluent flow of 11.34 mgd at a permitted solids loading of 7,000 lb/day, and a James River effluent flow of 3.5 mgd at a EPA NSPS solids loading of 4,080 lb/day, the maximum TSS levels from each source would be 74 mg/l and 140 mg/l respectfully. The maximum TSS levels in the combined effluent would therefore be expected to be about 90 mg/l.

Background summertime levels of TSS in the Willamette River at Harrisburg are typically in the range of 5 to 10 mg/l. If both mills were discharging at the levels cited above during the 7Q10 flow (3,190 cfs), the combined effluent (at 23 cfs

and 90 mg/l) would be expected to raise the Willamette River TSS levels from a background level of 5 ppm to a value of 5.6 ppm downstream of the mills. This small increase in TSS levels is not expected to be noticeable. Although this increase in TSS is slightly higher than 10% of background, TSS may not be directly related to turbidity. This evaluation represents worst case conditions (extreme low flow and both mills discharging at the levels cited above). The actual TSS increase will be well below 10 percent most of the time.

## 5. Evaluation

STORET data indicate that the up- and downstream TSS levels in the Willamette River are typically 1 to 5 ppm for Harrisburg and 1 to 10 ppm for Corvallis. The estimated downstream TSS concentration in the river will still be from 5 to 10 mg/l or background levels. The proposed project should not cause a significant increase of TSS in the Willamette River.

## D. pH (Hydrogen Ion Concentration) -- OAR 340-41-445(2)(d)

### 1. Applicable Standard

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the water of the Willamette River Basin:

#### (d) pH (hydrogen ion concentration)

pH values shall not fall outside the following ranges:

(A) Columbia River: 7.0 to 8.5.

(B) All other basin waters: 6.5 to 8.5.

### 2. Application of Standard

pH values relate to the balance of acid and alkaline substances in the water. The theoretical range is from 1 (very acid) to 14 (very alkaline). Most streams in Oregon have pH values falling somewhere between 6.5 and 8.5. There may be seasonal fluctuations in the pH value due to substances entering the water from land or biochemical activity in the water. Since the fish and other aquatic life in any stream have evolved under rather specific pH conditions, it is important to set a pH standard that

reflects natural conditions and will prevent any intolerable acid/alkalinity imbalances. The Willamette River pH standard has been set at a range of 6.5 to 8.5 to coincide with the natural observed conditions.

**3. Current Conditions**

The Willamette River in the location of the combined effluent outfall is generally alkaline in nature with seasonal pH values between 6.5 and 8.2. Background pH values in the Willamette River are determined by the natural conditions of soils and upstream reservoir conditions, in addition to the effects of upstream permitted municipal dischargers to the river.

**4. Applicant's Claim**

Typical pH values of other de-ink mill wastewaters average about 8.0. The applicant contends that the addition of the tissue mill effluent from the Halsey facility will not have a major effect on existing pH values in the Willamette River.

**5. Evaluation**

The treated effluent is expected to have a pH of approximately 8.0, which is within the basin water quality standard range of 6.5 to 8.5. The projected effluent should not cause any violations to this particular water quality standard in the upper Willamette River.

**E. Coliform Bacteria -- OAR 340-41-445 (2)(e)**

**1. Applicable Standard**

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(e) Bacteria of the coliform group associated with fecal sources and bacteria of the enterococci group (MPN or equivalent membrane filtration using a representative number of samples) shall not exceed the criteria values described in paragraph (2)(e)(A) of this rule:

(A) Freshwaters: A geometric mean of 33 enterococci per 100 milliliters based on no fewer than five samples, representative of seasonal conditions, collected over a period of at least 30 days. No single sample should exceed 61 enterococci per 100 ml:

**2. Application of Standard**

This is a stream standard of public health significance which takes into account the cumulative impacts of all coliform bacteria discharges; however, its major emphasis is on the control of human fecal coliform bacteria sources.

**3. Current Conditions**

Waters of the Willamette River in the combined outfall area currently comply with the coliform bacteria standard, although the Department has listed the stream segment from River Mile 109 to River Mile 150 in its 1990 "305b Report" (1990 Water Quality Status Assessment Report, DEQ) as partially impaired for water contact, due to bacteria.

Pope & Talbot owns and operates a small sanitary wastewater treatment plant to handle domestic wastes from both the Pope & Talbot pulp mill and the James River paper mill. Sanitary waste proceeds through an activated sludge treatment system with chlorination, and then flows with the Pope & Talbot process wastewater through the aerated stabilization basins. The current flow of sanitary wastewater at the mill is approximately 0.03 mgd, or 30,000 gpd.

**4. Applicant's Claim**

Pope & Talbot has agreed to continue to handle the sanitary wastewater treatment activities for the two combined mills. James River expects to add approximately 50 employees to operate the new mill.

Typical sanitary wastewater flows are estimated to be 15 to 35 gallons per person per shift. For the purposes of this report, a generous allowance of 50 gpd/person will be used to estimate increased flows. The 50 additional personnel can be expected to add about 2,500 gallons per day to the sanitary treatment plant. This represents an increase of less than 10% with respect to current conditions. Because sanitary wastewater flow from the additional personnel required for plant operation after the mill construction is not significant, there are no plans to expand or upgrade the current sanitary wastewater treatment system.

The applicant contends that the proposed James River de-ink and tissue mill will have no effect on the number or level of coliform bacteria discharged to the Willamette River. Violations of the coliform standard have occurred only rarely in the past, and the proposed new de-ink mill is not expected to have an impact on this parameter.



**5. Evaluation**

The existing sanitary waste treatment plant has been operating satisfactorily in past years and is capable of treating the small increase in flow and loading from the expected additional personnel. Currently, the treated sanitary wastewater is chlorinated prior to discharging into the aerated stabilization basins. With proper chlorination, the operation of the new mill should meet the standard.

**F. Bacterial Pollution -- OAR 340-41-445 (2)(f)**

**1. Applicable Standard**

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(f) Bacterial pollution or other conditions deleterious to waters used for domestic purposes, livestock watering, irrigation, bathing, or shellfish propagation or otherwise injurious to public health shall not be allowed;

**2. Application of Standard**

This standard is designed to allow the regulation of bacteria sources other than coliform organisms that may be a public health hazard.

**3. Current Conditions**

There are currently no known sources of bacterial pollution in the project zone of the river that would be subject to regulation under this standard.

**4. Applicant's Claim**

See discussion under "Coliform Bacteria Standard".

**5. Evaluation**

See discussion under "Coliform Bacteria Standard".

**G. Liberation of Dissolved Gases -- OAR 340-41-445 (2)(g)**

**1. Applicable Standard**

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(g) The liberation of dissolved gases, such as carbon dioxide, hydrogen sulfide, or other gases, in sufficient quantities to cause objectionable odors or to be deleterious to fish or other aquatic life, navigation, recreation, or other reasonable uses made of such waters shall not be allowed.

**2. Application of Standard**

This rule refers to noxious gases that sometimes result from putrescible substances in the water. Such substances may be from discharged wastes or they may be from accumulations of naturally occurring organic debris settled in stream bottoms. Such gases have two primary adverse properties when in excess concentrations: 1) some can be directly toxic to aquatic life, and 2) others consume dissolved oxygen which may lead to indirect mortalities. Also, some decomposition gases have disagreeable odors, especially hydrogen sulfide.

**3. Current Conditions**

There are currently no apparent sites in the project zone where noxious gases are being liberated in quantities harmful to aquatic life.

**4. Applicant's Claim**

The applicant contends that current conditions will not change with respect to noxious gases with the addition of the James River secondary fiber mill.

**5. Evaluation**

The Department concurs with the applicant's claim that the mill expansion will not alter the current conditions.

H. Development of Fungi -- OAR 340-41-445 (2)(h)

1. **Applicable Standard**

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

- (h) The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation, or industry shall not be allowed;

2. **Application of Standard**

The discharge of certain nutrient-laden wastes may stimulate deleterious growths of fungi, bacterial slime, sulfur bacteria, stalked diatoms, or nuisance levels of algae in receiving streams. The standard was developed to allow preventive regulation of discharges and activities that result in objectionable or deleterious growths.

3. **Current Conditions**

The waters of the upper Willamette Basin are naturally enriched. Algae, rushes, and other aquatic vegetation are released from upstream reservoirs. Irrigation drainage water likely adds to the river's natural nutrient supplies. There are municipal waste discharges that could promote apparent bacterial slime or fungi growths in the river. The Willamette River does not support a sizeable algae population in suspension, perhaps because it flows too rapidly to allow any local increase of growth.

4. **Applicant's Claim**

The applicant contends that the Willamette River has such a short hydraulic retention time that it will not support significant algae production. The applicant does not propose to discharge any substances from the project site that would cause fungi or deleterious growths in the stream. Previous studies by the Department and the USGS have shown the nutrient levels in the Willamette River are not limiting the nuisance growths. The apparent limiting factor for algal growth is detention time in the river systems.

## 5. Evaluation

Process effluents from pulp and paper operations are normally deficient in the nutrients nitrogen and phosphorous. In fact, in order to promote and sustain biological activities in the new secondary wastewater treatment system, both nitrogen and phosphorous must be added to the effluent before entering the activated sludge system.

The Department has previously conducted several river surveys around the existing Pope & Talbot mill outfall area. Visual inspections for algal growth along the river banks were conducted. No algal growth was observed in these inspections. Based on the lack of nutrients in the treated effluent and the velocity of the willamette River (approximately 185 ft/min. at low flow), the Department concurs that the new mill should not cause any significant increases of fungi in the receiving stream.

### I. Creation of Tastes or Odors -- OAR 340-41-445 (2)(i)

#### 1. Applicable Standard

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette Basin:

- (i) The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shell fish shall not be allowed.

#### 2. Application of Standard

This standard is self-explanatory in its purpose to prohibit the discharge of substances or creation of conditions that would be toxic to aquatic life, or impart unnatural tastes and odors to water or fish flesh.

#### 3. Current Conditions

During summer months, the City of Corvallis takes its municipal water supply from the Willamette River. The City water intake is downstream from wood pulp mills at both Springfield and Halsey. Also upstream from the intake are major sewage treatment plants at Springfield, Eugene, and Harrisburg. The City provides conventional chemical treatment (alum and chlorine) for all river water to remove suspended solids, color and bacteria. In recent years, there have been some complaints of water taste and odor during the summer months.

#### 4. Applicant's Claim

There is no evidence from the operation of similar mills that the proposed secondary fiber de-ink mill at Halsey will impart tastes or odors to water or aquatic life. Taste and odor problems in surface water drinking supplies generally occur in summer months. During this season, the growth of blue-green algal species is generally significant in streams and surface impoundments.

Previously, there was some concern that organic carbon loadings to the river upstream of Corvallis were contributing to a problem with respect to tri-halomethanes (THMs) and taste and odor in the City of Corvallis' drinking water. It has since been determined that the summertime blue-green algae bloom is responsible for much of the taste and odor problems observed by Corvallis residents in recent years.

Conventional drinking water treatment, which typically involves pre-chlorinating the water prior to treatment, is now known to foster the formation of THM's. The City of Corvallis' drinking water treatment plant has the capability of reducing THM formation by removing the taste and odor precursors prior to the chlorination step. It will be necessary for Corvallis to adjust operation of the treatment plant regardless of whether additional BOD loadings occur upstream.

Other compounds known to cause taste and odor include phenols. However, estimated phenol content of the de-ink mill wastewater is less than 0.1 ppm, which, for the proposed mill, would amount to about 3 lbs/day. This small phenol load is not expected to have an impact on the taste and odor of either water or fish.

#### 5. Evaluation

The City of Corvallis is a major user of the river for drinking water supply during summer months. A study of Corvallis' drinking water treatment requirements jointly sponsored by City of Corvallis and Pope & Talbot was conducted in 1989 by Brown and Caldwell, Study of Drinking Water Treatment Requirements, July, 1989. Brown and Caldwell recommended that a further study be done to develop additional mill effluent and river water quality data to test the assumptions of the Brown and Caldwell report. A second study was undertaken to further assess the problem of taste and odor (Willamette River Monitoring and Water Treatability Study for Pope & Talbot, Inc. and the City of Corvallis, CH2M Hill, July 1990). The CH2M Hill study concluded that, during the period studied, Pope & Talbot's effluent did not significantly influence concentrations of TDS (total

dissolved solids), COD (chemical oxygen demand), TOC (total organic carbon), phenol, zinc, chlorophyll-a, or TTHM (total trihalomethanes). The study further concluded that there is no immediate need for modifications of the Corvallis plant to meet the current requirements of the SDWAA (Safe Drinking Water Act Amendments) rules to cope with present river water quality.

The report suggested interim water treatment plant modifications to address "normal" and extreme earthy-musty taste and odor problems, help reduce trace organics, and help meet anticipated future SDWAA requirements, especially revised TTHM standards.

The proposed secondary fiber de-ink mill effluent is not expected to have an adverse impact on the quality of the City of Corvallis' intake water. Because the de-ink plant will be processing waste paper rather than raw wood and will not be using chlorine or chlorine compounds as a bleaching agent, there should be no discharge of chlorinated compounds such as THM and the color will be much lower than the Pope & Talbot kraft mill effluent.

**J. Bottom or Sludge Deposits -- OAR 340-41-445 (2)(j)**

**1. Applicable Standard**

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette Basin:

(j) The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry shall not be allowed.

**2. Application of Standard**

Bottom or sludge deposits may have several adverse impacts: (1) toxicity, (2) blanketing and smothering bottom dwelling aquatic life, (3) decimation of fish food organisms, and/or, (4) hindering the percolation of oxygen bearing water to buried fish eggs.

**3. Current Conditions**

In the free flowing river zone, where the combined mill effluent outfall is located, the channel is steep and the currents are rapid. Sediments do not accumulate in any appreciable amounts.

**4. Applicant's Claim**

The applicant contends that the proposed secondary fiber de-ink mill construction and operation will not cause any increases in bottom or sludge deposits in the Willamette River. The Willamette River moves swiftly in this area of the river basin, and the anticipated increase in solids loadings is not expected to be significant.

**5. Evaluation**

Bottom or sludge deposition in a stream bed is normally associated with high solids loading from an outfall discharge and the quiescent state of the receiving stream. The Willamette River maintains a good velocity near the outfall area of approximately 185 ft/min, even at low flow. It is very unlikely that there will be significant deposition of bottom sludge in the combined outfall area. Therefore, the Department concurs with the applicant's claim.

**K. Discoloration, Scum, Oily Sleek -- OAR 340-41-445- (2)(k)**

**1. Applicable Standard**

340-41-445 (2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(k) Objectionable discoloration, scum, oily sleek or floating solids, or coating of aquatic life with oil films shall not be allowed.

**2. Application of Standard**

A considerable number of industrial and domestic wastes have one or more of the water polluting properties identified in the standard. Their impact on water quality may range from simple annoyance to humans and aquatic life to outright mortality of fish and aquatic life.

**3. Current Conditions**

Background river water color levels at Harrisburg range from 10 to 20 CU (platinum color units) in the winter, and average about 5 CU in the summer. Color levels at Corvallis and Albany are higher than the Harrisburg levels. Wintertime water color is typically higher due to increased levels of suspended materials brought in by increased surface runoff and water flow.

#### 4. Applicant's Claim

The effluents from secondary fiber de-ink mills are normally slightly grayish in color. The color of de-ink mill effluent is typically 40 to 50 CU, while the effluent from bleached kraft pulping can reach 4000 CU and are visually much darker.

The applicant does not expect that the construction and operation of the secondary fiber de-ink plant will have any impact, positive or negative, on the existing situation. The pulping and bleaching processes associated with kraft mills produce color through the removal of lignin from the wood. The James River Secondary Fiber plant will not process any raw wood to produce pulp, and therefore will generate relatively little of this kind of color. Because color levels will be significantly lower than the Pope & Talbot effluent color levels, the applicant does not expect river color to change from current conditions.

#### 5. Evaluation

Based on the estimated color level of the de-ink mill effluent, which is less than 50 CU, and the relatively small effluent flow rate of 3.5 mgd, the Department concurs with the applicant's claim that the impact of the proposed mill effluent on the Willamette River water color will be negligible.

#### L. Aesthetic Conditions -- OAR 340-41-445(2)(1)

##### 1. Applicable Standard

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other waste or activities will cause violation of the following standards in the waters of the Willamette Basin:

- (1) Aesthetic conditions offensive to the human senses of sight, tastes, smell, or touch shall not be allowed;

##### 2. Application of Standard

Waters of the state should not be made aesthetically offensive to the human senses by the addition of wastes or other adverse manipulation of natural water quality conditions.



**3. Current Conditions**

Presently, the existing Pope & Talbot effluent discharge is noticeable to boaters and other recreational users of the river. The discharge has color and occasionally, odor. The Department has received repeated complaints of offensive color and odor.

**4. Applicant's Claim**

The applicant intends to use the same outfall diffuser as the existing Pope & Talbot discharge. Both wastewater streams will merge at a point subsequent to the Pope & Talbot aerated stabilization basin. The applicant predicts that the impact of the James River effluent will be negligible with respect to aesthetic conditions on the Willamette River.

**5. Evaluation**

The Department required Pope & Talbot to study the effect of its discharge on the river by comparing conditions above and below the discharge point. Their study (Biological Sampling of Aquatic Organisms in the Willamette River Above and Below the Pope & Talbot, Inc. Bleached Kraft Pulp & Paper Plant, Halsey, Oregon, December, 1988) concluded that there were small, if any, significant changes below the discharge. Because the James River discharge will be smaller and much less colored than the Pope & Talbot discharge, the Department does not expect that the James River discharge will significantly change the existing conditions.

**M. Radioisotopes -- OAR 340-41-445(2)(m)**

**1. Applicable Standard**

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette Basin:

- (1) Radioisotope concentrations shall not exceed maximum permissible concentrations (MPC's) in drinking water, edible fishes or shellfishes, wildlife, irrigated crops, livestock and dairy products, or pose an external radiation hazard.

**2. Application of Standard**

Radioisotopes, in general, are harmful to biological life. The purpose of the standard is to limit their concentration in waters of the state to levels deemed reasonably safe by national and international authorities.

**3. Current Conditions**

Radioisotope concentrations in the river water are at natural background levels both above and below the present discharge point.

**4. Applicant's Claims**

The applicant does not propose to discharge any radioactive substances from the project site. The construction materials and operating equipment are likely to contain natural background levels of radioactive materials.

**5. Evaluation**

The proposed de-ink mill will not add or utilize any radioactive substances in the manufacturing processes. Therefore, it is not likely that process effluents would have higher levels of radioactivity than background levels in the receiving stream.

**N. Total Dissolved Gas -- OAR 340-41-445(2)(n)**

**1. Applicable Standard**

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette Basin:

- (n) The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed 110% of saturation, except when stream flow exceeds the 10-year, 7-day average flood. However, for hatchery receiving waters and waters of less than 2 feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

**2. Application of Standard**

The supersaturation of atmospheric gases in water, especially nitrogen, may cause either crippling or lethal gas bubbles to form in the tissues of fish. The standard, based on scientifically derived evidence, is designed to prohibit discharges or activities that will result in atmospheric gases reaching known harmful concentrations.

**3. Current Condition**

There is no evidence of atmospheric gas supersaturation in the Willamette River near the existing effluent outfall.

**4. Applicant's Claim**

Gas supersaturation cannot logically be expected to occur as a result of the construction and operation of the de-ink plant. The applicant contends that this standard will not be violated as a result of the James River de-ink mill at Halsey.

**5. Evaluation**

Because the proposed primary and secondary wastewater treatment systems will be open to atmospheric pressure, any supersaturated effluent, if there were any, should be de-aerated prior to discharge into the Willamette River. Therefore, DEQ concurs with the applicant's claim.

**O. Total Dissolved Solids -- OAR 340-41-445(2)(o)**

**1. Applicable Standard**

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(o) Total Dissolved Solids: Guide concentrations listed below shall not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in OAR 340-41-442:

(A) Columbia River	500 mg/l
(B) Willamette River & Tributaries	100 mg/l

**2. Application of Standard**

Certain dissolved chemicals in water are known to be toxic to aquatic life and antagonistic to higher animals when in drinking water at low concentrations. Maximum allowable concentrations of the known toxic or offensive substances have been incorporated in standards for the protection of both aquatic and human life.

Also impacting water quality are a number of essentially non-toxic substances such as calcium, sodium, phosphorous, iron, etc., that may be either individually or collectively adverse to domestic, industrial, or agricultural uses when in high concentrations.

### **3. Current Conditions**

Data from the past year's monitoring by the Department indicates the average concentration of total dissolved solids (TDS) both upstream (at Harrisburg) and downstream (at Corvallis) of the pulp mill are approximately 40 to 60 ppm.

Normally, TDS concentrations will increase downstream perhaps as a result of increased usage of the river and the additional wastes being discharged from various sources.

In the summer of 1986, the DEQ performed analysis of water samples from 5 locations near the Pope & Talbot diffuser outfall: 1 upstream, 1 at the effluent plume, 3 downstream. Copper, chromium and zinc, which are frequently found in treated pulp and paper mill effluents at low concentrations, were below the level of detection.

Elevated concentrations of sodium and total dissolved solids (TDS) were found in the water outside the mixing zone (50% and 10% above the background respectively). However, these components were found in very low concentrations (7.2 mg/l sodium and 68 mg/l TDS).

### **4. Applicant's Claim**

The applicant has obtained results from one test for total dissolved solids (TDS) concentration in de-ink mill effluent. The result was reported at 1,571 ppm and it is expected that the major source of the dissolved solids is sulfates. Bleached kraft mill effluent is reported to have TDS levels of approximately 2,000 ppm. If the Pope & Talbot effluent contains these levels of TDS, the TDS contribution by the James River de-ink mill is not expected to be significantly different than the existing Pope and Talbot wastewater discharge.

### **5. Evaluation**

Background TDS concentration in the Willamette River is approximately 40 to 60 ppm. Using a simple mass balance and dilution calculation, TDS concentration in the Willamette River downstream from the combined outfall would be 64 ppm assuming a critical low river flow of the 7Q10, or 3,190 cfs.

Because this predicted TDS level is lower than the basin standard of 100 ppm, the Department concurs with the applicant's claim, that the operation of the proposed mill will not have a significant impact on the TDS of the Willamette River.

P. Toxic Substances -- OAR 340-41-445(2)(o)(A)

1. Applicable Standard

340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(A) Toxic Substances

- (A) Toxic substances shall not be introduced above natural background levels in the waters of the state in amounts, concentrations, or combinations which may be harmful, may chemically change to harmful forms in the environment, or may accumulate in sediments or bioaccumulate in aquatic life or wildlife to levels that adversely affect public health, safety, or welfare; aquatic life; or other designated beneficial uses.
- (B) Levels of toxic substances shall not exceed the criteria listed in Table 20 which were based on criteria established by EPA and published in Quality Criteria for Water (1986), unless otherwise noted.
- (C) The criteria in paragraph (B) of this subsection shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the Department on a site specific basis. Where no published EPA criteria exist for a toxic substance, public health advisories and other published scientific literature may be considered and used, if appropriate, to set guidance values;
- (D) Bio-assessment studies such as laboratory bioassays or instream measurements of indigenous biological communities, shall be conducted, as the Department deems necessary, to monitor the toxicity of complex effluents, other suspected discharges or chemical

substances without numeric criteria, to aquatic life. These studies, properly conducted in accordance with standard testing procedures, may be considered as scientifically valid data for the purposes of paragraph (C) of this subsection. If toxicity occurs, the Department shall evaluate and implement measures necessary to reduce toxicity in a case-by-case basis.

**2. Application of Standard**

Toxic substances are sometimes inadvertently produced as unwanted by-products in manufacturing processes. Without specific attention to the toxicity of industrial effluents, these substances may be harming the stream inhabitants, or have other adverse and long-term effects in the environment.

**3. Current Conditions**

Water samples taken from the initial mixing zone and immediate downstream section show no violation of water quality standards. A GC/MS scan of water samples from five locations near the Pope & Talbot diffuser (1 upstream, 1 at the effluent plume, 3 downstream) did not identify any organic priority pollutants above the level of detection or any other organic compounds at the 0.01 mg/l detection limit. Copper, chromium and zinc, which are frequently found in treated pulp and paper mill effluents at low concentrations, were below the level of detection. Elevated concentrations of sodium and total dissolved solids (TDS) were found in the water outside the mixing zone (50% and 10% above the background respectively). However, these components are in very low concentrations (7.2 mg/l sodium and 68 mg/l TDS).

**4. Applicant's Claim**

The effluent discharged to the river may contain trace quantities of some of the compounds listed by the EPA in Quality Criteria for Water (1986). However, none of these substances are expected to be present in quantities that would cause the Willamette River to exceed the standard outside the mixing zone.

The compounds which may be detected will not be formed in the process, they will be removed from the wastepaper as contaminants. The process has been designed to minimize the amount of contaminants being carried into the effluent stream. The conservatively designed high-rate activated sludge treatment system will remove or destroy the potentially hazardous substances that do end up in the process wastewater. The highly treated effluent should easily pass the required acute and chronic toxicity bioassay testing.

The Halsey secondary fiber process will use a non-chlorine bleaching/color stripping process (peroxide/hydrosulfite). Chlorinated organics, including TCDD and TCDF, are not expected to be generated in this process.

**5. Evaluation**

Bioassays conducted on treated effluents from secondary fiber operations have shown a wide range of response from none to significant toxicity (Characterization of Wastes and Emissions From Mills Using Recycled Fiber, NCASI Technical Bulletin No. 613, September, 1991).

Bioassay data from James River's South Glens Falls (New York) de-ink plant indicates that the acute 48-hr LC50 value for Ceriodaphnia and the 96-hr LC50 value for fathead minnow are both greater than 100 percent effluent. The chronic-test NOEC (No Observed Effect Concentration) for Ceriodaphnia dubia was 10 percent effluent and for the fathead minnow was 65 percent effluent.

Low concentrations of cadmium, copper, selenium, thallium and zinc may be discharged, according to data supplied by James River. The low concentrations of these elements, coupled with the dilution available in the river, make it very unlikely that any of the water quality standards would be violated.

**Q. Natural Quality -- OAR 340-41-445 (3)**

**1. Applicable Standard**

340-41-445 (3) Where the natural quality parameters of waters of the Willamette River basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard.

**2. Application of the Standard**

When standards were adopted, Oregon recognized that the natural quality of some waters within the basin may exceed the adopted standards. Limitations on the amount of data for the waters in the basin made it impossible to identify and adopt special standards for each such area. Therefore, language was included to establish natural quality as the standard in such instances.

**3. Current Conditions**

"Natural" water quality conditions for the Willamette River are difficult to define. The Willamette River above Halsey has several flood control and power production reservoirs that are used to control both high and low river flows.

Other mills and cities discharge treated effluents to the river system above the James River/Pope & Talbot discharge point. In addition, extensive timber harvesting and agriculture activities are carried out in the watershed above the plant. The Willamette River is a managed river system and currently "natural" water quality conditions may be hard to define.

**4. Applicant's Claim**

The applicant has agreed to construct and operate the new mill within the limitations of the Department's permits and to meet all applicable water quality standards.

**5. Evaluation**

The Department agrees that natural conditions for a highly used river such as the Willamette River are difficult to quantify. The historical uses of the river have included many pulp, paper and timber-related industries.

**R. Mixing Zones -- OAR 340-41-445 (4)**

**1. Applicable Standard**

340-41-445 (4) Mixing Zones:

- (a) The Department may allow a designated portion of a receiving water to serve as a zone of initial dilution for waste waters and receiving waters to mix thoroughly and this zone will be defined as a mixing zone.
- (b) The Department may suspend all or part of the water quality standards, or set less restrictive standards, in the defined mixing zone, provided that the following conditions are met:
  - (A) The water within the mixing zone shall be free of:
    - (i) Materials in concentrations that will cause acute toxicity to aquatic life as measured by a Department approved bioassay method. Acute toxicity is lethality to aquatic life as measured by a significant difference in lethal concentration between the control and 100 percent effluent in an acute bioassay



test. Lethality in 100 percent effluent may be allowed due to ammonia and chlorine only when it is demonstrated on a case-by-case basis that immediate dilution of the effluent within the mixing zone reduces toxicity below lethal concentrations. The Department may on a case-by-case basis establish a zone of immediate dilutions if appropriate for other parameters.

(ii) Materials that will settle to form objectionable deposits;

(iii) Floating debris, oil, scum, or other materials that cause nuisance conditions;

(iv) Substances in concentrations that produce deleterious amounts of fungal or bacterial growths;

(B) The water outside the boundary of the mixing zone shall:

(i) Be free of materials in concentrations that will cause chronic (sublethal) toxicity. Chronic toxicity is measured as the concentration that causes long-term sublethal effects, such as significantly impaired growth or reproduction in aquatic organisms, during a testing period based on test species life cycle. Procedures and end points will be specified by the Department in waste water discharge permits.

(ii) Meet all other water quality standards under normal annual low flow conditions.

(c) The limits of the mixing zone shall be described in the waste water discharge permit. In determining the location, surface area, and volume of a mixing zone area, the Department may use appropriate mixing zone guidelines to assess the biological, physical, and chemical character of the receiving water, and effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses. Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a waste water discharge to:

(A) Be as small as feasible;

- (B) Avoid overlap with other mixing zones to the extent possible and be less than the total stream width as necessary to allow passage of fish and other aquatic organisms;
  - (C) Minimize adverse effects on the indigenous biological community especially when species are present that warrant special protection for their economic importance, tribal significance, ecological uniqueness, or for other similar reasons as determined by the Department and does not block the free passage of aquatic life;
  - (D) Not threaten public health; and
  - (E) Minimize adverse effects on other designated beneficial uses outside the mixing zone.
- (d) The Department may request the applicant of a permitted discharge for which a mixing zone is required, to submit all information necessary to define a mixing zone, such as:
- (A) Type of operation to be conducted;
  - (B) Characteristics of effluent flow rates and composition;
  - (C) Characteristics of low flows of receiving waters;
  - (D) Description of potential environmental effects; and
  - (E) Proposed design for outfall structures.
- (e) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside the mixing zone boundary.
- (f) The Department may change mixing zone limits or require the relocation of an outfall if it determines that the water quality within the mixing zone adversely affects any existing beneficial uses in the receiving waters.

## **2. Application of the Standard**

A mixing zone at the point of discharge is required to reduce the immediate impact of the permitted discharge of a water flow that is different from the receiving water. By careful outfall design, the size of the mixing zone can be controlled and minimized. Goals listed above are met by magnitude and location of the discharge and by design of the outfall.

**3. Current Conditions**

Pope & Talbot's current discharge permit defines their mixing zone as "...a segment of the Willamette River extending 300 feet downstream from the diffuser and extending beyond each end of the diffuser by 30 feet."

The upper Willamette River is a rapidly moving stream that flows through a series of pools and fast-moving riffles. At low flow, most of the pools are 5 to 10 feet deep and the riffles are 2 to 4 feet deep.

The effluent outfall enters the river in about 15 feet of water. The outfall diffuser is approximately 50 feet long and equipped with a series of discharge ports. Mixing is rapid and visible, due to the existing effluent color. Turbulence in the water resulting from an upstream bend in the river causes a rolling motion in the mixing zone that distributes the effluent both vertically and horizontally. The effluent becomes completely mixed after passing through a "S" shaped curve about one mile downstream.

**4. Applicant's Claim**

The applicant claims that the existing outfall design, although very visible, accomplishes mixing very efficiently and provides the lowest adverse impact on the environment of any other diffuser design.

**5. Evaluation**

The Department concurs that the additional James River discharge will not significantly alter the nature of the existing mixing zone.

**S. Nuisance Phytoplankton Growth -- OAR 340-41-150**

**1. Applicable Rule**

340-41-150 The following values and implementation program shall be applied to lakes, reservoirs, estuaries and streams, except for ponds and reservoir less than 10 acres in surface area, marshes and saline lakes:

(1) The following average Chlorophyll a values shall be used to identify water bodies where phytoplankton may impair the recognized beneficial uses:

(a) Natural lakes which thermally stratify: 0.01 mg/L

(b) Natural lakes which do not thermally stratify, reservoirs, rivers and estuaries: 0.015 mg/L

Average Chlorophyll a values shall be based on the following methodology (or other methods approved by the Department): a minimum of three (3) samples collected over any three consecutive months at a minimum of one representative location (e.g. above the deepest point of a lake or reservoir or at a point mid-flow of a river) from samples integrated from the surface to a depth equal to twice the secchi depth or the bottom (the lesser of the two depths); analytical and quality assurance methods shall be in accordance with the most recent edition of Standard Methods for the Examination of Water and Wastewater.

(2) Upon determination by the Department that the values in OAR 340-41-150(1) are exceeded, the Department shall:

(a) In accordance with a schedule approved by the Commission, conduct such studies as are necessary to describe present water quality; determine the impacts on beneficial uses; determine the probable causes of the eschewed and beneficial use impact; and develop a proposed control strategy for attaining compliance where technically and economically practicable. Proposed strategies could include standards for additional pollutant parameters, pollutant discharge load limitations, and other such provisions as may be appropriate.

Where natural conditions are responsible for eschewed of the values in OAR 340-41-150(1) or beneficial uses are not impaired, the values in OAR 340-41-150(1) may be modified to an appropriate value for that water body;

(b) Conduct necessary public hearings preliminary to adoption of a control strategy, standards or modified values after obtaining Commission authorization;

(c) Implement the strategy upon adoption by the Commission;

(3) In cases where waters exceed the values in OAR 340-41-150(1) and the necessary studies are not completed, the Department may approve new activities (which require Department approval), new or additional (above the current approved permit limits) discharge loadings from point sources provided that it is determined that beneficial uses would not be significantly impaired by the new activity or discharge.

**2. Application of Rule**

Certain types of wastes in water, under proper ambient conditions, may stimulate nuisance algae growth. The magnitude of such growth may be determined by measuring chlorophyll a, a plant pigment found in algae. Chlorophyll a concentration has been found to be related to the amount of phytoplankton growth.

OAR 340-41-150 sets forth a process for determining when phytoplankton growths may be reaching nuisance proportions. This rule is designed to trigger further study and control strategies if the chlorophyll a values exceed specified levels in streams or lakes. Where natural conditions are responsible for the algae blooms, the existing level of chlorophyll a is considered to be the upper level of acceptability.

**3. Current Conditions**

Willamette River water quality as it relates to nutrients and phytoplankton growth is currently being studied as part of a joint study (the "Willamette River Study") by the Department, Associated Oregon Industries and the Association of Oregon Sewerage Agencies. The Environmental Protection Agency (EPA) has proposed 0.10 mg/l (100 ug/l) total phosphorus (in free-flowing streams) as the nutrient concentration below which nuisance algal growths are limited. The phosphorous concentration in the Willamette River below Newberg approaches 0.1 mg/l and the chlorophyll a concentration occasionally exceeds the 0.015 mg/l action level on an instantaneous basis but not for the three-month average specified by the basin standard.

**4. Applicant's Claim**

The proposed discharge will be low in nutrients and other chemical compounds that encourage phytoplankton growth. Should the Department determine that the chlorophyll a values in the river are exceeded, the applicant will cooperate with the Department in a study to determine the contribution of the discharge to the condition.

**5. Evaluation**

The Department is concerned that the phosphorous concentration in the river is approaching the EPA recommended limit of 0.1 mg/l. However, the Department will wait until the Willamette River Study is finished before

considering whether or not to set discharge permit limits for phosphorous. James River's proposed permit requires monitoring of phosphorous and ammonia, however, as a means of gathering data on the potential for algal growth caused by James River's effluent.

**VI. EVALUATION OF REGULATORY REQUIREMENTS FOR TREATMENT AND CONTROL OF WASTES**

**A. Highest and Best Practicable Treatment -- OAR 340-41-445(1)**

**1. Applicable Standard**

340-41-445(1) Notwithstanding the water quality standards contained below, the highest and best practicable treatment and/or control of wastes, activities, and flows shall in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dissolved chemical substances, toxic materials, radioactivity, turbidities, color, odor and other deleterious factors at the lowest possible levels.

**2. Application of Standard**

All dischargers are required to provide the highest and best practicable effluent treatment and control systems to reduce pollutants in their effluent to the lowest possible level. The requirement is a prerequisite regardless of basin standards or quality of the receiving waters, and regardless of the impact the discharge will have on the receiving water.

**3. Current Conditions**

The proposed Secondary Fiber Plant wastewater discharge is a new source.

**4. Applicant's Claim**

**a. Process Technology**

The James River Secondary Fiber Plant is designed to minimize impact on the environment through the installation of state-of-the-art processing equipment. The underlying goal of the engineering design was to use mechanical means to produce a pulp that would run on existing paper machines, have a high converting efficiency, and meet customer quality criteria.

Through the use of high consistency pulpers, mechanical energy is used to defiber the wastepaper and detach the ink, coatings and fillers, rather than the high

temperature and chemicals typically used in conventional recycling processes. Multiple cleaning, screening, and washing stages follow to remove contaminants from the wastepaper.

To meet customer demand for consistent shade and brightness, a non-chlorine bleaching/color-stripping sequence was chosen (peroxide/hydrosulfite). This technology is not as effective as the more widely used hypochlorite in the stripping of selective dyes and is more expensive from a capital and operative cost standpoint. However, laboratory work has shown that through proper wastepaper segregation, a quality product can be produced without the use of chlorine-based bleaching.

The use of polymer assisted dissolved air flotation allows the recycle of clarified effluent for use as process water. Approximately 15,000 gpm of internally recycled water and 200 gpm of fresh water are used in the process.

**b. Wastewater Treatment System Design**

Conservative parameters were employed in the design of the high-rate air activated sludge waste water treatment system. The design basis considered the current operation of a similar James River facility in South Glens Falls, New York. This facility processes similar wastepaper grades as those planned for the Halsey plant. The type of wastepaper processed is the most important variable in predicting the effluent quality going to wastewater treatment. Based on the anticipated Halsey grade mix of 35% coated book, 20% colored ledger, 25% white ledger, and 20% coated groundwood, the BOD generated is estimated to be 50 lb/ ton of wastepaper. (Table 15).

Table 1

**LABORATORY DEINKING STUDY RESULTS**

**Estimation of BOD Generated by the Halsey Plant**

Reference: S. R. Young, "Wastewater Treatment SGF-Estimate of BOD Load"  
Research Memorandum No. 443-9 August 5, 1983

<u>Wastepaper Grade</u>	<u>lbs BOD/WP Ton</u>	<u>% of grade mix</u>
Coated Book	49.1	35
Colored Ledger	54.8	20
White Ledger	45.8	25
Coated Groundwood	53.1	20

Overall BOD based on grade mix: 50 lb/WP ton

An analysis of the monthly average BOD data for the South Glens Falls facility indicates a variability of +/-60% (one standard deviation). This relatively high variation in effluent quality results from the extreme variability of the incoming raw material. The BOD associated with the wastepaper varies widely, depending on grade and source. The Halsey wastewater treatment plant was designed assuming a similar variability, such that the discharged effluent will be below the NSPS monthly average guideline of 3120 lbs/day 99.7 percent of the time (3 standard deviations). This limit translates to a minimum BOD removal of 88.5%. To ensure compliance, the treatment system is designed to achieve an efficiency of approximately 96% BOD removal on a long-term average basis.

**c. Waste Water Treatment Technology Review**

The National Council For Air and Stream Improvement (NCASI) conducted a study of several wastewater treatment systems associated with U.S. Pulp and Paper Mills (Technical Bulletin No. 540, February 1988). Part of this study looked at the operating efficiency of these systems. The average BOD removal of all secondary treatment systems, including aeration, stabilization and activated sludge systems, was 90%. Thirteen activated sludge systems were included in this study, including those with extended aeration. The BOD removal for these systems averaged 92%. The expected operating efficiency of the Halsey system as designed, will be comparable to, or exceed, what is being accomplished by the rest of the pulp and paper industry.

There are currently six pulp and paper manufacturing facilities which discharge effluent into the Willamette River. These facilities employ secondary treatment of their effluent using aerated stabilization or activated sludge systems. The BOD removal efficiency averaged 84% for all systems, with a range of 66.5% to 93.4%. Efficiencies are based on at least twelve monthly averages. Most of the facilities discharge effluent that is well below their permitted BOD limit. James River's proposed effluent treatment system is designed to be more efficient in BOD reduction than all other pulp and paper industry discharges on the river.



## 5. Evaluation

See Section VIII of this report for a discussion of the wastewater treatment technology on which the proposed permit limits were based.

## B. Industrial Waste Treatment Criteria -- OAR 340-41-455(2)

### 1. Applicable Requirement

**340-41-455** Subject to the implementation program set forth in rule 340-41-120, prior to discharge of any wastes from any new or modified facility to any waters of the Willamette River Basin, such wastes shall be treated and controlled in facilities designed in accordance with the following minimum criteria (In designing treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time, but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468.740 and recognize that the actual performance level may at times be less than the design criteria):

#### (2) Industrial Wastes

- (a) After maximum practicable implant control, a minimum of secondary treatment or equivalent control (reduction of suspended solids and organic material where present in significant quantities, effective disinfection where bacterial organisms of public health significant are present, and control of toxic or other deleterious substances).
- (b) Specific industrial waste treatment requirements shall be determined on an individual basis in accordance with the provisions of this plan, applicable federal requirements, and the following:
  - (A) The uses which are or may likely be made of the receiving stream;
  - (B) The size and nature of flow of the receiving stream;

- (C) The quantity and quality of wastes to be treated; and
  - (D) The presence or absence of other sources of pollution on the same watershed.
- (c) Where industrial, commercial, or agricultural effluents contain significant quantities of potentially toxic elements, treatment requirements shall be determined utilizing appropriate bioassays.
  - (d) Industrial cooling waters containing significant heat loads shall be subjected to offstream cooling or heat recovery prior to discharge to public waters.
  - (e) Positive protection shall be provided to prevent bypassing of raw or inadequately treated industrial wastes to any public waters.
  - (f) Facilities shall be provided to prevent and contain spills of potentially toxic or hazardous materials and a positive program for containment and cleanup of such spills should they occur shall be developed and maintained.

## **2. Application of Requirement**

An NPDES permit is based on information submitted by the applicant describing the facility's production processes and wastewater treatment. By accepting the permit and by operating the plant, the applicant has agreed to operate the entire plant, from receipt of raw materials to final discharge of effluent to the river, in such a way so as to minimize the release of contaminants to the environment.

## **3. Current Conditions**

The Secondary Fiber Plant with associated wastewater treatment is a new source. No current conditions exist.

## **4. Applicant's Claim**

The Halsey secondary fiber plant was designed to minimize the release of pollutants to the environment. Mechanical energy and specialized equipment will separate contaminants from the pulp and effluent. Primary treatment is accomplished within the process in dissolved air flotation clarifiers. The typically high flow of the Willamette River will quickly dilute the low volume of highly treated effluent to be discharged. Process

effluent will be treated in a conservatively designed high-rate activated sludge treatment system. Sanitary waste will be treated separately in Pope and Talbot's activated sludge package plant.

There are currently six other permitted industrial dischargers on the Willamette River, both upstream and downstream of the proposed discharge point. The river is not water quality limited for any of the listed criteria. The proposed Halsey secondary fiber plant effluent will have little or no measurable impact on Willamette River water quality.

Bioassays conducted on effluent from a similar facility utilizing fathead minnow and Ceriodaphnia dubia have indicated no acute or chronic toxicity at the maximum effluent concentration anticipated in the river.

All untreated wastewater must go through secondary treatment before being discharged to the effluent pipeline. There is no means to bypass the system. The wastewater treatment system operating plan includes provisions for operating procedures to be employed to control or mitigate upset conditions. Control measures to be taken to ensure proper operation of the wastewater treatment system include routine testing for residual dissolved oxygen and nutrients, in addition to standard activated sludge monitoring procedures. The process design includes sufficient redundancy to prevent process upsets from impacting the secondary treatment system. To prevent inadequately treated waste from being discharged, the operating plan calls for the process to be shut down and the treatment system put in the 100% recycle mode. James River maintains an up-to-date Spill Prevention Control and Countermeasure (SPCC) Plan for the existing paper mill. This plan will be modified to include the secondary fiber plant. All hazardous material storage areas are designed with secondary containment capable of containing 110% of the volume of the largest tank. The chemical unloading area will be paved and graded away from storm drains. Absorbent materials will be available to aid in the cleanup of small leaks and spills. All employees will be trained in proper spill response procedures prior to startup. Refresher training will be conducted on an annual basis.

## 5. Evaluation

The Department concurs that removal of BOD by activated sludge is an appropriate wastewater treatment technology and anticipates that James River will design and operate the plant in an optimum fashion to effect the greatest possible degree of BOD5 and TSS removal.

VII. EVALUATION OF POLICIES AND GUIDELINES GENERALLY APPLICABLE TO ALL BASINS

A. Anti-degradation Policy

1. Applicable Rules

EPA rules adopted pursuant to Section 303 of the federal Clean Water Act require state water quality standards to contain a statewide anti-degradation policy. This policy must, at a minimum, provide that existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected. The policy must provide that where existing quality exceeds that necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, the existing quality shall be maintained and protected unless the state goes through an intergovernmental coordination and public participation process to conclude that lowering the quality without impairing existing uses is appropriate. The policy must also provide that where high quality waters constitute an outstanding National resource, such as waters of national parks, state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, the existing high quality water shall be maintained and protected.

OAR 340-41-026(1)(a) and OAR 340-41-445(1) set forth the anti-degradation policy of the state for the Willamette Basin. These sections read as follows:

**340-41-026(1)(a)** Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless the Environmental Quality Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to lower water quality for necessary and justifiable economic or social development. The Director or his designee may allow lower water quality on a short term basis in order to respond to emergencies or to otherwise protect public health and welfare. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of waters within surface waters of the following areas:

- (A) National Parks;
- (B) National Wild and Scenic Rivers;
- (C) National Wildlife Refuges;
- (D) State Parks.

**340-41-445(1)** Notwithstanding the water quality standards contained below, the highest and best practicable treatment and/or control of wastes, activities, and flows shall in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dissolved chemical substances, toxic materials, radioactivity, turbidities, color, odor, and other deleterious factors at the lowest levels.

## **2. Application of Policy**

These sections, which are part of Oregon's water quality standards, require that existing high quality waters where quality exceeds the levels necessary to protect fish, shellfish, wildlife, and recreation shall be maintained and protected unless the Commission chooses to allow lowered water quality for justifiable reasons, or unless the Director allows lower water quality on a short term basis to respond to emergencies or otherwise protect public health and welfare. These sections further require the Department to minimize degradation of high quality waters and protect the recognized beneficial uses of such waters by requiring the highest and best practicable control of all waste discharges and activities. These sections, in conjunction with other provisions of the water quality standards contained in OAR 340-41-445(2), are intended to assure that water quality is not changed so as to impair recognized beneficial uses of the water.

The Department is required to interpret and apply the EQC water quality standards, including the anti-degradation policy, in a manner consistent with the guiding federal rules. The Department has traditionally interpreted the anti-degradation policy for non-water-quality-limited streams to allow approval of new discharges or activities that may have some theoretical or detectable impact on high quality waters provided that:

- a. Adverse impact on water quality will not be significant,
- b. Any change in water quality will not adversely affect recognized beneficial uses, and
- c. Highest and best practicable treatment and control of waste discharges and activities is employed to minimize any adverse effects on water quality.

Under ordinary circumstances, compliance with the water quality standards in OAR 340-41-445(2) would be considered sufficient to assure that beneficial uses will be protected. However, if a standard has not been adopted for a pollutant parameter of concern, or if new information indicates that an existing standard is not adequate to prevent adverse water quality impact on a beneficial use in the particular situation, the Department is required to impose more stringent water quality protection measures to protect recognized beneficial use, including denial of project approval if necessary.

Table 6 of OAR 340-41-442 identifies the beneficial uses to be protected in the waters of the Willamette Basin. This table essentially identifies all uses except hydropower as being appropriate for protection. Table 6 does not identify any relative priority or preference for uses or use protection.

### **3. Current Conditions**

Overall water quality in the Willamette River is very good. There have been complaints from boaters regarding the aesthetic conditions of color and odor at Pope & Talbot's existing outfall. The City of Corvallis, which uses the Willamette River as a drinking water supply in the summertime is also concerned about potential problems with taste and odor, color and THMs and THM precursors in their intake water.

### **4. Applicant's Claim**

The applicant is planning to use the best available technology to de-ink the waste paper and treat the resulting wastewaters. No chlorine based compounds will be used in the mill so no THMs should be

generated. Water will be conserved, recycled, and re-used in the process as much as possible. Both primary and secondary wastewater treatment facilities will be installed and operated to achieve peak removal efficiencies.

Total BOD and TSS loadings to the river will increase, while other parameters, such as total flow, color, pH and dissolved solids concentration will not increase significantly as a result of the proposed facility. The applicant believes that the additional BOD and TSS loadings will not impart significant deterioration to the Willamette River water quality.

According to simulation modelling of the Willamette River during low-flow summertime conditions, the dissolved oxygen regime of the river is not significantly affected by such an increase in the BOD load at the Halsey discharge point. Similarly, the increase in suspended solids is not expected to have a major impact on the upper Willamette River, due to the fast flowing nature of the Willamette River in this area. The suspended solids are expected to be biological in nature.

## **5. Evaluation**

The Department has traditionally interpreted the anti-degradation policy to allow approval (for non-water-quality-limited streams) of new discharges or activities that may have some theoretical or detectable impact on water quality, provided that beneficial uses would not be impacted, water quality impacts would be insignificant, and highest and best practicable controls were used to minimize any adverse effects on water quality.

The Department set the proposed BOD5 discharge limit to be less than the criterion of "no measurable DO impact" to the river, based on the results of the Department's modelling study. This criterion, in effect, is an antidegradation criterion.

## **B. Approval of New Sources -- OAR 340-41-026 (2) & (3)**

### **1. Applicable Policies**

**340-41-026 (2)** In order to maintain the quality of waters in the State of Oregon, it is the general policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such

that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads as provided in section (3) of this rule.

**340-41-026 (3)** The Commission or Director may grant exceptions to sections (2) and (6) of this rule and approvals to section (5) of this rule for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2).

(a) In allowing new or increased discharged loads the Commission or Director shall make the following findings:

(A) The new or increased discharged load would not cause water quality standards to be violated;

(B) The new or increased discharge load would not unacceptably threaten or impair any recognized beneficial uses. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;

(C) The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited under OAR 340-41-006(30)(a), unless:

(i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to be water quality limited; or

(ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) load allocations (LAs), and the reserve capacity have been established for the water quality



limited receiving stream; and compliance plans under which enforcement action can be taken have been established; and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or

(iii) Under extraordinary circumstances to solve and existing, immediate and critical environmental problem that the Commission or Department may consider a waste load increase for an existing source on a receiving stream designated water quality limited under OAR 340-541-006(30)(a) during the period between the establishment of TMDLs, WLAs and LAs and their achievement based on the following conditions;

(I) That TMDLs, WLAs and LAs have been set; and

(II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and

(III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses; and

(IV) That any waste load increase granted under subsection (iii) of this rule is temporary and does not extend beyond the TMDL compliance deadline established for the waterbody. If this action will result in a permanent load increase, the action has to comply with subsections (i) or (ii) of this rule.

(D) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as evidenced by a statement of land use compatibility from the appropriate local planning agency.

(b) Oregon's water quality management policies and programs recognize that Oregon's water bodies have finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the Commission or Department shall consider the following:

(A) Environmental Effects Criteria:

(i) Adverse Out-of-Stream effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes;

(ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, as appropriate;

(iii) Beneficial effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.

(B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loading will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:

(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams are finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading;

(ii) Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives shall be evaluated.

## **2. Application of Policies**

It is the intention of the Department to control all discharges into each drainage basin to protect all recognized beneficial uses and to maintain all water quality standards above the minimum water quality required by law so as to allow room for future industrial growth. This policy has been implemented by requiring both expanding and new industries to provide effluent treatment and control at or above that identified as best available treatment.

## **3. Current Conditions**

As discussed elsewhere in this report, the Department is concerned about the adequacy of dissolved oxygen and the high concentration of phosphorous in the river. The Department has listed the river from River Mile 109 to River Mile 150 (which includes this proposed discharge) as only partially supporting aquatic life, due to decreasing DO, in its 1990 "305b Report" (1990 Water Quality Status Assessment Report, DEQ). The same segment is also listed as only partially supporting contact sports, due to bacteria.

## **4. Applicant's Claim**

State-of-the-art controls and both primary and secondary effluent treatment facilities to be installed with this new mill will allow the project to proceed without violating this Commission policy.

**5. Evaluation**

The Department concurs with the applicant that the proposed mill construction and operation is within policy guidelines and can be accomplished without further reducing the quality of recognized beneficial uses.

**VIII. PERMIT DISCHARGE LIMITS**

**A. Proposed BOD5 and TSS Discharge Limits**

Table 2. DEQ PROPOSED PERMIT LIMITS FOR BOD5 AND TSS

Basis: 300 ADT per day of de-inked pulp production

<u>Parameter</u>	<u>Discharge Limitations</u>	
	Daily Maximum <u>lb/day</u>	Monthly Average <u>lb/day</u>
BOD <sub>5</sub>		
Summer Period (May 1-Oct.31)	5200	2000
Remainder of Year (Nov. 1-Apr. 30)	5760	3120
TSS	6750	3500

**B. EPA Effluent Guidelines**

Table 3. USEPA EFFLUENT GUIDELINES

Source: EPA Effluent Guidelines for NSPS Integrated Deink Tissue (40 CFR 430.175, Subpart Q)

Basis: 300 ADT per day of de-inked pulp production

<u>Parameter</u>	<u>Discharge Guidelines</u>			
	Daily Maximum <u>lb/ADT-day</u>	Daily Maximum <u>lb/day</u>	Monthly Average <u>lb/ADT-day</u>	Monthly Average <u>lb/day</u>
BOD <sub>5</sub>	19.2	5760	10.4	3120
TSS	26.2	7860	13.6	4080

C. Derivation Of Permit BOD5 Limits For The River Low-Flow Period (May 1-October 31)

The Department has proposed BOD5 and TSS discharge limits for this facility that are less than the EPA NSPS guidelines, for the river low-flow period, primarily because of concern for maintaining the present DO level in the river and minimizing overall impact. The reduced permit limits meet two specific objectives:

The BOD5 AML of 2,000 lb/day is less than the 2,800 lb/day (1700 lb/day as a long-term average) that the Department estimated would decrease DO by a measurable amount (0.1 mg/l) and,

They represent the performance level of efficient treatment systems.

Based on the estimated BOD5 influent from the proposed mill to the biological treatment system (27,100 lb/day), the BOD5 removal efficiency would have to be approximately 94 percent. Assuming a primary BOD5 removal efficiency of 45 percent, the overall system removal efficiency would be approximately 97 percent.

James River notes in Section VI of this report that their biological wastewater treatment system is designed to achieve an efficiency of approximately 96 percent BOD removal on a long-term average basis.

1. **Wastewater Treatment Capability**

Data representing the wastewater treatment capability of deink tissue mills using primary clarification and biological secondary treatment was collected from several sources for use in determining appropriate permit limits.

- a. From EPA 440/1-86/025 (December, 1986), Development Document for Best Conventional Pollutant Control Technology Effluent Limitations Guidelines for the Pulp, Paper and Paperboard and the Builders' Paper and Board Mills Point Source Categories:

Table 4. BCT PERFORMANCE DATA FOR DEINK-TISSUE MILLS

	<u>BOD5</u>	<u>TSS</u>
BCT Option 1	6.5 lb/ton	8.0 lb/ton
BCT Option 4	5.5 "	8.3 "

- b. From NCASI Technical Bulletin No. 613, Characterization of Wastes and Emissions From Mills Using Recycled Fiber, September, 1991:

Table 5. DATA FROM DEINKING MILLS PRODUCING TISSUE FROM WASTEPAPER, WITH BIOLOGICAL WASTEWATER TREATMENT

<u>Mill ID</u>	<u>Final Effluent BOD</u>	<u>BOD Removal</u>
WDD	2.8 lb/ton	98 percent
WEE	5.7 "	94 "
WFF	4.2 "	98 "
WII	4.1 "	98 "

- c. From data supplied by James River Corp. for their South Glens Falls, New York, deinking mill (communication from James River):

Effluent flow: 2.15 mgd  
 Paper production: 128 machine-dry tons per day  
 Pulp production: approximately 120 tons per day  
 Average effluent BOD5 concentration: 35 mg/l

BOD5 discharged per ton of pulp produced:

$$8.34 \text{ lb/gal} \times 35 \text{ mg/l} \times 2.15 \text{ mgd} / 120 \text{ tons/day} = 5.2 \text{ lb/ton}$$

- d. From data supplied by NCASI (communication from Douglas A. Barton, NCASI, to Gigi Sixour, James River) For tissue mills using biological treatment:

Average BOD5 discharged = 5.5 lb/ton (excluding mills B,E,H & L)

Average ratio of TSS to BOD5 = 1.6 (excluding mills B,E,H & L)

Mills B,E and L were excluded from the above averages because they were noted as "...not effectively controlling effluent TSS..." and mill H was excluded because it was an "outlyer" from the other data.

## 2. Calculation of BOD5 Permit Limits

An appropriate "highest and best" waste treatment technology long-term capability of 5.7 lb of BOD5/ton of de-inked pulp was determined from the above data. The proposed BOD5 AML (average monthly limit) and MDL (maximum daily limit) were calculated by the EPA statistical method described in EPA/505/2-90-001, Technical Support Document for Water Quality-based Toxics Control:

### Assumptions:

Effluent CV (Coefficient of Variation) = 0.6  
Daily sampling (permit actually requires 12 samples per month)

AML determined at the 95th percentile

MDL determined at the 99th percentile

Pulp production of 300 ADT (air dried tons per day)

$AML = 5.7 \text{ lb/ton} \times 300 \text{ tons/day} \times 1.19 = 2035 \text{ lb/day}$   
(2,000 lb/day in the permit)

$MDL = 5.7 \text{ lb/ton} \times 300 \text{ tons/day} \times 3.11 = 5318 \text{ lb/day}$   
(5,200 lb/day in the permit)

### D. Derivation Of Permit BOD5 Limits For The River High-Flow Period (November 1-April 30)

EPA NSPS guidelines were used for BOD5 permit limits for the river high-flow period.

### E. Calculation Of Permit TSS Limits

The proposed TSS limits apply for the full year. The TSS AML was based on a ratio of TSS to BOD5 in mill effluent of 1.75. This value is somewhat greater than the 1.6 average of the mills presented in the data from NCASI cited above in recognition that production of biological solids can increase as a result of pushing the activated sludge treatment process to higher performance levels.

Thus, the TSS AML is;

$1.75 \times \text{BOD5 AML} = 1.75 \times 2,000 \text{ lb/day} = 3,500 \text{ lb/day}$   
(permit limit is 3,500 lb/day)

The TSS MDL was calculated from the AML by using the ratio between MDL and AML represented by NSPS guidelines; viz.,  $26.2/13.6 = 1.93$ .

Thus, the TSS MDL is;

$1.93 \times \text{TSS AML} = 1.93 \times 3500 = 6743 \text{ lb/day}$  (permit limit  
is 6,750 lb/day)

This evaluation report was prepared from, in part, text and data submitted by the permit applicant, James River. The application and other pertinent information and data are in the files of the Department's Water Quality Division located on the fifth floor of the Department's Portland headquarters building.

Jerry Turnbaugh  
Department of Environmental Quality  
Water Quality Division  
Industrial & On-Site Section  
(503) 229-5374



**APPENDIX B - "James River Discharge to the Willamette River Model  
Review for Estimating No Measurable Impact"**

**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY**

**INTEROFFICE MEMORANDUM**

**10/23/91**

To: Neil Mullane, Standards and Assessments  
Kent Ashbaker\Gerry Turnbaugh, Industrial Waste  
Lydia Taylor, Administrator WQ Division

From Bob B.

Re: James River Discharge to the Willamette River,  
Model Review for estimating no measurable impact.

**Background:**

James River submitted an evaluation of the effect of various waste loads on Dissolved oxygen in the Willamette River. The EPA supported model QUALL2E was used for these evaluations. Since that time there have been two major changes in the analysis submitted by HMS Environmental Services for James River. The first was primarily changes in hydraulics from discussion with the Department. The Second major change reflected HMS's discussions with Dr. Bob Ambrose of EPA athens Georgia regarding rate constants for Biochemical Oxygen Demand and the relationship between BOD<sub>5</sub> and UBOD. HMS estimated, in their last document, a no observable effect load for James River at 8000 lbs/day of BOD<sub>5</sub>. No measurable impact was defined as 0.10 mg/l of dissolved oxygen by the Department.

**SUMMARY OF THE DEPARTMENT'S REVIEW**

The Departments analysis strongly disagrees with the conclusion of no measurable impact on dissolved oxygen at 8000 lbs/day of BOD<sub>5</sub>. The analysis to date would also disagree with the BOD decay rates used in the latest HMS analysis.

We do not have a calibrated model for dissolved oxygen in the Willamette River. There are several assumptions that will influence the results of our analysis. The Departments analysis finds that waste loads from James River on the order of 2800 to 3500 pounds per day of BOD<sub>5</sub> would result in no measurable change in dissolved oxygen in the Willamette River.

The dissolved oxygen was modelled only down to Willamette Falls. The Portland Harbor was not modelled since the tidal influence on flow makes use of a steady state one dimensional model difficult. Minimum level of dissolved oxygen and the simulated greatest impact due to new waste loads occurred at the falls. It can be anticipated that further reduction of dissolved oxygen would occur in the Portland Harbor. Residence time of water, and waste loads, is greater (approximately two weeks) in the Portland Harbor than in the mainstem Willamette from Eugene to the falls (one week).

## DISCUSSION ON ANALYSIS

The remainder of this memorandum will discuss the Departments and HMS analysis.

### BOD RATES AND CONVERSION OF BOD<sub>5</sub> to UBOD

The analysis presented by HMS Environmental used BOD decay ( $K_1$ ) rates on the order of  $0.03 \text{ day}^{-1}$  base e. These rates were derived from the 1974 analysis of the USGS and found to be consistent with decay rates determined by the Department in 1988.

The Department disagrees with the 0.03 decay rate and finds some of the confusion exists from converting the USGS rates presented as base 10 to base e. The Department reviewed, and recalculated the BOD decay rates from data presented in the USGS circular 715-1 for two sites and point source on the Willamette River. The Department used two methods for calculating  $K_1$ , H.A. Thomas (1950) in Snoeyink and Jenkins Water Chemistry (1980) and Barnwell, T.O. (1980) in ncasi bulletin 529 (1987). The USGS used Lees graphical method. The Barnwell method allows calculation of confidence intervals for both the decay rate and for UBOD.

For the Data presented by USGS at River Mile 86.5, both methods employed by DEQ resulted in  $K_1$  of near 0.10/day base e. Base e can then be converted to base 10 by dividing by 2.303 (Snoeyink and Jenkins 1980) resulting in 0.04 base 10. The Department reviewed BOD decay rates calculated from sample collected during the Summer of 1988 and found these rates typically between 0.08 - 0.10 day<sup>-1</sup>, base e. Interestingly, there does not seem to be a significant difference between rates found by DEQ in 1988 and the USGS in 1974. QUAL2E uses base e decay rates. Therefore decay rates should be on the order of 0.08 - 0.11 /day.

Once we have identified the decay rate we have identified the conversion ration between BOD<sub>5</sub> and UBOD. (The slower the reaction rate the greater the ratio for conversion) HMS environmental used the option in QUAL2E to convert input values of BOD<sub>5</sub> to UBOD by a defined conversion ratio. The model applies this conversion ratio to all headwater flows, point sources, and lateral inflows. It is important that recognition be given to the fact that ultimate to 5-day ratios are really a companion estimate of the oxidation rate constant. Because of this correlation, the values of the ratio and the reaction rate constant are not independent, selection of one without proper selection of the will lead to erroneous application and will produce considerable bias in the allocation of waste loads (ncasi bulletin 367 1982).

It is difficult, if not impossible, to select a universal ratio that will be accurate for the instream BOD as well as multiple and varied point sources treating different waste streams and having different effluent quality. It is for this reason that it is preferable to model using UBOD rather than converting BOD<sub>5</sub> to UBOD. Unfortunately we have very little data on UBOD.

HMS cites Bob Ambrose (USEPA Athens Georgia) on the USEPA rates constants and Kinetics manual for BOD rates to use for the conversion ratio. The USEPA rates Constants and kinetics manual cites NCASI (1982) and Martone (1976) and notes observed BOD decay rates of 0.02/day for paper industry wastewater following biological treatment. USEPA also states that for instream BOD arising from a wastewater inflow the degree of treatment of wastewater is important. In general the higher the degree of treatment the greater the degree of waste stabilization and the lower the decay rate will be.

Dr. Raymond C. Whittemore (USEPA-QUAL2E Course Athens Georgia) noted that decay rates decreased as treatment quality improved. Citing O'Connor Dr. Whittemore presented the following table describing rates as a function of effluent quality:

Primary	0.40/day
Intermediate	0.30/day
Secondary	0.20/day
Advanced	0.10/day to less than 0.05/day

Secondary treatment is defined as 30 mg/l BOD<sub>5</sub> and 30 mg/l of suspended solids. Most of the municipal treatment plants discharging to the Willamette have much better treatment than the secondary standards. Most of the treatment plants discharging to the Willamette River would likely have conversions ratios and decay rates well below the default decay rate of 0.23/day.

Confusing the problem even further is information developed by ncasi regarding the kinetics of BOD discharged from Pulp and Paper plants. Pulp and paper effluent may best be described by a dual first order model (ncasi No. 394 1983):

$$y = L_1 [1 - e^{(-k_1 t)}] + L_2 [1 - e^{(k_2 t)}]$$

where :

Y = BOD exerted at time t (mg/l)  
 L = Ultimate BOD for Component n  
 K = Reaction rate for component n (day<sup>-1</sup>)  
 t = time in days

The first component comprising about 10 percent of the total BOD decays at a high rate, in the order of 0.2 /day. The second, decays at a much slower rate on the order of 0.02/day NCASI 1982 and 1985). Other authors noted that using a single first order model under predicted UBOD but did not find this significant ( G. T. book).

#### DEPARTMENTS APPROACH:

The Department used QUAL2E with the streamflows, stream segments, and tributary and point source locations as described by HMS. Travel time for water in each section was taken from the USGS dye studies of the late 1960s. The Department recognizes that these travel times may have changed, as noted by McCutcheon. Limited travel time dye studies in the Willamette are part of the proposed Willamette River study. Cross section area for the Newburg pool was taken from McCutcheon.

The Department recognizes that a calibrated model does not exist for the Willamette. However it is possible to derive reasonably accurate estimates of the response of the river with existing information. The Department's approach was to test the sensitivity of the predicted no observable effect load of several assumptions in the model.

The smallest observable effect load occurred assuming a two stage BOD reaction. The model QUAL2E, used by HMS and DEQ, does not have a two stage component. The Department utilized the ammonia component of QUAL2E to act as the second stage of the BOD reaction. The ammonia to BOD conversion was changed to 1 (1 mg/l  $\text{NH}_3$  = 1mg/l UBOD). Forcing functions for BOD were entered as observed loads of UBOD. All pulp and paper effluent was assumed to have two stage BOD effluent with 90% of the UBOD as the slower second stage. Although preliminary such modifications can have significant effect on both the predicted instream DO (increase) and in the WLA for no significant impact. Only BOD was modeled, ammonia was assumed to be insignificant. Observed  $\text{BOD}_5$  was converted to UBOD for the treatment plants assuming a decay rate of 0.2/day.

In other model runs the Department assumed ammonia from the sewage treatment plants of 6.0 mg/l. Observed levels of  $\text{BOD}_5$  were taken from discharge monitoring reports and converted to UBOD using a ratio between 0.07 and 0.2 per day. These model runs generated no observable impact loads on the order of 3500 pounds per day or greater. The important point being that these loads are near or greater than the proposed loads.

The primary weakness remaining in this analysis is that the Portland is not modelled. The Portland harbor (below the falls to the Columbia) has historically been the area of greatest impact from oxygen demanding materials. Since residence time in the Portland harbor is longer than residence time of water in the rest of the River, the impact of loads may well be greater, especially of slow reacting materials.

# PUBLIC NOTICE

Expiration Date: 12-31-96  
Permit Number:  
File Number: 105814  
Page 1 of 6 Pages

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204  
Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and the Federal Clean Water Act

### ISSUED TO:

James River Paper  
Company, Inc.  
P.O. Box 215  
Halsey, OR 97348

### SOURCES COVERED BY THIS PERMIT:

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Combined Effluent (common outfall of James River Co. and Pope & Talbot, Inc.)	B	Willamette R. RM 148.4
James River Effluent	A	At point of combining with Pope & Talbot's effluent

### PLANT TYPE AND LOCATION:

Halsey Mill  
Secondary Fiber Pulp and  
Paper Mill  
30470 American Drive  
Halsey, OR 97348

### RECEIVING STREAM INFORMATION:

Basin: Willamette  
Sub-Basin: Upper Willamette  
Stream: Willamette River  
Hydro Code: 22--WILL 148.4 D  
County: Linn

### EPA REFERENCE NO: OR-003340-5

Issued in response to Application No. 998046 received March 14, 1991.  
This permit is issued based on the land use findings in the permit record.

\_\_\_\_\_  
Lydia Taylor, Administrator

\_\_\_\_\_  
Date

### PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify or operate a wastewater collection, treatment, control and disposal system and discharge to public waters adequately treated wastewaters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Discharge Limitations not to be Exceeded..	2
Schedule B - Minimum Monitoring and Reporting Requirements...	3-4
Schedule C - Compliance Conditions and Schedules.....	5-6
Schedule D - Special Conditions.....	7
General Conditions.....	Attached

Each other direct and indirect waste discharge to public waters is prohibited.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

**SCHEDULE A**

Waste Discharge Limitations Not to be Exceeded After Permit Issuance:

1. **Outfall A** (Point of discharge of process effluent from James River Paper Co. to the outfall pipe of Pope & Talbot, Inc.)

The following limitations apply to James River Paper Co., as their permitted discharge:

<u>Parameter</u>	<u>Monthly Ave.</u> <u>lb/day</u>	<u>Daily Max.</u> <u>lb/day</u>
BOD <sub>5</sub>		
Summer Period (May 1-Oct.31)	2000	5200
Remainder of Year (Nov. 1-Apr. 30)	3120	5760
TSS	3500	6750
pH	Shall not exceed the range 6.0-9.0	

2. **Outfall B** (Combined process effluent from James River Paper Company and Pope & Talbot, Inc.)

In the event of violation of water-quality standards outside the mixing zone that is directly attributable to the combined discharge, James River Paper Co. and Pope & Talbot, Inc. shall be considered to be jointly and severally liable for such violation unless one or the other demonstrates to the Department's satisfaction that their contribution to the combined discharge was not the cause of the violation.

3. Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which will violate Water Quality Standards as adopted in OAR 340-41-442 except in the following defined mixing zone:

The mixing zone shall not exceed a portion of the Willamette River extending 300 feet downstream from the outfall diffuser and extending beyond each end of the diffuser by 30 feet.

4. Slimicides and biocides containing trichlorophenol or pentachlorophenol shall not be used at the mill.

**SCHEDULE B**

Minimum Monitoring and Reporting Requirements (unless otherwise approved in writing by the Department)

1. **Outfall A** (Point of discharge of process effluent from James River Paper Co. to the outfall pipe of Pope & Talbot, Inc.)

<u>Parameter</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Flow Rate	Three per week	Recording Totalizer
BOD <sub>5</sub>	Three per week	24 hr composite
TSS	Three per week	24 hr composite
pH	Three per week	24 hr composite
Total Phosphorous-P	One per week	24 hr composite
Ammonia-N	One per week	Grab
Bioassays (See Schedule C)	Jan/Apr/Jul/Oct	per protocol

2. **Outfall B** (Combined process effluent from James River Paper Company and Pope & Talbot, Inc.)

The following monitoring requirements apply to the combined effluent at a point in the wastestream below the point of combination of the two separate waste streams.

<u>Parameter</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Bioassays (See Schedule C)	Jan/Apr/Jul/Oct	per protocol

3. Outfall A and Outfall B effluents shall be sampled simultaneously. Monitoring of the combined effluent and reporting may be conducted by James River Paper Company or Pope & Talbot, Inc., individually or together, with Department approval.

4. Monitoring of Pulp and Paper Production

- a. Pulp Produced            Average air-dry tons/day for reporting period.
- b. Paper Produced            Average machine-dry tons/day for reporting period.

(The average is defined as the total production during the reporting period divided by the number of days operated during the reporting period.)

5. Reporting Procedures

Monitoring results for Outfalls A and B shall be reported on approved forms. The reporting period, unless otherwise stated, is the calendar month. Reports must be submitted to the Department by the 15th day of the following month; however, results of bioassays may be submitted within 60 days of sampling.



SCHEDULE C

Compliance Conditions and Schedules

1. Beginning in the calendar quarter following six months after mill start-up, the permittee shall conduct quarterly whole-effluent toxicity bioassay tests per year of Outfalls A and B effluent with Ceriodaphnia dubia (water flea), Pimephales promelas (fathead minnow) and Selenastrum capricornutum (green algae).

Monitoring of the combined effluent and reporting may be conducted by James River Paper Company or Pope & Talbot, Inc., individually or together, with Department approval.

Except for the Selenastrum test, these bioassays shall be dual end-point tests in which both acute and chronic end-points can be determined from the results of a single chronic test. The acute end-point (LC50) only applies when significant mortality occurs.

The results of these bioassays will be evaluated by the Department after measurements have been taken for two years (eight measurements).

Bioassays shall be conducted in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001 and Methods for Measuring the Acute Toxicity of Effluents to Aquatic Organisms, EPA (most current edition).

The permittee shall make available to the Department Laboratory, on request, the written standard operating procedures (SOPs) they, or the laboratory performing the bioassays, are using for all toxicity tests required by the Department.

2. After the two-year bioassay review, the Department may, if appropriate, reduce the biomonitoring requirements in Item 1, reduce the frequency of testing or discontinue testing.
3. Quality assurance criteria, statistical analyses and data reporting for the bioassays shall be in accordance with the following reference:

Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001

The raw data and statistical calculations shall be included in the report.

4. The permittee shall evaluate (individually or jointly with Pope & Talbot, Inc.) the degree of dilution that occurs when the combined effluent of Outfall B mixes with ambient river water, according to the following schedule:

During the first calendar quarter following six months after mill start-up, the permittee shall submit a plan that outlines the dilution study methodology to the Department for review.

During the first calendar quarter following two years after mill start-up, a report summarizing the results of the dilution study shall be submitted to the Department. Results will be used to evaluate dilution with respect to the current mixing zone definition and achievement of water-quality standards.

5. If, after the two-year study period, the results of the Ceriodaphnia dubia (water flea) and Pimephales promelas (fathead minnow) bioassay tests of Outfall B indicate a violation of water quality standards for toxicity, the permittee, individually or jointly with Pope & Talbot, Inc., shall further evaluate the toxicity of the Outfall B effluent and its effects on the receiving waters. If these tests confirm a violation of water quality standards due to the effluent, the permittee shall develop a plan to eliminate the violation. Upon approval of the plan by the Department, the permittee, individually or jointly with Pope & Talbot, Inc., shall implement the plan and the process shall be continued until the violation has been eliminated.

The permit may be reopened to set WET discharge limits for Outfalls A and B based on the results of the Ceriodaphnia dubia (water flea) and Pimephales promelas (fathead minnow) bioassay results, if appropriate.

(See Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March, 1991)

6. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to, or no later than, 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if good and valid cause over which the permittee has little or no control has been determined.

**SCHEDULE D**

Special Conditions

1. Sanitary wastes generated by James River Paper Co. shall be sent to Pope & Talbot, Inc.'s sanitary treatment plant for treatment and discharge.
2. An adequate contingency plan for prevention and handling of spills and unplanned discharges shall be in force at all times. A continuing program of employee orientation and education shall be maintained to ensure awareness of the necessity of good inplant control and quick and proper action in the event of a spill or accident.
3. An environmental supervisor shall be designated to coordinate and carry out all necessary functions related to maintenance and operation of waste collection, treatment, and disposal facilities. This person must have access to all information pertaining to the generation of wastes in the various process areas.

P105814W (11-29-91)

## NPDES GENERAL CONDITIONS

### SECTION A. STANDARD CONDITIONS

#### 1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Oregon Revised Statutes (ORS) 468.720 and is grounds for enforcement action; for permit termination; suspension, or modification; or for denial of a permit renewal application.

#### 2. Penalties for Violations of Permit Conditions

Oregon Law (ORS 468.990) classifies a willful or negligent violation of the terms of a permit or failure to get a permit as a misdemeanor and a person convicted thereof shall be punishable by a fine of no more than \$25,000 or by imprisonment for not more than one year, or by both. Each day of violation constitutes a separate offense.

In addition to the criminal penalties specified above, Oregon Law (ORS 468.140) also allows the Director to impose civil penalties up to \$10,000 per day for violation of the terms or conditions of a permit.

#### 3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

#### 4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application should be submitted at least 180 days before the expiration date of this permit.

The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

#### 5. Permit Actions

This permit may be modified, suspended, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit, rule, or statute;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the permittee for a permit modification or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. Toxic Pollutants

The permittee shall comply with any applicable effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

7. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of federal, state or local laws or regulations.

## SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### 3. Bypass of Treatment Facilities

#### a. Definitions

- (1) "Bypass" means diversion of waste streams from any portion of the conveyance system or treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

#### b. Prohibition of bypass.

- (1) Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
  - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary pumping, conveyance, or treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
  - (c) The permittee submitted notices and requests as required under paragraph c of this section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, when the Director determines that it will meet the three conditions listed above in paragraph b(1) of this section.

#### c. Notice and request for bypass.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section D, Paragraph D-5 (24-hour notice).

- d. Bypass not exceeding limitations.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in such a manner as to prevent any pollutant from such materials from entering public waters, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Sampling and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and shall be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 10\%$  from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

4. Penalties of Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5. Reporting of Monitoring Results

Monitoring results shall be summarized each month on a Discharge Monitoring Report form approved by the Department. The reports shall be submitted monthly and are to be postmarked by the 14th day of the following month unless specifically approved otherwise in Schedule B of this permit.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean, except for coliform and fecal coliform bacteria which shall be averaged based on a geometric or log mean.

8. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records of all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, or report of application. This period may be extended by request of the Director at any time.

9. Records Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.



10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge of pollutants.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and the rules of the Commission. No permit shall be transferred to a third party without prior written approval from the Director. The permittee shall notify the Department when a transfer of property interest takes place.

4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

5. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- b. Any upset which exceeds any effluent limitation in the permit.

6. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D, Paragraphs D-4 and D-5, at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D-5.

7. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

8. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified in accordance with 40 CFR 122.22.

9. Falsification of Reports

State law provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$1,000 per violation, or by imprisonment for not more than six months per violation, or by both.


SECTION E. DEFINITIONS AND ACRONYMS

1. BOD means five-day biochemical oxygen demand.
2. TSS means total suspended solids (non-filterable residue).
3. mg/l means milligrams per liter.
4. kg means kilograms.
5. m<sup>3</sup>/d means cubic meters per day.
4. MGD means million gallons per day.
5. Composite sample means a combination of samples collected, generally at equal intervals over a 24-hour period, and apportioned according to the volume of the flow at the time of the sampling.
6. FC means fecal coliform bacteria.

State of Oregon  
Department of Environmental Quality

Memorandum

Date: April 2, 1992

To: Environmental Quality Commission  
From: Fred Hansen, Director   
Subject: Findings of Fact and Conclusions of Law and Final Order

At the March 12, 1992, EQC meeting, you adopted the Hearings Officers proposed **Findings of Fact and Conclusions of Law and Final Order** with some changes. You directed Legal Counsel to prepare the final document including the changes, and authorized me to sign the order on your behalf. In individual discussions following the meeting, Commissioners Squier and Castle suggested they would be more comfortable if we could devise a process that allowed enough time for proposed language to be developed and reviewed (in cases where the Commission makes some changes) before a decision is finalized in the signed order. I decided instead of waiting to do this in the future, we should start now.

Attached is a draft of the **Findings of Fact and Conclusions of Law and Final Order** for the Pulp Mill Contested Case Proceeding prepared by Larry Knudsen. I would appreciate your reviewing this document and returning any comments to me by **Tuesday, April 14**. The Order will be finalized and I will sign it following receipt of your comments.

In the future, when your decision on an item establishes direction and requires drafting of specific language for an order to reflect your decision, you may want to have your motion reflect a procedure which directs that language be prepared, circulated to the Commission members for review, and authorizes the Director to sign following concurrence from the members. It would also be possible to incorporate a process similar to this into our procedural rules so that it could be done without specific mention in a motion, however, we are not proposing that at this time. Another option would be to make the basic decision and provide direction at one meeting, and have the final order language presented at the next meeting for formal adoption. I would appreciate your further thoughts on this issue.

Thanks.

Attachment

H:\TP\HLSDRAFT



P.O. Box 12519  
1149 Court St. N.E.  
Salem, OR 97309-0519

Salem 503/588-0050  
Portland 503/227-5636  
FAX 503/588-0052

TESTIMONY OF  
ASSOCIATED OREGON INDUSTRIES  
TO THE  
ENVIRONMENTAL QUALITY COMMISSION  
February 18, 1992, Albany, Oregon

Members of the Commission, I am Thomas C. Donaca, Senior Environmental Consultant to the Association. AOI is here today in support of the permit that is proposed for the James River Wastepaper Recycling Mill at Halsey, Oregon. It is AOI's position that the permit should be issued without modification, other than as recommended by your staff as a result of the public hearing on this permit.

AOI is very sympathetic to the concerns raised by the Oregon Association of Clean Water Agencies (ACWA). AOI also represents a large number of members that are served by municipal sewerage plants, and they too are concerned about the potential costs that would have to be imposed if, as expressed by ACWA, municipal sewerage plants would at all times in the future have to live within their current permit limits.

As an AOI staff member I attended my first meeting of the Oregon Sanitary Authority, Chaired by Harold Wendell, in 1956. The Authority at that time had little direct authority or power to require either municipalities or industries to improve their waste discharges. However, the Authority was committed to carrying out the mandates of the 1938 initiative of the people to clean up the Willamette River. The Authority and its staff pursued this activity by addressing both the municipal and industrial sources at the same time and equally. It is this equal approach towards all direct dischargers that permitted the Willamette to become, at a very early date, the first major river in this country to be returned to a state of swimmable and fishable. AOI commends this Commission to assume this same stance. It has served the people of Oregon well.

As we noted in an earlier letter to Ms. Lydia Taylor, Administrator of the DEQ Water Quality Control Division, the closure of two pulp and paper mills on the Willamette resulted in a BOD reduction in excess of 11,000 lbs of BOD per day. In addition, the reduction of a major ammonia load from an Albany area plant and the elimination of pulping at an Oregon City paper mill have resulted in additional reductions in BOD. Closure of some food processing plants and land application of food processing waste water at other food processing plants have significantly reduced the summer load from those sources on the Willamette River. Municipal plants have been the primary beneficiary of this change. As we also

Page 2 ...

noted in that letter, we do not know of any individual or cumulative increases in industrial loading that would compare with the decreases in industrial loadings.

The assimilative capacity of the Willamette is of concern to all NPDES permit holders for at any time that that capacity is exceeded all permit holders may have their permits reviewed and modified by this Commission. The DEQ staff report on the public hearing on the James River-Halsey permit indicates that increased loadings have been granted to several municipalities in recent years and suggests that similar increases could be granted in the future. It is the opinion of AOI that there is a current forum for addressing this important issue for all permit holders and the public, and that is the on going Willamette River Study.

AOI urges you to authorize the James River-Halsey recycling facility permit which will:

Remove large tonnage of currently unrecyclable waste paper from Oregon landfills which are in ever shorter supply; and

Meet DEQ's current "no observable effects" criteria and are protective of the beneficial uses of the river.

Thank you for providing this opportunity to comment.

LT



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

February 6, 1992

Jerry Turnbaugh  
Water Quality Section  
Dept. of Environmental Quality  
811 S. W. 6th Ave.  
Portland, OR 97204

Dear Mr. Turnbaugh:

As you are aware, James River and the City of Corvallis have been working together over the past several months to address concerns the City has raised regarding the proposed discharge for the Halsey recycling plant. Agreement has been reached on two issues: solid waste management and impact of the proposed discharge on Willamette River water quality.

We have long recognized the need for a solid waste management plan for the reject material that is generated during the wastepaper recycling process. James River has agreed to an aggressive program to evaluate beneficial use alternatives. This program includes specific target dates and provides for public input during each stage of the process. James River offers the following language, as suggested by the City, to be included in Schedule D: Special Conditions, of the NPDES permit.

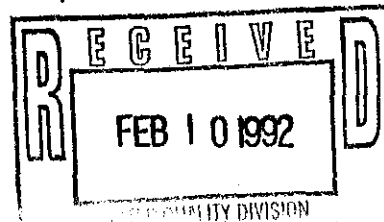
- 4. The permittee shall evaluate alternatives to landfilling the wastewater treatment plant sludge with the emphasis of finding a beneficial use for the waste material according to the following schedule:

By no later than January 1, 1994, a Solid Waste Feasibility Study and Solid Waste Plan shall be completed and submitted to the Department.

By no later than January 1, 1996, laboratory studies and/or pilot scale studies shall be completed. A written report summarizing the results of these studies shall be submitted to the Department.

By no later than January 1, 1997, a program and time schedule to implement the selected alternative(s) shall be submitted to the DEQ for review and approval.

Public meetings will be held at each stage of this process to share information and provide an opportunity for public input.

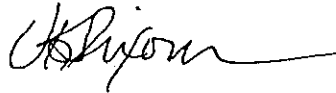


Jerry Turnbaugh  
Page 2  
February 6, 1992

James River believes that the DEQ has done a very thorough evaluation of the proposed discharge, and concurs with their determination that beneficial uses of the Willamette River, including drinking water, will be protected. The City continues to have concern about the potential impact on their drinking water supply. Instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and trihalomethanes, which may be related to taste and odor are of particular concern. An agreement to conduct scientific water quality studies to determine the effect, if any, of James River's discharge on the Corvallis water supply has been reached. This study will cover a two year period between July, 1992 and July, 1994. The following language is suggested for inclusion in James River's NPDES permit, Schedule D: Special Conditions, to acknowledge the existence of the agreement:

5. DEQ acknowledges the potential impact issuance of this permit may have on the City of Corvallis. This permit is issued in recognition of agreements reached between the City of Corvallis and James River Corporation.

Very truly yours,



VIRGINIA K. SIXOUR/gh

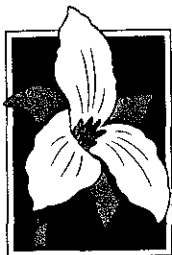
Manager, Environmental  
Field Services-Northwest

cc:

Fred Hansen, Director	- DEQ
Lydia Taylor, Administrator Water Quality Division	- DEQ
Hon. Charles Vars., Mayor	- City of Corvallis
Gerald Seals, City Manager	- City of Corvallis
Rolland Baxter, Public Works Director	- City of Corvallis



# NORTHWEST ENVIRONMENTAL ADVOCATES



National Whistleblower  
Center  
517 Florida Ave., N.W.  
Washington, D.C. 20002  
202-667-7515

Columbia/Willamette  
RIVERWATCH  
133 S.W. 2nd Ave. #302  
Portland, OR 97204

## NORTHWEST ENVIRONMENTAL ADVOCATES' COMMENTS BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF THE STATE OF OREGON REGARDING THE PROPOSED PERMIT FOR THE JAMES RIVER, HALSEY RECYCLING MILL

February 18, 1992

My name is Keith Warner. I am representing Northwest Environmental Advocates, a regional environmental organization with over 4000 supporters, which works to protect human health and the environment from toxic wastes, water and air pollution. Our executive director, Nina Bell, could not be here today because of a previous commitment.

Northwest Environmental Advocates welcomes the opportunity to give public comment on the proposed findings before you today. We are encouraged that James River is constructing a mill using recycled paper. However, we, and we believe the EQC, should have genuine concerns that DEQ is proposing a permit that is severely flawed and that James River has manipulated the administrative procedure for gaining a permit by virtually completing the facility before applying for a permit.

We find it most disturbing that we are giving comment on a permit that we have yet to see. Our organization received the memo of proposed findings and DEQ response to public comment now before you only Friday, February 14. The findings and associated documents refer to a revised permit that was not sent out in the package. DEQ has put us in the awkward position of giving comment on a revised permit we not been given the opportunity to review.

The public comment required by law is supposed to be meaningful; it is difficult to provide meaningful comment when the permit is not provided to the public. Given that this item was originally scheduled for the January EQC meeting, we are left wondering why DEQ waited until two working days before this meeting to mail out a public information packet -- one that was lacking the permit on which we are now attempting to comment? There appears to be substantial pressure on DEQ to push this permit through. We would ask you, members of the commission, to please slow this process down.

Please take note of the many assumptions you are being asked to accept, virtually without question. More importantly, ask DEQ why you are being asked to permit a mill that is already built? Ask yourselves if you have been given any real choice in this process. All agree that the ends are desirable, but why are you, as

members of the commission, denied the chance to decide the most fundamental question: is this facility appropriate to this river? And please consider what actions you can take so that neither you nor anyone else is forced to act on a regulatory question in which you are denied a real choice.

You are being asked to approve of a multi-million dollar industrial experiment. We believe the state should proceed on this matter with great caution and ample opportunity for genuine public comment.

**A. Problems with the permitting process**

- 1. DEQ *assumes* they know enough about the Willamette River to conclude another major industrial permit will not harm water quality.**

The Oregon Department of Fish and Wildlife expressed concern about the insufficiency of information, the potential cumulative effect of multiple approvals, each with no measurable effect, and the potential to adversely affect dissolved oxygen in the Willamette River. DEQ notes this concern, but then *assumes* it is not necessary to delay the approval of more major NPDES permits while it conducts a study of the Willamette basin.

DEQ's reasoning on page 12 of the proposal is flawed. It states: "(n)o evidence has been submitted demonstrating violations of water quality standards or negative impacts of beneficial uses." The issue at hand is not whether this facility's discharge, in and of itself, will violate standards. No one has ever suggested that it would violate standards. The issue is cumulative effects. The DEQ has not done a comprehensive study of this problem, and in the proposed findings, they merely wish the problem away.

Given that DEQ has yet to complete a comprehensive study of water quality in the Willamette, why is it proposing to issue more major permits along the waterway? NWEA does not believe DEQ knows enough about the Willamette River to grant another major industrial permit along the river. We don't believe it is reasonable at this time for DEQ to *assume* this mill won't contribute to water quality problems. It does seem perfectly reasonable, however, to place a moratorium on further major industrial permits until the first comprehensive study of Willamette River water quality is completed.

- 2. DEQ *assumes* the James River Recycling Mill will not discharge TCDD into the Willamette River.**

NWEA believes it is outrageous that this mill's permit, as originally drafted, did not include provision for testing TCDD in waste effluent. It is common knowledge that TCDD is produced in bleached-kraft process, and that some of this TCDD can be found

in the paper products produced by bleached-kraft mills. DEQ knew that TCDD could potentially be discharged from a mill using a mix of recycled paper materials, some of which may have significant levels of TCDD. Why did the evaluation report not include discussion of this toxin, given that a reasonable potential exists for its discharge? Why does the U.S. EPA have to prod the DEQ into action on this toxin? How could DEQ *assume* that they could "fix" the TCDD problem later?

All of the water quality technical staff at DEQ know that the Willamette River is water quality limited for TCDD. Why did the permit writers *assume* no TCDD would be discharged from this facility? There is no evidence demonstrating whether it will or will not. Given the state of the river, the burden of proof lies on both James River and DEQ to demonstrate that no TCDD will be discharged, yet because of the new technology involved, they cannot. There is no *de minimus* screening in water quality limited streams for pollutants of concern. If this mill discharges **any** TCDD, it will be in violation of the law.

The Willamette River is water quality limited for TCDD, and the permit needs to reflect appropriate caution in regard to the potential for this facility to discharge TCDD. We believe the James River Recycling Mill should be required to perform regular, rigorous testing for TCDD. If TCDD or any other toxin is detected, this should result in triggering two actions by James River:

- 1) Complete, broad-spectrum analysis for primary and secondary pollutants in both the influent and effluent. Testing needs to be done on water sources, because James River receives some of its water from the Pope & Talbot mill. The source of these pollutants must be identified to correct the violations.
- 2) The formulation of a plan to eliminate the discharge of illegal pollutants. The permit should be written to mandate James River to produce studies, provide analysis and implement solutions to correct violations. DEQ should mandate in the permit an appropriate timeline to complete these actions should they be necessary.

Detection of TCDD would indicate that assumptions made by DEQ and James River were seriously flawed. Given the sophisticated level of treatment for BOD and TSS, James River should be required to employ Best Available Technology for treating TCDD and toxics.

If the administration at DEQ had wanted to honestly address the issue of the potential for this mill to discharge toxins, they could have asked their technical staff. They could have included this concern in the original permit. Technical staff must have described this potential. The administration either 1) failed to ask their staff (and failed to ask EPA) or,

2) ignored their staff's recommendation. We believe either one of these indicates a serious problem with DEQ's decision-making process.

Originally, DEQ wanted us to *assume* that none would be discharged. They are now asking us to *assume* that the new permit will take care of the problem with monitoring and reporting. Commissioners, we ask you to put an end to the assumptions. Send this permit and its evaluation back to DEQ to re-write it. Ask DEQ to address the threat of TCDD responsibly.

## **B. Troubling questions about public policy**

### **1. Why are you being asked to approve a major industrial wastewater permit for a mill that is already built?**

It seems that this commission has been denied any real choice in this matter. The multi-million dollar facility has already been built. How can you possibly say no? James River began planning this mill years ago. This corporation knew it would be far easier to gain permit approval once the facility was built. It seems profoundly disrespectful of this commission for James River to build a facility and then appear before you, essentially with a wastewater pipe to your heads, saying: approve this permit or face the political consequences of keeping a jobs-producing facility closed. James River has literally put your backs against the wall.

Commissioners, you are being asked to adopt a findings for a facility that has been built contrary to OAR 340-45-015 (1), which states:

"Without first obtaining a permit from the Director, no person shall:

(b) Construct, install, modify, or operate any disposal system or part thereof or any extension or addition thereto;

(d) Construct, install, operate or conduct any industrial commercial, or other establishment or activity or any extension or modification thereof or addition thereto, the operation or conduct of which would cause an increase in the discharge of wastes into the waters of the state or which would otherwise alter the physical, chemical, or biological properties of any waters of the state in any manner not already lawfully authorized;

(e) Construct or use any new outlet for the discharge of any wastes into the waters of the state."

Given that the facility is virtually ready to begin operations, it is unlikely DEQ is going to take any action to prevent its completion. You can, however, direct DEQ to write a stringent permit. We urge you to do so. You also have the opportunity to direct James

River to take further actions to protect the river. Given that James River has clearly violated the spirit of the OAR statues, NWEA believes it is reasonable for the EQC to direct the company to construct a tertiary treatment system. James River flaunted the law; the company should not go unpunished.

## **2. Does this facility belong on this river?**

You have been denied by your own Department the chance to analyze the most important question: does this recycling mill belong along this waterway? This is the question which deserves your full consideration.

The Clean Water Act directs the states consider what waterways can support before allowing increased development to occur along them. We call this the "reality-based approach." The DEQ should know what the Willamette can reasonably support before assigning more pollutant loading to anyone. Just by the fact that the DEQ needs to conduct the Willamette River study indicates that DEQ does not know what the river can support. We urge you to direct DEQ to prohibit the construction of further facilities requiring major industrial permits along the Willamette River until a comprehensive study and a management plan have been completed.

## **C. Conclusions**

The findings you have before you are a result of months of back-room maneuvering with a total disregard for the spirit, if not the letter, of Oregon Law. But you do have the opportunity to prevent this kind of manipulation from happening again.

Commissioners, now is the time to develop a policy that directs applicants for major industrial permits to make a presentation directly to you before construction begins on any facility. You must be given the opportunity to vote on future pollutant sources during the planning process. If you do not establish a policy that directs industrial development to present proposals to you before they are built, we guarantee you will see many more foregone conclusions appear before you. This method of corrupting the permitting process is too obvious. It is a form of economic brinkmanship that is too easily won by an industry dangling out the promise of a few jobs.

Finally, we urge you to direct DEQ to include strict limits and testing for TCDD and other toxins, and to write up a clause which will trigger specific corrective actions on the part of James River. Given the way James River has disregarded the law, we believe an appropriate permit requirement would be tertiary wastewater treatment at the facility.

To:EQC

Feb. 18, 1992.

Feb.18th meeting, Albany,  
Old Armory, Fourth and Lyons Ave.

From: Maria Serrot  
920 SW 10th, Corvallis,  
Ore. 97333.

Dear Ladies and Gentlemen of the EQC:

I am a homeowner residing ten blocks from the Willamette and two blocks from the Mary's. As a self-supporting professional artist who derives daily recreation and inspiration from the Willamette, I resent any degradation of the river and its greenway.

James River, without a permit, erects a 65 million dollar plant and offers 60 jobs as what it appears as a "show of force". The public who feels for the river and demands its protection as promised in state-wide Goal 15, is expected by this formidable show of force, added by the fact that this is an illustrious recycling plant, to be stunned into apathetic silence. We are expected to passively accept the dumping of 2000 daily pounds of BOD's into the river as a necessary evil. The sludge into Coffin Bute, water treatment for Corvallis, and their possible detrimental effects are other matters of concern to Corvallis citizens.

In the summer, when I want to swim in the river, I don't, as I'm afraid of what manner of agricultural run-off, municipal and industrial waste may flow with the water. Most residents I know who use the riverfront for walking, running or biking and who benefit from the river merely by its proximity and beauty, feel the same way. As an artist and river lover, this already hurts me and others in a chronic way. As with noise pollution, these environmental degradations are forever overlooked. They do, however, inflict real pain to the public,

and people must be forever having to "get away" from these pains into more pristine surroundings to "recreate" themselves.

There is only one Willamette River, and it has tremendous recreational value to myself and to other Corvallis citizens who are so blessed to have it flow at the edge of our downtown. The river was cleaned up once. It took great effort to do it.

Let us honor the labors of the people who gave so much. If James River was so confident to expend 63 million without a permit, it would be expected of such intelligence to produce an alternate way to treat their waste. I do not for a moment take the consequence of James River's gamble into my conscience, on the contrary, because of my love for the river, I take as a personal affront. It is time now to apply as a standard for the Willamette the "anti-degradation policy" adopted by the EQC in Sept. 1991.

Sincerely,

*Quaria Lerrot*

SUPPORTERS OF JAMES RIVER  
HALSEY RECYCLING FACILITY  
NPDES PERMIT

*Steve Anderson	Pope & Talbot, & member, Willamette River Study Task Force
*Tom Donaca	Associate Oregon Industries
*Jim King	Exe. Dir., Corvallis Chamber of Commerce
*Gordon Swanson	United Paperworkers International Union
*Larry Jurgensmeier	Salem Building Trades
*Craig Sherman	Weyerhaeuser
*Doris Zacher	Weyerhaeuser
*Larry Gordon	Gordon Trucking
*Allen Meyer	Pacific Power
*Bill Weber	Landfill operator, Coffin Butte
*Liz Van Leeuwen	Oregon State Representative
Bob Shiprack	Oregon State Representative, and Oregon Building Trades
Carolyn Oakley	Oregon State Representative
Tony Van Vliet	Oregon State Representative
Mae Yih	Oregon State Senator
Duane Sorenson	President, Waste Control Systems, Inc. & Board Chm., Corvallis Chamber of Commerce
Jeff Andrews	Corvallis Disposal
Dave Schmidt	Commissioner, Linn County
Mike McLaren	Exe. Director, Albany Chamber of Commerce
Mel Joy	Director, Albany-Millersburg Econ. Dev. Corp.



James River Halsey Recycling Supporters/page 2

Sandra Gazeley	Pres., Harrisburg City Council & City Planner
Jim Ruef	Economic Dev. Officer, Lebanon & Sweet Home
Bill Perry	Corvallis
Bob Sweany	Corvallis, retired Chamber/Dev. Dir., business consultant
Ken Medearis	Corvallis, retired Pacific Power exe.
Doug Sweetland	Exe. Dir., Econ. Dev. Partnership, Corvallis/Benton Co.
Marty Stewart	Linn Benton Community College
Peter Sukalac	Willamette Valley Econ. Dev. Alliance
Mike Siles	Manager, Employment Division, Albany
Len Arnst	Wright Schuchart Harbor
Marlin Aernie	United Paperworkers International Union
Gabriella Lang	Oregon State Econ. Dev. Dept.
Roger Sherwood	Pope & Talbot
Bill Frohnmeyer	Pope & Talbot
Gene Buccola	Realtor, Corvallis
John Waggoner	Association of Western Pulp & Paper Worker, Local 5
Billy Taylor	United Paperworkers International Union, Local 1097
Doug Morrison	Northwest Pulp & Paper Assn.
Bob Cochran	Association of Western Pulp and Paper Workers, Local 5
Mike Hayden	Association of Western Pulp and Paper Workers, Local 5

James River Halsey Recycling Supporters/page 3

Jerry Powell	<u>Resource Recycling</u> magazine
William Mehrens	Columbia Pacific Building Trades
John Drew	Far West Fibers
Paul Cosgrove	American Paper Institute, Inc.
Patricia Wells	Bus. Enterprise Center, Corvallis
Roger Campbell	Pope & Talbot
Werner Gerling	Northwest Natural Gas
Dean Spady	Albany-Lebanon Sanitation Co.
Steve Michaels	Linn County
Tom Robicheaux	Rust International Corp.
Larry Gordon	Gordon Trucking
Larry Rust	Lane County Commissioner
Dick Mullican	Albany Chamber of Commerce
Bob Martin	Portland Metropolitan Service Dist.
Max Brittingham	Oregon Sanitary Service Institute
Keith Rohrbough	Albany City Council
Tom Ahlers	Town & Country Realty, Corvallis

\* Available to provide testimony at the Environmental Quality Commission meeting February 18, Albany.

CODE OF FEDERAL REGULATIONS  
Environmental Protection Agency  
40 CFR (revised as of July 1, 1990)  
[emphasis added in underlining]

122.2 Definitions

**New discharger** means any building, structure, facility, or installation:

- (a) From which there is or may be a "discharge of pollutants;"
- (b) That did not commence the "discharge of pollutants at a particular "site" prior to August 13, 1979;
- (c) Which is not a "new source" and
- (d) Which has never received a finally effective NDPES permit for discharges at that "site."

**New source** means any building, structure, facility or installation from which there is or may be a discharge of pollutants," the construction of which commenced:

- (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

**Site** means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

122.29 New sources and new dischargers.

(a) **Definitions.**

- (1) New source" and "new discharger" are defined in 122.2.
- (2) "Source" means any building, structure, facility, or installation from which there is or may be a discharge of pollutants.
- (3) "Existing source" means any source which is not a new source or a new discharger.
- (4) "Site" is defined in 122.2
- (5) "Facilities or equipment" equipment" means buildings, structures, process or production equipment or machinery which form a permanent part of the new source and which will be used in its operation, if these facilities or equipment are of such value as to represent a substantial commitment to construct. It excludes facilities or equipment used in connection with feasibility, engineering, and design studies regarding the source or water pollution treatment for

(b) **Criteria for new source determination.**

(1) Except as otherwise provided in an applicable new source performance standard, a source is a "new source" if it meets the definition of "new source" in 122.2 and

(i) It is constructed at a site at which no other source is located or

(ii) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source or

(iii) Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Director shall consider such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

(2) A source meeting the requirements of paragraphs (b)(1)(i), (ii), or (iii), of this section is a new source only if a new source performance standard is independently applicable to it. If there is no such independently applicable standard, the source is a new discharger.

(3) Construction on a site at which an existing source is located results in a modification subject to 122.62 rather than a new source (or a new discharger) if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraph (b)(1)(i)(ii) or (iii) of this section but otherwise alters, replaces or adds to existing process or production equipment.

(4) Construction of a new source as defined under 122.2 has commenced if the owner or operator has:

(i) Begun, or caused to begin as part of a continuous on-site construction program:

(A) Any replacement, assembly or installation of facilities or equipment: or

(B) Significant site preparation work including clearing, excavation or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

(ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation with a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility engineering, and design studies do not constitute a contractual obligation under the paragraph.

STATEMENT BY ELIZABETH FRENKEL  
1431 NW Vista Place, Corvallis, OR 97330  
before the  
Environmental Quality Commission  
February 18th, 1992  
Albany, Oregon

Regarding Agenda Item A: James River Recycle Facility: Approval  
of Proposed Waste Load Allocation

RE: Separate permits -- NEW SOURCE issue

Arguments:

- 1) In a September 17, 1991 letter by James River to Skirvin, DEQ  
-- James River & Pope & Talbot decided to go for separate permits  
-- James River notified DEQ of decision & rec'd verbal  
support for separate permits  
-- plans and specs supplied to DEQ in March 1991

**How can DEQ presume James River and Pope & Talbot require  
separate permits? How do they conclude that James River and Pope  
& Talbot are "independent" in the light of CFR 122.29? .**

- 2) Only one water right exists for the entire Halsey Site.  
That water right is owned by Pope & Talbot. Pope & Talbot, in fact,  
has just recently expanded its water right by nearly 15 cfs in  
preparation for its own expanded operation. James River has no  
water right and must supply its water needs of 3.5 mgd or 5.4 cfs  
from Pope & Talbot. "James River will obtain treated process  
water from the Pope & Talbot mill." (Evaluation Report, p. 4)

**How then is the James River system "independent from Pope &  
Talbot?**

- 4) Pope & Talbot NPDES Permit No.: 100413 (Modified 11/7/90  
Expires 12/31/92) reads:

SOURCES COVERED BY THIS PERMIT: "Effluent from bleached-  
kraft pulp and paper mill and sanitary treatment system."  
[Emphasis added.]  
Includes Limitations on BOD, TSS, pH, TCDD and, AOX.

Since Pope & Talbot has no paper mill on site (only James River  
has a paper mill on site) and Pope & Talbot has agreed to handle  
all of James River's sanitary sewage, this present NPDES permit  
(held by Pope & Talbot), can only be considered MODIFIED by the  
James River addition. James River cannot be considered a "new  
source". The James River effluent cannot be considered  
"independent" of Pope & Talbot. It should, rather, be considered  
as a modification to the Pope & Talbot NPDES Permit.

**How then is the James River system "independent" from Pope &  
Talbot?**

5) "Pulp to supply the [existing] paper mill is imported to the site from the nearby Pope & Talbot Pulp Mill and other sources." "90% of the water supply for the new mill" will come from the existing paper mill wastewater." (Evaluation Report p.5)

**How then is the James River system "independent" from Pope & Talbot?**

6) There is ONLY ONE discharge point to the Willamette River for both Pope & Talbot & James River effluent..

**How then is the James River system "independent from Pope & Talbot?**

7) The Evaluation Report as prepared and available for public hearings discussed "review of water quality data, modeling analysis performed by the applicant and DEQ staff, and Department staff knowledge and observations of water quality conditions and the effects of discharges." (Evaluation Report p. 11) This Report DID NOT discuss the issues of "new sources". The public was never given information regarding DEQ's assumptions about the "new source" issue prior to the Hanson MEMORANDUM dated February 11, 1992 which I received on Saturday, February 15th, 1992.

**There are no findings specific to CFR 122.30 regarding "Criteria for new source determination".**

#### CONCLUSION

EQC cannot approve this permit under 40 CFR 122.29 without a determination and findings as to whether this application should be considered a "new source" or a "new discharger".

James River **does not** meet the new source determination of (1)(i), nor of (1)(ii) and the justification for (1)(iii) have not been adequately argued.

(1)(iii) ... "The Director shall consider such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source."



# UNITED PAPERWORKERS INTERNATIONAL UNION

REGION XI

6882 Birchwood Court, N. • Keizer, OR 97303

**GORDON L. SWANSON**  
*International Representative*

Telephone  
(503) 390-4554

## STATEMENT FOR THE ENVIRONMENTAL QUALITY COMMISSION

on

### JAMES RIVER HALSEY RECYCLING FACILITY

Members of the commission, my name is Gordon Swanson. I am a member of the United Paperworkers International Union, which is one of the 300 affiliated local unions and part of the 125,000 members that make up the Oregon AFL-CIO. I'm here today as a union representative to support James River's request for a new waste load allocation for the Willamette River so that the Company can begin operating its new recycling facility.

I'm speaking today for many of the people who helped construct the new facility which meets the highest standards of technology. A number of these people have testified during the public hearing process about the many economic benefits this project is bringing to the State of Oregon. I'll briefly restate a few of those benefits now.

Customers in record numbers are requesting products made from recycled fiber. For example, a coalition of seventeen (17) western states has formed a purchasing alliance that calls for the use of recycled paper in state offices. We must find ways to meet such customer demand. The new recycling plant will supply recycled fiber for James River mills at Halsey and Wauna, Oregon and Camas, Washington to help those mills meet market demand for products containing recycled fiber.





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The new Halsey facility is creating sixty (60) new family wage jobs, and is helping to preserve hundreds more at the existing Oregon and Washington mills because it reduces the mills' dependence on purchased market pulp.

The new plant also will support hundreds of local recyclers, haulers and other businesses and industries that serve the recycling industry.

Construction of the Halsey plant has employed 400 local citizens directly and many others indirectly through the procurement of building materials and equipment from the local area.

People are eagerly awaiting the start-up of this plant. This project that creates a new market for office waste paper will complement the already existing markets for newsprint and corrugated papers, and it is receiving strong public support. It assists the State of Oregon in complying with the governor's executive order and the legislative mandate to develop markets for post-consumer waste.

James River has taken sound environmentally responsible steps to construct a plant that meets the highest standards of technology, and that will bring tremendous economic benefits to the State of Oregon.

Thank you.





not  
issues.

- 1. Jobs, -
- 2. Construction before permit

1. Water Quality standards met

2. Separate Source

~~3. High~~

3. Highest + Best Practicable Controls (Equity)

4. TCRP at zero

4.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
STATE OF OREGON

In the Matter of the Request for )  
Approval of Allocation of Currently )  
Unused Wasteload Assimilative )  
Capacity of the Willamette River to )  
James River II, Inc., for the Halsey )  
Secondary Fiber De-Inking Mill )  
(Recycle Facility) )

ORDER

James River II, Inc. has applied to the Department of Environmental Quality for a permit to discharge highly treated wastewater to the Willamette River from a new facility that will receive waste paper, process it to remove ink and other contaminants, and use it as a source of pulp for production of new paper. The proposed facility is referred to as the Halsey Secondary Fiber De-Inking Mill (Recycle Facility).

Rules adopted by the Environmental Quality Commission require that the Commission determine whether the allocation of currently unused wasteload assimilative capacity of the river for a proposed new source is appropriate. (OAR 340-41-026).

The Department evaluated the James River application, evaluated potential water quality effects and concluded that the proposed discharge will not cause water quality standards to be exceeded, determined that it would be appropriate to recommend that the Commission authorize a new discharge to the Willamette River, drafted a proposed permit, and held three public hearings on the Department's evaluation and permit proposal.

The Department then evaluated the testimony received at the public hearings, prepared a summary response to public comment, prepared proposed findings in support of approval of a new source discharge, and formally recommended to the Commission that it adopt the findings contained in Attachment A and approve a new discharge to the Willamette River near Halsey with the monthly average BOD, not to exceed 2,000 lbs/day during the summer months and 3,120 lbs/day during the winter months.

The matter came before the Commission for action on February 18, 1992, in a public meeting held in the Miller B Room of the Old Armory located at 104 Fourth Street in Albany, Oregon, beginning shortly after 9:30 a.m.

The Commission heard summary presentations from Department staff, and received public input on the matter.

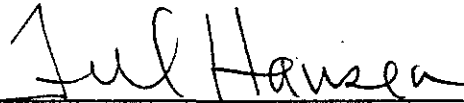
The Commission, after reviewing the Department's analysis and recommendations, considering public comment, and deliberating on the matter, approves for a limited duration of four (4) years, a new discharge for James River II, Inc., to the Willamette River near Halsey with the monthly average BOD, not to exceed 2,000 lbs/day during the summer months and 3,120 lbs/day during the winter months. To the extent otherwise consistent with this order, the Commission adopts the findings and analysis set forth in Attachment A of the staff report, "Agenda Item A, February 18, 1992 Special EQC Meeting" (included herewith as Attachment A).

In entering this order, the Commission takes notice of the Willamette River Water Quality Study that is in progress and expected to be completed in June 1993. The Commission also seeks an evaluation of potential options for additional wastewater treatment to reduce the discharge significantly below the recommended level of 2,000 lbs/day. The Commission anticipates that the evaluation results will be presented for its consideration along with a request for extension of the discharge approval at an appropriate level beyond the currently approved four year period.

IT IS SO ORDERED.

On behalf of the Environmental Quality Commission.

DATED this 28 day of February, 1992.



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Fred Hansen  
Director  
Department of Environmental Quality

PROPOSED ENVIRONMENTAL QUALITY COMMISSION FINDINGS  
REQUIRED BY OAR 340-41-026 FOR APPROVAL OF A NEW DISCHARGE  
FOR THE JAMES RIVER WASTEPAPER RECYCLE FACILITY AT HALSEY

OAR 340-41-026 presents basic water quality management policies and guidelines that are generally applicable to all river basins in Oregon. Several of the provisions of this rule have specific application to a proposed new or expanded wastewater source. The following discussion cites each applicable rule provision, presents the proposed finding regarding the rule provision, and provides discussion of the proposed finding.

340-41-026(1)(a)

*340-41-026(1) In order to maintain the quality of waters in the State of Oregon, the following is the general policy of the EQC:*

*(a) Antidegradation Policy for Surface Waters.*

*The purpose of the Antidegradation Policy is to guide decisions that affect water quality such that unnecessary degradation from point and nonpoint sources of pollution is prevented, and to protect, maintain, and enhance existing surface water quality to protect all existing beneficial uses. The standards and policies set forth in OAR 340-41-120 through 962 are intended to implement the Antidegradation Policy.*

*A. HIGH QUALITY WATERS POLICY: Where existing water quality meets or exceeds those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, and other designated beneficial uses, that level of water quality shall be maintained and protected. The [Environmental Quality] Commission, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, and with full consideration of OAR 340-41-026 (2), (3) and (5), however, may allow a lowering of water quality in these high quality waters if they find:*

*(i) no other reasonable alternatives exist except to lower water quality; and*

*(ii) the action is necessary and justifiable for economic or social development benefits and outweighs the environmental costs of lowered water quality; and*

*(iii) all water quality standards will be met and beneficial uses will be protected.*

*B. The Director or a designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare.*

- C. *WATER QUALITY LIMITED WATERS POLICY: For water quality limited waterbodies, the water quality shall be managed as described in OAR 340-41-026(3).*
- D. *OUTSTANDING RESOURCE WATERS POLICY: Where existing high quality waters constitute an outstanding state or national resource such as those waters designated as extraordinary resource waters, or as critical habitat areas, the existing water quality and water quality values shall be maintained and protected, and classified as "Outstanding Resource Waters of Oregon". The Commission may specially designate high quality waterbodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those waterbodies. The Department will develop a screening process and establish a list of nominated waterbodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305 (b) Report). The priority waterbodies for nomination include:*
- (i) National Parks;*
  - (ii) National Wild and Scenic Rivers;*
  - (iii) National Wildlife Refuges;*
  - (iv) State Parks; and*
  - (v) State Scenic Waterways.*

*The Department will bring to the Commission a list of waterbodies which are proposed for designation as Outstanding Resource Waters at the time of each Triennial Water Quality Standards Review.*

*In designating Outstanding Resource Waters, the Commission shall establish the water quality values to be protected and provide a process for determining what activities are allowed that would not affect the outstanding resource values. After the designation, the Commission shall not allow activities that may lower water quality below the level established except on a short term basis to respond to emergencies or to otherwise protect human health and welfare.*

### Finding

The Willamette River downstream from the proposed point of discharge is appropriately classified as "High Quality Waters" with respect to all potential pollutant parameters except 2,3,7,8 TCDD. For 2,3,7,8 TCDD, the Willamette River has been classified as "Water Quality Limited".

Existing water quality in the Willamette River downstream from the proposed point of discharge supports recognized beneficial uses including propagation of fish and wildlife and recreation. The proposed discharge will not measurably lower water quality.

### Discussion

The Department has evaluated compliance with each water quality standard, and has evaluated public comments received regarding the proposal. The evaluation is detailed in the permit application Evaluation Report, and in the summary and response to public comment. In addition, specific issues are further discussed in the following sections of these findings.

As noted in the permit application evaluation report, the Department has designated the mill's stretch of the river (RM 109-150) as only "partially" supporting aquatic life because of periodic reductions of DO below the standard of "not less than 90 percent of saturation". Measured DO values below 90 percent saturation reflect the low point of the naturally occurring diurnal variation. Another provision of the standards specifies that where natural water quality exceeds a water quality standard, the natural quality becomes the applicable standard. Thus it is possible to interpret the combination of the rules to conclude that the 90% saturation standard for DO is not violated. While no information is available that suggests this diurnal variation is harmful to aquatic life, the Department has elected to flag the issue for study. The level of chlorophyll *a* and phosphorous are two other parameters that appear to warrant further study. These issues have been included in the Willamette River Study for further study. This study involves gathering additional data and conducting a more detailed evaluation of water quality. Potential outcomes of the study include refinement of water quality standards to clarify intent and assure future protection of beneficial uses, and/or development of future source control strategies to assure that existing and future discharge loads can be accommodated while protecting beneficial uses. If it is determined appropriate to designate the river as water quality limiting for other parameters based on new data collection and additional evaluation, future actions and schedules for implementation will be prescribed as appropriate.

340-41-026(2) & (5)

- (2) *In order to maintain the quality of waters in the State of Oregon, it is the general policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) of this rule.*
  
- (5) *For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved subject to the criteria in Section 3 of this rule.*

Finding

The proposed wastewater discharge is from a new manufacturing facility that will receive and process waste paper for use as a pulp source for production of marketable paper products. Therefore, the proposed wastewater discharge is deemed to be a new waste source and is subject to review pursuant to paragraph (5).

The total volume of wastewater to be disposed of will be minimized by pollution prevention technologies including use of mechanical means of contaminant removal (de-inking) rather than the traditional chemical means, and extensive reuse of process water within the plant including reuse of existing paper machine whitewater as the water source for the wastepaper pulping process. These steps will result in waste water quantities which are one-third of the industry average for this type of plant.

Alternatives for wastewater treatment and disposal including Tertiary Treatment Using Filtration Technology, Tertiary Treatment Using Wetlands Treatment, and Conservatively Designed Secondary Treatment were evaluated by James River. The selected alternative, Conservatively Designed Secondary Treatment Technology, was found to be the most practicable and consistent with overall environmental goals. DEQ reviewed James River's evaluation and concurs with the result. The wastewater treatment system, consisting of primary treatment followed by a high rate activated sludge treatment system will achieve 95-97% removal of BOD and is equivalent to the level of technology generally required as "highest and best practicable treatment of wastes" for other municipal and industrial sources in the basin.

James River also evaluated irrigation utilization of treated wastewater effluent as an alternative to stream discharge and concluded that this option was not practicable for their location and the quantity of wastewater involved. DEQ reviewed the evaluation and concurs with the conclusion.

### Discussion

James River currently owns and operates an existing paper mill at the site. Pulp to supply the paper mill is imported to the site from the nearby Pope and Talbot Pulp Mill and other sources. Paper mill wastewater (paper machine "whitewater") has been piped to the Pope and Talbot Pulp Mill treatment facility for biological treatment and river discharge. James River and Pope and Talbot are separate and independent companies. James River proposes to use the paper machine whitewater from the existing Paper mill as 90% of the water supply for the new Wastepaper Recycle Facility (also referred to as the Recycle Facility or Secondary Fiber De-Inking Mill). The balance of the whitewater will be sent to the new Recycle Facility treatment units. The major part of the waste load to the proposed new wastewater treatment facility will come from the waste paper recycling process.

The James River Recycle Facility meets the federal definition of a new source and must meet requirements defined for new sources. Specifically, the Recycle Facility

processes are substantially independent of existing sources at the site [40 CFR 122.29(b)(1)(iii)]; new source performance standards are independently applicable [40 CFR 122.29(b)(2)]; and a new plant will be constructed [40 CFR 122.29(b)(3)].

Based on the federal rule provisions, and the fact that the substantial part of the wasteload will be from the new Recycle Facility, the Department concludes that it is most appropriate to view the proposed discharge as a new source discharge to the Willamette River.

James River has proposed state-of-the-art technology to minimize the potential environmental effects from the proposed Recycle Plant. First, they propose to use the existing paper mill wastewater as 90% of the water supply for the new mill. Second, they propose to use a mechanical process rather than the more common chemical and heat intensive processes for removing ink and other contaminants from the recycled paper. Third, they propose to use a color stripping and bleaching process that does not use chlorine and therefore will not produce chlorinated organic compounds. Finally, they propose to treat and extensively reuse water within the Recycle Facility itself. As a result of these pollution prevention steps, the quantity of wastewater to be disposed of from the Recycle Facility is expected to be about one-third of the quantity expected for a more traditional waste paper de-inking facility. In addition, the proposals to eliminate the use of chlorine and other chemicals for de-inking, contaminant removal, and bleaching is considered to be the environmentally preferred approach.

James River evaluated three options for wastewater treatment that would reduce BOD loading in the final effluent to levels that would be significantly less than the applicable New Source Performance Standards established by EPA. All of the treatment options assumed use of primary treatment technology to remove settleable solids as the first step. Primary treatment would be expected to remove 99% of the suspended solids and 45-65% of the BOD in the wastewater from the Recycle Facility. Additional treatment options evaluated included (1) Tertiary Treatment Using Filtration Technology, (2) Tertiary Treatment Using Wetlands Treatment, and (3) Conservatively Designed Secondary Treatment.

Tertiary Treatment Using Filtration Technology involves sand or other media filtration following the conventional biological secondary treatment required by the federal new source performance standards. This technology would be expected to reduce the BOD in the secondary treatment facility effluent by 25-35%. Frequent backwashing would be necessary to restore and maintain filter operation. Disposal of the filter "mud" from the backwashing process would be an added environmental problem. Chemical addition would likely be needed to prevent slime formation that would prematurely plug the filter. Capital costs would be in the range of \$2-3 million for construction. Additional operating costs would also be significant.



Tertiary Treatment Using Wetlands Treatment is an emerging technology that has not been implemented on a full-scale basis for pulp and paper effluent. In this system, effluent from the conventional secondary treatment facility would be discharged to a natural or constructed wetland area for "effluent polishing". The wetland area would ultimately discharge to the stream. Pope and Talbot is currently studying this technology on a pilot scale level. Preliminary indications are that such a system would achieve additional BOD reductions similar to the Filtration Technology. Potential concerns include availability of suitable land for construction of a wetlands, crop and bed maintenance, and potential groundwater impacts. This option is not considered practicable for full scale use at this time.

Conservatively Designed Secondary Treatment is the term used to describe enhanced conventional secondary treatment technology. This approach uses high rate activated sludge treatment with extended aeration, high sludge recycle rates, and conservative secondary clarifier design parameters. BOD removal is about 35% better than that expected from the conventional secondary treatment system required by the new source performance standards. This technology results in BOD removal efficiencies across the secondary system of about 94% and 97% across both the primary and secondary systems. The added capital costs are estimated to be about one million dollars. Operating costs are expected to be higher than the conventional secondary treatment system.

James River concluded that the Conservatively Designed Secondary Treatment system is the preferred alternative. The Department concurs. This option achieves about 35% additional BOD removal over what would be required under EPA's new source performance standards. The type of treatment and level of wastewater treatment technology (BOD removal efficiency) proposed by James River is equivalent to that required for municipal and industrial sources in the Willamette Basin. Reuse of wastewater within the production facilities to the extent practicable, followed by primary and "efficient" or "conservatively designed" secondary treatment technology is what has been accepted as "highest and best practicable treatment and control of wastes" for industrial facilities. This level of technology will generally result in BOD removal efficiencies in the range of 95-97%. The Department has been reluctant to encourage or require use of additional treatment technologies that involve chemical addition and filtration unless necessary to meet water quality standards because such facilities use additional energy, and produce large volumes of chemical sludges which can be difficult to dispose of in an environmentally acceptable manner.

James River evaluated two options for disposal of effluent from the treatment facility: irrigation utilization, and stream discharge. The following is their analysis of the irrigation alternative.

"Wastewaters used for irrigation of crops must be applied at an agronomic rate, i.e., equal to the consumptive use of the crop. This limitation is applied such that there will be no impact (i.e., no statistical increase above background) on groundwater quality. Since the treated effluent contains low levels of some parameters that have drinking water limitations, application must be limited to crop uptake. This crop uptake value varies depending on crop selection. An average value of 0.2 inches per day was chosen for the typical crops grown in the Willamette Valley. An application rate based on this value and the average effluent flow rate of 3.5 mgd results in an average land use requirement of 640 acres per day, 360 days per year. The land can only be irrigated on days that receive no rainfall and when the soil is capable of absorbing this quantity, such that no ponding or runoff result. Since these conditions are potentially met only 4-6 months per year in the Willamette Valley, sufficient storage capacity would need to be available to hold the effluent during the winter months. This will double or triple the land use requirement for irrigating during the summer months (1200-2000 acres per day). The cost for this non-discharge alternative would include capital costs for a storage lagoon and infrastructure for piping to nearby farmland, and operating costs for the irrigation operation. The capital for installing a lagoon capable of storing the required volume of effluent (600-800 mg) is approximately \$20-25 million. The availability of land, types of crops, and soil conditions have not been thoroughly investigated to determine the potential capital cost for piping and pumping the effluent for irrigation. The operating costs for the irrigation operation have been estimated to be \$4-6 million per year. Due to the high cost and potential environmental risk associated with this non discharge alternative, further evaluation was not conducted. It was determined that improved treatment and limited discharge to the Willamette River could be accomplished with no measurable impact on water quality."

The Department generally concurs with this evaluation. Experience has shown that irrigation utilization can be effectively managed and accomplished for wasteloads that occur during the summer dry weather months. Irrigation utilization as the sole means of disposal for substantial waste flows in the area west of the cascades presents significant environmental problems, and requires very careful site-specific study and design before implementation.

The Department also considered the potential for discharge of wastewater to a municipal system for treatment. No suitable municipal facility exists in proximity to the industrial site. The Department, based on years of observation and experience, does not encourage municipalities to assume the responsibility for treatment of large volumes of high strength industrial waste. In this case, the BOD concentration of the raw waste from the proposed recycle facility would be about 2,000 mg/l. This is approximately 10 times the strength of normal municipal sewage. A conservatively designed secondary municipal treatment system would be expected to remove about 95% of the BOD, resulting in an effluent concentration of about 100 mg/l. The facilities proposed by James River will result in an effluent BOD concentration of about 70 mg/l. Disinfection of sewage wastes is generally required to control potential pathogenic bacteria and protect public health. Disinfection is currently accomplished in nearly all cases by use of chlorine.

Chlorine addition to industrial effluents is generally discouraged because of the potential to form chlorinated organic compounds.

340-41-026(3)(a)(A)

(3) *The Commission or Department may grant exceptions to sections (2) and (6) and approvals to section (5) for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2).*

(a) *In allowing new or increased discharged loads, the Commission or Department shall make the following findings:*

(A) *The new or increased discharged load would not cause water quality standards to be violated;*

Finding

The proposed new source is properly classified as a major source for permit fee purposes in OAR 340-45-075(2).

The new discharge will not cause water-quality standards to be violated.

Discussion

The Department evaluated the water quality impact of the proposed discharge on each of the adopted water quality standards for the Willamette River. This evaluation is documented in the Evaluation Report for the permit application. The overall conclusion was that the discharge would not cause water quality standards to be violated.

The level of dissolved oxygen (DO) in the river has historically been the water-quality parameter of most concern with respect to a new discharge of waste. Biochemical oxidation of organic matter in the stream can cause a reduction in the level of dissolved oxygen if the rate of oxygen removal for waste stabilization occurs at a greater rate than re-oxygenation occurs (through re-aeration). For wastewaters containing organic matter, the amount of five-day biochemical oxygen demand (BOD<sub>5</sub>) that may be discharged is regulated as a means of assuring that dissolved oxygen is not unacceptably reduced.

The dissolved oxygen standard for the Willamette River varies with the reach of the river as follows:

Mouth to Willamette Falls	not less than 5 mg/l
Willamette Falls to Newberg	not less than 6 mg/l

Newberg to Salem  
Salem to [Springfield]

not less than 7 mg/l  
not less than 90% of saturation

The Department reviewed and commented on computer modeling analysis presented by the applicant and independently evaluated the potential impact of the proposed wastewater discharge on Dissolved Oxygen. In this process, a series of conservative assumptions were made as follows:

- The flow of the Willamette River and all of its tributaries was assumed to be the seven day consecutive low flow that occurs during the warm summer months on a statistical frequency of once every 10 years (the 7Q10 critical low flow).
- A calculated change in Dissolved Oxygen of less than 0.1 mg/l was assumed to be unmeasurable. This assumption is based on review of the Department's quality assurance monitoring data for the Willamette River. Standard Methods notes that precision may be expressed as a standard deviation, and that the presence of appreciable interferences, even with proper modification, may result in the standard deviation being as high as 0.1 mg/l. 0.1 mg/l is equivalent to 1.1 percent of saturation at 68°F.

Based on these very conservative assumptions, the Department calculated that a BOD<sub>5</sub> discharge of between 2800 and 3500 lb/day would not cause a measurable decrease in DO in the Willamette River between the point of discharge and the Willamette Falls. Aeration over the Willamette Falls acts to reduce the oxygen deficit incurred upstream. The DO levels in the slower, deeper portion of the river below the falls may be reduced by additional loads of BOD<sub>5</sub>. The reach below the falls is more difficult to model because it is tidal influenced, however, analysis suggests that the decrease in dissolved oxygen under the same assumptions would likely be less than 0.1 mg/l and would almost certainly be less than 0.2 mg/l. The dissolved oxygen standard for the reach below the Willamette Falls is 5.0 mg/l and was set to protect fish passage rather than the rearing and spawning uses that justified more stringent standards upstream. At present, the dissolved oxygen levels in the reach below the falls range from 7 to 8 mg/l during the summer. Thus, the margin of safety relative to standards compliance is the largest in this reach.

The Department has proposed a monthly average limit for BOD<sub>5</sub> at 2000 lb/day during the summer low-flow period (May 1-Oct. 31). This discharge limit is consistent with the capability of the wastewater minimization, reuse and treatment facilities proposed for the Recycle Facility. This proposed discharge limit also provides an additional margin of safety beyond that inherent in the conservative modeling assumptions used. The Department also proposes to allow a greater BOD<sub>5</sub> discharge during the remainder of the year when the Willamette River flow rate is sufficient to accept the BOD<sub>5</sub> load and not decrease DO. However, the installed

wastewater reduction and control facilities would be required to be operated at maximum efficiency at all times to minimize the magnitude of discharges.

The reach of greatest potential concern with respect to the DO standard is the reach between Salem and the point of discharge where the standard is 90% of saturation. Available data suggests that measured DO values at the diurnal low occasionally fall below 90% of saturation. Most measured values are above 90% saturation, and are near saturation. The measured values below 90% saturation appear to be a result of natural diurnal fluctuation and not a result of discharges. The proposed discharge would not be expected to cause the natural diurnal variation to be measurably altered. As noted previously, this issue will be evaluated in greater detail as part of the Willamette River Study. The results of this study may provide the basis for refinement of the standard and/or development of future source control strategies to assure that existing and future discharge loads can be accommodated while protecting beneficial uses.

The Willamette River, as previously noted, is classified as water quality limited for 2,3,7,8 TCDD. This means that the concentration of 2,3,7,8 TCDD in the river already meets or exceeds the established water quality standard. The only documented discharge of TCDD is the Pope and Talbot Pulp Mill which produces TCDD in its pulp bleaching process which uses chlorine compounds. The James River Recycle Facility will not use chlorine compounds in its process, and will not produce any TCDD in the process. There is a potential that trace amounts of TCDD could be in the plant effluent, however, because part of the waste paper used as the fiber source may have been bleached using chlorine compounds when originally produced. It is estimated that potential TCDD levels, if any, in the wastewater discharged from the Recycle Facility will be well below the level of detection. The permit is proposed to contain a dioxin (2,3,7,8 TCDD) discharge limit of zero, and require monitoring of TCDD levels in the incoming and outgoing pulp and levels in the solids removed from the treatment process to assure, by mass balance calculation, that the TCDD standard is met.

340-41-026(3)(a)(B)

- (B) *The new or increased discharged load would not unacceptably threaten or impair any recognized beneficial uses. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;*

Finding

The new discharge will not unacceptably threaten or impair any recognized beneficial uses.

### Discussion

The recognized beneficial uses for the Salem to Springfield stretch of the Willamette River are:

- Public Domestic Water Supply
- Private Domestic Water Supply
- Industrial Water Supply
- Irrigation
- Livestock Watering
- Anadromous Fish Passage
- Salmonid Fish Rearing
- Salmonid Fish Spawning
- Resident Fish & Aquatic Life
- Wildlife & Hunting
- Fishing
- Boating
- Water Contact Recreation
- Aesthetic Quality
- Hydro Power
- Commercial Navigation & Transportation

The Department prepared a separate Evaluation Report for the permit application submitted by James River. This evaluation was available prior to three public hearings held by the Department on the permit application. The Evaluation report presents the results of the Department's review and evaluation relative to each applicable water quality standard and rule provision. The evaluation was based on review of materials submitted by James River in support of its permit application, review of water quality data, modeling analysis performed by the applicant and DEQ staff, and Department staff knowledge and observations of water quality conditions and the effects of discharges. In this report, the Department concluded that the proposed discharge would not cause water quality standards to be exceeded and would not adversely affect recognized beneficial uses.

The Department has received substantial public testimony on the evaluation report and proposed permit that were presented at public hearing. Some testimony strongly supported the proposed Recycle Facility and urged approval and issuance of the permit. Some Testimony opposed issuance of permit or urged delay pending further study. The Department has prepared separate brief responses to significant points raised in testimony. In addition, the most significant points are addressed in these findings and discussion.

As indicated in the rule, compliance with the standards is presumptive evidence of protection of beneficial uses. The information presented in public hearings has not caused the Department to alter its initial conclusion that the proposed discharge would not cause water quality standards to be violated. Further, the Department has no evidence upon which to conclude that this proposed discharge would otherwise adversely affect beneficial uses of the Willamette River.

The Department of Fish and Wildlife expressed concern about the "insufficiency of information", the potential cumulative effect of multiple approvals each with "no measurable effect", and the potential for the additional discharge to adversely affect dissolved oxygen in the lower Willamette which "...already fall below the 90% saturation level required by OAR 340-41-445." These concerns were shared by others. The Department understands and shares the concerns expressed by the Department of Fish and Wildlife. The Department has initiated a Willamette basin water quality study. Results of this study will be used to review existing management strategies for the basin. However, the Department does not believe it is necessary to delay action on this proposal pending completion of the study. No evidence has been submitted demonstrating violations of water quality standards or negative impacts on beneficial uses. The Department notes that the water quality standards and rules specifically allow approval of discharges that have small effect on water quality. The rules seek to minimize any such effects by requiring highest and best practicable treatment and control of wastes. The rules prohibit approval of a discharge if the discharge would cause water quality standards to be violated. The Fish and Wildlife testimony, while expressing general concerns about lack of desirable information, did not suggest that water quality standards are inadequate to protect fish and wildlife. As previously noted, the standard in the lower Willamette (below the falls) is 5 mg/l and observed values during the summer are close to 8 mg/l most of the time with values occasionally dropping to 7 mg/l.

The discharge is also not expected to cause taste, color, odor or toxicity that would adversely affect use of the water as a drinking supply or for water contact recreation. The City of Corvallis has expressed concern about the potential effect of the proposed discharge on their use of the Willamette River as a source of drinking water. The Department of Fish and Wildlife and others called attention to the color and odor in the reach of the Willamette below the proposed point of discharge that is the result of the current discharge of Kraft Pulp Mill wastewater from the Pope and Talbot Mill. The assumption by many seems to be that since James River is proposing to produce pulp at the site, similar color and odor effects will result. James River is not proposing a process that will result in any increase in the typical Kraft Mill color and odor problems. In order to minimize any potential impact on the drinking water use of the Willamette, James River has proposed a more costly mechanical de-inking and pulp contaminant removal process rather than the traditional process that uses chemicals. The Department concludes that the James River proposed discharge will not adversely affect beneficial uses downstream from

the discharge, and will not add to the problems that result from the Pope and Talbot Kraft Pulp Mill discharge. The Department notes that Pope and Talbot is undertaking a major compliance program and mill reconstruction that is expected to result in a significant reduction in the current observed color effects in the river.

In order to further assure that the proposed discharge will not adversely affect fish or aquatic life, the Department is proposing to require biomonitoring of the effluent with three organisms (fathead minnow, water flea and green alga) as a means of detecting potential whole-effluent toxicity which could adversely affect beneficial uses. The proposed permit will require corrective action if potential toxicity is detected.

340-41-026(3)(a)(C)

C) *The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited under OAR 340-41-006(30)(a), unless:*

- (i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or*
- (ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream; and compliance plans under which enforcement action can be taken have been established; and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or*
- (iii) Under extraordinary circumstances to solve an existing, immediate, and critical environmental problem that the Commission or Department may consider a waste load increase for an existing source on a receiving stream designated water quality limited under OAR 340-41-006(30)(a) during the period between the establishment of TMDLs, WLAs and LAs and their achievement based on the following conditions:*
  - (I) That TMDLs, WLAs and LAs have been set; and*
  - (II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and*
  - (III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses; and*



*(IV) That any waste load increase granted under subsection (iii) of this rule is temporary and does not extend beyond the TMDL compliance deadline established for the waterbody. If this action will result in a permanent load increase, the action has to comply with subsections (i) or (ii) of this rule.*

### Finding

The Willamette River has been designated as Water Quality Limited for 2,3,7,8 TCDD (dioxin).

No 2,3,7,8 TCDD will be produced as a byproduct of the production processes proposed by James River.

The proposed permit will establish a discharge limit for 2,3,7,8 TCDD of zero, and require monitoring of TCDD levels in the incoming and outgoing pulp and levels in the solids removed from the treatment process to assure, by mass balance calculation, that the TCDD standard is met. The company will require actions including but not limited to regulation of the quality of incoming waste paper, as necessary, to assure that the standard is met.

### Discussion

As noted in previously, the Willamette River has been designated as Water Quality Limited for 2,3,7,8 TCDD (dioxin).

The 2,3,7,8 TCDD loading capacity of the Willamette River at Harrisburg has been calculated by EPA to be 0.24 mg/day. By permit action, a limitation of 0.19 mg/day on a long term average has been placed in the Pope & Talbot Pulp Mill Permit. The remainder has been allocated as a margin of safety for Non Point Sources and unidentified point sources. The TMDL from EPA focuses on regulating sources which known to produce significant amounts of TCDD. EPA recognized that municipal effluents may contain trace amounts of TCDD and considered these to be among the "unidentified point sources". Pope and Talbot is the only identified source in or above this stream segment using processes which produce TCDD and result in a TCDD discharge to the river. A program has been incorporated in a permit and stipulated compliance order establishing a program and time schedule for achieving compliance with the TCDD permit limit. Pope & Talbot is pursuing a control strategy that seeks to ultimately eliminate the use of chlorine for pulp bleaching. Implementation of this strategy would reduce the load to this segment of the river allowing modification to the waste load allocations.

James River does not propose any production process or use of chlorine that would result in the production of 2,3,7,8 TCDD in its facility. Thus, they have not

proposed to discharge 2,3,7,8 TCDD, and have not requested a discharge allocation for this compound.

Waste paper proposed for use as a source of fiber for the Recycle Facility would reasonably be expected to contain traces of 2,3,7,8 TCDD as a result of the bleaching process used during original pulp production. It is reasonable to assume that any 2,3,7,8 TCDD entering the facility in the waste paper would leave in different ways: some would leave in paper products produced, some would be removed in the wastewater treatment system and leave in the sludge, and some could be contained in the wastewater effluent discharged. Quantities of 2,3,7,8 TCDD in the effluent would be expected to be analytically non-detectable with current detection technology.

Production of pulp from waste paper will inevitably pose the potential for release of minute quantities of 2,3,7,8 TCDD and other chlorinated organics that were produced previously in the production and bleaching process. Production of virgin pulp using current production techniques would result in far greater releases of TCDD to the environment. Technology does not exist to specifically remove this contaminant from the waste paper. Public policy strongly encourages reuse rather than landfilling of waste paper. SB 66, passed by the 1991 legislature, established goals for such reuse and recycling. As chlorine based pulp bleaching diminishes through replacement with alternative technology, the levels of TCDD in waste paper would be expected to diminish. Therefore, any potential problem with unintended and uncontrollable TCDD discharges would correct itself over time.

The Department proposes to place a wastewater discharge limit in the permit for 2,3,7,8 TCDD of zero, and require compliance to be determined by use of an averaged mass balance technique. The Department also proposes to require the company, if necessary, to take special actions including but not limited to regulation of the quality of incoming waste paper to assure that the standard is met.

340-41-026(3)(a)(D)

- (D) *The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as evidenced by a statement of land use compatibility from the appropriate local planning agency.*

Finding

The proposed facility is allowed as an outright use and is consistent with the Linn County Comprehensive Land Use Plan.

## Discussion

The applicant submitted a completed Land Use Compatibility Statement confirming land-use compatibility. Information provided by Linn County indicates that the use proposed by James River is allowed outright by their acknowledged plan. By letter, the County Planning Manager stated the following:

"The recycling plant is consistent with the Linn County Comprehensive Plan which specifically supports the expansion of the paper mill. The paper mill and surrounding undeveloped land have been zoned Heavy Industrial in anticipation of the plant expansion. Expansion of the paper plant was discussed at the time the Linn County Comprehensive Plan was first amended (1980). Policies in support of future plant expansion were written into the plan and subsequently adopted by the Linn County Planning Commission and Board of Commissioners. After the land use plan was adopted, adjacent property was redesignated Heavy Industrial to accommodate plant expansion.

Recently, the county amended the Industrial Land Section of the comprehensive plan to recognize the importance of resource related industry. The plan states that a rural location is appropriate for certain industries such as the Halsey paper plant. The rural location of the plant and its proximity to transportation facilities and nearby water supply establish comparative advantages that are not found in other locations. It would be difficult to find a location better suited for paper production than the Halsey site."

### 340-41-026(3)(b)(A)(i)

*340-41-026(3)(b) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the Commission or Department shall consider the following:*

*(A) Environmental Effects Criteria.*

*(i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes.*

## Finding

The potential for adverse out-of-stream effects was considered. Storage and land application of wastewater was considered as an alternative to stream discharge. The combined factors of cost for implementation, potential for adverse affects on groundwater, and practical difficulties in implementation of such an alternative on a large scale led to the conclusion that the option was not practicable.

#### Discussion

As noted in previous discussion, alternatives were explored for utilization and disposal of wastewater in a manner that did not involve stream discharge. Land application of the wastewater would have required large land areas for storage ponds and irrigation utilization. The potential effects on groundwater levels and groundwater quality were not specifically evaluated but are a potentially significant concern. The storage and irrigation utilization alternative was determined to be not practicable.

#### 340-41-026(3)(b)(A)(ii)

*(ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, as appropriate.*

#### Finding

The potential for instream effects was considered in the evaluation. The applicant has proposed to maximize reuse and recycling of wastewater and selected production and treatment process to minimize the discharge of pollutants to the stream.

#### Discussion

The applicant proposes to use an existing source of wastewater as the primary water supply for the new Recycle Facility. Further, the applicant proposes to extensively treat and recycle wastewater within the production facility and to use a production process that does not use chemicals for de-inking. Finally, the applicant proposes to use a waste treatment system that achieves a greater level of reduction of BOD than is required by EPA's New Source Performance Standards. The Department has proposed a conservative effluent limit during the summer months when stream flows are the lowest. A higher level of discharge is proposed to be allowed during the cooler winter months when biological treatment systems are less efficient, when

stream flows are higher and the capacity of the river to receive treated wastes is substantially greater.

340-41-026(3)(b)(A)(iii)

*(iii) Beneficial Effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.*

Finding

No beneficial effects have been identified that would justify requiring land application or another alternative method of wastewater treatment and disposal.

Discussion

Neither the Department nor James River have identified any beneficial effects associated with the various alternatives for waste disposal that would justify selection of an option other than the proposed treatment and discharge system. Concerns were previously noted regarding potential pollutant effect on groundwater resulting from land application of wastewater, and the lack of demonstrated full scale success for wetlands treatment.

340-41-026(3)(b)(B)(i)

*(B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loadings will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:*

*(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams are finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading.*

Finding

The proposed use of a limited portion of the potential wastewater assimilative capacity of the Willamette River to support the public policy goal of promoting recycling and reuse of waste paper is appropriate.

## Discussion

The proposed recycle facility can provide a direct environmental benefit because it will recycle waste paper that would otherwise be disposed of in landfills. This position is supported by SB 66 passed by the 1991 legislature. This bill establishes goals for such recycling. In order to reduce the potential impact from the proposed discharge, James River has proposed more costly technology treat and recycle wastewater within the plant and to mechanically de-ink and remove contaminants from the waste paper to be recycled (rather than the more traditional chemical de-inking process). They also propose to use a more costly process for pulp bleaching that does not use chlorine compounds and therefore prevents formation of chlorinated organic compounds within the production process. The summer-time BOD, discharge limits have been made as conservative as possible, not only to protect the DO level but also to use as little of the river's remaining assimilative capacity as possible. The applicant proposes a more costly wastewater treatment process than would be required to meet EPA's New Source Performance Standards. Permit limits proposed by the Department will require this level of control. For comparison, the summer-time BOD, limit will be approximately two-thirds of the applicable EPA effluent guideline.

### 340-41-026(3)(b)(B)(ii)

- (ii) *Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives shall be evaluated.*

## Finding

Cost of alternative treatment and disposal alternatives was evaluated. Selection of proposed options was based on environmental factors.

## Discussion

Alternatives for treatment and disposal of waste water from the proposed new Recycle Facility were evaluated by James River, and reviewed by the Department. The technologies selected and the level of treatment proposed and required was chosen for environmental reasons. Costs were evaluated and did not result in any reduction of the levels determined to be needed and appropriate.



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February 18, 1992

Environmental Quality Commission  
Oregon Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204

PROPOSED JAMES RIVER NPDES PERMIT

Dear Chair Wessinger and Commission members:

The City of Corvallis appreciates the opportunity to address the Commission on the proposed James River Corporation NPDES permit. I am here today to express my concerns, which are less with James River Corporation than with the failure of DEQ practices and policies to protect existing beneficial uses of the Willamette River. DEQ applies different standards to municipal and industrial dischargers. DEQ also drafts permits that do not address the full range of environmental impacts from industry, nor do they require management plans to address problems that must be solved in the future.

The City does not oppose the granting of a permit for James River, but we request that three (3) actions be taken:

1. Limitations should be placed in the permit (including the text of the James River-City of Corvallis agreement) to fully protect those who use the Willamette River as a water supply.
2. The City of Corvallis and other entities who currently discharge treated wastewater to the river must be protected from future, more stringent permit limitations as a result of the newly permitted James River discharge, and this should be explicitly recognized in the permit.
3. A comprehensive sludge management plan, with emphasis placed on development of beneficial use alternatives, should be developed and included in this permit.

James River has made a similar request of the Department. While we may disagree on some of the details, conceptually James River's proposal is consistent with the City's on two of the three actions I bring forward today.

I will not repeat testimony I have previously given to DEQ at the January 9, 1992, hearing in Corvallis. I assume that you have had an opportunity to review the hearing record, and are familiar with the issues I raised at that time. I do, however, want to point out the policy failures which will occur if you approve this permit as proposed.

**Drinking water quality impacts.**

The City draws its water supply from the Willamette River downstream of the James River and Pope & Talbot waste discharge point. While DEQ claims in its findings there will be no water quality impacts from the James River discharge, the City of Corvallis remains concerned about the overall impact on beneficial uses of the river, including municipal water supply. Our citizens express great concern about existing river conditions, such as the marked color and odor differences in the river caused by the existing Pope & Talbot waste discharge. I am concerned that the James River discharge may exacerbate this condition.

I am dismayed by the lack of concern on the part of DEQ to the issues raised by Corvallis citizens. The City of Corvallis has had to act on its own to insure protection of its water supply. The City should not have had to take this action.

James River and the City have signed an agreement whereby James River will conduct studies of its impact on river water quality. If the studies show an impact on river water quality at the Corvallis water intake, James River will mitigate those quality impacts at no cost to Corvallis water ratepayers.

The City requests that the EQC incorporate this agreement into James River's NPDES permit. The Commission should note that DEQ staff has not taken this action. I am submitting a copy of the James River-City of Corvallis agreement for inclusion in the permit.

**Wastewater discharger impacts.**

The City of Corvallis also discharges its treated wastewater to the Willamette River. Corvallis has one of the most stringent NPDES permits in the state (10 milligrams per liter BOD and 10 milligrams per liter suspended solids). The City expends in excess of \$1 million dollars per year to treat wastewater to comply with these permit limitations.

The proposed James River permit allows them to discharge to the river a waste over 7 times more concentrated than Corvallis' discharge. The mass load of the James River discharge is over 2.5 times that allowed for Corvallis, a community of 45,000 people. This disparate treatment cannot be tolerated by the citizens of Oregon. DEQ states that James River will meet all the technological requirements for a paper de-inking facility wastewater discharger. This may be true. However, if DEQ is truly interested in maintaining or enhancing river water quality, it



PROPOSED JAMES RIVER NPDES PERMIT  
February 18, 1992  
Page 3

will hold James River to the same high standards it requires of municipal dischargers to the Willamette River.

Inequitable treatment of dischargers, as is apparent here, is not in the best long term interests of the citizens or the economy of Oregon. This disparate treatment of municipal and industrial dischargers points to the lack of a coordinated management policy within DEQ with respect to a comprehensive and encompassing evaluation of the impact of all wasteloads to the river.

I understand that, at some point in the future, DEQ will establish Total Maximum Daily Load (TMDL) limitations for the Willamette River on all water quality parameters that it determines contribute to the waterway being water quality limited. I also understand that at that time DEQ will evaluate all waste discharge loadings to the river and adjust each NPDES permit accordingly. This concerns Corvallis because the Proposed EOC Findings report on page 3 of ~~Director Hansen's report to the Commission~~ states that "...the Department has designated the mill's stretch of the river (River Mile 109-150) as only "partially" supporting aquatic life because of periodic reductions of DO below the standard...".

The City of Corvallis does not want its discharge limitations, nor those of other municipal dischargers, made more stringent because one industry, James River, is given as large a wasteload allocation, as this permit proposes. The City wrote to Fred Hansen on January 8, 1992 requesting assurances that if the James River permit were to be granted as proposed, that no changes in the NPDES permit held by Corvallis would be forthcoming. Mr. Hansen's reply offered no assurances.

If, after the Willamette River study, DEQ proceeds with setting TMDLs, Corvallis asks that the permit require James River's waste discharge load to be adjusted downward before any such action is taken on the Corvallis permit. This action by DEQ would be consistent with implementing equitable permit requirements for all dischargers on the river, whether they be industrial or municipal.

#### **Sludge disposal impacts.**

James River proposes to dispose of 175 tons of sludge per day in the regional landfill. This single user will make up 25% of the annual volume that is disposed of at this regional landfill, which serves Benton, Linn, and Lincoln counties. I am dismayed at the lack of a coordinated resource management policy with respect to how DEQ addresses sludge disposal by NPDES permittees.

Oregon Administrative Rules, Chapter 340, Division 50 defines the regulations pertaining to the disposal of sewage sludge. The purpose statement specifically excludes regulation of industrial sludge disposal under these rules.

In discussions with DEQ staff, we have learned that industrial waste sludge disposal has no corollary rules. DEQ looks at each application on a case by case basis. However, DEQ staff have stated that it is Department policy to look first at what beneficial uses could be made of industrial sludge before approving non-beneficial (landfilling) means of disposal. The DEQ evaluation report for the James River proposed permit states the sludge is a nonhazardous material. The report does not indicate that an analysis of beneficial use as a disposal method has been pursued. As a consequence, the City contends that beneficial use disposal methods should be carefully and fully evaluated before this waste material is approved for disposal in the landfill.

Director Hansen has told the City, through his January 31, 1992 letter, that the NPDES permit is not the appropriate means of regulating disposal of James River's sludge. This makes no sense to us. The City of Corvallis' sludge disposal method is regulated through its NPDES permit, as are those of other municipal dischargers. The City contends that industrial sludges should be regulated this way as well.

The City recognizes that, at this point in time, asking DEQ and James River to do the required sludge management planning would unduly delay the startup of the mill. The City is not advocating this. What we do want you to do is include the following in the NPDES permit:

1. Under the appropriate permit section, place a compliance schedule requiring that James River complete a comprehensive sludge management evaluation.
2. Require a public input process which provides for a sharing of information and an opportunity for the public to have input into the process.
3. Incorporation of the approved sludge disposal method into the NPDES permit as is required of municipal sludge generators.

#### **Summary**

The City of Corvallis supports the James River Corporation's efforts to develop a mill to process waste paper. Without efforts like this, recycling and reuse programs advocated by the City and its citizens will not succeed.

As I have stated above, the City requests that the following actions be taken by the Environmental Quality Commission on James River's permit:

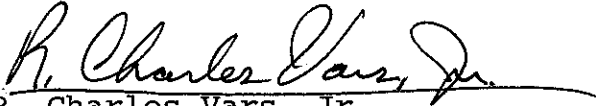
1. Place limitations in the permit, including the James River-City of Corvallis agreement, to fully protect those who use the river as a water supply.

2. Provide assurances to the City of Corvallis, and other entities who currently discharge treated wastewater to the river, that they will be protected from future, more stringent permit limitations, as a result of the newly permitted James River discharge, and that these assurances be included in this permit.
3. Require James River Corporation to prepare a comprehensive sludge management plan, with emphasis placed on development of beneficial use alternatives, and include this plan in the permit.

The City of Corvallis wants fair and equitable treatment of all dischargers, municipal and industrial alike, when NPDES permit limitations are established. DEQ policies and practices should be changed to reflect this concept. I am committing my staff's resources to DEQ to help in any way they can toward achieving this objective.

Again, thank you for this opportunity to express the views of the City of Corvallis on the James River permit request.

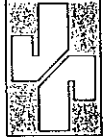
Sincerely,

  
R. Charles Vars, Jr.  
Mayor

attachments

cc: Governor Barbara Roberts  
Senator Dick Springer, Chair, Senate Committee on Agriculture and  
Natural Resources  
Senator Mae Yih, District 19  
Senator Cliff Trow  
Representative Tony Van Vliet  
Joe McLaughlin, President, League of Oregon Cities  
Jeff Miller, Mayor, City of Eugene  
Keith Rohrbough, Mayor, City of Albany  
R.G. Anderson-Wychoff, Mayor, City of Salem

*JAMES RIVER*



**JAMES RIVER CORPORATION**  
Consumer Products Division  
P.O. Box 215, Halsey, Oregon 97348



**JEFFREY J. MANCHESTER**  
Vice President  
Manager  
Halsey Mill  
(503) 369-1222

January 20, 1992

Gerald Seals, City Manager  
501 SW Madison Avenue  
Corvallis, OR 97333

Dear Gerald:

On January 3, 1992 we met to discuss several concerns the City of Corvallis has had with regard to James River's Halsey, Oregon recycling mill. We have agreed to work together as partners to address these specific issues. Two of these issues, solid waste management and potential waste load impacts, are being addressed separately. The purpose of this letter is to address the City of Corvallis' concern about the potential impact of the proposed discharge from James River's paper recycling plant on the City's drinking water supply. The Oregon Department of Environmental Quality has evaluated our proposed discharge and has made a determination that existing beneficial uses of the Willamette River, including use of the river for drinking water purposes, will be protected. The City continues to have concern about taste and odor, specifically about instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and also about trihalomethanes. James River proposes to address this issue as follows:

## **BACKGROUND**

- A. James River will be engaging in the business of producing paper from recycled products at its Halsey, Oregon Mill.
- B. James River has applied for a National Pollution Discharge Elimination System (NPDES) permit for a proposed new operation at its Halsey, Oregon Mill site located in Linn County, Oregon, adjacent to the Willamette River.
- C. The proposed James River wastewater discharge is upstream of the City of Corvallis drinking water supply intake on the Willamette River.
- D. The City desires to protect its drinking water source.
- E. The City and James River desire and agree to cooperate in addressing the potential impacts of the James River operation on the City of Corvallis' drinking water supply.

## **JAMES RIVER AND CITY COOPERATION**

- A. James River agrees to fund scientific studies to determine the effect of James River's discharge on the City of Corvallis water supply.
- B. James River and the City agree that a consultant(s) agreeable to each party will be hired to conduct the scientific studies.
- C. James River and the City agree to the following Work Plan.

## WORK PLAN

1. James River within 120 days of approval of its NPDES permit, will commence scientific studies to determine the effect of James River's discharge on the City of Corvallis water supply.
2. Sampling and other field work shall cover a two year period and shall commence by July 1, 1992.
3. Interim reports shall be submitted to the City no later than July 1, 1993 and July 1, 1994.
4. Final reports shall be completed by July 1, 1995.
5. The detailed scope of work shall be cooperatively agreed to by James River and the City.
6. The City shall review and approve any changes to the scope of work, work plan, or consultant(s) for the studies.
7. The City shall review and comment on all draft work products prior to final publication.
8. All costs associated with the studies shall be borne by James River Corporation.

## MITIGATION

Should the studies indicate that James River's discharge causes the river not to meet water quality standards, or that the studies indicate an adverse impact on the City of Corvallis' water supply as a result of James River's wastewater discharge, then James River agrees to mitigate the impacts caused by its discharge. At James River's option, James River will mitigate the impacts by taking actions at its mill site to remove or reduce the constituent(s) which cause the degradation of Corvallis' water supply, and/or compensate the City of Corvallis for those waterworks improvements and operating costs required of the City as a result of James River's discharge.

Mr. Gerald Seals, City Manager  
January 20, 1992  
Page 4

## NPDES PERMIT

James River agrees that the following clause shall be incorporated in the NPDES permit issued to James River:

DEQ acknowledges the potential impact issuance of this permit may have on the City of Corvallis. This permit is issued in recognition of agreements reached between the City of Corvallis and James River Corporation.

## ARBITRATION

Any controversy regarding the terms and conditions of this agreement shall be submitted to arbitration. Either party may request arbitration by written notice to the other. If the parties cannot agree on a single arbitrator within 15 days from the giving of notice, each party shall within five (5) days select a person to represent that party and the two (2) arbitrators shall within five (5) days select an impartial third person to complete a 3-member arbitration panel. If the two (2) arbitrators cannot agree within 15 days on the third arbitrator, then either party may petition the Presiding Judge of the Benton County Circuit Court to select the third arbitrator. The panel shall conduct the arbitration in accordance with the provisions of ORS 36.300 through 36.365 or the corresponding provisions of any such future law. The arbitrator(s) shall assess the cost of arbitration, including attorney fees, 60% to the James River Corporation and 40% to the City of Corvallis.

We look forward to working with the City of Corvallis as partners in preserving the quality of the Willamette River. We believe you will continue to find that James River Halsey paper recycling plant is a valuable asset to the community and a good neighbor.

Sincerely,



Jeffrey J. Manchester

:sm

Approved and accepted by the City of Corvallis.

Signed:



Gerald Seals, City Manager

February 3, 1992



*Council*  
**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

February 6, 1992

Jerry Turnbaugh  
Water Quality Section  
Dept. of Environmental Quality  
811 S. W. 6th Ave.  
Portland, OR 97204

Dear Mr. Turnbaugh:

As you are aware, James River and the City of Corvallis have been working together over the past several months to address concerns the City has raised regarding the proposed discharge for the Halsey recycling plant. Agreement has been reached on two issues: solid waste management and impact of the proposed discharge on Willamette River water quality.

We have long recognized the need for a solid waste management plan for the reject material that is generated during the wastepaper recycling process. James River has agreed to an aggressive program to evaluate beneficial use alternatives. This program includes specific target dates and provides for public input during each stage of the process. James River offers the following language, as suggested by the City, to be included in Schedule D: Special Conditions, of the NPDES permit.

4. The permittee shall evaluate alternatives to landfilling the wastewater treatment plant sludge with the emphasis of finding a beneficial use for the waste material according to the following schedule:

By no later than January 1, 1994, a Solid Waste Feasibility Study and Solid Waste Plan shall be completed and submitted to the Department.

By no later than January 1, 1996, laboratory studies and/or pilot scale studies shall be completed. A written report summarizing the results of these studies shall be submitted to the Department.

By no later than January 1, 1997, a program and time schedule to implement the selected alternative(s) shall be submitted to the DEQ for review and approval.

Public meetings will be held at each stage of this process to share information and provide an opportunity for public input.

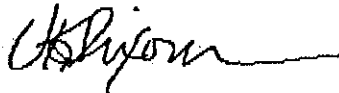


Jerry Turnbaugh  
Page 2  
February 6, 1992

James River believes that the DEQ has done a very thorough evaluation of the proposed discharge, and concurs with their determination that beneficial uses of the Willamette River, including drinking water, will be protected. The City continues to have concern about the potential impact on their drinking water supply. Instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and trihalomethanes, which may be related to taste and odor are of particular concern. An agreement to conduct scientific water quality studies to determine the effect, if any, of James River's discharge on the Corvallis water supply has been reached. This study will cover a two year period between July, 1992 and July, 1994. The following language is suggested for inclusion in James River's NPDES permit, Schedule D: Special Conditions, to acknowledge the existence of the agreement:

5. DEQ acknowledges the potential impact issuance of this permit may have on the City of Corvallis. This permit is issued in recognition of agreements reached between the City of Corvallis and James River Corporation.

Very truly yours,

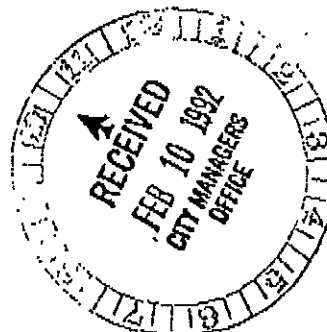


VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc:

Fred Hansen, Director	- DEQ
Lydia Taylor, Administrator Water Quality Division	- DEQ
Hon. Charles Vars., Mayor	- City of Corvallis
Gerald Seals, City Manager	- City of Corvallis
Rolland Baxter, Public Works Director	- City of Corvallis





**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

RECEIVED  
JAN 30 1992  
PUBLIC WORKS

January 29, 1992

Mr. Jerry Turnbaugh  
Industrial Waste Section  
Water Quality Division  
Department of Environmental Quality  
811 S. W. 6th Ave.  
Portland, Oregon 97204

Dear Jerry:

Several groups have submitted formal comments to the Department on James River's draft NPDES permit for the Halsey recycling plant regarding the perceived inequities between municipal and industrial dischargers on the Willamette River. The commenters include the Oregon Association of Clean Water Agencies (ACWA), the League of Oregon Cities, and the cities of Albany and Corvallis. The comments carried similar themes, most of which were directed at the DEQ. One of the central concerns expressed is that the approval of the James River discharge could potentially impact the wasteload allocations of the existing dischargers by using up a significant portion of the remaining assimilative capacity. The Department has made the statement that the river is not water quality limited for any of the parameters that would be impacted by the proposed discharge, including dissolved oxygen. The DEQ staff has done a very thorough review of James River's permit application, and has done extensive river water quality modeling to determine the impact that the proposed discharge will have on Willamette River Water Quality Standards. The results of the modeling have demonstrated that James River's discharge will not have a measurable impact on in-stream dissolved oxygen levels, even under worst case river conditions (extreme low flow and all dischargers at permit limits). This clearly indicates that the discharge will not have a significant impact on the remaining assimilative capacity and definitely would not impact the existing load allocations of other dischargers.

Mr. Jerry Turnbaugh  
Page 2  
January 29, 1992

The inequity concerns raised by the cities do not directly affect James River's proposed discharge. The permitting process has received rigorous DEQ review in compliance with all Oregon Administrative Rules. However, James River urges the Department to formally respond to this issue by giving the cities the assurance that the Willamette River is not water quality limited for dissolved oxygen and that approval of the James River discharge will not impact current wasteload allocations.

Very truly yours,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc:

Terry Smith - ACWA  
Joe Mc Laughlin - League of Oregon Cities  
Keith Rohrbough - City of Albany / Mayor  
Rolland Baxter - City of Corvallis / Public Works

To:EQC

Feb. 18, 1992.

Feb.18th meeting, Albany,  
Old Armory, Fourth and Lyons Ave.

From: Maria Serrot  
920 SW 10th, Corvallis,  
Ore. 97333.

Dear Ladies and Gentlemen of the EQC:

I am a homeowner residing ten blocks from the Willamette and two blocks from the Mary's. As a self-supporting professional artist who derives daily recreation and inspiration from the Willamette, I resent any degradation of the river and its greenway.

James River, without a permit, erects a 65 million dollar plant and offers 60 jobs as what it appears as a "show of force". The public who feels for the river and demands its protection as promised in state-wide Goal 15, is expected by this formidable show of force, added by the fact that this is an illustrious recycling plant, to be stunned into apathetic silence. We are expected to passively accept the dumping of 2000 daily pounds of BOD's into the river as a necessary evil. The sludge into Coffin Bute, water treatment for Corvallis, and their possible detrimental effects are other matters of concern to Corvallis citizens.

In the summer, when I want to swim in the river, I don't, as I'm afraid of what manner of agricultural run-off, municipal and industrial waste may flow with the water. Most residents I know who use the riverfront for walking, running or biking and who benefit from the river merely by its proximity and beauty, feel the same way. As an artist and river lover, this already hurts me and others in a chronic way. As with noise pollution, these environmental degradations are forever overlooked. They do, however, inflict real pain to the public,

and people must be forever having to "get away" from these pains into more pristine surroundings to "recreate" themselves.

There is only one Willamette River, and it has tremendous recreational value to myself and to other Corvallis citizens who are so blessed to have it flow at the edge of our downtown. The river was cleaned up once. It took great effort to do it.

Let us honor the labors of the people who gave so much. If James River was so confident to expend 63 million without a permit, it would be expected of such intelligence to produce an alternate way to treat their waste. I do not for a moment take the consequence of James River's gamble into my conscience, on the contrary, because of my love for the river, I take as a personal affront. It is time now to apply as a standard for the Willamette the "anti-degradation policy" adopted by the EQC in Sept. 1991.

Sincerely,

*Charles Serratt*

MAE YIH  
LINN AND BENTON COUNTIES  
DISTRICT 19



OREGON STATE SENATE  
SALEM, OREGON  
97310-1347

COMMITTEES  
Member:  
Joint Legislative Ways and Means Committee  
Subcommittee on Education  
Subcommittee on General Government  
Joint Legislative Audit Committee  
Senate Committee on Redistricting

REPLY TO ADDRESS INDICATED:

□ S 214 State Capitol  
Salem, OR 97310-1347  
Phone (503) 378-8847  
FAX 378-6604  
✓ 34465 Yih Lane NE  
Albany, Oregon 97321  
Phone (503) 327-2666  
FAX 327-1942

December 30, 1991

Environment Quality Commission  
Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

Dear Chair Wessinger and Commission Members:

SUBJECT: Proposed James River Permit

I am writing to express strong support for the James River Recycling Plant's water discharge permit. The James River Halsey Plant is an important economic venture. It will create jobs for the rural communities, establish a major recycling market for the Northwest and will use the best available technology to protect the quality of the Willamette River.

I do, however, concur with Albany City's equity concern regarding the disparate treatment of municipal and industrial dischargers. DEQ records from 1989 indicate that the six industrial dischargers contributed approximately 42% of the total BOD load to the river while the 11 municipal dischargers contributed only 17%. The balance of the BOD load comes from nonpoint and natural sources.

The two points Albany City makes regarding the different standards are well taken. Currently Albany City is operating at 20 mg/l BOD. They have been asked to restrict this to 10 mg/l BOD with their next expansion project while the new industrial permit for James River is being proposed at an allowable level of 70 mg/l for BOD. Additionally, the current policy of allowing an industrial user to discharge directly to a receiving water and obtain a significant economic advantage over a similar industrial user locating within a city and discharging through the municipality's treatment system not only creates a real economic disadvantage for the municipal industrial user but also conflicts with our land use policies.


December 30, 1991  
Page 2

It is hoped that the capacity of the river to assimilate pollutant loads can be identified with greater certainty in June 1993 when the state's study of the Willamette River will be completed. Once it is identified, the state needs to conduct a comprehensive scientific, economic, and policy analysis of the effect of various load allocation strategies. This is critical because the present policy of allocating significant portions of remaining assimilative capacity to industries may very well have the effect of tremendous cost increases for water and wastewater treatment within each of the municipalities.

Again, I wish to express strong support for James River's water discharge permit. At the same time, I hope the Commission will look at the long term work that needs to be done in a better and more equitable distribution of the river's assimilative capacity.

Thank you very much for your consideration of my suggestions.

Yours sincerely,



Mae Yih  
State Senator

MY:dc

cc: Judge John C. Beatty, Jr., Chair, Willamette River Study,  
Technical Advisory Steering Committee  
Fred Hansen, Director, Department of Environmental Quality  
Jeff Manchester, Vice President, James River Halsey Mill  
Halsey, Oregon  
Keith Rohrbough, Mayor, City of Albany, Oregon

LIZ VanLEEuwEN  
LINN COUNTY  
DISTRICT 37



COMMITTEES  
Chairman:  
Intergovernmental Affairs  
Vice-Chairman:  
Agriculture, Forestry, and  
Natural Resources  
Member:  
Environment and Energy

REPLY TO ADDRESS INDICATED:

- House of Representatives  
Salem, OR 97310-1347  
Capitol Message 378-8772  
 27070 Irish Bend Loop  
Halsey, Oregon 97348  
Home Phone 369-2544

HOUSE OF REPRESENTATIVES  
SALEM, OREGON  
97310-1347

DATE: DECEMBER 18, 1991  
FROM: STATE REPRESENTATIVE *Liz* VanLEEuwEN  
TO: DEQ HEARING OFFICIALS  
RE: DEQ WASTE WATER PERMIT FOR JAMES RIVER CORPORATION

I am State Representative Liz VanLeeuwen, and I've come this evening to offer testimony as one of the elected officials for this area and as a neighbor of the James River Halsey plant.

We worked diligently last legislative session to address solid waste issues through major environmental legislation such as Senate Bill 66. As a member of the House Environment and Energy Committee, I know first hand the urgency with which we must meet the challenges to reduce landfills and create recycling markets.

This new Halsey recycling plant is one of the solutions. We need to get this plant operational as soon as possible. This large scale recycling of "white papers" should make a big difference in landfill volumes. The new plant should create secure jobs for this area, while at the same time reduce our dependency on virgin wood.

As a legislator concerned about the quality of Oregon's water, I believe that James River is taking the necessary precautionary measures in construction of its plant and waste water treatment system, to assure that its discharge will have very little (if any) adverse affect on the beneficial uses of the Willamette River.

The scientific approach James River takes in designing and running its facilities is most important to me and my family since we live and farm nearby.

I believe the recycling plant has been scientifically designed to meet or exceed water quality requirements, to optimize recovery of office paper, and to produce high quality fiber to manufacture products for Oregon with recycled content.







# UNITED PAPERWORKERS INTERNATIONAL UNION

REGION XI

6882 Birchwood Court, N. • Keizer, OR 97303

**GORDON L. SWANSON**  
*International Representative*

Telephone  
(503) 390-4554

## STATEMENT FOR THE ENVIRONMENTAL QUALITY COMMISSION

on

### JAMES RIVER HALSEY RECYCLING FACILITY

Members of the commission, my name is Gordon Swanson. I am a member of the United Paperworkers International Union, which is one of the 300 affiliated local unions and part of the 125,000 members that make up the Oregon AFL-CIO. I'm here today as a union representative to support James River's request for a new waste load allocation for the Willamette River so that the Company can begin operating its new recycling facility.

I'm speaking today for many of the people who helped construct the new facility which meets the highest standards of technology. A number of these people have testified during the public hearing process about the many economic benefits this project is bringing to the State of Oregon. I'll briefly restate a few of those benefits now.

Customers in record numbers are requesting products made from recycled fiber. For example, a coalition of seventeen (17) western states has formed a purchasing alliance that calls for the use of recycled paper in state offices. We must find ways to meet such customer demand. The new recycling plant will supply recycled fiber for James River mills at Halsey and Wauna, Oregon and Camas, Washington to help those mills meet market demand for products containing recycled fiber.





# UNITED PAPERWORKERS INTERNATIONAL UNION

REGION XI

6882 Birchwood Court, N. • Keizer, OR 97303

**GORDON L. SWANSON**  
*International Representative*

Telephone  
(503) 390-4554

The new Halsey facility is creating sixty (60) new family wage jobs, and is helping to preserve hundreds more at the existing Oregon and Washington mills because it reduces the mills' dependence on purchased market pulp.

The new plant also will support hundreds of local recyclers, haulers and other businesses and industries that serve the recycling industry.

Construction of the Halsey plant has employed 400 local citizens directly and many others indirectly through the procurement of building materials and equipment from the local area.

People are eagerly awaiting the start-up of this plant. This project that creates a new market for office waste paper will complement the already existing markets for newsprint and corrugated papers, and it is receiving strong public support. It assists the State of Oregon in complying with the governor's executive order and the legislative mandate to develop markets for post-consumer waste.

James River has taken sound environmentally responsible steps to construct a plant that meets the highest standards of technology, and that will bring tremendous economic benefits to the State of Oregon.

Thank you.



- Copy -

904 NW 34th st.  
Corvallis, Or. 97330  
February 5, 1992

Environmental Quality Commission  
Oregon Dept. of Environmental Quality  
811 SW Sixth Av.  
Portland, Or. 97204

To the Commission:

May I urge that the Environmental Quality Commission reject a wastewater discharge permit for James River Corp. at its Halsey plant for the following reasons:

1. (a) The supposed "protections" the city of Corvallis is asking are worthless: it requests studies of the effluent's effect on the city drinking water quality only after the permit has been granted and final reports on that water quality by 1995--three years after citizens of Corvallis begin drinking the mill effluent in the Willamette River.

Even if these ex post facto studies show an "adverse impact" on Corvallis water supply from the wastewater discharge, the city will then permit James River to "mitigate" the impacts by removing "or reducing" the pollutant and/or compensating the city for necessary costs in doing so.

This agreement, besides giving the company three or more years to poison the community's drinking water, does not even call for a halt to operations that may be harming the water supply. It should be rejected by the commission as detrimental to public health.

(b) The city-requested "protections" also include more studies, by James River, on other methods of waste disposal than the community landfill, where James River plans to dump 175 tons a day of solid waste. Although Valley Landfills, which operates the local Coffin-Butte landfill, reports it has proposed alternative waste disposal to James River, the company has not responded. This is solid evidence that the public ultimately will bear the cost of trash disposal when the landfill is prematurely filled up, 25% of its volume by James River.

2. At the Corvallis City Council discussion of the James River permit Feb. 3, company representatives referred to DEQ verification of some of its claims. The permit analysis prepared by the Department of Environmental Quality was a mockery of scientific evaluation. Repeatedly it merely endorsed James River claims, conceded that DEQ had done no independent research, or based its statements on ungrounded assumptions or incomplete evidence. To use this report as basis for issuing any permit is a travesty of the permit process.

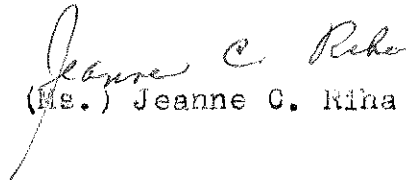
3. The whole public information process that should accompany granting of a permit was sadly flawed: inadequate public notice before the original public hearings as a result of state and city negligence; local media inattention, probably resulting again from state and city neglect. Even the Feb. 3 council discussions did not appear in the following day's Gazette-times; this may have resulted from the late hour of the considerations and they may appear later, with resultant loss of public attention.

-2-

Coming from a state where permit applications are taken seriously and there are regulations in place for public notification, I can only conclude that the State of Oregon and its constituent agencies need to catch up with the best prevailing practices of keeping the public informed.

Finally, I urge you to reject James River's permit application because neither the state nor the city has provided adequate protection for the quality of Corvallis drinking water or has acted to prevent landfill capacity that belongs to residents of this community from being absorbed by James River waste, which will be arriving from all parts of the country.

Sincerely,

  
(Ms.) Jeanne C. Rina

Mr. William Wessinger, Chairman  
Environmental Quality Commission  
c/o Department of Environmental Quality  
811 SW 6th Ave.  
Portland, OR 97204

January 21, 1992

Dear Mr. Wessinger:

On behalf of the Air Quality Industrial Source Advisory Committee, I am pleased to recommend adoption by the Environmental Quality Commission of the proposed Interim Air Emission Fee Rules. The committee's recommendation to adopt the rules, made unanimously at its January 6 meeting, was accompanied by a request to staff to address several minor technical issues in the final draft. It is my understanding that these issues have been resolved.

The committee was greatly assisted in its efforts by a technical working group which developed an alternative to the "standard" source testing criteria for categories of sources. The alternative criteria are found in section 340-20-550(4). Their effect is to provide a means for the department to approve actual emission calculations from categories of sources. The ability to calculate emissions from categories of sources should, we hope, encourage more permittees to elect to report actual emissions.

The committee would have been unable to meet its deadlines without the able assistance of Department staff, particularly Sara Laumann, Wendy Sims, Mark Fisher and Eunice Hopkins. Throughout the process, they demonstrated a firm grasp of technical details, thoughtful consideration of the committee's concerns, a patient willingness to keep searching for solutions to problems, and a remarkable ability to turn drafts around in record time.

We have appreciated the opportunity to be involved in the development of the interim rules, and look forward to working with the Department and the Commission on the next phase of Oregon's implementation of the Clean Air Act.

Sincerely,

  
Pamela G. Wiley, Chair  
Air Quality Industrial Source Advisory Committee

c. Air Quality Industrial Source Advisory Committee Members

Jeanne Riha  
904 NW 34th st.  
Corvallis, Or.

*Please pass on to members of commission*  
Testimony: James River Corp.

From the public standpoint, this whole issue of a permit for James River Corp. has been mishandled from the start.

The permit was sought after the plant was almost completed. Whatever the technical and administrative reasons given, building a plant before getting a permit would be prohibited in ~~more~~ <sup>the</sup> many environmentally aware States.

Because the DEQ evaluation report, the hearings and even the DEQ responses to comments are inadequate, the public continues to be uneasy. Information on the effluent pollutants has been extracted bit by bit, only because people kept asking questions. The answers still are often inconclusive, incomplete or unsatisfactory.

Some examples:

James River is being allowed to push and even exceed the limits on biological oxygen demand. (pp. 10-11) *disolved oxygen*  
The only test of de-ink mill effluent turbidity given in the DEQ evaluation report <sup>is going to relay the BOD rule (made to non flexible)</sup> amounted to 105 turbidity units--and only 25 units has been shown to adversely affect fish gill tissue. (16-17)

Suspended solids will rise by a combined load of 11,000 pounds a day, and presumably only dilution in the river will be relied upon to protect the fish. (17)

Dioxin will go into the river, not from the manufacturing process, but from the wastepaper itself, if it isn't captured earlier in the pulp or sludge.

We're told there will be traces of heavy metals going into the effluent, such unhealthy substances as cadmium and copper. We're not told how much of each or how much can be removed. There's now going to be monitoring for metals--once every two or three months in the early stages. What happens to people who are drinking the water if it isn't cleaned up, or can't be, before it gets to them? And who is doing the monitoring? The same question applies to who will be monitoring for furans.

Oregon Dept. of Fish and Wildlife contended that sensitive fish species require excellent water quality for survival and that, so long as the effect of the discharge remains undetermined, DEQ should not issue the permit. The Department brushed this off by saying the discharge would not violate the standards or adversely affect beneficial uses--even though BOD, suspended solids, turbidity and low-level toxics suggest the contrary.

If you look through the DEQ evaluation report, you can easily see why the public is anxious.

Instead of a thorough examination by credible scientists, the DEQ relied on the applicant for much of its information and sometimes for its conclusions, and it accepted partial information.

On pH, for example (p. 19)

The report said that typical pH values of other de-ink mill wastewaters average about a pH of 8. The report says that the applicant contends effluent from the Halsey facility will have no major effect on the Willamette River.

DEQ concludes: The treated effluent is expected to have a pH of approximately 8, and that is within the acceptable range of 6.5 to 8.5.

Who says this mill, with its waste coming from all over, will conform to any "typical" de-ink mill? Why even repeat company assurance that the effluent will have no major effect on the river? What what is "major"? What is major, indeed, to a company applying for a permit? And why should we accept DEQ's thesis that the treated effluent is quote "expected" to have a pH of "approximately" 8--which, actually, is pretty close to the 8.5 cutoff?

Another example, on metals (p. 35)

The low concentrations, coupled with dilution in the river, make it quote "very unlikely" that any of the water quality standards would be violated, according to the report.

This is no way to write a scientific evaluation of a project.

What is needed, for public assurance, is not politicized conclusions but researched opinions by reputable independent scientists.

If they came out with evidence and statements to the effect that the effluent would not harm environment or people, I for one would be satisfied.

As it is, there is not sufficient or credible evidence of the environmental or health safety of this plant.

If the Environmental Quality Commission accepts this facility as is, I think you can be certain of repercussions in the future. Human illness among those drinking the water, disorders of the fish, decline in other aquatic life, problems in the riparian environment may very well be laid at your door, rightfully or not.

You could avoid this by delaying the permit and ordering a study by outside, reputable, nonpolitical scientists of the points at issue.



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

February 6, 1992

Jerry Turnbaugh  
Water Quality Section  
Dept. of Environmental Quality  
811 S. W. 6th Ave.  
Portland, OR 97204

Dear Mr. Turnbaugh:

As you are aware, James River and the City of Corvallis have been working together over the past several months to address concerns the City has raised regarding the proposed discharge for the Halsey recycling plant. Agreement has been reached on two issues: solid waste management and impact of the proposed discharge on Willamette River water quality.

We have long recognized the need for a solid waste management plan for the reject material that is generated during the wastepaper recycling process. James River has agreed to an aggressive program to evaluate beneficial use alternatives. This program includes specific target dates and provides for public input during each stage of the process. James River offers the following language, as suggested by the City, to be included in Schedule D: Special Conditions, of the NPDES permit.

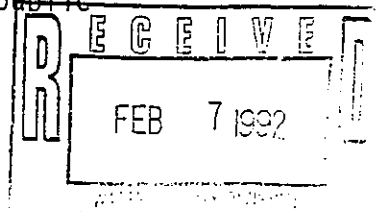
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By no later than January 1, 1997, a program and time schedule to implement the selected alternative(s) shall be submitted to the DEQ for review and approval.

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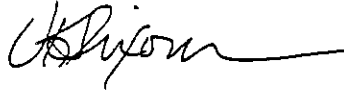


Jerry Turnbaugh  
Page 2  
February 6, 1992

James River believes that the DEQ has done a very thorough evaluation of the proposed discharge, and concurs with their determination that beneficial uses of the Willamette River, including drinking water, will be protected. The City continues to have concern about the potential impact on their drinking water supply. Instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and trihalomethanes, which may be related to taste and odor are of particular concern. An agreement to conduct scientific water quality studies to determine the effect, if any, of James River's discharge on the Corvallis water supply has been reached. This study will cover a two year period between July, 1992 and July, 1994. The following language is suggested for inclusion in James River's NPDES permit, Schedule D: Special Conditions, to acknowledge the existence of the agreement:

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Very truly yours,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc:

Fred Hansen, Director	- DEQ
Lydia Taylor, Administrator Water Quality Division	- DEQ
Hon. Charles Vars., Mayor	- City of Corvallis
Gerald Seals, City Manager	- City of Corvallis
Rolland Baxter, Public Works Director	- City of Corvallis

bcc:

Bob Gilbert - CES/Camas  
Gus Moody - Richmond  
Kathleen Bennett - Richmond  
Carolyn McGreevy - Vancouver  
Harry Barber - Vancouver  
Jeff Manchester - Halsey  
Dick Sleeter - Halsey  
Steve Wolfe - Halsey



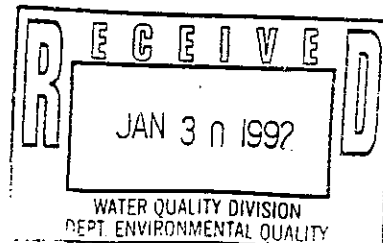
**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

January 29, 1992

Mr. Jerry Turnbaugh  
Industrial Waste Section  
Water Quality Division  
Department of Environmental Quality  
811 S. W. 6th Ave.  
Portland, Oregon 97204

Dear Jerry:

Several groups have submitted formal comments to the Department on James River's draft NPDES permit for the Halsey recycling plant regarding the perceived inequities between municipal and industrial dischargers on the Willamette River. The commenters include the Oregon Association of Clean Water Agencies (ACWA), the League of Oregon Cities, and the cities of Albany and Corvallis. The comments carried similar themes, most of which were directed at the DEQ. One of the central concerns expressed is that the approval of the James River discharge could potentially impact the wasteload allocations of the existing dischargers by using up a significant portion of the remaining assimilative capacity. The Department has made the statement that the river is not water quality limited for any of the parameters that would be impacted by the proposed discharge, including dissolved oxygen. The DEQ staff has done a very thorough review of James River's permit application, and has done extensive river water quality modeling to determine the impact that the proposed discharge will have on Willamette River Water Quality Standards. The results of the modeling have demonstrated that James River's discharge will not have a measurable impact on in-stream dissolved oxygen levels, even under worst case river conditions (extreme low flow and all dischargers at permit limits). This clearly indicates that the discharge will not have a significant impact on the remaining assimilative capacity and definitely would not impact the existing load allocations of other dischargers.



Mr. Jerry Turnbaugh  
Page 2  
January 29, 1992

The inequity concerns raised by the cities do not directly affect James River's proposed discharge. The permitting process has received rigorous DEQ review in compliance with all Oregon Administrative Rules. However, James River urges the Department to formally respond to this issue by giving the cities the assurance that the Willamette River is not water quality limited for dissolved oxygen and that approval of the James River discharge will not impact current wasteload allocations.

Very truly yours,

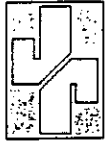


VIRGINIA K. SIXOUR/gh

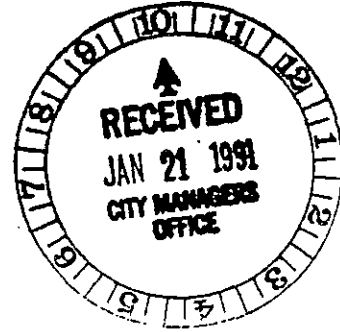
Manager, Environmental  
Field Services-Northwest

cc:

Terry Smith - ACWA  
Joe Mc Laughlin - League of Oregon Cities  
Keith Rohrbough - City of Albany / Mayor  
Rolland Baxter - City of Corvallis / Public Works



**JAMES RIVER CORPORATION**  
Consumer Products Division  
P.O. Box 215, Halsey, Oregon 97348



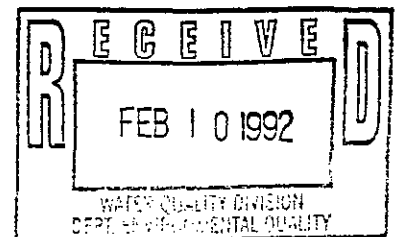
**JEFFREY J. MANCHESTER**  
Vice President  
Manager  
Halsey Mill  
(503) 369-1222

January 20, 1992

Gerald Seals, City Manager  
501 SW Madison Avenue  
Corvallis, OR 97333

Dear Gerald:

On January 3, 1992 we met to discuss several concerns the City of Corvallis has had with regard to James River's Halsey, Oregon recycling mill. We have agreed to work together as partners to address these specific issues. Two of these issues, solid waste management and potential waste load impacts, are being addressed separately. The purpose of this letter is to address the City of Corvallis' concern about the potential impact of the proposed discharge from James River's paper recycling plant on the City's drinking water supply. The Oregon Department of Environmental Quality has evaluated our proposed discharge and has made a determination that existing beneficial uses of the Willamette River, including use of the river for drinking water purposes, will be protected. The City continues to have concern about taste and odor, specifically about instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and also about trihalomethanes. James River proposes to address this issue as follows:



Mr. Gerald Seals, City Manager  
January 20, 1992  
Page 2

## BACKGROUND

- A. James River will be engaging in the business of producing paper from recycled products at its Halsey, Oregon Mill.
- B. James River has applied for a National Pollution Discharge Elimination System (NPDES) permit for a proposed new operation at its Halsey, Oregon Mill site located in Linn County, Oregon, adjacent to the Willamette River.
- C. The proposed James River wastewater discharge is upstream of the City of Corvallis drinking water supply intake on the Willamette River.
- D. The City desires to protect its drinking water source.
- E. The City and James River desire and agree to cooperate in addressing the potential impacts of the James River operation on the City of Corvallis' drinking water supply.

## JAMES RIVER AND CITY COOPERATION

- A. James River agrees to fund scientific studies to determine the effect of James River's discharge on the City of Corvallis water supply.
- B. James River and the City agree that a consultant(s) agreeable to each party will be hired to conduct the scientific studies.
- C. James River and the City agree to the following Work Plan.

## WORK PLAN

1. James River within 120 days of approval of its NPDES permit, will commence scientific studies to determine the effect of James River's discharge on the City of Corvallis water supply.
2. Sampling and other field work shall cover a two year period and shall commence by July 1, 1992.
3. Interim reports shall be submitted to the City no later than July 1, 1993 and July 1, 1994.
4. Final reports shall be completed by July 1, 1995.
5. The detailed scope of work shall be cooperatively agreed to by James River and the City.
6. The City shall review and approve any changes to the scope of work, work plan, or consultant(s) for the studies.
7. The City shall review and comment on all draft work products prior to final publication.
8. All costs associated with the studies shall be borne by James River Corporation.

## MITIGATION

Should the studies indicate that James River's discharge causes the river not to meet water quality standards, or that the studies indicate an adverse impact on the City of Corvallis' water supply as a result of James River's wastewater discharge, then James River agrees to mitigate the impacts caused by its discharge. At James River's option, James River will mitigate the impacts by taking actions at its mill site to remove or reduce the constituent(s) which cause the degradation of Corvallis' water supply, and/or compensate the City of Corvallis for those waterworks improvements and operating costs required of the City as a result of James River's discharge.

Mr. Gerald Seals, City Manager  
January 20, 1992  
Page 4

## NPDES PERMIT

James River agrees that the following clause shall be incorporated in the NPDES permit issued to James River:

DEQ acknowledges the potential impact issuance of this permit may have on the City of Corvallis. This permit is issued in recognition of agreements reached between the City of Corvallis and James River Corporation.

## ARBITRATION

Any controversy regarding the terms and conditions of this agreement shall be submitted to arbitration. Either party may request arbitration by written notice to the other. If the parties cannot agree on a single arbitrator within 15 days from the giving of notice, each party shall within five (5) days select a person to represent that party and the two (2) arbitrators shall within five (5) days select an impartial third person to complete a 3-member arbitration panel. If the two (2) arbitrators cannot agree within 15 days on the third arbitrator, then either party may petition the Presiding Judge of the Benton County Circuit Court to select the third arbitrator. The panel shall conduct the arbitration in accordance with the provisions of ORS 36.300 through 36.365 or the corresponding provisions of any such future law. The arbitrator(s) shall assess the cost of arbitration, including attorney fees, 60% to the James River Corporation and 40% to the City of Corvallis.

We look forward to working with the City of Corvallis as partners in preserving the quality of the Willamette River. We believe you will continue to find that James River Halsey paper recycling plant is a valuable asset to the community and a good neighbor.

Sincerely,



Jeffrey J. Manchester

:sm

Approved and accepted by the City of Corvallis.

Signed:



Gerald Seals, City Manager

February 3, 1992



January 22, 1992

TO: DEQ/WQ

I am writing to ask you to deny the water discharge permit for the new James River paper plant until wastewater processing equipment is installed to assure no degradation of the James River water quality.

We have worked for many years to improve the water quality of the Willamette River and it is unconscionable that we would allow any further water quality degradation.

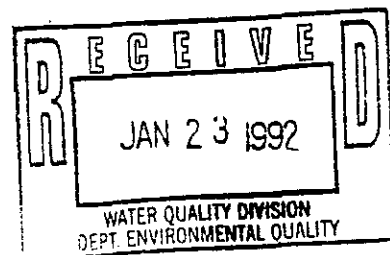
The current discharge of 2500lb/day should not be exceeded and wastewater processing equipment should be added to existing wastewater sources so as to keep the total combined discharges at or below the 2500/day level.

Please consider the downstream agricultural users, municipal users and aquatic wildlife when making your decisions.

Sincerely



Wayne Hunter  
Cathedral Forest Action Group  
501 Thousand Oaks rd  
Corvallis, Oregon  
97330





**OREGON WATER UTILITIES COUNCIL  
PACIFIC NORTHWEST SECTION  
AMERICAN WATER WORKS ASSOCIATION  
P.O. BOX 19581 PORTLAND, OR 97280**

OREGON WATER UTILITIES COUNCIL  
CHAIR: Kimber Johnson (503)341-3724  
VICE CHAIR: Edward Olson (503)770-4509

CITIES

Thomas Penpraze  
*City of Corvallis*

January 9, 1992

WQ 0.5.1

Ron Gross  
*City of La Grande*

Julie Schmitt  
Industrial and On-site Waste Section  
Water Quality Division  
Department of Environmental Quality  
811 SW 6th Avenue  
Portland, OR 97204

John McKeivitt  
*City of Lincoln City*

John Thomas  
*City of Newberg*

Jeanne McKeever  
Robert Willis  
*City of Portland*

Subject: Written Comments on Application for NPDES  
Wastewater Discharge Permit for the  
Proposed Secondary Fiber Plant, James  
River Corp., Halsey, Oregon

Daniel Bradley  
Jim Young  
*City of Salem*

Dear Ms. Schmitt:

Brian Stahl  
*City of The Dalles*

We have recently become aware of the permit application by James River that would discharge additional pollutants to the Willamette River through the outfall being operated by the Pope & Talbot Corporation at their Halsey mill.

Dan Boss  
*City of Tualatin*

Tom O'Conner  
*League of Oregon Cities*

The Oregon Water Utilities Council is an organization of water utilities from throughout the state of Oregon, serving the municipal water needs for the state of Oregon.

COMMISSIONS, DISTRICTS,  
BOARDS AND ASSOCIATIONS

Charles Harrison  
*Clackamas Water District*

Our efforts are generally associated with the Water Resources Department activities and therefore we are not generally on the mailing list for industrial waste permit applications. This particular application has attracted our attention because one of our member agencies, the City of Corvallis operates a drinking water treatment plant thirteen miles downstream from the proposed additional discharge.

Phil Matson  
*Coos Bay - North Bend Water Board*

Kimber Johnson  
*Eugene Water and Electric Board*

Mike Kendall  
*Glen Eden - Lincoln Beach Water District*

Edward Olson  
*Medford Water Commission*

We strongly support your Department in it's efforts to keep pollution from entering the streams and water bodies of this state. In order to support you in your efforts and expand that work we offer the following comments for your consideration.

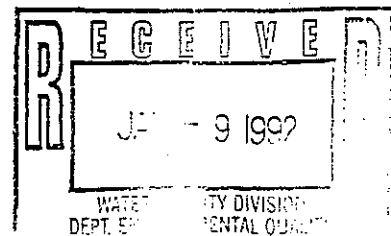
Charles Petersen  
*Special Districts Association of Oregon*

Ken Cerotsky  
*Springfield Utility Board*

Noel Groshong  
*Umpqua Basin Water Association*

Gene Seibel  
Mike Walker

*Tualatin Valley Water District*



Julie Schmitt  
January 9, 1992  
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## COMMENTS ON PROPOSED DISCHARGE

### ROLE OF WATER QUALITY MONITORING

It appears that industrial plants such as the proposed mill are not required to handle treatment loads in a similar way to sewage treatment plants. By this we mean that the application of additional BOD and total dissolved solids are permitted in a format of pounds per day. There is no regulation or checking as to how these loads reach the Willamette. We believe that there is a possibility for shock loading of the stream for short periods of time as the plant is operated in response to mill operations. We believe that this particular mill has not investigated the possibilities of more innovative treatment practices that may be available to enable the return water to be of even better quality than represented in the evaluation report of November 29, 1991.

### ROLE OF ASSIMILATIVE CAPACITY

It appears that this mill addition in conjunction with the adjacent Pope & Talbot operation is using a significant proportion of the available assimilative capacity in the Willamette River.

In this way, using up the assimilative capacity has the same general effect as withdrawing water for the following reasons. Since so much of the river is needed for dilution of pollutants, that much less water is available for other uses.

Certain of our member agencies are investigating the possibility of using Willamette River water as a drinking water source in the Wilsonville area. The in-stream need for pollution dilution will no doubt impact the amount of water available for that purpose.

## COMMENTS ON METHODOLOGY

### WATER QUALITY MODELING

After a brief review of the water quality model prepared for James River by the HMS Environmental Co. (October, 1991) it appears that a simplified model has been used. The limited data input does not reflect the diurnal variations when possible slug flows of pollutants may be escaping the mixing zone near the diffuser.

One of the results of the study is figure No. 1 "Model Prediction of Dissolved Oxygen in the Willamette River on August 8, 1986". To us this is a very revealing piece of evidence to indicate that both James River and Pope & Talbot should reconsider their mill waste treatment and attempt to improve their operations. Please see attached copy of figure No. 1. Note that from all areas up-stream of the Halsey Mill the slope of the DO is very flat, even though this

Julie Schmitt  
January 9, 1992  
page 3

section includes sewage treatment operations from the large metropolitan area of Eugene/Springfield. From the Halsey mill at approximately river mile 147 to the Santiam River at approximately river mile 107, the slope of the curve for DO loss shows a marked decrease and a higher rate of oxygen loss. Were it not for the input of the Santiam River it appears that all downstream users would be heavily affected. From river mile 107 to river mile 47 the curve is again flat until lower river inflows and other influences affect DO.

We have not had time to review the report in more detail, but we do not believe that enough constituents have been analyzed as will be indicated below.

#### COMMENTS ON RAW WATER QUALITY

##### ROLE OF DRINKING WATER TREATMENT

There has been a great increase in water quality requirements in recent years. Water treatment technology and detection methods have become much finer. For example, constituents are now measured in parts per billion and beyond, where before they were only measured in parts per million. Therefore, the discharge from the mill operations at Halsey will continue to be a problem for all downstream users of the river, such as Corvallis, Albany, and any future users of the river.

#### COMMENTS ON OUTSTANDING WATER RESOURCES

##### ROLE OF "PUBLIC BENEFIT" AND PUBLIC PERCEPTION

The public benefit to be derived by allowing this increase in pollution load is not clear to us. We would like a better definition of the public benefit. We believe that the public at large would have other views in that our streams and rivers ought not to be used for carrying pollutants if other means are available. The materials submitted by James River have not shown leadership in trying to find the best available treatment technology or in innovative ways to handle their pollutant loads beyond the secondary treatment that they are recommending. We realize these means would be more expensive, however, the public acceptance of higher prices for an environmental benefit would follow.

We appreciate the fact that James River is moving into the recycling of waste paper as this will benefit all of us. We would hope that their forward thinking business-like approach would also allow them to innovate and have the least impact on receiving waters of the State of Oregon.

Julie Schmitt  
January 9, 1992  
page 4

**SUMMARY**

In summary, the Oregon Water Utilities Council has serious reservations about the granting of additional pollution discharge to the Willamette River reflected in this application. We believe that both point sources such as this load and non-point sources of pollution should be identified and quantified so that if they choose to maintain their pollution practices that other economic considerations be involved. For example, pollution discharges above a certain level might be allowed if water were purchased from up-stream storage reservoirs and released to compensate for pollution dilution and such additional loading.

The increased demand for the limited resource of our streams and rivers will result in continually decreases in stream flows. This resulting pressure to improve and enhance disposal systems we believe is now appropriate. By granting this application we are encouraging continued "business as usual" that will only lead to lower quality waters for all purposes.

Thank you very much for the opportunity to comment on this NPDES application. We look forward to hearing the result so that we might inform our members of the actions taken by DEQ in this matter.

Sincerely,



Kimber Johnson, Chair  
Oregon Water Utilities Council

WME:daw      EAZ:9201W061

attachment

cc: Ed Olson  
Robert Willis  
Tom Penpraze  
OWUC members

**IMPACTS OF SECONDARY  
FIBER PLANT EFFLUENT DISCHARGE  
ON THE WILLAMETTE RIVER:**

**WATER QUALITY  
MODELLING PREDICTIONS**

*Prepared for:*

James River Corporation  
Halsey, Oregon

*Prepared by:*

HMS Environmental, Inc.  
1600 NW Compton Drive, Suite 306  
Beaverton, Oregon 97006

October 1991

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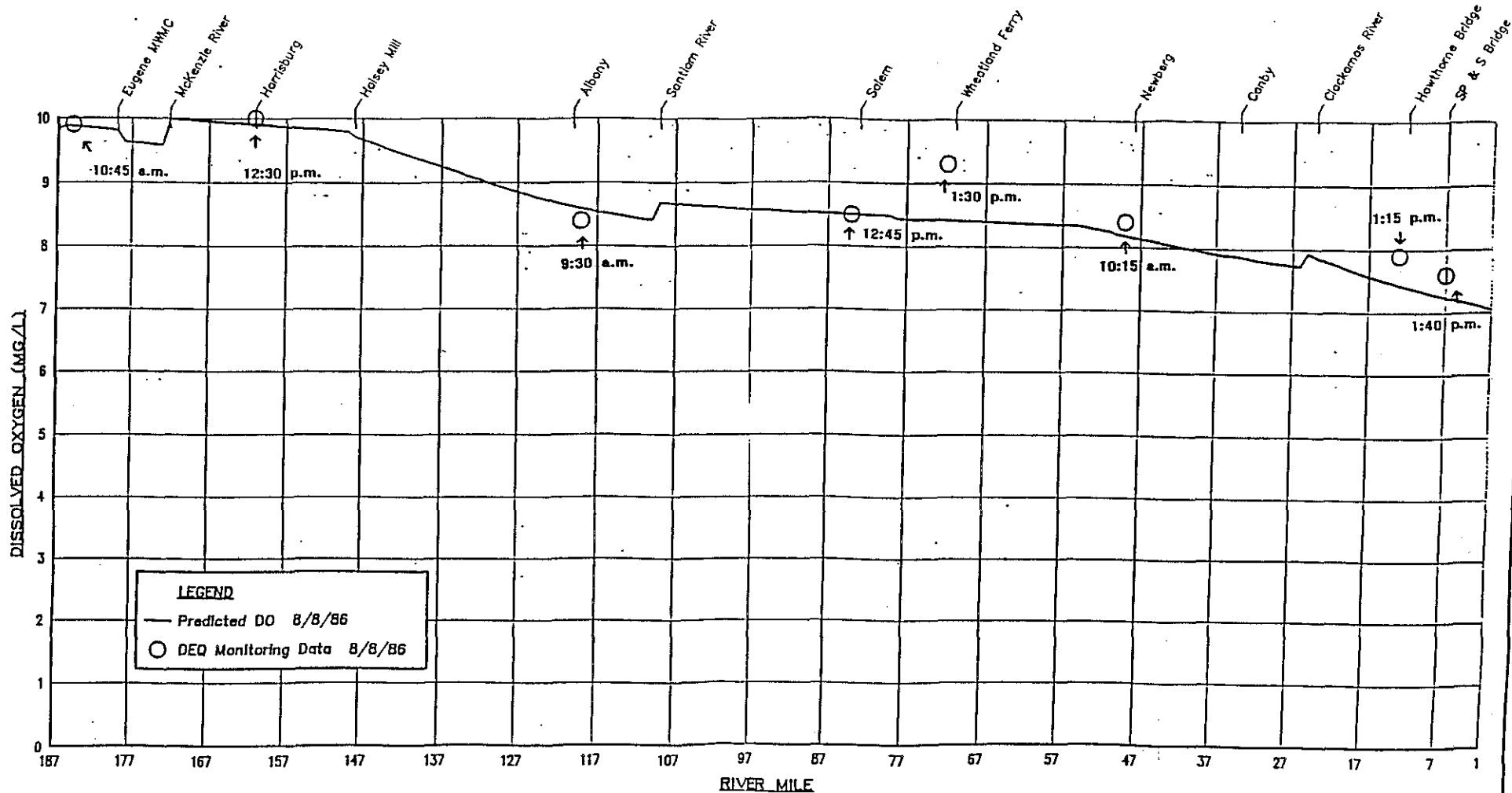


Figure 1. Model Prediction of Dissolved Oxygen in the Willamette River on August 8, 1986.

(Actual river water sample collection times are shown adjacent to the plotted point.)

REFERENCES

- Rickert, David A. and Walter G. Hines, "A Practical Framework for River-Quality Assessment", U.S. Geological Survey Circular 715-A.
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- Friday, John, and Suzanne Miller, "Statistical Summaries of Stream Flow Data in Oregon", Volumes 1 and 2, U.S. Geological Survey Open-File Report 84-454, 1984.
- McCutcheon, Steve C., "Evaluation of Selected One-Dimensional Stream Water-Quality Models with Field Data", Technical Report E-83-11 U.S. Army Engineer Waterways Experiment Station, May 1983.

Table 5. USGS Data on BOD and BOD Coefficients (8)

TABLE 5.—BOD<sub>5</sub> loading to the Willamette River from individual outfalls and tributary watersheds  
[Calculated loadings are based on 1974 low-flow conditions (6.800 ft<sup>3</sup>/s or 190 m<sup>3</sup>/s Salem gage)]

Location of load (RM)	Description of waste-water load or tributary	Point source (lb/d) <sup>1</sup>	Nonpoint source (lb/d) <sup>2</sup>	Total (lb/d)	Average BOD <sub>5</sub> concentration (mg/l)	Average carbonaceous deoxygenation rate, k <sub>d</sub> (d <sup>-1</sup> )
187	Confluence of Middle and Coast Forks	240	21,800	21,800	2.1	0.04
184	Springfield STP	—	(19,200 Middle)	—	—	—
176	Eugene STP	3,100	—	3,100	74	.06
175	McKenzie River	8,650	—	8,650	92	.06
148	Wood products industry	4,200	30,500	36,700	22	.05
132.1	—	4,100	—	4,100	22	.06
132	Marys River	2,900	—	2,900	300	.04
131	Corvallis STP	120	120	240	15	.01
118	Calapooye River	3,100	—	3,100	52	.06
116	Albany STP	240	240	480	4.8	.03
108	Combined effluent of metals and wood products industries	1,100	—	1,100	21	.06
107.9	Santiam River	960	—	960	36	.05
107.8	Lackiamute River	15,000	13,000	28,000	2.2	.01
95.4	Independence STP and Ash Creek	120	120	240	15	.06
85.0	Wood products industry	960	—	960	50	.02
78.2	Salem STP	13,000	—	13,000	65	.06
55.0	Yamhill River	11,800	—	11,800	60	.05
50.3	Newberg STP	720	720	1,440	4.9	.05
49.8	Wood products industry	100	—	100	22	.06
35.8	Melalls River	7,200	—	7,200	90	.07
31.0	Candy STP	500	980	1,480	2.1	.04
28.4	Tualatin River	70	—	70	32	.05
23.0	Wood products industry	4,300	960	5,260	25	.06
21.6	do	11,100	—	11,100	50	.06
21.2	Oregon City STP	5,000	—	5,000	37	.06
21.8	Clockamas River	240	—	240	13	.06
21.1	West Elm Stp	240	3,400	3,640	1.3	.07
20.9	Tysoe Creek STP	170	—	170	30	.06
20.1	Oak Lodge STP	430	—	430	13	.05
18.4	Milwaukie STP	240	—	240	26	.06
Total		92,300	77,640	169,900	31	.06

Notes.—STP, sewage treatment plant; e, estimated from Oregon DEQ routine surveillance data.  
<sup>1</sup>Only sources with BOD<sub>5</sub> loads greater than 100 lb/d shown in table.  
<sup>2</sup>All point-source BOD<sub>5</sub> data above RM 85 based on 1973 samples. All point-source data below RM 85 based on 1974 samples except discharges with loads less than 500 lb/d which were sampled only in 1973.  
<sup>3</sup>Below RM 85 municipalities and industries with BOD<sub>5</sub> loads greater than 1,000 lb/d were generally sampled 3-10 times. Above RM 85 municipalities and industries were generally sampled 1-4 times. Tributaries were sampled 3-10 times.  
<sup>4</sup>Nonpoint-source data from June to August 1974 samples (see table 4) of major tributaries and estimates for minor tributaries.  
<sup>5</sup>Point-source loads primarily from upstream wood products industries.



Greg Metcalfe  
6465 NW Mountain View  
Corvallis OR 97330

Dear Sir,

Regarding the James River Paper Company application for a waste water permit just south of Corvallis:

- o The Willamette should be driven in a cleaner direction, not toward water quality limits.
- o Benchmark data are not available.
- o Area growth will provide enough pressure on the river, and the Coffin Butte Landfill (which would receive 175 tons/day).
- o Pope & Talbot and James R. would share the same outfall. Much damage could occur while these companies pointed finger, in the event of standards being exceeded.
- o Pope & Talbot, James R., and Corvallis should be considered as a system, not piecemeal. That is the only way to ensure fairness to both the river, and the mid-valley residents.

9/2/81

Sincerely,  
Greg A. Metcalfe



Office of the Mayor  
501 SW Madison  
P.O. Box 1083  
Corvallis, OR 97339-1083  
(503) 757-6985  
FAX (503) 757-6936

January 9, 1992

Environmental Quality Commission  
Oregon Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Or. 97204

RE: PROPOSED JAMES RIVER NPDES PERMIT

Dear Chair Wessinger and Commission Members:

The City of Corvallis appreciates the opportunity to comment on the proposed James River Corporation NPDES permit.

We recognize the positive contribution this facility will make to advance Oregon's efforts toward recycling and resource conservation. The City also recognizes the economic benefits from this endeavor for our region.

The City has had several meetings with James River over the past several months to discuss City concerns about the potential impacts on our citizens from James River's discharge.

The City's issues focused on the following:

1. Drinking water quality impacts;
2. Wastewater discharge impacts; and
3. Solid waste issues.

The City and James River have worked cooperatively to find solutions to each of these issues. I am pleased to report the progress made on each, as well as the City's remaining concerns.

**Drinking water quality impacts.**

The City is concerned with the impacts James River's discharge may have on Corvallis' drinking water supply. The City's intake is approximately 13 miles downstream of the James River waste discharge point. The main concerns are over impacts on taste and odor and trihalomethane formation in the water supply. James River's discharge contains compounds known to cause taste and odor and other materials that may increase

Environmental Quality Commission  
January 9, 1992  
Page 2

trihalomethane formation in the municipal water supply. DEQ staff contend there will be no impact.

In order to assure the City of Corvallis that James River's discharge will not impact the City's water supply, James River has agreed to conduct studies of the impacts of its discharge on water quality. If the studies indicate that the discharge adversely impacts water quality, James River has agreed to mitigate the impacts.

The City and James River request that this agreement be formally recognized in the Special Conditions section of James River's permit.

#### **Wastewater discharge impacts.**

The City is concerned about the impact James River's discharge may have on City of Corvallis as a discharger on the river.

The portion of assimilative capacity allocated to James River in the proposed permit is large in comparison to existing dischargers on the river. It is our concern that this allocation may result in the City prematurely having more stringent permit limitations placed on it if Total Maximum Daily Loads are established on the river. The City already has one of the most stringent permits on the river (10/10 BOD and SS). Treatment facilities to make further reductions would be very expensive, and, arguably, an untimely expense, for the citizens of Corvallis.

DEQ staff has stated that granting James River's permit as proposed will not impact other discharger's permitted loadings. The City has written DEQ requesting confirmation and assurances on this matter. The City has not received this confirmation as yet. This remains an issue for the City. DEQ confirmation and assurance, given informally, should be formalized and is, thus, hereby requested.

More to the point, prior to issuance of the James River permit, the City requests that DEQ confirm in writing the fact that James River's permit will not have a detrimental impact on Corvallis' permit.

#### **Solid waste issues.**

The City is concerned that the sludge waste from the James River wastewater treatment facility disposed of at the Coffin Butte regional landfill may have an adverse impact on landfill operations and landfill costs.

The citizens of Corvallis, through garbage rates, support the construction of new cell space. James River proposes to discard 150 to 175 tons of solid waste per day at Coffin Butte. This waste loading will use up landfill volume at a faster rate, thus requiring new cell development.

Environmental Quality Commission  
January 9, 1992  
Page 3

The citizens of Corvallis should not have to pay the cost of premature cell development because of James River's waste.

Prior to but consistent with the guidance of Senate Bill 66, Corvallis embarked on an aggressive recycling, waste reduction program in part to preserve landfill capacity and minimize landfill costs. Our concern is that by letting James River dump at Coffin Butte these efforts might not prove effective.

The City feels James River should explore other means of disposal of the solid waste, preferably via some type of beneficial use.

The City and James River have reached an agreement on this issue. The agreement calls for James River to conduct studies and evaluate alternative methods of disposal, and to have these evaluations and studies completed by 1996.


James River and the City have also agreed that this commitment should be formally recognized in James River's NPDES permit.

The City has also received assurances from the landfill operator, Valley Landfills, that in the interim, disposal of solid waste from James River will not have a detrimental impact on landfill operations or on landfill rates. This means, for example, that without James River, rate increases will reflect only the cost of increased regulation and normal inflation. James River's waste volume will not exacerbate expected increases associated with future operating costs.

The City needs firm commitments from James River and DEQ which insure that the City's concerns are adequately addressed. We are encouraged with the progress made to date. We expect this progress to continue. This must entail formalization of our conceptual agreements with James River, and acknowledgement by DEQ that granting James River's permit as proposed will not negatively impact the City's wastewater discharge permit.

Your assistance in assuring that City expectations, concerns, and issues will be addressed and resolved to the City's satisfaction prior to EQC action on James River's permit is respectfully requested and appreciated.

Sincerely,



R. Charles Vars, Jr.  
Mayor

attachments

2003



POPE & TALBOT, INC.

January 9, 1992

Mr. Jerry Turnbaugh  
Acting Manager Industrial  
& On-sight Waste Section  
Water Quality Division  
Department of Environmental Quality  
811 SW 6th  
Portland, OR 97119

Dear Sir:

On behalf of Pope & Talbot Inc. I would like to reiterate our support of the James River Recycle Plant permit. We believe that this approach is the safest and most manageable of all the options considered by the company and DEQ.

There were a number of statements and comparisons made at the January 8th public hearing that we feel needs response and clarification for the record.

The first is the issue around running the recycle plant effluent through the Pope & Talbot system. When the project was first announced by James River we immediately began to evaluate our system capability and quickly came to the conclusion that the nature of the project would add load to a system that is fully utilized especially during the summer. The different nature of the effluent also brought us to the conclusion that the Pope & Talbot permit would have to increase in order to accommodate the Recycle plant. Since, separate treatments would be necessary it made logical sense to request a separate permit to manage the two systems separately. Once the two effluents are mixed and then treated assigning a cause to upset conditions becomes impossible. Therefore, separate treatments testing and discharges maintain full accountability and safety. Thus the need for separate permits.

Second, there seemed to be some confusion at the meeting about testing. As you know and the public needs to understand each permittee is required to test its effluent quality at the point of discharge. So Pope & Talbot and James River will test and report effluent quality and together we will be testing to assure the combined discharge continues to meet the water quality Standards for the Willamette River.

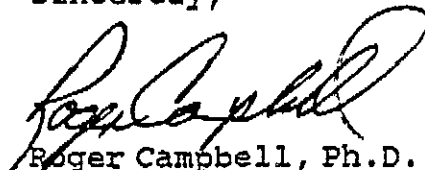
Third, a number of times the question was asked about why James River required 2,000 lbs/day BOD limit when Pope & Talbot can triple its size and stay within the existing 2,500 lbs/day limit in its current permit. The assumptions in that type of question is that James River is not installing the best available technology. Which they are. It assumes the nature of the effluents from the two processes are the same which they are not. Finally, it does

not consider the facts that in order to achieve a no increase in BOD Pope & Talbot must completely replace its current 30 year old mill technology with 1990's technology at a cost of \$400 million. We think it is unfair to base any decision on BOD by comparing different processes and vintage of process and treatment technology.

Pope & Talbot has been willing to investigate new and innovative treatment technologies as witnessed by our five year commitment to the Wetlands Programs. However, this technology has had only one year of practical evaluation. It will require at least the full term of the study to answer the questions around the practical and environmental benefits. Without that it seems unfair to require James River or Pope & Talbot to invest in that technology.

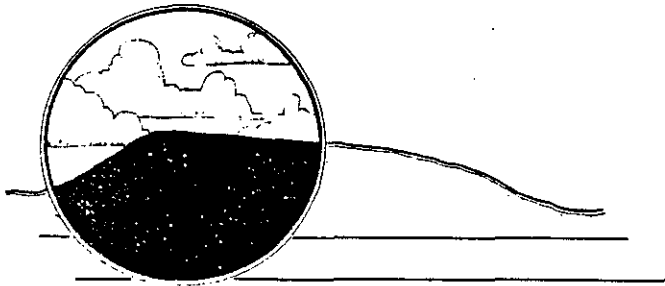
Thank you for the opportunity to comment and hope this will help in making a positive determination of the James River permit.

Sincerely,



Roger Campbell, Ph.D.  
Operations Manager

cc: Bill Frohnmayer  
Art Vosburg  
Roger Sherwood  
Jeff Manchester



*Handwritten signature: J. T. [unclear]*

MARYS PEAK GROUP, SIERRA CLUB  
P.O. BOX 863  
CORVALLIS, OREGON 97330

January 9, 1992

Mr. Fred Hansen, Director  
Department of Environmental Protection  
811 S.W. 6th Avenue  
Portland, Oregon 07204

Re: Application of James River Paper Company, Inc.  
File Number 105814

Dear Mr. Hansen:

This letter amends and supplements our comments of January 8, 1992, and is based on additional information that became available, both on and off the record, last evening at the public hearing that your Department held in Corvallis.

Information concerning Pope & Talbot, Inc. was obtained off the record because its representatives did not offer evidence at the hearing. Unless it is a party, with a stake in the outcome of these proceedings, there can be no assurance of a complete public record.

First, this situation is unique because changes in ownership within the Halsey Mill Complex occurred without corresponding changes in the master permits for water use and effluent disposal. Although everyone agrees that Pope & Talbot, Inc. and the Applicant, James River Paper Company, Inc. should have clear, separate accountability, an equitable division of obligations, rights, and responsibilities cannot be accomplished in a permit proceeding to which only one of them is a party!

It was confirmed last evening that the combined operation at the Halsey Mill Complex will stay within the master water right that Pope & Talbot, Inc. has. The effect of granting the Applicant's separate request in this proceeding will be to bypass the master NPDE pollution permit, now in the name of Pope & Talbot, Inc., and to increase total quantities of BOD<sub>5</sub> entering the Willamette River from the combined outfall pipe -- an increase from 2500 pounds per day to 4500 pounds per day!

Mr. Fred Hansen,  
Director

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January 9, 1992

Pope & Talbot, Inc. plans to triple its production capacity at a cost, according to published reports, of about 300 million dollars. It expects to do so without any increase in permitted levels of effluent entering the Willamette River. To stay within existing permit levels it is prepared to spend at least 32 million dollars (an off the record figure mentioned last evening), or roughly 10% of the cost of the project, even before considering other innovative, lower tech, lower cost approaches on which its staff is working, such as constructed wetlands for effluent treatment.

The Applicant, James River Paper Company, Inc., after normal prudent risk assessment, expanded its plant at a cost of 65 million dollars, without first obtaining the permit now sought. When asked, the Applicant's representatives were unwilling, or unable, to state what it would cost the Applicant to follow Pope & Talbot's example, if its Application is denied! The only reasonable inference is that if you deny the Application, the additional cost, while perhaps disagreeable, is within the Applicant's means and is not a problem.

Unlike Pope & Talbot, Inc., this Applicant, despite of all its talk, wants to do as little as possible, not as much as is technically and economically feasible, to clean up our River, and to keep it that way. Recycling paper is admirable. We want this kind of business in Oregon. Oregonians like to be environmental leaders, to set an example. But we also want to set a responsible example for handling the resulting waste streams. The Applicant hasn't explained why it thinks it doesn't have to act responsibly, rather than to be like its neighbor.

Parenthetically, there are a lot of people who would be happy to pay an additional nickel a roll for their recycled paper towels if the package stated that the higher price was dedicated, specifically, to keeping the Willamette River clean. America's consumers are proud of their country and will support responsible business.

Last evening the Applicant indicated it had not submitted any data to your Department on alternative treatment approaches that would allow the combined effluent to remain at the currently permitted levels of BOD. Under pressure from a questioner, one of your representatives stated that your Department had considered alternatives and their costs. Another citizen, who had scoured your files in Portland, countered that he had found no evidence of



Mr. Fred Hansen,  
Director

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January 9, 1992

any such analysis, and requested that your Department make it available, if it exists.

If you do not present adequate data on available alternatives to the Environmental Quality Commission when they review this matter, we submit that the Commission will have an inadequate record upon which to base a policy decision, and will be legally required to deny the Application and refuse to issue the permit.

Several speakers sought to create a sense of urgency by stating that the plant will be ready to operate in March, 1992, the assumption being that it will not be able to operate without the permit. Other speakers suggested than a short-term, conditional permit be issued, so that the Applicant would have sufficient time to make the changes needed to operate within the limitations of the master permit, 2500 tons of BOD<sub>5</sub> per day for the Halsey Mill Complex.

Please note that for reasons independent of permitting problems Pope & Talbot's expansion is proceeding more slowly than planned. At this time there ought to be sufficient available capacity within the master permit structure for the Applicant's plant to begin operating by March, 1992 in any case. Operating under the master permit, without a conditional increase, would allow sufficient time for the Applicant to upgrade its treatment facilities within the real timetable that Pope & Talbot has for completion of its own expansion.

In other words, given the history of combined operations at the Halsey Mill Complex and the sums of capital involved, this is a matter which the private parties can and will work out for themselves when you deny the permit application.

Second, a representative from your Department admitted that you did not even consider the "no permit" regulatory position. Rather, when requested to issue a permit, your Department tried to figure out some way to accommodate the Applicant. Admittedly there is no data on assimilative capacity for the Willamette River, so your Department invented a new, special criterion for this case: it will deem an average increase of 0.1 mg/l dissolved oxygen within the reach from the Halsey Mill Complex to Willamette Falls to be within permissible degradation limits. Plugging this figure into a "model," the Water Quality Division backed into a figure of 2000 pounds of

Mr. Fred Hansen,  
Director

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January 9, 1992

BOD<sub>5</sub> per day for the "recommended" permit level.

Your Department representative admitted that this is a special criterion only for this case, and will not be applied to any other applicant along the Willamette River. He also stated that in addition to a pounds per day limitation, sewage plants are limited to 10 mg. per liter BOD<sub>5</sub> at their outfalls, while this Applicant is not so limited. Both statements are clear admissions of denial of equal protection to all other permit holders as well as to their beneficial users along the River. This denial by itself is sufficient reason to deny the Application in its present form and to refuse to issue the permit.

For all the reasons stated in this addendum, as well as in our January 8, 1992 comments, the permit should not be granted, and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent entering the Willamette River from the common outfall pipe of the Pope & Talbot/ James River Complex does not exceed the amount currently permitted under the master permit held by Pope & Talbot, Inc..

Respectfully submitted,

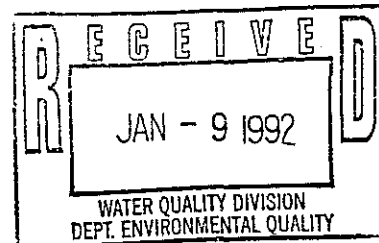
MARYS PEAK GROUP SIERRA CLUB

KARL R. HUBER, CHAIR

cc: Water Quality Division  
David Paul, Esq.  
Karl Anuta, Esq.  
Hon. Charles Vars, Mayor  
City of Corvallis

FAX to: number 2298-6164<sup>2</sup>  
Department of Environmental Quality  
~~Water Quality Division~~  
811 S.W. Sixth Ave  
Portland, Or 97204

From: Elaine Kuehn  
1525 N. W. Maple Ave  
Corvallis, OR 97330



RE: NPDES permit for James River Paper Comp

To whom it may concern:

Please file this as official comment on this permit application.

I am commenting as a concerned citizen and home owner in Corvallis.

I believe that the NPDES permit should not be approved unless the joint liability portion can be further clarified.

It is terribly difficult to enforce environmental fines. "Deep" pocket litigation over many issues would indicate that when more than one party is involved in environmental violations there is long delay and public bodies become involved in tedious processes of litigation involving many hours of staff time and many taxpayer dollars that are often not fully recovered.

In the hearing on January 8, 1992 I asked if the DEQ had any experience with dual liability. The reply was that they did not, nor did Region 10 of the EPA. Thus, Linn-Benton county municipalities and citizens and the DEQ become a test case. I believe that to reduce potential taxpayer expense and lack of enforcement, the dual liability agreement must be reinforced in some manner. Dual outfalls could be created. This might be cost prohibitive. Alternately, additional monitoring of the effluent from Pope and Talbot and that from James River could be done prior to mixing. The study from DEQ does not anywhere mention possible synergistic effects from mixing the two effluents. These should be studied. Finally, the state could protect taxpayers by insisting on some sort of escrow fund for paying violations. Both companies could contribute to the fund and fines could be paid out of it. If the companies disagree about who caused a violation, the state and taxpayers would not have to wait. This sort of fund would be a disincentive for the two companies to delay payment of fines by arguing over who was responsible, especially for minor violations.

This concern for the dual liability issue does not presume bad faith on the part of either company, only an awareness that ownership and commitments may change faster than physical plants in the current economic atmosphere.

Finally, I would like to express my dismay that the DEQ would not provide some report on the impacts that the sludge will cause to the landfill. Even though this may be a separate permitting issue, the public has a right to know about impacts that will be indirectly caused by a project of this magnitude.

*Elaine Kuehn*  
1/8/92

FAX to DEQ 229-6124  
1/9/92 1655 Hrs

January 8, 1992

Jerry Turnbaugh  
Department of Environmental Quality  
811 SW 6th Avenue  
Portland, OR 97204



DEPARTMENT OF  
FISH AND  
WILDLIFE

Re: James River NPDES Permit

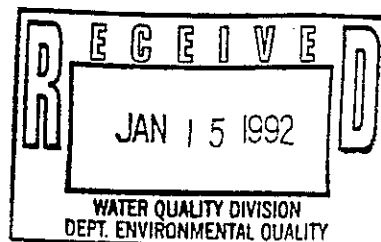
Dear Jerry:

This forwards our comments regarding this proposed discharge. The Oregon Department of Fish and Wildlife (ODFW) is concerned about the impacts of this proposed discharge on Willamette River corridor fish and wildlife. As the attached memorandum of December 31, 1991, from our West Slope-Willamette District Fish Biologist, Steve Mamoyac suggests, ODFW is specifically concerned about the cumulative effects of this proposed discharge on our interests.

For example, angling use of the river should not be further impacted by this additional outfall. Any degradation of the aesthetic value of the river at the point of discharge (already degraded from existing discharge giving rise to citizen complaints) should not be permitted. In addition, watchable wildlife observers who use the river in the area of the proposed discharge, demand observing wildlife in an aesthetically pleasing, odor free setting. This increased BOD loading will further detract from these aesthetic values.

### Insufficiency of Information

The effects of this proposed discharge on lower Willamette River dissolved oxygen (DO) are unknown. Wood product effluents in this proposed discharge break down slowly and therefore have a prolonged oxygen consumption rate which will likely have a cumulative adverse effect on oxygen availability in the Newberg pool and Willamette harbor reaches downstream from this proposed discharge. These lower Willamette River reaches already fall below the 90% saturation level required by OAR 340-41-445. Although your staff report indicates the BOD will be less than 0.1 mg/liter/day, the effect of which is "unmeasurable" how many times does the Environmental



2501 SW First Avenue  
PO Box 59  
Portland, OR 97207  
(503) 229-5400

DEQ - James River  
January 8, 1992  
Page 2

Quality Commission intend to give away "no measurable effect"?

The Willamette River contains steelhead and cutthroat trout, coho and chinook salmon as well as a wide variety of warm water fish species. Coho are listed by ODFW as sensitive species. These fish depend on excellent water quality for survival. Until the cumulative effect of additional pollutant discharge raises a substantial public interest issue. Accordingly, while the effect of such discharge on the river ecosystem remains undetermined, DEQ should not issue this permit.

Thank you for the opportunity to comment.

Sincerely,



Gregory P. Robart  
Staff Biologist  
Aquatic Habitats Program  
Habitat Conservation Division

Attachment

WRD - Applegate  
EQC - Wessinger  
DEQ - Water Quality Division - Yon



# MEMORANDUM

OREGON DEPARTMENT OF FISH AND WILDLIFE

INTRADEPARTMENT

DATE: December 31, 1991  
TO: Greg Robart  
FROM: Steve Mamoyac  
SUBJ: James River NPDES Permit

The permit description states that only basic water quality parameters (eg. BOD, TSS) will be impacted by the project and that these impacts are expected to be well within established legal limits. DEQ's Willamette River Basin Water Quality (WRBQ) study (April, 1991) cites inadequacies in the current state of the knowledge with regard to the effect "contaminants" may have on the aquatic environment. I assume that reasonable certainty exists that no such "contaminants" are contained within the effluent of concern? in light of the WRBQ study proposal's observations it would seem premature to allow additional effluent into the river until its effects, cumulative and synergistic, were well understood and predictable.

At present, the esthetic qualities of the Willamette at the existing outfall are less than optimum due to the presence of effluent which can often times be seen (and smelled) as it boils up from beneath the water's surface. At least a portion of the angling public perceive this phenomenon to be, at best, underdesireable. I've had anglers approach me on the river to ask if fish caught in this area were safe to eat. Given the river's current esthetic shortcomings below the outfall I am compelled to question the wisdom of allowing additional discharge at this location. DEQ states in the permit description that "the aesthetic impacts on the river from the discharge are expected to be minimal." Conceptually, it seems to me that any net additional impact on water quality at this location would best be avoided.

I believe that a very conservative approach should be adopted with respect to dealing with new sources of industrial discharge until DEQ's WRBQ study is complete. This is not to imply that new development cannot be accommodated. However, potential water quality impacts must be carefully evaluated in order to identify and effectively reckon with any biological uncertainties that may exist.

cc: Dave Anderson

DEQ PUBLIC HEARING  
Wednesday, January 8, 1992  
7:00 P. M.  
Majestic Theater  
Corvallis, Oregon

My name is Robert L. Sweany, and I reside at 6125 N. W. Ponderosa, in Corvallis, Oregon. I am retired from the position as Executive Vice President of the Corvallis Area Chamber of Commerce and as the Executive Director of the Corvallis-Benton County Economic Development Partnership, positions I held from 1982 until August, 1989. I am currently Vice President of Trusts, with Delco Financial Services of Oregon, and am a member of the Corvallis Chamber.

I am appearing before you this evening because of my continuing interest in the economic health of Linn, Lane, Marion, Polk, and Benton Counties, and, of course, the State of Oregon. It pleases me greatly to learn about the broad support the JAMES RIVER, HALSEY RECYCLING PLANT is receiving from public and private groups and organizations throughout the valley, and I am not surprised. I join with these individuals and groups in urging the Department of Environmental Quality to approve and issue the necessary National Pollutant Discharge Elimination System (NPDES) Permit, to discharge process wastewater from the new recycled-fiber, de-ink mill in Halsey, Oregon, to the Willamette River.

This new \$65 Million Dollar recycling facility is an exciting project which does many things for our area and State. It is James River's response to consumer demand for products with recycled content -- It responds to State Policy, the Governor's Executive Order, Legislative Intent, and to Environmentalists Groups, all of which encourage the development of markets for post-consumer waste and the diversion of municipal solid waste from landfills. It also brings over 60 new "family-wage" jobs to our Willamette Valley, and at a time when they are most needed and welcome. (These are not just jobs -- These are jobs for which new employees have been in training to fill, at LBCC, and at the plant, since last September, and which will pay annual salaries in the \$35-40,000 range.)

The announcement that this new plant will begin operations on March 1, 1992, must be very good news to the communities that are participants in the Willamette Valley Economic Alliance (Albany-Millersburg, Lebanon, Salem, Eugene-Springfield and Corvallis.) This new \$65 Million Dollar plant is a fine new taxpaying entity for Linn County and for the State of Oregon. Those new plant employees are going to be good taxpayers too -- not to mention that they will be good customers for businesses and professions in the area. This is a major investment by James River Corporation, and the speed with which they have moved, hopefully will assure them a good position in the marketplace. This is a highly competitive industry and company officials have stressed their need to move quickly in order to serve their customers and not to lose this business opportunity. It is entirely possible that had the company not received the cooperation, which permitted them to move swiftly, this major facility might have been located elsewhere, outside of the State of Oregon. That would have been deplorable. I commend all who worked so diligently to make this new recycling plant a reality.

It boggles my mind to imagine the logistics of collecting, sorting and processing Tons of recovered office waste paper -- and I mean all kinds of waste paper --- even window envelopes and paper with staples and paper clips. It is hard to conceive of 450 Tons of waste paper being processed into 300 Tons of pulp every day. Based on a five day week, that is over 9,000 Tons/Month converted into over 6,000 Tons of pulp. My simple mathematics tell me, that is over 1500 dump truck loads of waste which will not end up in landfills in the Western States. What a great way to conserve our resources and reduce the solid waste problem..

It was fascinating to read about the environmental considerations James River incorporated into their plant design. From their state-of-the-art, Recycling Process Design to their extensive treatment of process water, and their handling of solid waste, it is apparent that James River Corporation is committed to preserving the quality of the environment in Oregon. There will certainly be no adverse impacts on Air, Land or Water from this new operation. This is exactly the kind of enlightened management and industrial plant we want in our valley.



PAGE THREE

It is important to note that this new source of secondary fiber comes at a time when virgin wood supplies are in short supply and future supplies are uncertain. This new source will assure the long-term viability and operation of the Halsey Mill. And that means long-term job security.

Finally, isn't it great that these economic development objectives are accomplished, and at the same time, THE FACILITY WILL MEET OR EXCEED WATER QUALITY STANDARDS ESTABLISHED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY, to protect all beneficial uses of the Willamette River, including DRINKING WATER. Specifically, it will not have a measurable effect on the dissolved oxygen content of the river, because Best Available Treatment will be used to meet and exceed water quality standards and result in a 95% Biochemical Oxygen Demand removal. This must bring great satisfaction to those of you at the DEQ who have been working with James River technical people in developing this process.

My compliments to the Department of Environmental Quality and to James River Corporation for a well conceived project. As a citizen of Corvallis, I thank James River for this important investment in our area.

I urge the Oregon Department of Environmental Quality Commission to take action at it's January 23rd meeting to grant James River Corporation it's National Pollutant Discharge Elimination System Permit, so that it may begin operations at the new plant on schedule, March 1, 1992.



**JAMES RIVER CORPORATION**  
Consumer Products Division  
P.O. Box 215, Halsey, Oregon 97248

**JEFFREY J. MANCHESTER**  
Vice President  
Manager  
Halsey Mill  
(503) 369-1222

January 8, 1992

Mr. Gerald Seals, City Manager  
City Hall  
501 SW Madison Avenue  
Corvallis, OR 97333

Dear Gerald:

On January 3, 1992, we met to discuss several concerns the City of Corvallis has had with regard to James River's Halsey, Oregon, recycling mill. We have agreed to work together as partners to address these specific issues. Two of these issues, solid waste management and potential waste load impacts, are being addressed separately. The purpose of this letter is to address the City of Corvallis' concern about the potential impact of the proposed discharge from James River's paper recycling plant on the City's drinking water supply. The Oregon Department of Environmental Quality has evaluated our proposed discharge and has made a determination that existing beneficial uses of the Willamette River, including use of the river for drinking water purposes, will be protected. The City continues to have concern about taste and odor, specifically about instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and also about trihalomethanes. James River proposes to address this issue as follows:

#### **BACKGROUND**

- A. James River will be engaging in the business of producing paper from recycled products at its Halsey, Oregon, mill.
- B. James River has applied for a National Pollution Discharge Elimination System (NPDES) permit for a proposed new operation at its Halsey, Oregon, mill site located in Linn County, Oregon, adjacent to the Willamette River.
- C. The proposed James River wastewater discharge is upstream of the City of Corvallis drinking water supply intake on the Willamette River.

Mr. Gerald Seals  
Page 2  
January 8, 1992

- D. The City desires to protect its drinking water source.
- E. The City and James River desire and agree to cooperate in addressing the potential impacts of the James River operation on the City of Corvallis.

#### **JAMES RIVER AND CITY COOPERATION**

- A. James River agrees to fund scientific studies to determine the effect of James River's discharge on the City of Corvallis water supply.
- B. James River and the City agree that a consultant(s) agreeable to each party will be hired to conduct the scientific studies.
- C. James River and the City agree to the following Work Plan.

#### **WORK PLAN**

1. James River, within 120 days of approval of its NPDES permit, will commence scientific studies of the impact of the Halsey paper recycling plant effluent on instream concentrations of phenolic compounds, sulfates, total organic carbon (TOC), and trihalomethanes.
2. Sampling and other field work shall cover a two year period and shall commence by July 1, 1992.
3. Interim reports shall be submitted to the City no later than July 1, 1993, and 1994.
4. Final reports shall be completed by July 1, 1995.
5. The detailed scope of work shall be cooperatively agreed to by James River and the City.
6. The City may review and be consulted on any changes to the scope of work, work plan, or consultant(s) for the studies.
7. The City shall review and comment on all draft work products prior to final publication.
8. All costs associated with the studies shall be borne by the James River Corporation.

Mr. Gerald Seals  
Page 2  
January 8, 1992

**MITIGATION**

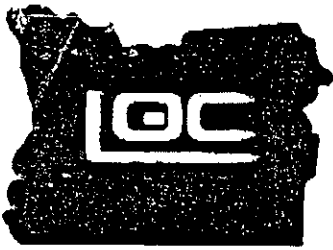
Should this study indicate that James River's discharge causes the river not to meet water quality standards or should the City demonstrate that the James River discharge causes a measurable negative impact on drinking water quality that will require additional treatment in order to comply with State or Federal drinking water standards, then James River agrees to mitigate any increased cost incurred by the City until appropriate technology is installed to remedy the negative impact.

We look forward to working with the City of Corvallis as partners in preserving the quality of the Willamette River. We believe you will continue to find that the James River Halsey paper recycling plant is a valuable asset to the community and a good neighbor.

Sincerely,



Jeffrey J. Manchester



*Corvallis Oregon*

# League of Oregon Cities

Local Government Center, 1201 Court St. N.E., P.O. Box 928, Salem 97308 • Telephone: (503) 588-6550; 1-800-452-0338 toll free; FAX: 378-5859

January 8, 1991

Mr. William Wessinger, Chairman  
Environmental Quality Commission  
811 S.W. 6th Ave.  
Portland, Oregon 97204

Dear Chairman Wessinger,

The League of Oregon Cities takes no formal position on the issuance of the proposed James River NPDES permit. However, we believe that this particular permit application and the Department's proposed discharge limits emphasize significant policy issues which neither the Commission nor the Department have addressed. We are particularly concerned about the differential standards established for industrial vs. municipal dischargers and the possible exhaustion of the river's assimilative capacity prior to the completion of the Willamette River study.

The disparity between existing municipal and industrial BOD discharge standards is significant. Accordingly, it is not surprising that the Department's 1989 records indicate that six industrial users contribute 42% of the river's total BOD load while eleven municipalities discharge only 17% of the load. Clearly this data has both environmental and economic implications. If we wish to protect the quality of the river - and if cleaner standards are attainable - why shouldn't industrial dischargers attain them as well? Obviously, cleaner discharge is attainable through more expensive treatment. We believe that the Commission should review its current discharge standards which effectively determine that municipal ratepayers will bear a substantially larger burden of the cost of clean water.

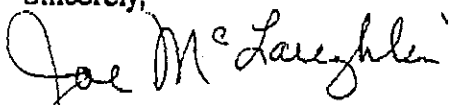
Differential standards appear to have land use implications as well by providing clear financial incentives for an industry to locate outside an urban area in order to discharge directly into a receiving stream rather than to locate inside a city and discharge through a municipal treatment system which has higher and, therefore, more expensive standards.

We are also concerned that proposed permit limits allow the use of a substantial portion of the river's assimilative capacity. The Willamette River study was officially commissioned by the 1991 Legislative and the study's findings, which will provide a basis for a comprehensive load allocation formula for the river are expected to be available, in draft form, by December of this year. In view of the potential impact which the establishment of a load allocation formula might have on all users of the river, we are surprised that the Department and the Commission are prepared to dedicate such a significant portion of the river's assimilative capacity via this one permit.

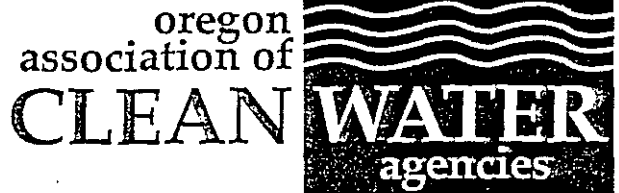
Mr. William Wessinger  
January 8, 1991  
Page Two

The Commission has received written testimony from other municipal representatives, (January 6th, 1992 letter to Commissioners from Terry Smith of ACWA), which questions, from a technical perspective, various inequities in the municipal and industrial permit standards as they relate to the use of highest and best treatment processes; the state's anti-degradation policy; the process used for calculating permit limits; and bioassay requirements. On behalf of Oregon's city officials, I urge the Commission to carefully consider the municipal testimony which it has received and to re-examine the policy choices which are reflected in current standards. Should the Commission determine that it must issue the requested permit, I would encourage the Department to develop a creative and innovative compliance schedule which will assure that the assimilative capacity of the Willamette River is available to all legitimate users. I would urge the Commission to look closely at its policy choices on this issue.

Sincerely,

A handwritten signature in cursive script that reads "Joe McLaughlin". The signature is written in dark ink and is positioned above the typed name.

Joe McLaughlin, President  
League of Oregon Cities



Wednesday, January 8, 1992

Department of Environmental Quality  
Water Quality Division  
811 S.W. 6th Avenue  
Portland, OR 97204

RE: Proposed James River NPDES Permit

Dear Chair Wessinger and Commission Members;

The Oregon Association of Clean Water Agencies (ACWA) strongly supports resource recovery and Oregon's economic development efforts. Many of our members operate resource recovery programs including water reclamation, biosolids application, and compost production. In addition, our members frequently work with new and existing industries to develop ways of accommodating new development. All of these programs and our members' sanitary sewer treatment facilities are required to meet the most stringent water quality standards. As a result ACWA finds itself in an awkward position: we support the successful operation of the James River paper recycling plant but have some strong concerns about the proposed NPDES permit and any precedents that are established by granting the permit in its current form. Further we understand that significant capital construction for this plant has already been completed and that denial of a permit at this stage would be extraordinarily disruptive. We therefore will request that a substantially modified permit be granted.

#### Equal Protection For All Permittees

The heart of our concern is the inequities we see between the permit requirements for municipal resource recovery or wastewater facilities and the proposed James River permit. These inequities appear to us to seriously disadvantage economic development within existing urban growth boundaries served by existing wastewater facilities.

Data from 1989 shows that the municipal dischargers to the river contribute approximately 17% of the BOD load, while industrial dischargers contribute 42% of the load. Current permitting policy is allowing the industrial loadings to the river to increase, while requiring municipal dischargers to maintain or reduce loadings as populations and urban development increase.

#### ACWA MAILING ADDRESS

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Terry Smith, 687-5289

Vice Chair  
Garry Ott, 669-2438

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Bob Elmstad, 796-7266

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Albany  
Arch Cape Service District,  
Arch Cape  
Ashland  
Bear Creek Sanitary Authority,  
Medford  
Canby  
Cannon Beach  
Charleston Sanitary District,  
Charleston  
Clackamas County Department  
of Utilities  
Coos Bay  
Corvallis  
Dallas  
Douglas County Public Works,  
Roseburg  
Eugene  
Grants Pass  
Green Sanitary District, Roseburg  
Gresham  
Hermiston  
Irigon  
Joseph  
Klamath Falls  
La Grande  
Lebanon  
Medford  
Metropolitan Wastewater  
Management Commission,  
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Molalla  
Myrtle Creek  
Newberg  
North Bend  
Oak Lodge Sanitary District,  
Milwaukie  
Oregon Water Wonderland Unit II  
Sanitary District, Bend  
Pacific City Sanitary District  
Philomath  
Portland  
Redwood Sewer Service District,  
Grants Pass  
Roseburg Urban Sanitary Authority  
Salem  
Sandy  
Seaside  
Shady Cove  
South Suburban Sanitary District,  
Klamath Falls  
St. Helens  
The Dalles  
Tillamook  
Tri City Sanitary District,  
Myrtle Creek  
Troutdale  
Twin Rocks Sanitary District,  
Rockaway Beach  
Unified Sewerage Agency  
Wilsonville  
Woodburn

Municipal dischargers to the Willamette have been told repeatedly by DEQ staff (most recently in lengthy discussions during the Triennial Review of dissolved oxygen standards) that no increased waste loads would be allowed for their discharges to accommodate new development and that advanced treatment capacity would have to be installed to keep the mass loads discharged at current levels regardless of the expense. If industrial facilities were being permitted in a similar fashion, the new James River plant would have to be accommodated within the mass discharge limits that exist for the already operating paper plants.

These inequities are no trivial matter for Oregon's economic future. Over the next ten years, Oregon's population growth will add the equivalent of five new Salems and within 40 years 12 new Salems! Without doubt, a significant portion of that growth will occur along the Willamette River or one of its tributaries. If the practice represented by this permit is continued, a few industrial direct dischargers that create a relatively small number of new jobs would be granted load increases while municipal governments would be forced to expend literally hundreds of millions of dollars to accommodate far more new jobs within existing municipal load allocations.

The numerous inequities that we see between municipal and industrial permits are described below. In addition to the equity issues however, there are several deficiencies in the proposed permit.

### Highest and Best Treatment

As you are aware, municipal discharges on the Willamette are currently meeting summer time discharge limits as low as 10 mg/L for BOD and suspended solids. The discharge that would be allowed James River by the proposed permit would have concentrations of 70 mg/L BOD and 120 mg/L TSS. The proposed discharge equals the highest concentration of BOD and TSS being discharged by any industry to the Willamette River. Many of our members treat influent with these concentrations at some times of the year!

To their credit, James River is making substantial use of internally recycled water during paper production steps and it is true that the proposed treatment facility has a higher removal efficiency than found at most municipal wastewater facilities. The higher removal efficiency is at least partly the result of the much higher influent waste concentrations produced by paper processing. In addition we are aware that current regulations for industrial discharges focus on the mass loads in the discharge and not the effluent concentration. None the less, the proposed effluent is treatable to lower limits using activated sludge treatment and perhaps adding additional treatment steps for suspended solids removal.

DEQ staff have repeatedly told municipal dischargers that highest and best treatment as required by OAR 340-41-445(1) has no economic limits. The material submitted by James River and the Evaluation Report prepared by Department staff proposes that



"best conventional treatment" is being used. There has been no demonstration that additional treatment is impossible or even impractical, however. To the contrary, an existing mill identified as WDD in Table 5 is apparently producing effluent at 2.8 lbs. BOD/ton and two other mills are producing only 4.1 and 4.2 lbs. BOD/ton while the proposed James River permit is based on 5.7 lbs. BOD/ton of pulp produced. All that has been shown is that the DEQ has required James River to reduce the proposed discharge from 8.7 lbs. BOD/ton to 5.7 lbs. BOD/ton during the summer and that this discharge will not reduce dissolved oxygen more than 0.1 mg/L. Clearly the Department's position on this permit is contradictory to its earlier position on municipal permits and requires less treatment than has been achieved at other mills. If this permit represents a working definition of highest and best treatment by the Department then that definition needs to be clarified and applied equitably to all permittees.

### Anti-degradation Policy

The second major concern we have is application of the anti-degradation policy. The proposed discharge has not been evaluated by the Department for compliance with the new anti-degradation policy, OAR 340-41-026(1), adopted by the EQC on September 18, 1991.

We find no scientific basis for the "no observable effects" value used in the Evaluation Report. Is a reduction of 0.1 mg/L dissolved oxygen a reasonable benchmark for meeting anti-degradation? We think it may not be. If a similar load increase was granted to other dischargers on the Willamette (several new Salems for example), it may not be possible to maintain dissolved oxygen water quality standards. Clearly there is a distinction between "no observable effects" and the cumulative effect of the repeated application of an arbitrary value. This also points out the serious limitations of the current incremental approach to load increases.

The new policy contains an economic benefit test but there is no justification in the Evaluation Report that the creation of 65 jobs is an adequate economic benefit to justify the proposed increased load. Certainly, other types of industrial development could produce more jobs for the same load increase.

### Assimilative Capacity of Willamette River

The Willamette River currently appears capable of accommodating existing permitted pollutant loads without degradation of dissolved oxygen water quality. The Willamette River Study now underway will allow a new determination of the assimilative capacity of the river. This study could serve as the basis for a more comprehensive approach to future load allocations. With the data from this study and Oregon's comprehensive land use planning, it should be possible to develop a comprehensive approach to load allocation.

### Calculation of Daily Permit Limits

The method used to calculate the summertime daily mass discharge limits in the James River permit is statistically based and more generous than the method used to calculate limits for municipal permits. Municipal monthly average mass limits are calculated from the average monthly concentration limit and the dry weather design flow of the treatment facility. The daily mass limit is then calculated by multiplying the monthly limit using an arbitrary factor of 2. The James River proposed permit uses a statistical method described in the EPA's Technical Support Document for Water Quality-based Toxics Control. The statistical method is based on the variability of the effluent quality and the number of samples per month. This results, in the case of the James River permit, with a ratio of daily to monthly BOD limits of 2.6, compared to 2.0 in the municipal permits.

### Bioassays

Bioassay requirements in recently issued municipal permits are more stringent than in the proposed James River permit. Municipal permittees typically have several bioassay tests that show no toxicity but are still required to conduct numerous additional tests. For example, the City of Salem wastewater treatment plant is required to conduct seven tests per year. The bioassay data submitted by James River are results from one test from a similar plant in New York. This test shows a chronic toxicity No Observed Effect Concentration (NOEC) of 10% for *Ceriodaphnia dubia*. In light of this potential toxicity, the requirement of four bioassays in the proposed permit is inequitable. Six bioassay tests during the first year of operation with the typical feed stocks would be an appropriate comparable permit requirement.

### Toxics

The James River proposed permit contains no monitoring requirements for toxics even though the evaluation report notes the likelihood that small amounts of heavy metals and other toxics will be present. Recently issued municipal permits contain considerable requirements for toxics monitoring. The estimated toxics data for proposed plant effluent appear to be from analysis of one sample of effluent from a similar plant and show relatively low metals concentrations. Given the variability of the feed stock, this data is not adequate to assess the potential for toxics in the effluent from the proposed facility. Several tests for toxics should be conducted during the first year of operation with the typical feed stocks.

### Land Use

The appropriate land use compatibility determinations appear to have been made in the permit application. The James River plant expansion is an allowed use in the ap-

proved Linn County comprehensive plan. It can be argued that James River should be located in a rural area. The odors from pulp mills may make it impossible to locate such a facility within an urban growth boundary.

However, ACWA is concerned about the long term implications of this permit and the precedents it may set for State Land Use Goals 14 (Urbanization) and 6 (Air, Water, and Land Resources). A continuation of the inequitable permit requirements will produce strong economic advantage to industrial facilities locating outside urban growth boundaries where ever possible. While the secondary environmental impacts of 65 employees driving autos to James River will not be critical, the same can not be said for 650 or 6,500 employees doing the same at another or even several other rural industrial job sites. I do not need to describe for you the implications of such a trend for Oregon's growth management policies.

### Recommendations

ACWA has long argued that the Department's application of the highest and best treatment policy to municipal permits is economically damaging and is not justified by the water quality on the Willamette River. Conceptually, ACWA believes that the highest and best treatment rule should have a similar affect as the anti-degradation rule. Water quality standards and beneficial uses should be protected but additional discharge load increases should be equitably available to all permittees during a very long planning period. Unused assimilative capacity is a valuable resource and a clear economic benefit test should be applied to any load increase but no single permittee should be granted an economic benefit that can not be made available to all dischargers within a basin. In all cases, there should be a sound scientific basis for the imposition of treatment standards.

Given the inequities demonstrated above and the current state of construction of the new plant, ACWA requests that an interim discharge permit be granted to James River and that the EQC undertake a policy change to produce equity between the permit requirements for municipal and industrial permittees. Specifically, we request the following:

- Revise or clarify the definition of highest and best treatment to include some consideration of cost-benefit.
- Establish comparable and scientifically based methods for the calculation of daily mass limits for municipal and industrial permits.
- Revise DEQ's State Agency Coordinating Agreement with DLCD to fully support Goals 14 and 6. Either the economic advantage available to a direct industrial discharger should be granted to municipalities to accommodate growth or it should not available to anyone.

- Develop a comprehensive method of allocating new load increases that assures that future assimilative capacity will be available to accommodate Oregon's growth. Specifically, revise the "no observable effects" level of 0.1 mg/L dissolved oxygen using current data and eventually the results of the Willamette River Study to a scientifically supportable value that incorporates the projected future growth of discharges.
- Issue an interim permit for James River with the discharge levels in the proposed permit and include a compliance schedule to improve summertime discharge quality to BOD5 AML = 1,000 lbs./day and TSS AML = 1,000 lbs./day. The lower discharge levels are comparable to what is achieved by the better performing facilities of this type and to what is currently required of municipal facilities. In addition, this would equate to a "no observable effects level" of about .033 mg/L dissolved oxygen which may be a more reasonable value to use in the long term.
- Require at least 6 bioassay and toxic substance tests during the first year of operation to establish future treatment and monitoring requirements.

We appreciate the opportunity to comment on this difficult issue. Our goal is to constructively assist in the reconciliation of an important economic development effort and the need to protect Oregon's water quality. We hope that our efforts are helpful.

Sincerely,

Terry Smith  
Chair

Jan. 8, 1992

Comments on the James River Corp. discharge into the  
Willamette River

*Corvallis*  
*Washington*

Charles M. Leach  
2815 NW Arthur Avenue, Corvallis, Oregon 97330

Times have changed and I am encouraged that the Willamette River is no longer treated as an open sewer as it was prior to the 1930s and to a lesser degree in the 1950s when I moved to Corvallis. I am impressed by Oregon's Department of Environmental Quality "Evaluation Report (November 29, 1991), and Appendix B to this report. However, I still do not believe that the James River Corporation should be allowed to discharge its treated wastes into the Willamette River.

As a person who has boated the Kiger Island/Peoria/ Corvallis stretch of river hundreds of times, and as one who opposed building the Pope and Talbot mill (ex-American Can) at its present site, I can attest to that the quality of the river (color and smell) has deteriorated considerably since this mill went into production. This new proposed discharge cannot but add to this river quality reduction. Tourism is also a major income earner for Oregon and any further reduction of river quality will not encourage use by locals or tourists.

DEQs report indicates that there are 5 other sources of polluting discharges on the river above Corvallis. As Eugene and Springfield grow so the amount of treated sewerage will be discharged into the Willamette River. Population growth is less easily controlled than the establishment of a new mill. In other words don't allow the mill to discharge and thereby provide more flexibility for coping with pollution due to population growth.

One of the most troubling aspects of the proposed discharge is that it is occurring approximately 15 miles up river from Corvallis's water intake. Data supplied by James River admits that low levels of Cadmium, copper, selenium, <sup>l</sup>tallium and zinc will be discharged into the river. But no mention is made of the innumera~~ble~~<sup>ous</sup> other compounds that will most likely also be liberated into the river, and then going into our drinking water.

The DEQ in their evaluation report (p.55) state that "the Department is concerned about the adequacy of dissolved oxygen and the high concentration of phosphorus in the river. The Department has listed the river from mile 109- mile 150 (which includes the mill's outfall) as only partially supporting aquatic life, due to decreasing dissolved oxygen..." Later this same report estimates that James River discharge would further

reduce dissolved oxygen by 0.1mg/l if the James River removal system is efficient. Many of these calculations are based on models and theoretical considerations and as many of us know models can overlook key inputs. A reduction of merely 0.1 mg/l is not very much but what if it is considerably more?

While I personally am a great supporter of recycling, I resent the potential for further reducing the quality of our river when the recycled material is largely from other regions than Oregon. It is stated that 25% will come from the Northwest and Northern California with the other 75% transported from S. California and the mid-west. Why should we Oregonians bear the brunt of further river pollution for the reprocessing of paper products mainly from other parts of the nation? It seems to me a better location for this plant would be on the lower Columbia River where the discharge is carried out to sea.

In addition to reducing river quality the proposed James River Corp. new plant will create 150 tons of dry waste a day, or 54,000 tons per year intended for the Coffin Butte landfill. I do not know how this compares to the tons of landfill created by Corvallis but it would be interesting to see a comparison. Who is generating more landfill Corvallis or James River Corporation? In talking to Corvallis Disposal (who did not have precise figures) I get the impression that James River may be the larger contributor.

# NORTHWEST ENVIRONMENTAL ADVOCATES



NORTHWEST ENVIRONMENTAL ADVOCATES'  
COMMENTS ON THE PROPOSED PERMIT FOR  
JAMES RIVER, HALSEY RECYCLING MILL  
January 8, 1992

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202-667-7515

Columbia/Willamette  
RIVERWATCH  
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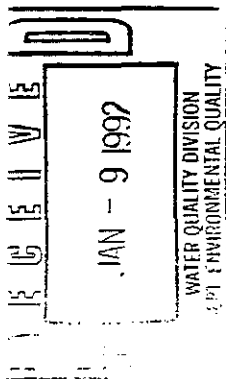
Northwest Environmental Advocates welcomes the opportunity to comment on the proposed permit for the James River Halsey Recycling Mill. We applaud James River's effort to close the recycling loop by providing the public with the opportunity to purchase goods made from recycled paper. We are extremely pleased with James River's choice of a non-chlorine method of brightening their product, a method that will not add to the over-contamination of the Willamette River by generating dioxin.

Unfortunately, however, there are such glaring problems with both the process of creating this proposed permit and the actual result that the only appropriate action is to send the proposal back to the drawing board. Whatever actions DEQ takes, it must understand that its treatment of this proposal will be viewed with great skepticism due to the circumstances surrounding the proposal and the obvious politics that are at work. The circumstances include the fact that this multi-million dollar plant is nearing completion without the wastewater discharge permit that would allow it to operate. DEQ must be under substantial pressure to hurry this permit through. Add to that the distinct impression that this plant is receiving the benefit of political support at the highest levels in the Department of Environmental Quality, and skepticism is the only result. After all, what other reasons would the DEQ have to propose a permit that does not even mention toxic pollutants when this plant is likely to discharge a range of toxins, including dioxin, for which the Willamette is "water quality limited"?

## I. Errors in the Permitting Process

### A. Pollutants are Omitted from Consideration

The proposed permit does not include any monitoring or effluent limits for a number of pollutants that could be expected to be discharged from the proposed mill. These include toxins including but not limited to dioxins and furans, as well as nutrients, color, and others. In fact, DEQ's evaluation report states that low concentrations of cadmium, copper, selenium, thallium and zinc may be discharged. It is Northwest Environmental Advocates' position that any toxic discharges should be eliminated, where possible, in keeping with the national goal stated in the Clean Water Act that "the discharge of pollutants into the navigable waters be eliminated by 1985."



DEQ should address the issues of toxic constituents squarely, by requiring James River to provide information quantifying the likelihood these pollutants will be discharged, by requiring monitoring, and by setting permit limits. These permit limits should be set at zero, but only if there is an analysis, based on information, which allows the DEQ to conclude that the discharges will, in fact, be zero. DEQ should perform an analysis of each pollutant and compare it to the relevant water quality standard both at the point of discharge, inside the mixing zone, and at the edge of the mixing zone. For bioaccumulative toxins, that analysis should include the entire river.

DEQ places great weight on the fact that dioxins and furans will not be "generated" by the proposed recycling and de-inking process, but ignores the fact that they are already present in the chlorine bleached paper which the James River mill will be processing. Therefore, while the amounts may be small, dioxins and furans are likely to be present in the discharges. This is particularly important because the Willamette River is "water quality limited" for dioxin. Not only is it incumbent on DEQ to appropriately address any new discharges of a pollutant for which a waterbody is already over-polluted, but DEQ's own regulations require it. By ignoring dioxin, DEQ effectively manages to avoid both protecting the environment and carrying out the law.

Specifically, DEQ has failed to comply with OAR 340-45-035(3)(a)(A) & (B) which require the public notice for a proposed NPDES permit to include:

"A description (when available) of the water quality of the receiving water body both upstream and downstream;"

and

"If the waterbody is water quality limited under Section 303(d)(1) of the Clean Water Act, a description of whether the permit relates to the parameter(s) which is water quality limited; if so, how the permit will fit within the existing TMDLs or if no TMDL exists, how it is acceptable \* \* \* "

#### **B. Water Quality Limited Status**

By avoiding the regulations that require DEQ to discuss the water quality of the receiving stream, DEQ manages to avoid alerting the public to the rest of the permitting process that is required where load increases are proposed for water quality limited streams, namely OAR 340-41-026(3)(a). This set of regulations requires DEQ to make findings that new loads will not cause water quality standard violations or threaten or impair beneficial



uses. Section (3)(C) of this regulation prohibits new discharges to water quality limited receiving streams unless the Department makes further findings that are related to the legal mechanisms which are required to bring waters into compliance with state standards. DEQ has failed to do so.

### C. Monitoring

DEQ fails to include the requirement of monitoring parameters which the James River mill will likely discharge. Not only should this oversight be remedied, but James River should be required to have a consultant monitor the amounts of toxic constituents in its discharge, in sediments, aquatic plants (algae), invertebrates and fish downstream of the facility. Not only would this information be helpful in evaluating the possible impacts of the plant, assuming it receives its permit, but it would in a small way compensate the public for the incremental degradation to the river that will be made by James River. Use of the Willamette for disposal of James River's waste is a privilege, not a right, making the attachment of additional obligations to that use appropriate.

In addition, the results of the bioassays required by the proposed permit should be made available to the DEQ as they are completed in order that the regulatory agency can make informed decisions about potential problems prior to the close of the two year reporting period established in the permit. Theoretically, the current proposal would allow James River to operate for two years with bioassays of 100% mortality. Finally, DEQ does not make any provisions for changes in monitoring that might be called for based on the alterations over time of the original paper grades being recycled by the mill, despite its acknowledgement that these changes are likely and, in fact, anticipated by James River.

### D. Mixing Zone

Mixing zones increase mass loads and decrease treatment requirements for industrial permittees. As EPA states, "[M]ixing zones must be applied carefully, so as not to impede progress toward the [Clean Water Act] goals of maintaining and improving water quality." Contrary to this advice, DEQ has performed its analysis without regard to the pollutant-specific issues that should be evaluated. DEQ does not consider eliminating the mixing zone, even for toxic pollutants, as recommended by EPA but simply concludes that for toxic substances, standards would not be exceeded outside the mixing zone. Further, DEQ concludes that "dilution available in the river" make it unlikely that any toxic substances potentially discharged by James River will cause violations of water quality standards. This type of analysis completely disregards the potential for certain toxins to bioaccumulate and thereby impair beneficial uses and disregards the water (including sediment and tissue) quality already existing in the receiving stream. This analysis also fails to

consider the hydrodynamics of the river and the transport of toxins outside of the mixing zone. DEQ does not apply such flimsy reasoning to its control of dioxin from bleach kraft pulp mills; why should it rely on it here?

#### **E. Combined effluent**

DEQ cannot seem to decide how to treat the James River request because the proposed plant's effluent will be combined with that from Pope & Talbot prior to its discharge into the receiving stream. DEQ alternates evaluating the proposal as a new source and a load increase from an existing source. For example, DEQ's evaluation report for the proposed plant treats the James River mill separate from that operated by Pope & Talbot except that at times it combines the effluent in evaluating the likely impacts of the discharge of pollutants. Likewise, DEQ doesn't address why the James River discharge isn't an overlapping mixing zone with that of Pope & Talbot. DEQ seems to believe that it can use the effluent from either plant as a source of dilution for the discharge of the other. This method of evaluating new sources has no basis in state regulations and should not be done. In any case, DEQ should choose a rationale for treating this proposal as a load increase or a new source and then stick with that method of evaluation consistently throughout the process.

In addition, DEQ repeatedly concludes that if the James River discharge will be similar in composition to that of Pope & Talbot, the proposed discharge will be acceptable. Discharging more effluent with a particular concentration is not necessarily without impact to the river due to the total load involved yet DEQ appears to ignore this. Moreover, DEQ analyzes certain parameters related to the James River plant by comparison with the discharges from Pope & Talbot. This is wrong. Perhaps the best example of why this is wrong is DEQ's observation that the Pope & Talbot discharge has an offensive color and odor to boaters -- in other words, it impairs a beneficial use that DEQ is obligated to protect under its own regulations. DEQ cites the claim that James River's discharge will be less offensive as a basis for finding that the discharge therefore is of no consequence. If the DEQ made a finding that one industrial source discharged so much dioxin that a new source of dioxin was of no consequence, the public would surely identify that as both wrong-headed and contrary to federal and state laws. Perhaps DEQ should focus its attention on restoring the beneficial use now being impaired instead of accepting it and possibly making it worse with an additional discharge.

## **II. Policy Issues**

### **A. Use of Assimilative Capacity**

Overall, DEQ has failed to put itself in a position to evaluate the policy issues which this proposal brings to light. DEQ has neither gathered nor evaluated the data that are necessary to

allow it and the Commission to make reasoned decisions about the future of the Willamette River and the surrounding lands. Now, in the absence of information and a management plan that is based on information, DEQ proposes to allow a new discharge without regard to the future of this river. DEQ itself acknowledges the problem in the narrow area of phosphorous levels. DEQ expresses its concern, but states that it will wait until the Willamette River study is completed before taking action. Perhaps, for phosphorous as well as some other parameters, it would be more appropriate for the Department to put a freeze on new sources and load increases until it has the information that shows conclusively that there is no problem. A novel approach, but one consistent with DEQ's mandate under the Clean Water Act.

#### **B. Effect of Multiple "No Measurable Decreases"**

DEQ has made a finding that the James River discharge of BOD will not create a "measurable decrease" in the river's dissolved oxygen concentration. The problem lies in the fact that multiple "no measurable decreases" will eventually be both measurable and significant. It does not appear that DEQ has even done an analysis of how many of these "no measurable" or "no significant" increases are available before protection of DO becomes a problem -- at the point of discharge or in the lower Willamette River. As lands are developed in the Willamette River Basin, BOD levels are bound to increase, with the result that DO in the Willamette will be impacted. DEQ will be forced to squeeze municipal dischargers or other industrial dischargers of BOD, in part because it made a decision to allow the James River discharge. These are choices that should be made out in the open, with a full discussion of the policy implications for the future. Using ad hoc strategies, as the DEQ is now doing, is no substitute for comprehensive management of such a significant resource.

#### **C. Impacts on Other Sources**

Presumably DEQ believes that there are unlikely to be many more industrial permits requested for the Willamette River. Under this theory, DEQ feels it can safely separate the James River proposal from the future needs of municipalities that discharge treated sewage into this basin. This avoids the policy issue of whether Oregon should use whatever remaining assimilative capacity exists in the Willamette for the proposed purpose, as opposed to other purposes, whether point or non-point sources. The choice is being made in an intellectual vacuum, and yet it is a choice that we will all have to live with once the die is cast.

DEQ has also failed to comply with OAR 340-41-026(3)(b)(B) by not addressing the economic effects criteria:

"...Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally.

Allocation of any unused assimilative capacity should be based on explicit criteria..."

Another policy issue DEQ is not addressing is the lack of parity in the levels of BOD treatment required for industrial dischargers and municipalities. Currently municipalities must meet 20mg/l and may soon have to meet 10mg/l. James River, on the other hand, will be allowed under the proposed permit to discharge on the order of 70 mg/l. Is this fair? Must the public continue to bear the double burden (degraded water quality and increased taxes to pay for water treatment) for degraded water quality? The time for DEQ to answer these questions is now, before the James River permit is issued.

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Columbia Forest Products

\*WILLIAM JUNE  
Portland General Electric

DOUGLAS MCKEE  
PayLess Drug Stores NW

MORTON MICHELSON  
Cascade Steel Rolling Mills

R. GENE MORRIS  
Oak Street Tank & Steel

\*BRUCE O'NEIL  
Westcom Productions

RICHARD RUDISILE  
Boise Cascade

RON SCHMIDT  
Schmidt/Westerdahl  
Group

BARBARA SUE SEAL  
Barbara Sue Seal Properties

JOHN J. SUPPLE  
Astoria Warehousing

\*STEPHEN M. TELFER  
Legacy Health System

\*WILLIAM THORNDIKE, JR.  
Medford Steel/Div CSC, Inc.

\*District Vice-Chairmen

MAJOR POLICY COMMITTEES

Education Excellence

Environment

Health Care

Labor Law & Human Resources

Retail Council

Revenue & Taxation

MAJOR AFFILIATED ASSOCIATIONS

Oregon Association of Realtors

Oregon Chamber Executives

Oregon Restaurant Ass'n

Oregon Small Woodlands Ass'n

Oregon Soft Drink Ass'n

Oregon Trucking Associations, Inc.

Oregon Advertising Federation



January 8, 1992

Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

RE: James River application for Halsey plant discharge permit

AOI strongly supports James River's wastewater discharge permit application for their Halsey recycling plant. The advantages to the state's landfills, as well as the significant progress in fulfilling the market requirements of SB 66 (Oregon's new solid waste recycling legislation) afforded by operation of this plant greatly outweigh any disadvantage caused by increasing the load on the Willamette river.

- Operation of the plant promotes development of recycled materials markets, a concept that is central to the success of SB 66. Halsey will take used office paper, including window envelopes, fax paper, computer printout and glossy paper, including brochures. This is an entirely new market for office paper and complements Oregon's existing markets for newspaper, magazines, and unbleached paper.

- Halsey provides a market for 450 tons of waste paper PER DAY and reduces the amount going into landfills by 300 tons per day. Reduction of waste directed to Oregon's limited landfill space was a driving force behind both Measure 6 and SB 66 and should be facilitated in as many situations as possible.

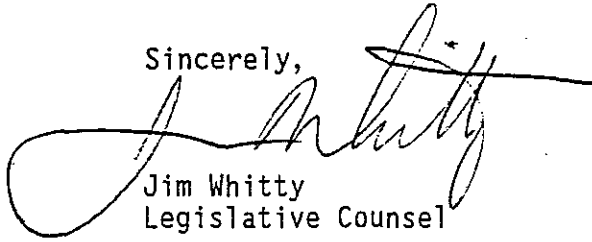
- This project ensures the company's pulp supply in the face of uncertain fiber supplies in the Northwest, helping to ensure existing positions and actually adds fifty new jobs.

- Addition of the Halsey plant will not have a significant detrimental effect on the Willamette river. The additional BOD5 load to the river at the Halsey location should not decrease the dissolved oxygen concentration by more than 0.1 mg/l. Furthermore, the lower BOD5 permit limit during the low-flow period will require 94 percent BOD5 removal efficiency in biological secondary treatment systems; James River's overall BOD5 removal efficiency for Halsey's wastewater treatment system will be approximately 97 percent.

Page 2

In summary, operation of James River's Halsey plant will be a strong step toward reaching Oregon's goal of strengthening and creating markets for recycled materials. Additionally, Halsey's ability to recycle office waste paper preserves precious landfill capacity. Any increased loading of the Willamette will be offset by these environmental advantages.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Whitty". The signature is written in a cursive style with a large, looping initial "J".

Jim Whitty  
Legislative Counsel

JW:sjs



1855 NW DIVISION PLACE CORVALLIS, OR 97330 (503) 758-1616

### JAMES RIVER HALSEY SECONDARY FIBER PLANT

The new plant will result in a benefit to the State of Oregon and our Community. It will bring more jobs into the area--jobs which are far above our family wage definition in pay. This new plant will create a market for waste office paper and, therefore, take pressure off our landfills, help relieve the wastepaper glut; in addition, it will help preserve Oregon's forests.

Funds have been and will continue to be provided for training at our local post-secondary institution (LBCC) for training employees, many of the employees will live in Corvallis and the surrounding area and spend their paychecks on local goods and services.

The facility will meet or exceed water quality standards established by the Oregon Department of environmental quality to protect all beneficial uses of the Willamette River, including our drinking water. It will have no measurable effect on the oxygen content of the river because the treatment used will meet and exceed the water quality standards.

Because of the obvious benefit to our community, an rational person would be pleased to see such a plant built in the area, therefore I support the granting of a permit for the James River Halsey Secondary Fiber Plant.

Patricia A. Wells, Ph.D.  
Executive Director,  
Busienss Enterprise Center, Inc.

Comments by James H. Martin  
D.E.Q. open meeting  
Majestic Theater, Corvallis  
January 8, 1992 7 PM

My name is Jim Martin, I live at 962 NW. Polk in Corvallis. I used to be a frequent user of the Willamette River from the confluence of the McKenzie River to Corvallis.

The purpose of my testimony is to raise some hell with the D.E.Q. water quality department. This is my 3rd public meeting and all I've heard is promises, promises; that the discharge will not significantly harm the river. Well, that didn't turn out to be true for Pop and Talbot and won't for James River either.

Oregon is forcing a choice between its rivers and jobs and profits for big business. The trend has been toward economic determinism. \$ talks! But people don't come to Oregon for jobs, but for its unique natural setting!

The D.E.Q. should have a public meeting BEFORE granting a "draft permit", not AFTER a company has spent \$65 million on a new facility! Seems like these public meetings are just window dressing; and that the permit will be granted is a foregone conclusion.

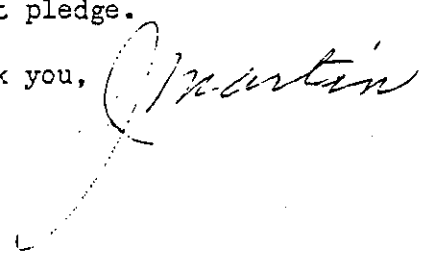
For those like the editor of the Gazette Times who claim that James River will boost the environment, consider these points:

1. The intake pipe is located above the discharge pipe-naturally!
2. The waste paper will come from as far east as Mississippi and as far south as San Diego and north into Washington and Canada. Why not, therefore, discharge into the Sacramento, or Mississippi or Puget Sound?
3. There will be a new discharge of  $3\frac{1}{2}$  million gallons a day.
4. The B.O.D.'s (Biological Oxygen Demands) will discharge into the Willamette River, which will lower the free oxygen in the river to the detriment of aquatic life.

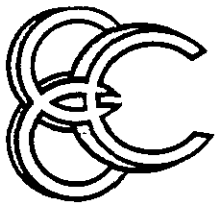
All this is especially critical during low water in the summer. The time when the river is heavily used by canoeists, boaters, fishermen and swimmers.

In 1938, outraged citizens overwhelmingly supported an initiative petition to clean up the Willamette River. Let's not fall back on that pledge.

Thank you,







**Corvallis Area  
Chamber of Commerce**

420 N.W. Second St., Corvallis, OR 97330 (503) 757-1505

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**Date/Time/Place: January 8, 1992, 7:00 p.m., Majestic Theatre**  
**To: The Department of Environmental Quality in oral Testimony**  
**From: Jim King, Executive Director**

Thank you for this opportunity to testify in support of James River Corporation's request for an operating permit for their wastewater treatment system. My name is Jim King and I serve as the Executive Director of the Corvallis Area Chamber of Commerce, located at 420 NW 2nd Street in Corvallis.

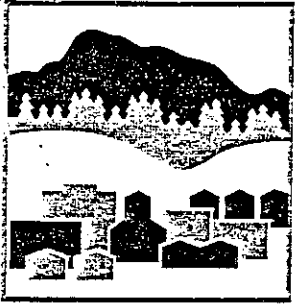
Having been assured that mutual concerns of the City of Corvallis and the James River Corporation are being resolved in a positive manner, the Board of Directors of the Chamber concentrated on three areas of importance before endorsing James River's request:

1. James River is responding to an environmental demand of the consuming public. Waste of resources can no longer be tolerated and James River Corporation has proposed an innovative and efficient method of recycling office waste paper. Business can now lead the effort in making better use of our resources by creating new markets for recycled products. James River is to be given kudos for their ingenuity and every encouragement to continue their quest for better environmental quality in Oregon.

**2. An added benefit of recycling is the gross reduction of need for land fill space. By recycling office waste paper, which would otherwise be dumped in landfills in the region, James River is playing an integral part in reducing the overall costs to the public and to the environment. In addition, new markets are being developed for the secondary biodegradable waste produced as a by-product of recycling.**

**3. James River will add at least 50 new jobs at its Halsey Plant. The firm currently employes 600 at an annual payroll of \$24m. The new jobs will create an additional \$2m in payroll. Of the fifty new employees, the Corvallis-Benton County Economic Development Partnership estimates that 20% will reside in Corvallis, adding 10 new families and their property taxes and buying power to the Corvallis economy. This will create a very positive economic impact on Corvallis.**

**The Chamber's Board is pleased to endorse the efforts of the James River Corporation and encourages the DEQ to act favorably by granting them an operating permit for their wastewater treatment system.**



Corvallis-Benton County

# Economic Development Partnership, Inc.

420 N.W. Second St., Corvallis, Oregon 97330

(503) 757-1507

FAX (503) 753-2664

## PRESENTATION - JAMES RIVER

I am Doug Sweetland, Director of the Corvallis-Benton County Economic Development Partnership. On behalf of the Board of Directors of the Partnership, I am here in support of the waste water discharge permit application requested by the James River Corporation.

In this present time of efforts to balance the concerns of the environment with the need to provide a stable and expanding economic base, companies such as James River should be commended and supported. Their commitment to the recycling effort of the State of Oregon, and more specifically, their response to the State Legislatures SB 66 demonstrates the companies interest in the future welfare of this state.

As James River continues to work closely with the city of Corvallis, the welfare of the residents of Corvallis and Benton County will be foremost in their discussions. Not only will the concerns of the Willamette River be addressed regarding future usage, James River will also provide an economic boost to the economy of the valley region through the addition of 50 new jobs, primary wage jobs, which are directly attributed to the establishment of this facility.

James River is a good neighbor industry who is concerned about the welfare of this region. Your support of their discharge permit to the Environmental Quality Commission will enable the company to complete a recycling facility which will be of value to the Willamette Valley as well as the State of Oregon.

1/8/92

DEQ PUBLIC HEARING  
Wednesday, January 8, 1992  
7:00 p.m.  
Majestic Theater  
Corvallis, Oregon

My name is Peter Sukalac. I reside at 3461 Wildwood Court, NW in Salem, Oregon. I am the Executive Director of the Salem Economic Development Corporation. I am here tonight, however, as a representative of the Willamette Valley Economic Development Alliance, of which I am president. The Alliance represents the cities of Albany/Millersburg, Corvallis, Eugene/Springfield, Lebanon and Salem.

Our joint mission is the marketing of the Willamette Valley as a place to locate manufacturing facilities that are environmentally compatible.

The James River Project is environmentally sound according to information available to us. I will not comment on the technicalities because I am not qualified to do so.

My testimony addresses three points:

1. The project brings major investment to the Valley along with 60 new, family wage jobs;
2. It will process a type of waste paper that is now going to landfill; and
3. It will develop a new source of pulp now needed to supply demand for biodegradable paper products.

On the last point...a year ago we were assisting a corporation that had selected the Valley as the site for a \$35 million plant that would use de-inked waste paper to produce biodegradable trays that would be used in the food industry. An analysis done over several months proved to the company that there would not be an adequate supply of news print and other types of paper, such as office waste and coated papers.

We did not get the investment or the 50 to 75 jobs that would have gone with it as a result.

It is our hope that the James River Project will provide a supply breakthrough as well as help solve the landfill problem. The employment opportunities that go with it speak for themselves.

Therefore, we urge the Department of Environmental Quality Commission to take positive action when it meets on January 23, by granting the company its permit, clearing the way for the plant to begin operations on March 1, 1992.

Corvallis hearing

DEQ PUBLIC HEARING  
TESTIMONY OF SANDRA GAZELEY  
JANUARY 8, 1992

My name is Sandra Gazeley. My business address is 456 SW Monroe in Corvallis, and I reside at 130 North 7th Street in Harrisburg.

I'm providing testimony this evening in a number of capacities...first as a Benton County - based planning consultant, representing both municipal and private clients throughout Oregon. I'm also testifying as President of the Harrisburg City Council. Additionally, I serve as Planning Director for the cities of Tangent and Brownsville, and I've been asked to address you on behalf of those cities as well.

Collectively, we would like to encourage the Department of Environmental Quality to issue the Water Quality Waste Discharge Permit which is necessary for operation of the James River Halsey Recycling Plant. James River has proven to be a good neighbor in our region and consistently performs in an environmentally responsible manner.

As I mentioned, my business is located in Corvallis. I and many people I care about drink Corvallis water daily. I'm vitally concerned with health issues in this area...and I'm comfortable with James River's plan for waste water treatment and discharge into the Willamette River.

Speaking once again for the various jurisdictions I'm representing, it's our understanding that James River will meet or exceed all DEQ standards relative to air, land and water quality in construction and operation of the recycling plant.

The purpose of this new facility is large scale recycling of paper (including some papers for which there have previously been little or no demand); creating new markets for recyclables; and manufacturing recycled products. This will have long term beneficial effects for the environment of the western United States (the source for the recyclable materials), and is a purpose which we all support wholeheartedly.

Given that this industry will operate within acceptable environmental parameters, and will, in fact, have positive environmental impacts over the long term, we are particularly pleased about the socioeconomic impacts this facility will have on our region. The economic and employment impacts of James River Corporation are not isolated. This industry has regional importance. In this case, direct benefits will accrue to several counties...counties which are being seriously hurt by the downturn in the timber industry. If indirect impacts are considered, the benefits reach much further. The products proposed for the new facility are value-added products, which are increasingly important to this state (and for that matter, to the United States.)

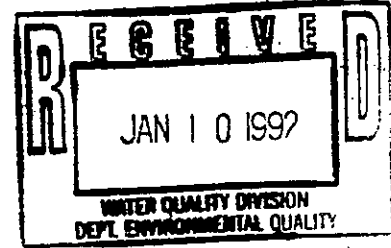
The outlook for this region relative to primary timber products is not highly promising. I'm sure we're all aware that the character of a society can be altered dramatically when high unemployment is chronic. Crime and other social problems rise with increases in unemployment.

From my work on the Harrisburg City Council, as chairman of the Linn Economic Committee, and a member of the Linn County Economic Stabilization and Conversion Task Force, I'm acutely aware of the changes that are already occurring as a result of the downturn in the timber industry. James River Corporation's proposed Recycling Plant can provide a stabilizing force in this region's economy and social equilibrium.

James River Corporation has a proven record of responsible action in dealing with potentially sensitive environmental issues. We urge DEQ to issue the required discharge permit so that the region may benefit from the planned investment and employment.



Public Works  
1245 NE 3rd Street  
P.O. Box 1083  
Corvallis, OR 97339-1083  
(503) 757-6916



January 8, 1992

Fred Hansen  
ODEQ  
811 S.W. Sixth Street  
Portland, OR 97204-1390

#### JAMES RIVER NPDES PERMIT

The City of Corvallis operates under one of the tightest permits on the Willamette River and compliance requires extensive wastewater treatment. The City is concerned about its continued ability to serve its wastewater customers in an environment of increasing standards and moderate community growth.

It is the understanding of the City of Corvallis that DEQ intends to issue a new waste discharge (NPDES) permit for a secondary fiber plant which James River is adding at their Halsey, Oregon operation. It is further our understanding that:

- DEQ has thoroughly evaluated the permit application
- DEQ will not issue a permit which is detrimental to other existing wastewater dischargers
- DEQ has evaluated the results of this action (issuing permit) and has concluded that approval of the permit will not be detrimental to permits held by others
- DEQ has evaluated the Willamette River and has concluded that the River is not water quality limited in terms of the primary waste constituents to be discharged by James River
- DEQ has considered the NPDES permit held by Corvallis and has confirmed that no changes in the permit will be required as a result of the issuance of the James River permit. Specifically, it has been determined that no reduction in waste loads currently permitted will be required.
- DEQ has concluded that issuance of the permit will not jeopardize the ability of other wastewater dischargers to effectively serve their customers.



FRED HANSEN  
JAMES RIVER NPDES PERMIT  
January 8, 1992  
Page 2

The City of Corvallis respectfully requests written, formal DEQ confirmation that the City's understanding is accurate and that Corvallis' continued use of the river at permitted discharge levels is assured.

Respectfully,

A handwritten signature in black ink, appearing to read "Rolland Baxter". The signature is written in a cursive, somewhat stylized font.

ROLLAND BAXTER  
PUBLIC WORKS DIRECTOR

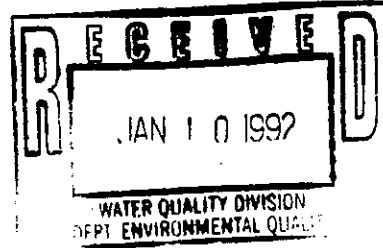
RB/eao

cc: Gerald Seals, City Manager  
Charles Vars, Mayor and City Council  
Virginia Sixour, James River  
Jerry Turnbaugh, ODEQ



*James River*

Public Works  
1245 NE 3rd Street  
P.O. Box 1083  
Corvallis, OR 97339-1083  
(503) 757-6916



January 8, 1992

Fred Hansen  
Department of Environmental Quality  
811 S.W. 6th Street  
Portland, OR 97204-1390

#### JAMES RIVER NPDES PERMIT

The City has reviewed the draft NPDES permit and determined that the James River plant will produce a significant volume of solid waste. The vast majority of this waste will be sludge produced as a by-product of the wastewater disposal system. James River proposes to dispose of this sludge at Coffin Butte, a regional landfill north of Corvallis. James River waste will constitute 25% or more of the total volume disposed at the landfill. As a major landfill user, James River may have a dramatic impact on the landfill and on the costs associated with operating and constructing landfill facilities.

- James River recognizes the need for a long term strategy for solid waste disposal and has represented to the City of Corvallis that feasibility studies will be undertaken to evaluate alternate waste disposal schemes.

The City of Corvallis requests, and James River concurs, that commitments made by James River be included in the waste discharge permit. Consequently the following wording should be added to Schedule D:

4. The permittee shall evaluate alternatives to landfilling the wastewater treatment plant sludge with the emphasis of finding a beneficial use for the waste material according to the following schedule:

By no later than January 1, 1994, a Solid Waste Feasibility Study and Solid Waste Plan shall be completed and submitted to the Department.

By no later than January 1, 1996, laboratory studies and/or pilot scale studies shall be completed. A written report summarizing the results of these studies shall be submitted to the Department.

FRED HANSEN  
JAMES RIVER NPDES PERMIT  
January 8, 1992  
Page 2

By no later than January 1, 1997, a program and time schedule to implement the selected alternative(s) shall be submitted to the DEQ for review and approval.

Public meetings will be held at each stage of this process to share information and provide an opportunity for public input.

Respectfully,



ROLLAND BAXTER  
PUBLIC WORKS DIRECTOR

RB/eao

attachment

cc: Gerald Seals, City Manager  
Charles Vars, Mayor and City Council  
Virginia Sixour, James River  
Jerry Turnbaugh, ODEQ



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

January 7, 1992

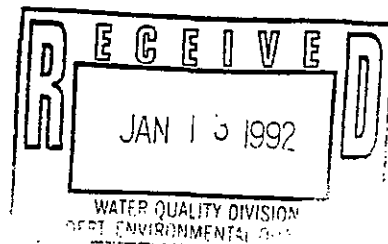
Mr. Scott Ames  
Northwest Environmental Defense Center  
10015 S. W. Terwilligar Blvd.  
Portland, OR 97219

Re: James River Halsey Recycling Plant Draft NPDES Permit

Dear Mr. Ames:

James River has had an opportunity to review your letter to Fred Hansen, Oregon DEQ dated December 31, 1991, in regard to the Halsey draft NPDES permit. We appreciate NEDC's support of this important project. A few very good questions were raised in your letter concerning the combined discharge from James River and Pope and Talbot that I would like to take this opportunity to respond to.

1. Types of Toxic Pollutants - treated effluents from pulp and paper recycling plants typically have only very low concentrations of some individual compounds that may be considered to be toxic. As such, effluent toxicity is determined by conducting whole effluent toxicity testing using bioassays to determine both an acute and chronic endpoint. James River estimated the levels of all parameters listed in EPA's priority pollutant list that are expected to be present in the treated effluent from the Halsey recycling plant in its NPDES permit application (attached).
2. Combined Discharge from James River and Pope and Talbot - effluents from James River and Pope and Talbot will receive extensive treatment prior to combining for discharge to the Willamette River. Any toxicity that may be present in the raw (untreated) wastewater will be treated in biological treatment such that the final effluent will not be toxic. The Halsey wastewater treatment system was designed specifically for recycling plant wastewater. The biological community will be acclimated to this type of waste, resulting in much more effective treatment. The effluents from the two facilities are not substantially different in the major constituents that they contain, and will therefore not be reactive.



Fred Hansen  
Page 2  
January 7, 1992

3. Combined Discharge Sampling - the sample of the combined effluent from James River and Pope and Talbot will be collected at the river immediately prior to its discharge. It will, therefore, have had ample opportunity to become completely mixed during the 3 1/2 mile distance to the river, and will be representative of the effluent actually discharged.
4. Monitoring Schedule - James River has over 20 years of experience with toxicity testing of effluents from a wide range of pulp and paper processes that indicate that the types of effluent to be discharged from James River and Pope and Talbot will not be toxic. The monitoring schedule proposed in the draft NPDES permit is comparable to, or in many cases, more extensive than other industrial dischargers on the Willamette River.

Again, we appreciate NEDC's support and trust that the above discussion addresses their concerns. We would be happy to discuss any of these in additional detail as necessary.

Sincerely,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc: Jerry Turnbaugh - DEQ

Attachment



**POPE & TALBOT, INC.**

DIRECT DIAL 503/369-1155

January 7, 1992

Mr. Jerry Turnbaugh  
Water Quality Division  
Department of Environmental Quality  
811 SW. Sixth Avenue  
Portland, Oregon 97024-1390

Dear Mr. Turnbaugh,

This is in reference to James River's draft permit for the proposed secondary fiber processing plant in Halsey, Oregon.

Pope & Talbot would request the wording in Schedule A, Item 2, be changed as follows:

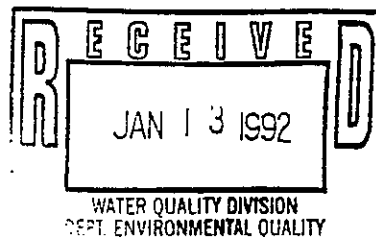
"In the event of a violation of water quality standards outside the defined mixing zone that is directly attributable to the combined discharge the permittee (individually or jointly with Pope & Talbot) shall evaluate the effects of the combined discharge on the receiving stream. If the evaluation confirms a violation of a water quality standard due to the combined discharge, the permittee (individually or jointly with Pope & Talbot) shall develop a plan to eliminate the violation. Upon approval of the plan by the Department of Environmental Quality, the permittee (individually or jointly with Pope & Talbot) shall implement the plan to eliminate the violation."

If you have any questions, please feel free to contact me.

Very truly yours,

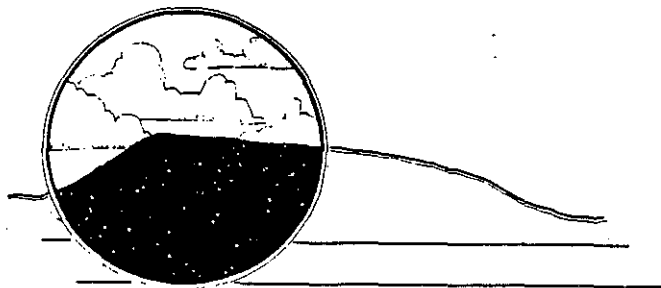
Roger Sherwood  
Environmental Manager

pc Art Vosburg  
Roger Campbell  
Bill Frohnmayer  
Bob Gilbert, James River Camas  
Gigi Sixour, James River Camas  
Jeff Manchester, James River Halsey



(RS001.92)

P.O. BOX 400 • HALSEY, OREGON 97348 • TELEPHONE 503 369-2841 • TELEFAX 503 369-2849



*Jerry T.*

MARYS PEAK GROUP, SIERRA CLUB

P.O. BOX 863  
CORVALLIS, OREGON 97330

January 7, 1992

Mr. Fred Hansen, Director  
Department of Environmental Protection  
811 S.W. 6th Avenue  
Portland, Oregon 07204

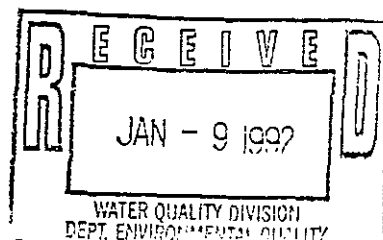
Re: Application of James River Paper Company, Inc.  
File Number 105814

Dear Mr. Hansen:

The Marys Peak Group, Sierra Club, in opposition to the issuance of a National Pollutant Discharge Elimination System (NPDES) permit to James River Paper Company, Inc. (the Applicant), says:

1. The Application should be withdrawn so that it can be refiled with Pope & Talbot, Inc. as a necessary party. The Applicant seeks an increase in the amount of BOD<sub>5</sub> and TSS discharge to the Willamette River at the outfall pipe of Pope & Talbot, Inc., without increasing the total quantities that may be discharged under the existing permit held by Pope & Talbot, Inc. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

2. Granting a permit based on the Application in its present form sets a precedent for circumventing restrictions on increases in the amount of discharge allowed under all other existing permits. Treating this Application as a new discharge is false and misleading. The permit should not be granted, and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s



discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

3. Granting a permit based on the Application in its present form denies equal treatment and equal protection of the laws to all other beneficial users of the river, whether currently permit holders or beneficial users under existing permits. Granting the permits would single out one industrial Complex for kid-gloves treatment, and allow the real party in interest, Pope & Talbot, Inc., to hide behind the Applicant, James River Paper Company, Inc.. The Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

4. Total Minimum Daily Load (TMDL) Capacity for the Willamette River is unknown at this time. No action should be taken on this or any other permit application for allegedly new discharges or for increases in discharges under existing permits until TMDL has been determined. No permit should be issued and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

5. Pope & Talbot, Inc. holds the water right that controls the supply of water to the Applicant's facilities. Effluent from these facilities is currently commingled and combined with effluent from Pope & Talbot, Inc.'s operations. The combined effluent passes through Pope & Talbot Inc.'s outfall pipe and is discharged at a



Mr. Fred Hansen,  
Director

3

January 7, 1992

single outfall, controlled by Pope & Talbot, Inc. At the input side to the Pope & Talbot/James River Complex there will be no change. Water will be drawn from the river as it always has been, through the same pipes, by the same pumps, by the same employees, for the same overall uses. Physically, at the output side of the Complex there will be no change either, except that granting the Application and issuing the permit will increase the total amount of pollutants entering the river from the outfall pipe of the Pope & Talbot/James River Complex. What happens within the Complex, i.e., how the several participants divide up their rights and responsibilities within the Complex, monitor their respective contributions to pollution going into the river, or compete for limited clean air and clean water resources, has no bearing on the environmental impacts that the Department of Environmental Quality should allow the Complex to make. Environmentally the Pope & Talbot/James River Complex must be treated as a single entity. Inhabitants of the Complex should have to live by the same rules that the citizens of Corvallis must live by. There is an existing permit for the Complex, and an increase, if any, should be made under the existing permit. A new permit should not be granted and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

6. The Applicant's plant expansion within the Pope & Talbot/James River Complex is no more a new business than is the planned tripling of Pope & Talbot's facilities. Changing the input from wood fiber to waste paper, installing new machinery, modifying the bleaching process to eliminate chlorine and its associated environmental hazards, and changing the grades of paper produced does not turn the expansion on land within the complex into a new business. James River Paper Company, Inc. is still a paper company. It continues to manufacture paper. The Application should be denied because this is not a new discharge to the river. In the alternative, no action should be taken until the Application can be considered

Mr. Fred Hansen,  
Director

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January 7, 1992

together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/James River complex.

7. The Solid Waste Management Plan proposed in the Evaluation Report prepared by the Oregon Department of Environmental Protection is inadequate because it accelerates increases in costs for citizens who are not parties to this proceeding, without informing them and without giving them an opportunity to consent to increased costs to themselves. In particular, the citizens of Corvallis and all other communities using the Coffin Butte Landfill are being asked to subsidize waste disposal costs for the Applicant because their disposal fees will rise as new, more expensive cells are opened to compensate for the less expensive disposal cell space appropriated by the Applicant's waste. The Permit should not be issued and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/James River complex.

8. The best educated guess in the absence of TMDL data for the Willamette River is that the additional discharge to the river, proposed in this Application, will use all of the river's carrying capacity. As a consequence Corvallis and other communities below the point of discharge to the river will be unable to increase the amount of polluted effluent that they can discharge. To meet their planned growth, these communities will be required to erect multi-million dollar tertiary treatment plants for sewage. At least a portion of the accelerated cost incurred by these communities is a subsidy for the Applicant. These communities have not been informed that they are required to subsidize the Applicant, nor have they had an opportunity to make an informed choice about whether they wish to subsidize the Applicant. The permit

Mr. Fred Hansen,  
Director

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January 7, 1992

should not be granted and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

9. The Environmental Quality Commission (EQC), not the Department of Environmental Protection, has discretion to maintain water quality in the Willamette River, or to allow its degradation. No action should be taken on this or any other application until the policy question has been referred to the EQC for a policy determination. Failure to refer the matter to the EQC will mean that the Department is exercising discretion in a policy matter reserved for the EQC, and eliminating the EQC's option to maintain the present quality of the Willamette River. The Permit should not be granted and the Application should be denied in its present form. In the alternative, no action should be taken until the Application can be considered together with renewal of Pope & Talbot, Inc.'s discharge permit, so that the sum of polluting effluent discharged under both permits, if granted or renewed, does not exceed that which currently is permitted under the single Pope & Talbot, Inc. permit for the entire Pope & Talbot/ James River complex.

Respectfully submitted,

MARYS PEAK GROUP SIERRA CLUB

KARL R. HUBER, CHAIR

cc: Water Quality Division  
David Paul, Esq.  
Karl Anuta, Esq.  
Hon. Charles Vars, Mayor  
City of Corvallis

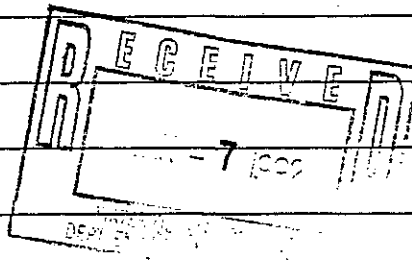
James River (Holsay)  
Convent Rile

To whom it may concern

Dear persons James River has  
my full approval as a citizen and  
as a tax payer. They are a concern  
company and will do there best  
to take care of the environment  
and ~~our~~ our county as well as  
state.

The impact they have on  
the economy is of great concern  
as they effect a large number of  
people in the job market

Sincerely  
C. W. Dilson



Jeanne Riha  
904 NW 34th st.  
Corvallis, Or. 97330

RECEIVED

JAN - 7 1992

OFFICE OF THE DIRECTOR

TESTIMONY ON POLLUTION DISCHARGE PERMIT

for James River Corp. Paper Recycling Plant  
at Halsey, Or.

PUBLICITY

I learned about the Dec. 18 Albany hearing on the James River plant permit after the hearing was held, and learned about this hearing from an acquaintance.

My first point is: Are there any state regulations that cover the publicizing of permit applications? In the state I came from, there had to be notices in the local paper of permit applications before construction occurred, and these notices were also sent to two environmental organizations. If one person requested it, a hearing was held. If the hearing was to be controversial, the state agency sent out a news release.

Neither the Albany (Dem-Herald) or the Corvallis (Gazette-Times) papers could find that they ran legal notices on the permit application in December or advance stories on the December hearing. The Gazette-Times did run a puff story for Pope & Talbot on Dec. 14 on how it planned to offset chlorine pollution. \*

Secondly, the DEQ investigation report was issued Nov. 29, 1991. But site development work began in March 1991, and completion of the wastepaper recycling plant was expected in Dec. 1991.

Why didn't the company come in for a wastewater discharge permit BEFORE it built the plant that will be discharging? Why was a hearing not held when it first proposed to build the plant? We are presented with a fait accompli, which seems at least irregular--if not illegal.

DEQ REPORT

I find the DEQ investigation report quite unconvincing. Again and again it accepts company data without comparing it against independent research; it accepts incomplete data; it relies repeatedly on dilution to correct pollution. It fails even to promise regular monitoring of Willamette River water if this project is approved.

A few examples:

DISSOLVED OXYGEN

Dissolved oxygen is critical to fish. The report (p.55) admits the Willamette River, for a stretch that includes this discharge, only partially supports aquatic life due to decreasing amounts of dissolved oxygen.

--more--

\* Also an editorial 1/1/92

## 2- Willamette River

Both the department and the company concede that the proposed amounts of discharge from the new plant would reduce the dissolved oxygen content further (.1 mg/l). Since dissolved oxygen already doesn't always meet the standard, 3100 pounds a day more of BOD certainly isn't going to improve the quality of the water, help the fish, or stop the degradation of aquatic life.

Even when it predicted a decrease in dissolved oxygen in both the upper and lower river, the DEQ in its evaluation failed to draw the obvious conclusion: that the wastepaper recycling plant would be bad for river quality.

The DEQ is supposed to be the state agency protecting natural resources. When it fails to do so, its assessments should be supplemented by those from an objective source.

### TOXICS

The company says: The discharge to the river may contain trace quantities of toxic substances, but the company will minimize the amount of contaminants dumped in the river, and the effluent "should" easily pass acute and chronic toxicity tests. It is implied in the report that the standards could be exceeded within the mixing zone.

DEQ finds that tests on treated effluents from fiber operations like this one show a wide range of response from no toxicity to significant toxicity. It finds that low concentrations of cadmium, copper, selenium, thallium, and zinc may be discharged, but they'll be diluted, therefore it's unlikely that standards will be violated.

This is an incredibly casual, reckless approach to public health. We're going to be drinking this water all summer in Corvallis. We need an independent appraisal of what substances and how much of each is present in the effluent to be dumped into the Willamette River. What comes from de-inking, slick paper, coated groundwood and all the rest? What effect will these residue substances have on people, fish, birds, riparian plant life, and water quality itself?

We need this knowledge before anything is allowed to go into the river. Then we need regular, continuing monitoring of the river water. We also need monitoring wells at the landfill if James River Corp. is allowed to use the landfill to dump its waste--and that should not be allowed. But if it is, with the rain we have here, we need to know what's being leached into the groundwater as these residue materials get into the fill.

### TURBIDITY

Both turbidity and suspended solids damage fish and can kill at certain levels. The DEQ concludes there won't be a "significant increase" of suspended solids, but the research is too incomplete to draw that conclusion.

pp. 16- For example, it says turbidity--meaning light-scattering--becomes  
18 a danger to fish at the level of 25 turbidity units. It says the  
river at Harrisburg--before it reaches Halsey--is less than 10  
turbidity units, except in major storms. The company gives one  
example of testing of de-inking mill effluent: That measured 105  
turbidity units! At that point the company prefers to focus on  
suspended solids as a measure of turbidity.

On suspended solids, DEQ says damage to fish occurs at over  
25 mg/l (milligrams per liter). But ambient monitoring already  
measures 40 to 80 mg/l along the upper Willamette. So it appears  
there's already no leeway for safety of fish. Suspended solids in  
the combined effluent of Pope & Talbot will be about 90 mg/l.  
So they're relying on dilution again in saying there will not  
be a "significant increase" of suspended solids.

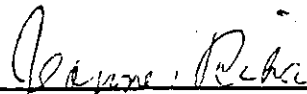
I understand the city of Corvallis says the James River waste  
loading to the Willamette would be greater than the total discharge  
from the cities of Albany and Corvallis combined.

Supposedly the state of Oregon is trying to SAVE fish after a  
century of practices that succeeded in eliminating whole species.  
Now is the state going to permit this protective effort to be  
scuttled before it even gets started?

Many similar criticisms could be made of the sections on  
water temperature and pH on the basis of inadequate or questionable  
evidence, lack of independent research, reliance on dilution to  
reduce pollution.

If this project goes ahead at all, it should be permitted  
only after a genuinely independent appraisal, taking into account  
all the subsections of the DEQ which were inadequate --most of them--  
and the need for toxics investigation mentioned earlier. Further,  
the James River Corp. should provide for its own disposal of  
175 tons a day of solid waste, someplace other than the community's  
Coffin Butte landfill.

Finally I hope that in the future permit applications will be  
announced to the public in a timely and effective manner and that  
hearings will precede the construction of the permitted facility.

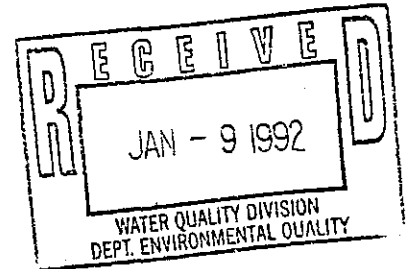


Jeanne Riha

Jan. 7, 1992.

To: DEQ  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

From: Maria Serrot, Colin Conolly  
920 S.W. 10th,  
Corvallis, OR 97333



Dear Sirs:

Subject: James River Paper Co, adjacent to Pope & Talbot, south of Corvallis. Wastewater pollution permit.

My position on this subject is in opposition to the issue of the permit, due to the following reasons:

1. Corvallis has no insurance that its future growth may be limited by the James River waste load allocation. I am a home owner and do not wish to have to pay in the future for additional water treatment.
2. Individual monitoring of Pope/Talbot and J. River for each company's effluent should be a must for possible violations controversies.
3. Each plant which receives a new wasteload allocation further degrades the river, DEQ Commission has discretion in this matter. The Willamette River needs a water quality benchmark. Studies for load capacity of certain pollutants in the Willamette River have just begun. Why add more waste under these circumstances?
4. The J. River pulp plant has been under construction since March 1991, why is its discharge permit being considered this late? Why is it being considered before the Corvallis discharge renewal and before Pope and Talbot's discharge renewal?
5. The waste paper source for the new pulp plant is 75% from the Mid-West and Southern Cal. Why should Corvallis residents risk possible future waste-water processing increases if Corvallis' Coffin Butte Landfill becomes full?

No one I know currently wishes to swim in the Willamette, due to agric. waste and other sources of wastes dumped in the river. Since there is no bench mark for water quality for the river, and we know of all the current discharges, I see no reason to add to the further degradation of the river's water quality. I am opposed to the issuance of the permit in question.

*Maria Serrot*  
*Colin Conolly*



2815 NW Arthur Ave.,  
Corvallis, OR 97330  
January 7, 1992

Department of Environmental Quality  
Water Quality Division  
811 SW 6th Avenue  
Portland, OR 97204

To Whom It May Concern,

Since moving to Corvallis in December 1951, I have been conscious of and have participated in constant efforts to clean up and keep clean, the waters of the Willamette River. When we first arrived, the Willamette was a virtual sewer with cities and towns dumping untreated sewage into it, with farms draining waste from their dairy barns into it and with several lumber mills and paper mills using it for waste disposal. It was not swimmable in the summer. I vividly remember coliform counts being published in the Gazette Times as warnings to those wishing to swim in it.

Enormous progress was made toward cleaning things up during the eight years Tom McCall was Governor. I believe that the DEQ was established at that time.

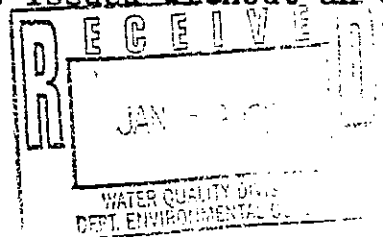
Gradually things improved, and regular kayak trips from Peoria to Corvallis showed constant improvement in the clarity and smell of the water until the Halsey mill began dumping something that turns the water a maroon color. Now we cannot see the bottom of the river when we launch at Peoria, yet near Armitage State Park, the water is clearer and a natural color.

Now it is proposed that a new pulp plant use the same outfall as the Halsey Mill and dump more waste into our water. Are you not aware that the drinking water supply of Corvallis comes largely from the river? Do you expect that the people of Corvallis must through ever increasing costs in their water bills cover the removal of the unwanted waste from it before they can safely drink it? How is it that a mill obtained a building permit without hearings in Corvallis when their proposed dumping of waste will affect us tremendously?

I am also concerned with the disposal of tons of waste in the Coffin Butte Land Fill. As far as I am aware through studies of the League of Women Voters of Corvallis of which I am a member, the land fill was not designed and the estimates of its life did not and do not include said dumping.

I believe in recycling. I believe in jobs. I do not believe in corporations being able to use emotional pleas for these causes in putting over polluting activities upon communities or individuals.

Having been involved for forty years in helping to clean up the Willamette and keep it that way, I am not willing to have another dumping permit issued without an objection.



Sincerely yours,

*Jean Leach*  
Jean Leach



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

January 7, 1992

Mr. Jerry Turnbaugh  
Industrial Waste Section,  
Water Quality  
Dept. of Environmental Quality  
811 S. W. 6th Ave.  
Portland, OR 97204

Re: Letter from USEPA regarding Halsey Draft NPDES Permit

Dear Jerry:

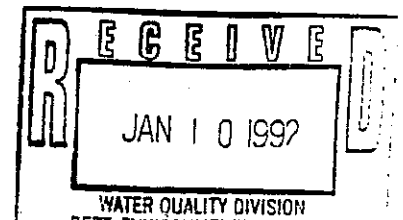
James River has had an opportunity to review the comments submitted to you by Tom Robertson of the Oregon Operations Office of the USEPA, dated December 10, 1991, pertaining to the Halsey mill's draft NPDES permit. It is apparent that Mr. Robertson has done a thorough review of the draft permit and associated information. The following comments address some of the concerns raised in his letter.

1. Selanastrum Interferences

Effluent from the Halsey recycling plant will be nutrient deficient when sent to biological (secondary) treatment. Nutrients will be added to promote and sustain biological activity. The amount of nutrients added will be controlled based on the residual measured in the final treated effluent. As the effluent will not be "nutrient-rich" when discharged, interferences due to nutrients are not expected. The color of treated effluent from the recycling operation is expected to be only 20-50 color units compared to that of a typical pulp mill, which can exceed 3000 color units. Interferences due to color are not expected.

2. Toxicity Testing Requirements

Mr. Robertson indicated that, due to potential effluent variability, it may not be possible to confirm or negate actual toxicity by conducting additional testing. Both the Pope and Talbot and James River treatment systems have significant detention time that will minimize the variability of the effluent. Should a bioassay failure occur, it is important that the results and supporting data be reviewed by the Department and James River prior



Mr. Jerry Turnbaugh  
Page 2  
January 7, 1992

to classifying it as a violation. A failure of a bioassay test can result from test procedural problems, such as organism health, feeding regimes, control waters, test parameters, and organism performance during the test. Further testing to evaluate effluent variability and/or actual water quality impacts should be undertaken only after the violation has been confirmed. This verification process could be outlined in the permit by requiring that James River notify the Department of a failure within 15 days, and set up a review meeting within the next 15 days to review all pertinent information. If a violation is confirmed, we would then be in the plan development process.

We concur with Mr. Robertson's comment relative to DEQ approval of a TRE/TIE plan.

We appreciate the opportunity to comment on the above issues and trust that this information will be of assistance in drafting James River's final permit.

Sincerely,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc: Tom Robertson - USEPA Oregon Operations Office



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Portland Field Station  
2600 S.E. 98th Avenue, Suite 100  
Portland, Oregon 97266

January 6, 1992

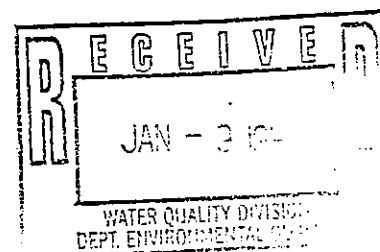
Jerry Turnbaugh  
Oregon Department of Environmental Quality  
Water Quality Division  
811 S.W. 6th Avenue  
Portland, Oregon 97204

Dear Mr. Turnbaugh:

The Fish and Wildlife Service (Service) has reviewed the James River application for a National Pollutant Discharge Elimination System (NPDES) permit to discharge process wastewater from a recycled-fiber, de-ink mill in Halsey, Oregon. The Service supports the proposed secondary fiber recycling facility for production of paper products and the conversion from chlorination processes which produce dioxins and furans to alternative technologies which do not generate these potentially hazardous chemicals.

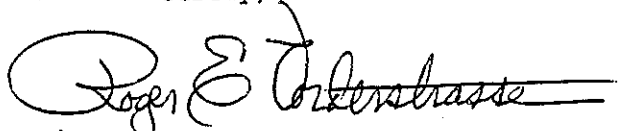
The Department of Environmental Quality's Evaluation Report does not indicate deleterious impacts to fish and wildlife resulting from the anticipated discharge into the Willamette River. Accordingly, we recommend that the following two issues be addressed in the permit. Section V. P. Toxic Substances of the report states that chemical analysis (GC/MS scan) of water samples from five locations near the Pope & Talbot diffuser did not identify any organic priority pollutants above the level of detection or any other organic compounds at the 0.01 mg/L detection limit. However, numerous organic compounds are known to be toxic at concentrations below this detection level. If the potential exists for highly toxic compounds to be discharged, we believe that detection levels should be adjusted to discern toxic concentrations.

The second issue also pertains to this same section in which the applicant claims that the effluent discharged to the river may contain trace quantities of some of the compounds listed by the Environmental Protection Agency in Quality Criteria for Water (1986), and that these substances are expected to be below the standard outside the mixing zone. The mixing zone extends 300 feet downstream from the diffuser and 30 feet beyond the diffuser at each end, therefore, any aquatic life within the mixing zone may not be protected. To evaluate the potential impacts to fish and wildlife, these predicted chemicals and their concentrations need to be specified.



The Service appreciates the opportunity to comment on this application. Any comments or questions should be directed to Elizabeth Materna at 231-6179.

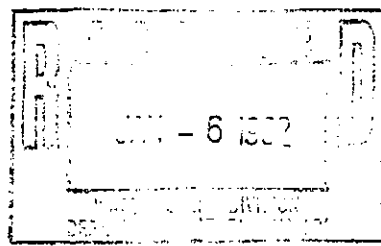
Sincerely,



for Russell Peterson  
Field Supervisor

EM/jmsrvr (misc)

James River (Halsey)  
Comment File



Dear DEQ

I live in the willamette valley. My family and I spend many hundreds of hours fishing on the states streams. From the way I see it. Careless and sloppy fishermen and campers put more pollution in our waterways than James River does. They have spent millions of dollars making sure the water they put back in the willamette will support fish life.

This recycling plant will add 60 jobs up front. And hundreds of ~~it~~ support jobs to our depressed community. Plus it will save countless millions of lbs of waste paper going to our overflowing landfills.

Please let them have a wastewater permit. Then we can concentrate on the ~~the~~ real things that harm the beauty of our streams. Those are trash and car bodies etc.

Thank You  
Harry Rankin

Department of Environmental Quality

Water Quality Division

811 S.W. Sixth Avenue

Portland, OR 97204

Dear Sir

1-6-92

I have been to two public meetings on

the proposed discharge permit for James

River, I do plan on going to the third meeting

being held on Jan. 8, 1992 in Corvallis.

I am an hourly employee of James River

Albany Secondary Fiber Plant. I have been an

employee for 18 years.

I am very proud to be part of a company that

has so much concern for the environment by

Recycling, so we can utilize our raw material

more wisely.

The James River Albery mill takes great pride,

hourly and salary, in recycling everything in

our mill. We have been doing this for some time

now.

At this time I would like to give you a little

background on myself.

I have been brought up with the belief that

when I make a commitment I am to follow

through with it to the best of my ability.

When I accepted this job I was told what

my duties were and it fully emphasized that

the water treatment plant would be our

first priority and running the secondary

plant second.

I am very aware of the importance of

quality of our water and how we all must stay right on this. For you see, my Dad, George M. Howard, is a volunteer for the D.E.Q. He does quality water sampling in Lane County at Triangle Lake in the summer months.

I personally do know the impact on what happens to our lakes and rivers.

Also being Vice President of the Linx Humane Society, I very well do know we need people to make the commitment to speak out for those who can't.

So with this as a background you can see that I as an employee of James River am fully committed to monitor the Secondary Fiber Plant process very closely, to make sure we stay within our permit limits and keep the Willamette River clean for everyone to use.

Sincerely,

Andrew R. Peterson



P.O. Box 884  
Corvallis, OR 97339

January 6, 1992

Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Ave.  
Portland, OR 97204

Gentlemen:

I am concerned about the wastewater pollution permit for the new pulp plant at the James River Paper Company facility at Halsey.

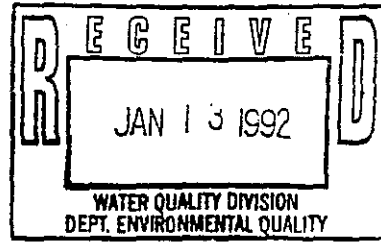
You should not allow further degradation of the water quality of the Willamette River. As a Corvallis resident and taxpayer, I would not want to see the future growth of Corvallis limited by additional waste load allocation to the James River Company, or forced into expensive wastewater treatment processes because of waste load allocations allowed to upstream dischargers.

Would the waste load allocation proposed for James River also increase Corvallis costs of water supply for water taken from the river for municipal use?

Yours sincerely,  
*Fred Hirsch*  
Fred Hirsch

Susan C. Danver J. 1.  
1021 NW 32nd St.  
Corvallis, OR 97330  
January 5, 1992

Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204



Dear Water Quality Division:

I write to you in regards to the water quality of the Willamette River and specifically the James River Paper Company's wastewater pollution permit. I would like the State of Oregon to maintain a high anti-degradation standard for the Willamette River. I believe rivers are to be an avenue for healthy life, not a corridor for easy/inexpensive waste disposal. I would like the water quality of the Willamette River to improve, not to be degraded further. Spiritually, a clean Willamette River is important to Oregonians, its wildlife, and other citizens of the world.

A wastewater pollution permit is currently being considered for the James River Paper Company. The timing for this permit seems awkward. Why was this permit not studied before plant construction began in March 1991? However, with this delay already having occurred, it seems wise to postpone this permit decision to a point in time when it can be studied in conjunction with the City of Corvallis' wastewater permit renewal and Pope and Talbot's wastewater permit renewal. In that way the Department of Environmental Quality would have a grasp of the total BOD load to be placed on the river near Corvallis. And, if cutbacks of BOD would have to occur, the responsible parties could share in the reduction. I do not wish the Willamette River to be compromised because of political "timing" mistakes (i.e. since "they" have a permit, we deserve one also.) Again, I suggest all three permits be studied at the same time.

Please keep me informed in this process. Thank you.

Sincerely,

Susan C. Danver

*Corvallis Hearing*

3390 NW Tanager  
Corvallis, OR 97330  
January 5, 1992

Oregon DEQ  
811 SW 6th Ave.  
Portland, OR 97204

Gentlemen:

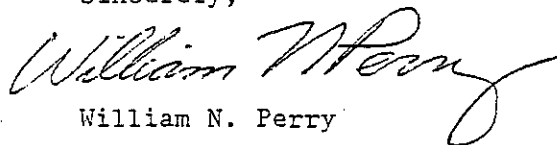
My name is William Perry. I moved to Corvallis 12 years ago to attend graduate school at Oregon State University. Having received a masters degree in business administration, I decided to stay in the area to work and raise my family. I earned my bachelor of science degree in natural resource management with an emphasis in fisheries and wildlife from California Polytechnic State University. I am an avid sportsman and spend a great deal of time on Oregon's lakes and streams and in the forests.

In the past I have worked with such organizations as Northwest Steel-headers, Oregon Rivers Council and Oregon Trout on environmental issues affecting Oregon fisheries. I consider myself to be environmentally aware and qualified to assess the impact of the proposed James River Recycling Plant on the Willamette River and its related fisheries. Having reviewed the Oregon DEQ's special conditions for waste water discharge for this permit, it is my assessment that the operation of the recycling plant will have an insignificant impact on Willamette River water quality and fish habitat.

On the other hand, the James River Plant will provide significant benefits to the environment in Oregon, Washington and California by recycling 450 tons per day of office waste paper that would otherwise be destined for landfills that are rapidly filling and in short supply. The recycling of a large quantity of office waste paper would mean a significant reduction in timber for paper production at a time when there is a timber shortage and mills are closing. Finally, the recycling plant will provide 50 new quality jobs for area residents, the creation of many more jobs in establishing the recycling network, and possibly save mill worker's jobs because timber that would otherwise be used in making paper could be diverted to saw mills.

I urge the Oregon DEQ to issue the proposed discharge permit to James River Company so that all Oregonians and the environment will receive the benefits of large-scale paper recycling. Let Oregon once again be a leader in recycling and an example to other states of what a responsible solid waste management program can accomplish.

Sincerely,

  
William N. Perry

COLUMBIA PACIFIC BUILDING  
AND  
CONSTRUCTION TRADES COUNCIL

AFL-CIO



January 2, 1992

TO: OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

FROM: WILLIAM W. MEHRENS  
EXECUTIVE SECRETARY  
COLUMBIA PACIFIC BUILDING TRADES COUNCIL

RE: JAMES RIVER, HALSEY, NPDES PERMIT

The Columbia Pacific Building Trades Council represents 40 Local Unions and approximately 16,000 construction workers in NW Oregon and SW Washington. The majority of these Unions serve a statewide membership.

The current crisis in the wood products industry also affects the construction industry. This new process can aid in minimizing the effects of this crisis by serving many statewide goals and needs.

One major goal is to reduce the flow of solid waste filler to Oregon landfills by over 300 tons per day. It will also soften the need for wood fibre at a controversial time. It will add 60 new permanent high wage jobs in a very depressed industry.

The State of Oregon needs to encourage it's industrial employers to make major capital expenditures such as this to protect the standard of living of Oregonians.

We need to maintain an environmentally sound industrial base with good full time family wage jobs and partime construction jobs.

On behalf of the hundreds of construction workers utilized by James River at Halsey now and in the future we would we encourage the DEQ to grant this discharge permit as it not only meets or exceeds Oregons stringent environmental standards but also meets or exceeds Oregons economical needs.

SINCERELY;

WILLIAM W. MEHRENS  
EXECUTIVE SECRETARY

*Deq Morris*

COMMENTS OF THE  
NORTHWEST PULP AND PAPER ASSOCIATION

DEQ'S PROPOSED NPDES PERMIT FOR THE  
JAMES RIVER RECYCLING MILL AT HALSEY

JANUARY 2, 1992

NWPPA is here to support the issuance of an NPDES permit for the operation of the James River Corporation's recycled fiber de-ink mill at Halsey. The construction and operation of this plant is representative of the longstanding and continuing efforts of the pulp and paper industry to support recycling. This commitment to recycling by James River takes us a step closer to realization of the industry's goal of achieving a 40 percent recycling rate by 1995.

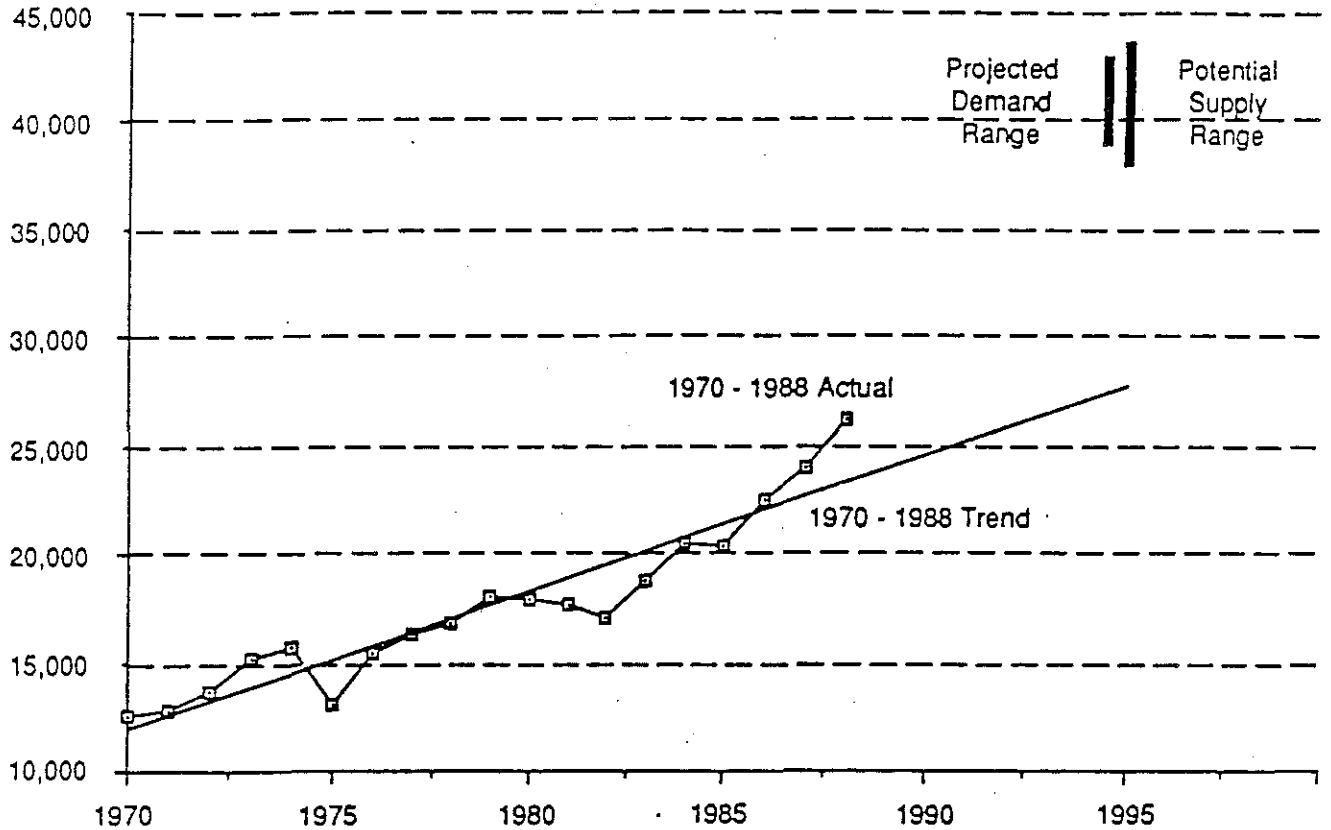
Achieving a 40 percent recycling rate requires the recovery and reuse of about 40 million tons of waste paper—a 50 percent increase over the 1988 level. With the heightened demand for recycled content in paper and paperboard products, the industry is committed to doing more at a time when paper materials already account for over 80 percent of post-consumer recycling. In the Pacific Northwest, paper manufacturers are responding again with new capital investments in recycling that will create jobs and help to reduce the amount of waste sent to landfills.

The paper industry cannot go this alone. State and local governments and citizens must assist the industry by ensuring that paper collected for recycling is clean and sorted. Separation and collection efforts will be the limiting factor in meeting the industry's 40% recovery goal.

At issue today is approval of the NPDES permit for the Halsey recycling project that will allow for a small increase in nutrient and solids loading to the Willamette River. The mill will install state-of-the-art pollution control equipment to reduce these loadings to a minimum. When viewed from a multi-media perspective, this facility will have a positive environmental impact. Recycling avoids landfilling of waste papers; major new facilities like this one will develop and sustain a long term local economy in waste paper, and thus encourage more local collection. The water discharges from the recycling operation will cause no noticeable impact to the river. On balance, this project benefits the environment.

At stake is the future of recycling in Oregon and the Northwest. The DEQ and the EQC should resoundingly approve of the efforts of James River by issuing an NPDES permit for the new Halsey recycling and de-inking facility.

# Paper Recycling: A 40 % Goal



**Recovery Trends For All Grades of Waste Paper - 1970 to 1995  
(In Thousands of Short Tons)**

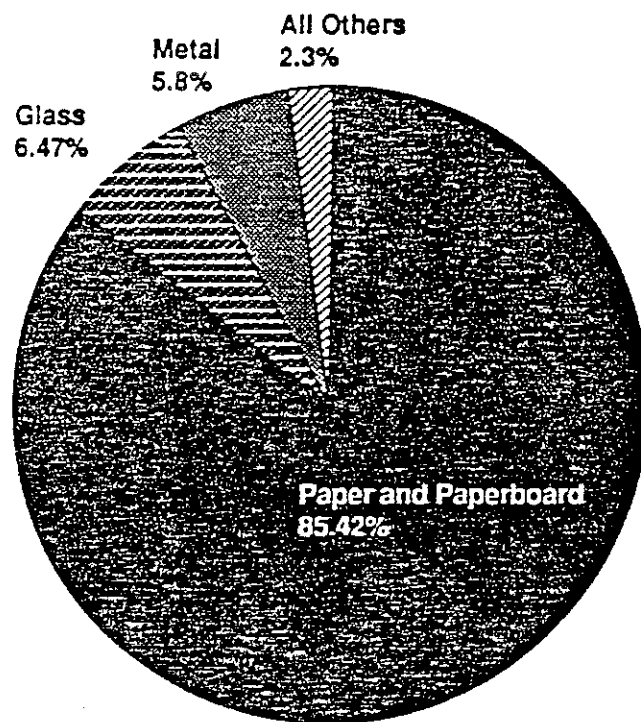
Source: American Paper Institute and Franklin Associates, Ltd.



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# Paper Leads Recycling

## Percentage of Post-Consumer Waste Material Recovered for Recycling (By Weight)



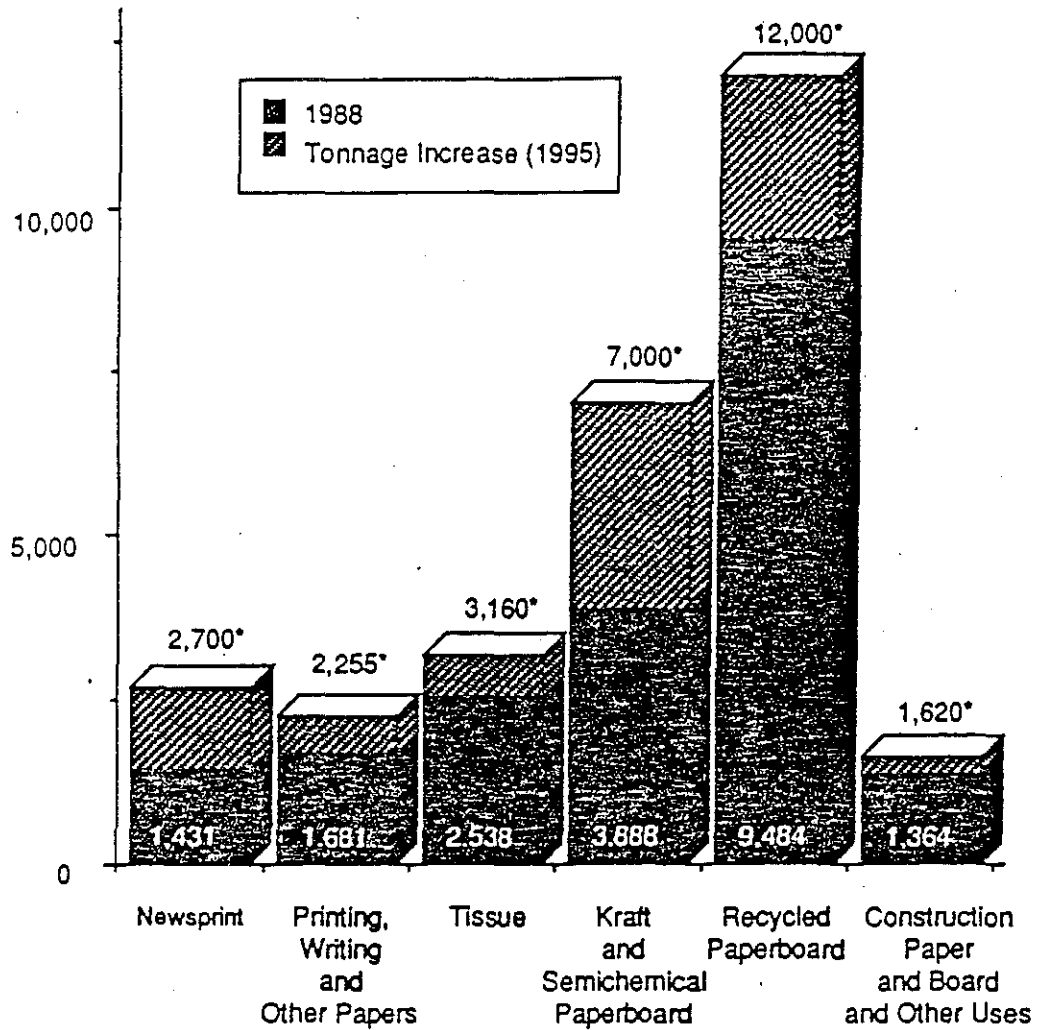
Source: Franklin Associates, 1991



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# Domestic Waste Paper Consumption by End Use

(In Thousands of Short Tons)



**Total Domestic Waste Paper Consumption 1988.....20.4 million tons**  
**Total Projected Domestic Waste Paper Consumption 1995. ....28.7 million tons**

\*Projected total tonnage figures for 1995

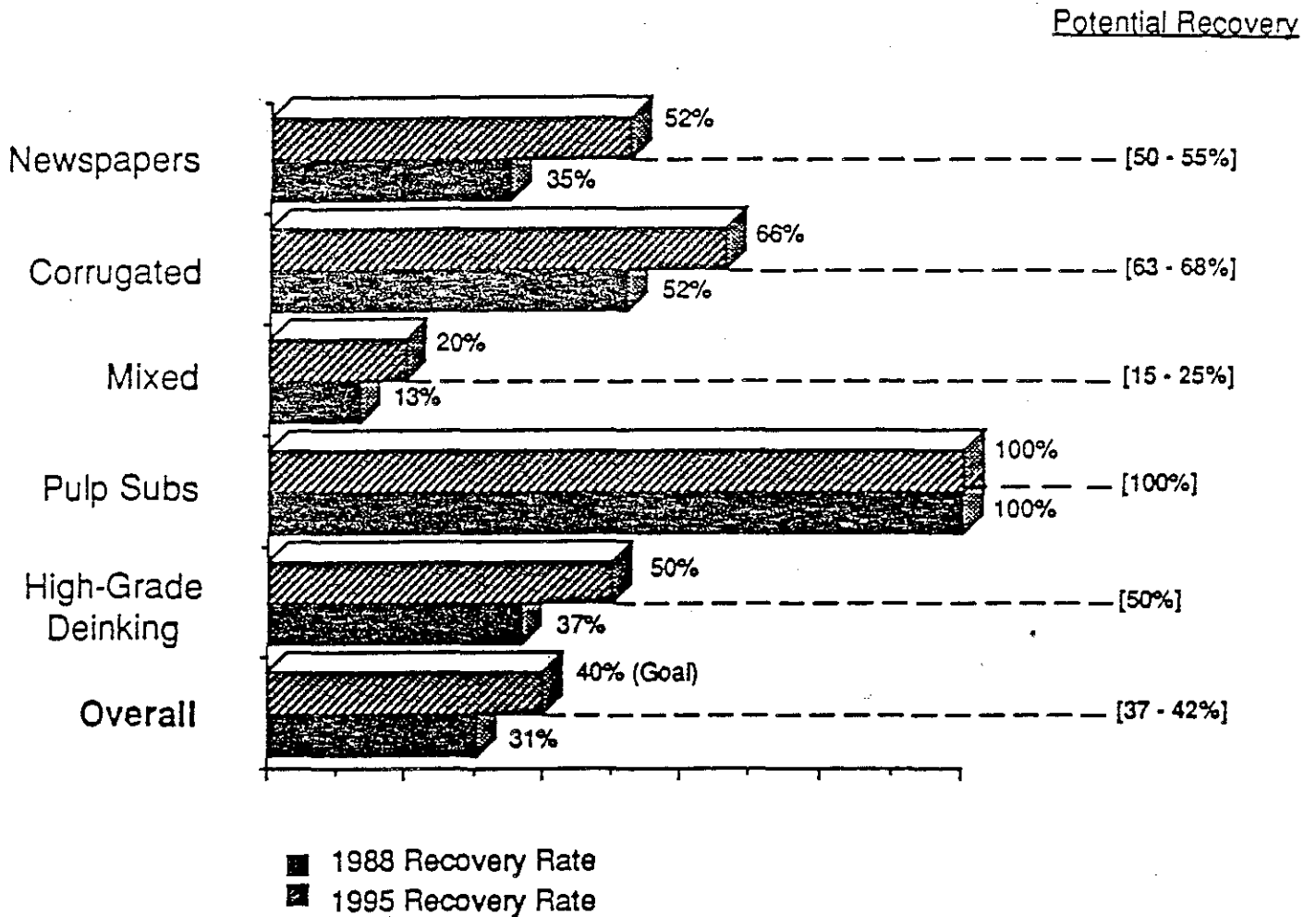
Source: American Paper Institute and Franklin Associates, Ltd.



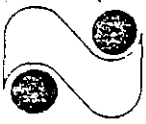
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# Potential Waste Paper Recovery Rates



Source: American Paper Institute and Franklin Associates, Ltd.



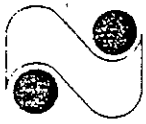
## Recycling in Washington and Oregon

### Washington Paper Mills Using Recycled Paper As Part of Their Fiber Supply

Washington Mills	Products	Fiber Supply
Boise Cascade, Steilacoom	Newsprint; 545 tons/day	\$90 million project initiated to install deinking plant and convert to 40 percent recycled content newsprint
Boise Cascade, Vancouver	Envelope and office paper; 325 tons/day	10% post-consumer, 50% total recycled, by weight; deink 120 tons/day on site
Boise Cascade, Wallula	Corrugating medium and fine papers; 895 tons/day	10% recycled; one paper machine can utilize up to 25%, one up to 3%; restrictions based on finished product characteristics
Container Corp. of America, Tacoma	Core stock and linerboard; 100 tons/day	100% recycled
Daishowa America Co. Ltd, Port Angeles	Directory stock; 400 tons/day; after deinking plant on line, 40 percent recycled fiber	\$400 million deinking plant for processing waste paper for directory production, capacity 190 tons/day; target 1992
Georgia Pacific, Bellingham	Industrial and personal care products; 250 tons/day	None at this time
Grays Harbor Paper Co., Hoquiam	Office and printing papers; 375 tons/day	Two product lines use 3,000 tons post-consumer and 500 tons pre-consumer/year
Inland Empire Paper Co., Millwood	Newsprint; 225 tons/day	Install deinking system to produce 40 percent recycled-content newsprint
James River, Camas	Office paper, tissue; 1,450 tons/day	Preparing to accept secondary fibers from sister facility in Oregon in 1992
Keyes Fibre, Wenatchee	Fruit packaging trays and pads	100% recycled
Longview Fibre, Longview	Corrugating medium; kraft board and papers; 2,600 tons/day	More than 10%; installed \$12.5 million old corrugated pulper in 1989 and expanded in 1991
Ponderay Newsprint, Usk	Newsprint; 585 tons/day	None at this time
Port Townsend Paper Co.	Unbleached kraft pulp and kraft paper; 550 tons/day	5% recycled in some grades

---

Washington Mills	Products	Fiber Supply
Scott Paper, Everett	Sanitary paper products; 500 tons/day	Small quantities of post-industrial fibers; exploring ways to incorporate additional secondary fiber
Simpson Tacoma Kraft	Kraft natural and mottled white linerboard; bleached and natural grocery bag; multiwall shipping sack; saturating and converting papers; 900 tons/day	100 tons/day old newsprint by Spring 1992
Sonoco, Sumner	Core and tube board, partition board, folding boxboard, jute linerboard; 65 tons/day	100% recycled
Weyerhaeuser, Longview	Corrugating medium 330 tons/day Bleached board and fine papers; 1044 tons/day NORPAC, newsprint; 2300 tons/day	Approximately 20% recycled content Approximately 1-2% recycled content Approximately 25% recycled content



## Recycling in Washington and Oregon

### Oregon Paper Mills Using Recycled Paper As Part of Their Fiber Supply

Oregon Mills	Products	Fiber Supply
Boise Cascade, St. Helens	Printing papers, kraft specialties, tissue products; 810 tons/day	30% sawdust; de-inking being considered
Georgia Pacific, Toledo	Kraft paper bags and linerboard; corrugating medium; 1755 tons/day	More than 25% recycled; kraft bags Green Cross Certified
International Paper, Gardiner	Kraft containerboard; 900 tons/day	9% recycled
James River, Clatskanie WAUNA	Newsprint, uncoated groundwood; business and converting; tissue and toweling; 1150 tons/day	Preparing to use secondary fibers from Halsey plant
James River, Halsey	Tissue, communication paper; 265 tons/day. New secondary fiber mill to produce 300 tons/day recycled pulp	By 1992, utilize fiber from \$65 million secondary fiber plant; mill to use 450 tons/day mixed waste paper
Simpson, West Linn	Coated Papers; 500 tons/day	Beginning early 1992, mill will use at least 50% recycled
Smurfit, Newberg	Newsprint; 1060 tons/day	55% recycled
Smurfit, Oregon City	Newsprint; 650 tons/day	57% recycled; magazine deinking facility on-site
Weyerhaeuser, North Bend	Corrugating medium; 570 tons/day	50% recycled
Weyerhaeuser, Springfield	Kraft linerboard; 1600 tons/day	15% recycled; proposed \$40 million system to process 450-tpd
Willamette Industries, Albany	Linerboard and bagpaper; 1200 tons/day	More than 40% recycled

12.6.91



## Northwest Environmental Defense Center

10015 S.W. Terwilliger Blvd., Portland, Oregon 97219  
(503) 244-1181 ext.707

December 31, 1991

Fred Hansen, Director  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

Dear Mr. Hansen:

I am writing this letter on behalf of the Northwest Environmental Defense Center (NEDC) concerning the draft NPDES permit for James River Paper Company, Inc.

My educational background includes a B.S. in Chemistry and a Masters degree in Hazardous Waste Management, both from Arizona State University. Prior to moving to Oregon, I worked for the State of Arizona as a manager within the State's environmental laboratory.

NEDC is extremely sensitive to the need for companies and facilities, such as James River, to recycle wastes. It is from this perspective that NEDC has chosen to comment on the proposed NPDES permit. It is not the goal of NEDC to hinder or prevent the issuance of a permit that would be used for such a beneficial purpose. We are only concerned that potential detriments be identified, if possible, and be minimized prior to the issuance of a final permit. NEDC has the following concerns with the findings of the Department, contained in the permit Evaluation Report, justifying the issuance of an NPDES permit to James River.

### Monitoring Requirements for Outfall B

Neither the information provided by James River nor the DEQ Evaluation Report specifies what types of toxic pollutants may be present in the discharge or what their individual concentrations or combined toxicity may be. The only specific compound or parameter mentioned other than BOD, TSS, pH, total phosphorus, and ammonia is that dioxin will not be a problem at James River due to the non-chlorinated process being utilized.

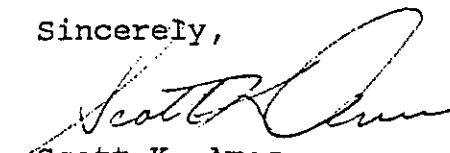
If the Department has information as to what possible toxic pollutants may be present, it should make all of that information available to allow for meaningful public comment. If the Department does not have any specific information as to toxic pollutants, the issuance of a permit should be delayed until this information can be obtained, distributed to the public, and another public comment period provided.

The fact that the proposed permit combines two dissimilar effluents only compounds the problem. Will there be any reactive chemical species present in either effluent that could produce toxic by-products not present in either effluent initially? The Department addresses the topic of toxic pollutants in their Evaluation Report but relies on data from other plants using similar technologies as the proposed James River operation. Do these other plants using technologies similar to James River combine their undiluted effluent with undiluted effluent, similar to that of Pope & Talbot, and then pipe the combined effluent four miles before discharging into a water body?


The sampling of the combined effluent is an issue not addressed in the Department's Evaluation Report, and thus is not contained in the draft permit, and NEDC feels the Department should consider and address this issue. The four mile discharge pipe provides a finite reaction time, dependant on flow rate, for the combined dissimilar effluents to mix and potentially react. Steps should be taken to insure that the samples taken from the combined effluents reflect the true nature of the discharge actually being emitted into the river. Field samples are routinely iced down to 4 degrees C immediately after sampling, therefore, samples taken near the point where the effluents are mixed may not be given ample opportunity to react prior to cooling. Samples for bioassay should be withdrawn from the pipeline at a point immediately prior to being discharged into the river so that any reactions that would be of concern would be allowed occur.

The initial monitoring schedule for the bioassays is not adequate to protect the river and the public from the combining of dissimilar effluents with unknown consequences. Other than the monitoring requirements specified for parameters with numerical standards enumerated in the draft permit, the public has no assurance that the combined effluent is not unacceptably toxic. Until the Department can demonstrate that the level of toxicity of the proposed effluent will routinely pass the required bioassay tests for Outfall B, monitoring by bioassay should be much more frequent than once every three months.

Sincerely,



Scott K. Ames  
Executive Director



December 30, 1991

Attn: Mr. Jerry E. Turnbaugh  
Dept. of Environmental Quality  
Water Quality Divisions  
811 S.W. Sixth  
Portland, OR 97204

Dear Mr. Turnbaugh:

This letter is being written to show CRS Sirrinc Engineers' support for the new James River Corporation Halsey Recycling Plant in Halsey, Oregon. We support this effort of James River as an important business venture in the Pacific Northwest that will create and preserve new and existing jobs, establish a major recycling market, reduce municipal solid waste disposal from landfills and is in response to continually growing customer and consumer demand for quality recycled paper products.

We at Sirrinc sincerely hope this important business venture by James River is fully supported as well by the Oregon Department of Environmental Quality and that all necessary required permitting of this facility is shortly forthcoming.

Respectfully,



David L. Poler, P.E.  
Sales Manager  
Northwest Division

DLP:plh

CRS Sirrinc Engineers, Inc.  
Post Office Box 5210  
Portland, Oregon 97208-5210  
503 624-3000  
Fax 503 624-3001  
A Subsidiary of CRSS Inc.  
People achieving unequalled solutions...

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DEC 31 1991

MAE YIH  
LINN AND BENTON COUNTIES  
DISTRICT 19

REPLY TO ADDRESS INDICATED:

S 214 State Capitol  
Salem, OR 97310-1347  
Phone (503) 378-8847  
FAX 378-6604  
 34465 Yih Lane NE  
Albany, Oregon 97321  
Phone (503) 327-2666  
FAX 327-1942



OREGON STATE SENATE  
SALEM, OREGON  
97310-1347

COMMITTEES  
Member:  
Joint Legislative Ways and Means Committee  
Subcommittee on Education  
Subcommittee on General Government  
Joint Legislative Audit Committee  
Senate Committee on Redistricting

December 30, 1991

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
RECEIVED  
JAN 10 1992

Environment Quality Commission  
Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

OFFICE OF THE DIRECTOR

Dear Chair Wessinger and Commission Members:

SUBJECT: Proposed James River Permit

I am writing to express strong support for the James River Recycling Plant's water discharge permit. The James River Halsey Plant is an important economic venture. It will create jobs for the rural communities, establish a major recycling market for the Northwest and will use the best available technology to protect the quality of the Willamette River.

I do, however, concur with Albany City's equity concern regarding the disparate treatment of municipal and industrial dischargers. DEQ records from 1989 indicate that the six industrial dischargers contributed approximately 42% of the total BOD load to the river while the 11 municipal dischargers contributed only 17%. The balance of the BOD load comes from nonpoint and natural sources.

The two points Albany City makes regarding the different standards are well taken. Currently Albany City is operating at 20 mg/l BOD. They have been asked to restrict this to 10 mg/l BOD with their next expansion project while the new industrial permit for James River is being proposed at an allowable level of 70 mg/l for BOD. Additionally, the current policy of allowing an industrial user to discharge directly to a receiving water and obtain a significant economic advantage over a similar industrial user locating within a city and discharging through the municipality's treatment system not only creates a real economic disadvantage for the municipal industrial user but also conflicts with our land use policies.



December 30, 1991

Page 2

It is hoped that the capacity of the river to assimilate pollutant loads can be identified with greater certainty in June 1993 when the state's study of the Willamette River will be completed. Once it is identified, the state needs to conduct a comprehensive scientific, economic, and policy analysis of the effect of various load allocation strategies. This is critical because the present policy of allocating significant portions of remaining assimilative capacity to industries may very well have the effect of tremendous cost increases for water and wastewater treatment within each of the municipalities.

Again, I wish to express strong support for James River's water discharge permit. At the same time, I hope the Commission will look at the long term work that needs to be done in a better and more equitable distribution of the river's assimilative capacity.

Thank you very much for your consideration of my suggestions.

Yours sincerely,



Mae Yih  
State Senator

MY:dc

cc: Judge John C. Beatty, Jr., Chair, Willamette River Study,  
Technical Advisory Steering Committee  
Fred Hansen, Director, Department of Environmental Quality  
Jeff Manchester, Vice President, James River Halsey Mill  
Halsey, Oregon  
Keith Rohrbough, Mayor, City of Albany, Oregon

December 26, 1991

Dave Mazza, Chair  
Oregon Chapter, Sierra Club  
1413 S.E. Hawthorne Blvd.  
Portland, OR 97214-3640

Dear Mr. Mazza:

Thank you for your interest in the James River (Halsey) permit public hearings.

In response to your's and others' requests, the Department has scheduled a third permit hearing in Corvallis on Wednesday, January 8, 1992.

The attached public notice was mailed December 20, using the same mailing lists that were used for mailing the first notice.

We look forward to receiving your comments.

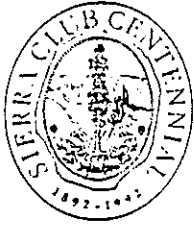
Sincerely,

*Stephanie Hallock*  
for  
Fred Hansen  
Director

FH:JET:crw  
IW\WC9\WC9455  
Enclosure: Second James River Public Comment Notice  
cc: Marys Peak Group, Sierra Club  
c/o K. Huber  
10425 Oak Hill Road  
Independence, OR 97351



811 SW Sixth Avenue  
Portland, OR 97204-15  
(503) 229-5696



**SIERRA CLUB**  
Oregon Chapter

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

**RECEIVED**

DEC 24 1991

OFFICE OF THE DIRECTOR

*Director's  
Letter  
NOA  
- RUSH  
before  
Jan 2*

December 13, 1991

Mr. Fred Hansen, Director  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, Oregon 97204

Re: Request for a Hearing  
NPDES Permit -- James River Corporation

Dear Mr. Hansen:

The Marys Peak Group Sierra Club has brought to our attention your Department's schedule for hearings on James River Corporation's application for a permit to substantially increase the discharge of BOD and TSS pollutants into the Willamette River.

We have over 11,000 members statewide who are concerned about effective, meaningful environmental regulation. On their behalf we request that you schedule an additional hearing in the City of Corvallis. The hearing should take place in the third or fourth week of January, when Oregon State University and the 509-J Consolidated School District are back in session.

The City of Corvallis, with a population in excess of 40,000, is the largest urban center immediately downstream from the proposed discharge site. It also is the home of Oregon State University, and its citizens tend to be informed and to want to participate in public decision processes that affect the quality of life in their community and in our State. While the two hearings already scheduled may meet the minimum requirements of your existing rules, the effect of holding hearings only on December 18 in Albany and January 2 in Portland is to exclude meaningful participation by a large, informed segment of the citizenry -- those whose presence is tied to the academic calendar.

To explore, enjoy and preserve the nation's forests, waters, wildlife, and wilderness...

Mr. Fred Hansen, Director  
Department of Environmental Quality

We believe public participation is extremely important in this case because granting the permit will have long-term implications, foreclosing options for future growth.

First, the Willamette River is our principal river in Western Oregon. It's quality affects the bulk of the State's population. For many communities it is both a fresh water source and a waste discharge sink. Its availability for recreation and its value as a quality of life amenity attract tourists and citizens to the State. Yet the State Government has barely begun its study of the river's total minimum daily load capacity ("TMDL"). Without TMDL information we believe there is a real risk that granting the NPDES permit now will foreclose expansion options for the City of Corvallis and Oregon State University, without informed public debate. An additional hearing in Corvallis would allow the local community to voice its concerns and offer constructive alternatives.

Second, Pope and Talbot, which uses the same discharge site, is expected to double its mill capacity without increasing its effluent discharge to the river. It would appear that it is technically feasible for the James River project to occur without any increase in effluent discharge, to do so economically, and to demonstrate sound corporate citizenship at the same time. In any case, the permit applications of these two businesses, which share a common waste treatment facility, cannot be treated in isolation.

Effective, fair and orderly environmental regulation requires that both the citizens and industry know where they stand, and that the concerns of the entire community be taken into account.

Since the quality of the Willamette River also is of concern to the citizens of Portland, we do not think that

Mr. Fred Hansen, Director  
Department of Environmental Quality

the second hearing should be moved from Portland to Corvallis. Rather, it is important that additional affected communities also be given a meaningful opportunity to participate. For this reason we request that an additional hearing be held in the City of Corvallis.

Sincerely yours,

SIERRA CLUB

*Dave Mazza*  
DAVE MAZZA, CHAIR  
OREGON CHAPTER

cc: Hon. Barbara Roberts  
Hon. Cliff Trow  
Hon. Tony Van Vliet  
Hon. R. Charles Vars  
Gerald Seals, City Manager  
Lydia Taylor, Administrator  
Karl R. Huber, Chair MPG

Please reply to the Sierra Club Oregon Chapter Office, 1413 SE Hawthorne Blvd, Portland Oregon 97214-3640, with a copy to the Marys Peak Group Sierra Club, c/o K. Huber, 10425 Oak Hill Road, Independence, Oregon 97351.

BOB SHIPRACK  
CLACKAMAS COUNTY  
DISTRICT 23



COMMITTEES  
Member:  
Ways & Means

REPLY TO ADDRESS INDICATED:

- House of Representatives  
Salem, OR 97310-1347
- 22610 S Forest Park Rd.  
Beavercreek, Oregon 97004

HOUSE OF REPRESENTATIVES  
SALEM, OREGON  
97310

December 26, 1991

Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

Attn: Fred Hansen

Dear Fred,

I am writing to support the water quality waste discharge permit application of James River Corporation for its office paper recycling plant at Halsey.

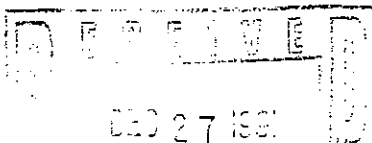
The intent of the Legislature in passing SB 66 was to encourage the establishment of new markets for recyclable materials. The new plant at Halsey will do just that. It will also reduce the amount of waste going to landfills and provide new family wage jobs in the Mid-Willamette Valley where they are badly needed.

I understand that the Willamette River can handle the effluent from the plant, and that James River's system will protect all uses of the river including drinking water.

This is a good economic and sound environmental project for Oregon that should be approved.

Sincerely,

Bob Shiprack  
State Representative  
District #23



*file*



PACIFIC POWER 200 South Ferry Street • P.O. Box 248 • Albany, Oregon 97321 • (503) 928-3311

December 20, 1991

Jerry E. Turnbaugh  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
Water Quality Division  
811 SW Sixth Avenue  
Portland OR 97204

Dear Mr. Turnbaugh:

*I am writing on behalf of Pacific Power, in support of the Halsey Recycling Plant's permit application before the Oregon Department Of Environmental Quality (DEQ). As a diversified electric company serving seven western states, our company is concerned about environmental stewardship and the economic well being of Oregon and the entire Northwest.*

*Oregon has long been a pioneer in moving aggressively to promote recycling and reuse of our natural resources. James River's Halsey recycling plant will help to ensure that the waste stream, that includes envelopes, computer paper, glossy brochures, and direct mail, is made into reusable paper instead of becoming another load of waste to our overburdened landfills. James River reports that the facility will recycle 450 tons daily, reducing the need to dump another 74 truckloads into our landfills.*

*Along with these clear environmental benefits, the Halsey Recycling Plant will strengthen Oregon's economy by creating 60 new jobs while supporting many indirect jobs within the recycling industry.*

*The James River plant should be granted its discharge permit, as the plant will operate in compliance with all Willamette River waste quality standards while bringing clear economic and environmental benefits to the state and region.*

Sincerely,

Dan Hitchcock  
Willamette Area Manager

pb

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DEC 20 1991



*file*

December 19, 1991

Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Ave  
Portland, OR 97204

Re: Proposed Discharge Permit for James River Corporation

To the best of my knowledge James River's Discharge Permit application complies with current DEQ discharge requirements. If this is the case, there should be no reason why JR shouldn't be granted the permit. If some person or municipality doesn't agree with the requirements, they should seek to change the standards by which future applications will be judged.

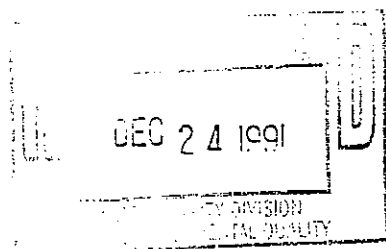
Even if the application "crosses the line," I think some latitude is in order because of the nature of the expansion--recycling paper which should result in decreasing the need to cut trees and in decreasing the volume of waste paper entering our rapidly shrinking landfills.

Let's help this company obtain raw material from a new source.

Sincerely,

*Tom Ahlers*

Tom Ahlers







250 BROADALBIN SW  
PO BOX 490  
ALBANY, OR 97321

(503) 967-4300  
FAX (503) 967-4330

December 19, 1991

Environmental Quality Commission  
Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

Dear Chair Wessinger and Commission Members:

SUBJECT: Proposed James River Permit

The Albany City Council wishes to convey our strong support for the successful completion and operation of the James River paper recycling plant at Halsey. Not only will this facility add important employment opportunities in the Southern Willamette Valley, but the very nature of this industry provides a unique opportunity to demonstrate Oregon's commitment to resource recovery and our receptiveness to industries which process recycled materials. Furthermore, we trust that your review of the proposed permit will consider the interests of all dischargers and users of the Willamette River.

We wish to express some equity concerns regarding the disparate treatment of municipal and industrial dischargers. Currently there are 17 permittees along the Willamette River. Six of these are industrial dischargers and 11 are municipal treatment plants. DEQ records from 1989 indicate that the six industrial dischargers contributed approximately 42% of the total BOD load to the river while the 11 municipal dischargers contributed only 17%. The balance of BOD load comes from nonpoint and natural sources. The proposed permit for James River plant will further add to this percentage spread between the two classes of users. We would like to make two important points regarding the different standards.

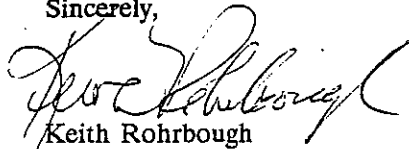
First, we recognize that the Willamette River can only accommodate a finite pollutant load without serious degradation to water quality. Hopefully, the capacity of the river to assimilate pollutant loads can be identified with greater certainty through the current Willamette River Study. Once it is identified, we believe that the State must conduct a comprehensive scientific, economic, and policy analysis of the effect of various load allocation strategies. The policy of allocating significant portions of remaining assimilative capacity to a few industries may very well have the effect of tremendous cost increases for water and wastewater treatment within each of the municipalities. We find it troubling, for example, that our current 20mg/L BOD treatment standard will likely be stiffened to 10mg/L with our next expansion project while the new industrial permit for James River is being proposed at an allowable level of 70 mg/L for BOD.

Environmental Quality Commission  
Page 2  
December 19, 1991

Secondly, we have difficulty with the notion that an industrial user can discharge directly to a receiving water and obtain a significant economic advantage over a similar industrial user locating within a city and discharging through the municipality's treatment system. This has land use policy implications that we feel have not been adequately addressed by the State.

Thank you for your consideration of our testimony.

Sincerely,



Keith Rohrbough  
Mayor

SWB\*:ldh

c: Governor Barbara Roberts  
Senator Mae Yih  
Representative Carolyn Oakley  
Fred Hansen, Director, DEQ  
Dick Benner, Director, DLCD  
Mel Joy, AMEDC  
Gerald Seals, City Manager, City of Corvallis  
Terry Smith, Public Works Department, City of Eugene  
Dan Eckels, City Administrator, City of Harrisburg  
Ed Sherman, James River Corporation, Halsey  
Steve Bryant, City Manager  
John Joyce, Public Works Director  
Helen Burns Sharp, Community Development Director  
Mark Yeager, Public Works Engineering/Utilities Manager

# METRO

2000 SW First Avenue  
Portland, OR 97201-5398  
(503) 221-1646  
Fax 241-7417

December 18, 1991

Mr. Jerry Turnbaugh  
Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

Dear Mr. Turnbaugh:

I wish to lend my support to the James River Paper Company's application for a National Pollutant Discharge Elimination System (NPDES) permit to discharge process wastewater to the Willamette River from its new recycled-fiber de-ink mill in Halsey.

Metro supports and encourages markets for materials recovered from the waste stream. Such markets are the critical final link in the recycling loop. The James River facility will greatly expand mill capacity to process a wide range of wastepapers being collected at increasing rates in the Portland region. It will also use materials from the Portland region that historically have been difficult to process and for which there has been low demand.

In short, this plant will facilitate Metro's vital recycling efforts; it offers extensive benefits to the Portland region and the state as a whole.

Sincerely,



Bob Martin  
Solid Waste Director

BM:jc

Executive Officer  
Rena Cusma

Metro Council

Tanya Collier  
Presiding Officer  
District 9

Jim Gardner  
Deputy Presiding  
Officer  
District 3

Susan McLain  
District 1

Lawrence Bauer  
District 2

Richard Devlin  
District 4

Tom DeJardin  
District 5

George Van Bergen  
District 6

Ruth McFarland  
District 7

Judy Wyers  
District 8

Roger Buchanan  
District 10

David Knowles  
District 11

Sandi Hansen  
District 12



# UNITED PAPERWORKERS INTERNATIONAL UNION

REGION XI

6882 Birchwood Court, N. • Keizer, OR 97303

**GORDON L. SWANSON**  
*International Representative*

Telephone  
(503) 390-4554

December 18, 1991

Good evening, my name is Gordon Swanson and I reside at 6882 Birchwood Court, North, in Keizer, Oregon which is approximately 50 miles downstream from the Halsey facility. I am an International Representative with the United Paperworkers International Union. Our organization represents approximately 3,000 members and their households in the State of Oregon, covering from Clatsop and Clackamas to Deschutes and Douglas Counties. I am here this evening to respectfully request the Department of Environmental Quality to approve the application for the National Pollutant Discharge Elimination System permit to discharge process wastewater from a recycled fiber, de-ink mill in Halsey, Oregon.

The United Paperworkers International Union is an environmentally conscious organization representing more than a quarter of a million members across the United States. Our organization is over 100 years old and our record is clear on promoting both safe and clean work places and communities for our members. I have worked in the pulp and paper industry for over 30 years and in that time have seen an overwhelming amount of changes in both attitudes and controls instituted toward environmental responsibility. During those thirty years in the industry, I spent over twenty years as a process control technician in a primary mill. I have seen first hand the changes in technology in the area of environmental quality control and have also watched as James River Corporation has taken the lead in utilizing state of the art equipment to assure a clean and safe worksite and community for their employees.

Not only as a representative of the employees at the James River, Halsey facility but also as a concerned citizen of the Willamette valley, I feel certain that the James River Corporation will continue to strive for continued improvement in the area of environmental quality. I see this use of recycled fiber as another indication by the James River Corporation to their commitment to the quality of life and being a good neighbor.

Thank you.

*Respectfully submitted,*  
*Gordon L. Swanson*





# CORVALLIS DISPOSAL CO.

P.O. BOX 1  
CORVALLIS, OREGON 97339  
503-754-0444



James River corporation  
Halsey Recycling Plant  
Testimony for DEQ public hearing  
December 18, 1991 @ 7:00 pm  
LBCC, College Center Building

Intro: My name is Jeff Andrews and I manage Albany-Lebanon Sanitation and Corvallis Disposal. These companies provide solid waste and recycling services in Linn and Benton Counties.

I am here tonight to show my support for the James River Recycling Plant. This plant will help improve our recycling programs in two ways: 1. We will have another, closer market for our high grade office papers. 2. We will be able to expand the materials we collect to include envelopes with windows, fax paper, carbonless paper and forms, and glossy papers. The expanded grades will help us double the recycling volumes we generate from our office paper customers. The acceptance of these new types of paper will make it easier for our customers to recycle their paper because more will be acceptable and we won't need to follow so many rules about what can't be recycled.

In closing, I want to emphasize my support for this plant because of the great recycling opportunities it will provide.

Comments by Jim Martin at the E.E.Q. open meeting at L.B.C.C.  
7 pm 12/18.91

*file*

*James River, Halsey*

I remember another public meeting in Corvallis in the late 1960's granting the original effluent permit to the original pulp company, I believe it was American Can Company at Halsey.

I testified in that meeting too, and as I recall 95% of the public input at that meeting was against granting a permit.

The D.E.Q., by a vote of 2 to 1, granted the permit on the assumption that it would only pollute the river a little bit. This on the face of the fact that the Willamette had just recently been cleaned up. That was a sad mistake! I hope we're not about to make the same mistake again.

Today we have TWO companies discharging into the river. The James River Company through the Pope and Talbot discharge. Now we have James River asking for a permit to discharge their own effluent into the river bypassing the Pope & Talbot pipe.

More pollution of the river! When will it stop?!

Steve Wolfe, operation manager of James River, told me that they remove almost everything except B.O.D.s (Biological Oxygen Demands) which will use some of the free oxygen in the river. This will be detrimental to the aquatic life in the river, not to mention the esthetic quality of what once was a beautiful stretch of water from the McKenzie R. to Corvallis.

Before issuing more pollution permits, these companies should clean up their act including the brown (lignin) color. I quote from Oregon Administrative Rules, D.E.Q. Biological Criteria:

340-41-027 "Waters of the State shall be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities."  
Copy enclosed.

I also quote from a letter of our governor, Barbara Roberts, written to me on December 10, 1991, paragraph 5:

*(COPY ENCLOSED)*

"I will not allow a pollution discharge into any water of the state that will threaten or impair identified beneficial uses."

During the winter run-off, this is no problem; but in late summer the problem can be identified with ease by sight and nose on a canoe trip from Irish Bend to Peoria Park.

It's commendable that the new James River plant will recycle newspapers, but not at the expense of our river; no matter what they promise. They don't have a good record in the state of Washington where, in 1991, they are rated 4th in a list of the 12 worst violators by the Washington State Department of Ecology.

I thank you for this public chance to express my views on a subject dear to my heart: the Willamette River.

JAMES H. MARTIN



*[Handwritten initials]*

MEMBER  
**NSWMA**  
National Solid Waste  
Management Associa

OREGON SANITARY SERVICE INSTITUTE

---

December 18, 1991

Jerry E. Turnbaugh  
Oregon Department of Environmental Quality  
811 SW Sixth  
Portland OR 97204

Dear Jerry:

Bruce Bailey, President of Oregon Sanitary Service Institute (OSSI), has asked me to communicate the Association's support for projects that enhance the market for recycled products.

The Halsey Recycling Plant will create jobs for the local community, hopefully create a new market for recycled office paper, and help reduce solid waste in landfills.

OSSI has consistently favored and encouraged projects that take an economic and efficient approach to the State of Oregon's leadership role on environmental issues.

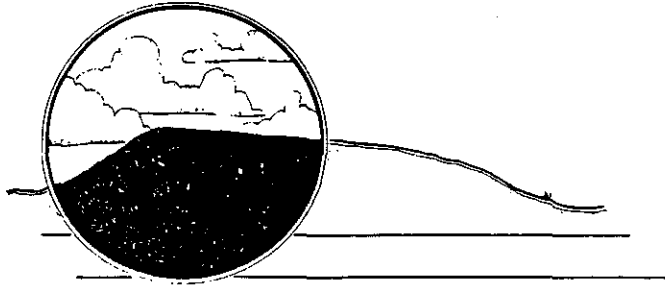
Sincerely,

A handwritten signature in black ink, appearing to read "Max Brittingham". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Max Brittingham  
Executive Director

MB:kjc

cc: Bruce Bailey  
Ed Sherman



*Jerry*

MARYS PEAK GROUP, SIERRA CLUB

P.O. BOX 863  
CORVALLIS, OREGON 97330

December 17, 1991

John Vial, Enforcement Officer  
Washington Department of Ecology  
Mail Stop PV 11  
Olympia, Washington 98504

Dear Sir,

The Marys Peak Group Sierra Club is developing information regarding the James River Paper Company, Inc., which has filed an application with the Oregon Department of Environmental Quality for a NPDES permit to discharge process wastewater from a new recycled-fiber de-ink mill in Halsey, Oregon, to the Willamette River.

The most of our members live in the Corvallis area which is down-river from the proposed mill. We are interested in documenting the corporate environmental responsibility of the James River Corporation and ask your help.

We understand that the DOE has recently released its 1991 Fiscal Year Enforcement Record. We would appreciate information regarding the relative status of the James River Corporation in the State of Washington in terms of number of violations, comparison with other permittees as to number of violations, as well as any other available information, such as the nature of the violations, penalties assessed, etc.

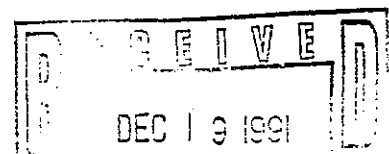
Please address the information to me.

Sincerely,

*Karl R. Huber (s)*

Karl R. Huber, Chair  
10425 Oak Hill Road  
Independence, Oregon 97351

cc: Liz Frenkel, Oregon Chapter Water Coordinator  
Lydia Taylor, Oregon Department of Environmental Quality  
Charles Vars, Mayor, City of Corvallis







## LINN COUNTY BOARD OF COMMISSIONERS

**RICHARD STACH**  
*Commissioner*

**DAVE SCHMIDT**  
*Commissioner*

**JOEL FOSDICK**  
*Commissioner*

---

*Linn County Courthouse  
P.O. Box 100, Albany, Oregon 97321  
(503) 967-3825 FAX: 926-8228*

December 17, 1991

Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Avenue  
Portland, OR 97204

RE: James River Waste Discharge Permit

Gentlemen:

The Linn County Board of Commissioners wishes to be on record in full support of approval of the request tendered by James River Paper Company. This application for a National Pollutant Discharge Elimination System (NPDES) permit to discharge process wastewater from a new recycled-fiber de-ink mill in Halsey should be approved without further restrictive changes.

It is not often that a new industrial activity or expansion of a current activity is a win-win situation for both the natural environment and the economy of the community. This application, however, represents just such an example.

The extraction of 300 tons per day out of our current wastestream hauled to landfills is a very laudable social action. The re-use of a net 300 tons per day also eliminates the need for 300 tons per day of virgin wood fibre that happens to be in shorter and shorter supply as lumber mills decline in their production output due to reduction of public timber supply. This production of needed paper products is therefore accomplished using less energy and chemicals than would otherwise be used in pulping virgin fibre. In fact, the mechanical process used to remove contaminants and the chlorine-free process for paper brightening is a state-of-the-art technology and environmentally very desirable.

The beneficial use of the Willamette River downriver from the point of discharge should be safely protected by the limits set for Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS). It is calculated that the discharged water will have no measurable impact on the river's BOD, color, or temperature.

The benefits expected to accrue to the Halsey area and Linn County can certainly be measured! Over 50 new family wage jobs will be directly created by this operation together with a multi-million dollar increase in assessed value of the James River plant facility. This is of critical importance in light of the recent losses of over 1,000 timber jobs in Linn County along with the expectation of many more job losses to come in the timber industry.

The fact that this new operation will enhance the long term viability of this James River mill facility should not be overlooked. The rapidly changing fibre supply is dramatically changing the paper industry. It is in the best interest of our communities that this enterprise remain competitive and prosperous.

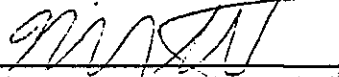
The Linn County Board of Commissioners strongly urges that this application be approved without delay and without restrictions above and beyond what have already been imposed.

Sincerely,

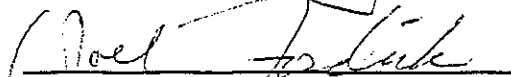
LINN COUNTY BOARD OF COMMISSIONERS



David R. Schmidt, Chairman



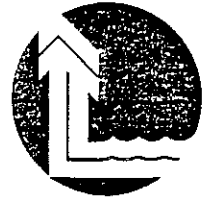
Richard Stach, Commissioner



Joel Fosdick, Commissioner

JERRY RUST  
LANE COUNTY BOARD OF COMMISSIONERS  
SOUTH EUGENE DISTRICT

Lane  
County



December 16, 1991  
WP bc/jr/00652/T

Jerry E. Turnbaugh  
Oregon Department of Environmental Quality  
811 SW 6th  
Portland, OR 97204

Dear Mr. Turnbaugh:

It is with great interest that I followed the progress of James River Corporation in siting a recycling plant at Halsey that will utilize waste paper. I feel that this is an important project from a number of perspectives: It is a clean industry setting a standard for these kinds of plants; it will create jobs; and very importantly, it will create more demand for recycled paper.

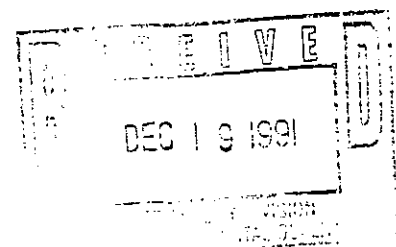
It has been my observation that lack of recycled goods and products is often the stumbling block in terms of making recycling pay. This is a very significant venture that will contribute to this entire region. I would like to go on record as supporting the proposal.

Sincerely,

A handwritten signature in cursive script that reads "Jerry Rust".

Jerry Rust  
Lane County Commissioner

JR:tn



Dear Friends, 12-66 ~~Jan~~  
Please schedule another hearing  
in Corvallis re. James River expansion  
project.

Would like it for 3rd wk. in January.

Thank you very much.

Jerry Roney  
611 NW 15th  
Corvallis, OR.  
97330

758-8567



*[Handwritten initials]*

December 16, 1991

Mr. Turnbaugh  
Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Ave.  
Portland, OR 97204

Dear Mr. Turnbaugh:

The Albany Area Chamber of Commerce whole-heartily supports the James River-Halsey Recycling Plant. The Chamber Board of Directors voted unanimously in favor of supporting this important business venture on December 10th. Not only will the Halsey plant create 50 new jobs, it will establish a major recycling market for the Northwest, thereby, contributing further to the environmental leadership of the State of Oregon.

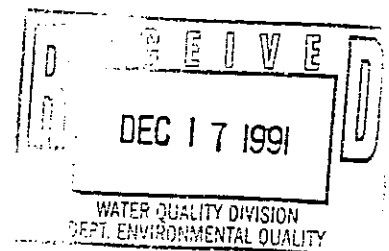
The Albany Area Chamber believes that this is a great opportunity for the DEQ to approve an operating permit without undue delay in light of all the good that will be done and the fact that water-quality standards will not be violated.

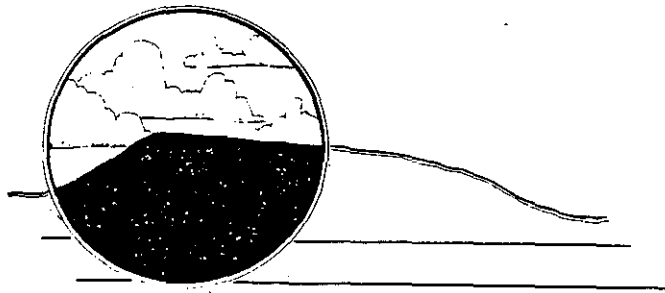
Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dick Mullican".

Dick Mullican  
President





~~7~~  
Jerry Turnbaugh  
file

MARYS PEAK GROUP, SIERRA CLUB

P.O. BOX 863

CORVALLIS, OREGON 97330

December 15, 1991

Ms. Lydia Taylor  
Administrator, Water Quality Division  
Department of Environmental Protection  
811 S.W. 6th Avenue  
Portland, Oregon 07204

Re: Request for a Hearing  
NPDES Permit -- James River Corporation

Dear Ms. Taylor:

We would appreciate your sending us a copy of the Staff Report and Staff Recommendations in the above matter.

Please send this material to:

Marys Peak Group Sierra Club  
c/o Karl R. Huber, Chair  
10425 Oak Hill Road  
Independence, Oregon 97351

We thank you in advance for your cooperation and assistance in this matter.

Sincerely yours,

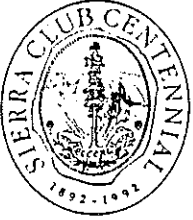
MARYS PEAK GROUP SIERRA CLUB

*Karl R. Huber*

KARL R. HUBER, CHAIR

12-27-91

Mailed copies of:  
1 - Public Notice  
2 - Draft Permit  
3 - Evaluation Report  
4 - ...



**SIERRA CLUB**  
Oregon Chapter

December 13, 1991

Mr. Fred Hansen, Director  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, Oregon 97204

Re: Request for a Hearing  
NPDES Permit -- James River Corporation

Dear Mr. Hansen:

The Marys Peak Group Sierra Club has brought to our attention your Department's schedule for hearings on James River Corporation's application for a permit to substantially increase the discharge of BOD and TSS pollutants into the Willamette River.

We have over 11,000 members statewide who are concerned about effective, meaningful environmental regulation. On their behalf we request that you schedule an additional hearing in the City of Corvallis. The hearing should take place in the third or fourth week of January, when Oregon State University and the 509-J Consolidated School District are back in session.

The City of Corvallis, with a population in excess of 40,000, is the largest urban center immediately downstream from the proposed discharge site. It also is the home of Oregon State University, and its citizens tend to be informed and to want to participate in public decision processes that affect the quality of life in their community and in our State. While the two hearings already scheduled may meet the minimum requirements of your existing rules, the effect of holding hearings only on December 18 in Albany and January 2 in Portland is to exclude meaningful participation by a large, informed segment of the citizenry -- those whose presence is tied to the academic calendar.

Mr. Fred Hansen, Director  
Department of Environmental Quality

We believe public participation is extremely important in this case because granting the permit will have long-term implications, foreclosing options for future growth.

First, the Willamette River is our principal river in Western Oregon. It's quality affects the bulk of the State's population. For many communities it is both a fresh water source and a waste discharge sink. Its availability for recreation and its value as a quality of life amenity attract tourists and citizens to the State. Yet the State Government has barely begun its study of the river's total minimum daily load capacity ("TMDL"). Without TMDL information we believe there is a real risk that granting the NPDES permit now will foreclose expansion options for the City of Corvallis and Oregon State University, without informed public debate. An additional hearing in Corvallis would allow the local community to voice its concerns and offer constructive alternatives.

Second, Pope and Talbot, which uses the same discharge site, is expected to double its mill capacity without increasing its effluent discharge to the river. It would appear that it is technically feasible for the James River project to occur without any increase in effluent discharge, to do so economically, and to demonstrate sound corporate citizenship at the same time. In any case, the permit applications of these two businesses, which share a common waste treatment facility, cannot be treated in isolation.

Effective, fair and orderly environmental regulation requires that both the citizens and industry know where they stand, and that the concerns of the entire community be taken into account.

Since the quality of the Willamette River also is of concern to the citizens of Portland, we do not think that



Mr. Fred Hansen, Director  
Department of Environmental Quality

the second hearing should be moved from Portland to Corvallis. Rather, it is important that additional affected communities also be given a meaningful opportunity to participate. For this reason we request that an additional hearing be held in the City of Corvallis.

Sincerely yours,

SIERRA CLUB

*Dave Mazza*  
DAVE MAZZA, CHAIR  
OREGON CHAPTER

cc: Hon. Barbara Roberts  
Hon. Cliff Trow  
Hon. Tony Van Vliet  
Hon. R. Charles Vars  
Gerald Seals, City Manager  
Lydia Taylor, Administrator  
Karl R. Huber, Chair MPG

Please reply to the Sierra Club Oregon Chapter Office, 1413 SE Hawthorne Blvd, Portland Oregon 97214-3640, with a copy to the Marys Peak Group Sierra Club, c/o K. Huber, 10425 Oak Hill Road, Independence, Oregon 97351.



## GORDON TRUCKING INC.

December 13, 1991

Oregon Department of Environmental Quality  
Attention: Jerry E. Turnbaugh  
811 SW Sixth  
Portland, OR 97204

Dear Mr. Turnbaugh:

I am very pleased to receive this opportunity to contact you in support of James River's Secondary Fiber Mill at Halsey, Oregon. While no expert on the complicated workings of the wastewater treatment system and its environmental impact, I do have some strong views about the project's positive economic and environmental impacts in general.

Gordon Trucking has over 600 employees, 44% of which are based in Oregon. We have been engaged in business with James River for a number of years and are very excited about this new project. The start-up of this new facility will certainly afford us the opportunity to add jobs in and around the Halsey mill. Because of the significant impact this new traffic pattern will have, we also believe we will be able to add additional jobs as an indirect result of the effect of these new traffic patterns.

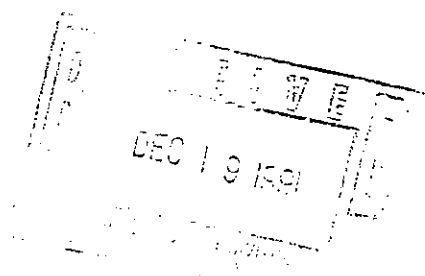
Additionally, the mill will create a tremendous market for scrap office paper that did not previously exist, allowing for more recycling and less use of virgin fiber. The mill has made every attempt to use scrap from the nearest possible sources to gain greater efficiency and cost savings, with Portland and Seattle being the primary sources for scrap. This will undoubtedly create more jobs for scrap collectors throughout the Northwest.

We are proud to be involved in such an ambitious project, creating economic growth and jobs during this recessionary climate. Furthermore, we feel our involvement will allow us to display our commitment to the environment and a leadership role in finding solutions to environmental concerns. We sincerely hope that the State of Oregon feels the same way and will take this opportunity to display its support as a leader in innovative approaches to environmental concerns.

Please feel free to contact me at 800-426-8486 if you have any further questions or concerns.

Sincerely,

Larry Gordon  
President & CEO  
Gordon Trucking, Inc.



# ALBANY-LEBANON SANITATION CO.

December 11, 1991

Attention: Jerry E. Turnbaugh  
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY  
811 S.W. Sixth  
Portland OR 97204


I would like to convey my support for the new James River Halsey Recycling Plant.

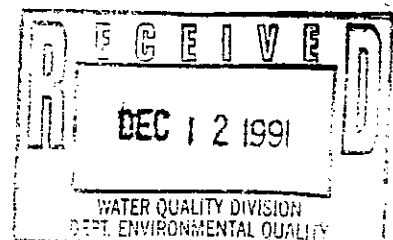
This plant will offer a new market for recyclable paper and add to the tremendous strength the State of Oregon has shown in it's commitment to recycling and environmental concerns.

The new mill will also create new jobs and promote the general economy.

Very Sincerely Yours,

ALBANY-LEBANON SANITATION CO.

  
Dean Spady  
Operations Manager





Rust  
International  
Corporation

RUST AND QUALITY — A Company and a Commitment

December 11, 1991

Mr. Jerry E. Turnbaugh  
Oregon Department of Environmental Quality  
811 S. W. Sixth Avenue  
Portland, Oregon 97204

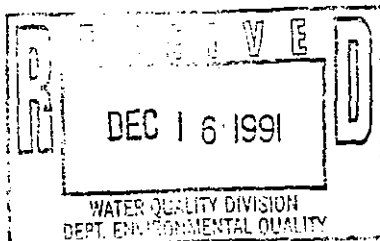
Subject: James River Paper Company  
Halsey Recycling Plant  
Halsey, Oregon  
NPDES PERMIT APPLICATION

Dear Mr. Turnbaugh:

RUST International enthusiastically supports the development of this environmentally positive project. As the leading design/-constructor of pulp and paper facilities in the United States, we see few projects that have as positive an effect on the environment.

Through the removal of 450 TPD of waste paper from the amount going to our landfills and creating 300 TPD of recycled paper with no virgin fiber and reduced specific energy consumption, James River will have a net positive overall effect on our environment. Added to this is the careful design of the facility to minimize water use and the fact that most of that water is recycled effluent from the existing paper mill.

RUST strongly supports this project that will provide jobs in these economically trying times and help Oregon maintain its leadership position as the most environmentally conscious state in the United States.



Sincerely,

RUST INTERNATIONAL CORPORATION

Thomas A. Robicheaux  
Manager - Northwest Operations

TAR/ja

DISTRIBUTION

bcc:

P. Herbert  
J. Davis  
S. Straub  
J. Shouse

Dick Sleeter w/o attachments

BARBARA ROBERTS  
GOVERNOR



*(Copy)*

OFFICE OF THE GOVERNOR  
STATE CAPITOL  
SALEM, OREGON 97310-0370  
TELEPHONE: (503) 378-3111

December 10, 1991

James H. Martin  
962 N. W. Polk  
Corvallis, Oregon 97330

Dear Mr. Martin:

Thank you for your recent letter concerning pollution in the Willamette River. I share with you a concern for protecting the quality of the Willamette River. The Willamette is a barometer of how well we are protecting the environment in Oregon. I want the river protected to the highest standards possible and I do not want to see any pollution source allowed to pollute the river above the instream water quality standards and effluent limitations set by the Environmental Quality Commission (EQC) and Department of Environmental Quality (DEQ).

I have discussed your concerns with Fred Hansen the Director of the DEQ. He assures me that the Department is requiring the highest and best technology standards possible for the Pope & Talbot plant at Halsey. He also agrees that the wastewater discharge permit for the James River Corporation new facility must employ the highest and best treatment technology standards regardless of whether the river has additional assimilative capacity. The new facility will not be allowed to employ less than the highest and best technology. This is the only way to maintain the high water quality of the river.

The DEQ is in the initial stage of a multiyear study of the Willamette River which will evaluate how much pollution is being discharged into the river and the river's capacity to handle these wastes. This study will be very instrumental in helping the DEQ determine what, if anything, can be discharged into the river in the future.

James H. Martin  
December 10, 1991  
Page 2

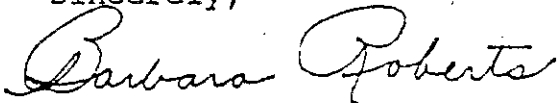
The EQC has in recent years taken a very serious look at how it decides to permit new waste loads. This has resulted in expanded administrative rules to guide them in these decisions. I would draw your attention to OAR 340-41-026. It is very difficult to determine whether to allow a new source to discharge waste into any water body. This decision is not taken lightly. It must include a water quality assessment that examines the impact a waste discharge may have on the river and the identified beneficial uses. It must look at the availability of assimilative capacity in the river and whether a portion of that assimilative capacity should be given to this particular source.

I will not allow a pollution discharge into any water of the state that will threaten or impair identified beneficial uses.

A draft permit for the new James River Corporation facility at Halsey will be available for public review and comment soon. I have asked the DEQ to send this to you. Please review it carefully and send your comments back to DEQ.

I want you to be assured that I am concerned about the Willamette as well as all other rivers in the state. The livability of Oregon is one of our greatest assets, we must protect it.

Sincerely,



Barbara Roberts  
Governor

BR:NM:crw  
SA\WC9\WC9284  
(84908)

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 41 — DEPARTMENT OF ENVIRONMENTAL QUALITY

water quality standards for a specific ecoregion, basin, or water body are met. This shall be established by accepted biomonitoring techniques.

(37) "Without detrimental changes in the resident biological community" means no loss of ecological integrity when compared to natural conditions at an appropriate reference site or region.

(38) "Ecological integrity" means the summation of chemical, physical and biological integrity capable of supporting and maintaining a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitat of the region.

(39) "Appropriate reference site or region" means a site on the same water body, or within the same basin or ecoregion that has similar habitat conditions, and represents the water quality and biological community attainable within the areas of concern.

Stat. Auth.: ORS Ch. 183.500, 468.020, 468.705, 468.710 & 468.735

Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 24-1981, f. & ef. 9-8-81; DEQ 16-1988, f. & cert. ef. 7-13-88; DEQ 16-1989, f. & cert. ef. 7-31-89 (and corrected 8-3-89); DEQ 30-1989, f. & cert. ef. 12-14-89; DEQ 22-1990, f. & cert. ef. 7-6-90; DEQ 14-1991, f. & cert. ef. 8-13-91

#### Treatment and Control Required

340-41-010 [SA 26, f. 6-1-67;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### Restriction on the Discharge of Sewage and Industrial Wastes and Human Activities Which Affect Water Quality in the Waters of the State

340-41-015 [SA 26, f. 6-1-67;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### Maintenance of Standards of Quality

340-41-020 [SA 26, f. 6-1-67;  
DEQ 28, f. 5-24-71, ef. 6-25-71;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### Implementation of Treatment Requirements and Water Quality Standards

340-41-022 [DEQ 28, f. 5-24-71, ef. 6-25-71;  
DEQ 46, f. 6-15-72, ef. 7-1-72;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### Mixing Zones

340-41-023 [DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### Testing Methods

340-41-024 [DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### General Water Quality Standards

340-41-025 [SA 26, f. 6-1-67;  
DEQ 39, f. 4-5-72, ef. 4-15-72;  
DEQ 55, f. 7-2-73, ef. 7-15-73;

Repealed by DEQ 128,  
f. & ef. 1-21-77]

#### Policies and Guidelines Generally Applicable to All Basins

340-41-026 (1) In order to maintain the quality of waters in the State of Oregon, it is the general policy of the EQC that:

(a) Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless the Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to lower water quality for necessary and justifiable economic or social development. The Director or his designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of water within surface waters of the following areas:

- (A) National Parks;
- (B) National Wild and Scenic Rivers;
- (C) National Wildlife Refuges;
- (D) State Parks.

(b) Point source discharges shall follow policies and guidelines (2), (5), and (6), and nonpoint source activities shall follow guidelines (7), (8), (9), (10), and (11).

(2) In order to maintain the quality of waters in the State of Oregon, it is the general policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) of this rule.

(3) The Commission or Department may grant exceptions to sections (2) and (6) of this rule and approvals to section (5) of this rule for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2):

(a) In allowing new or increased discharged loads, the Commission or Department shall make the following findings:

(A) The new or increased discharged load would not cause water quality standards to be violated;

(B) The new or increased discharge load would not unacceptably threaten or impair any recognized beneficial uses. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;

(C) The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited under OAR 340-41-



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340.06(30)(a), unless:

(i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or

(ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) and load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream; and compliance plans under which enforcement action can be taken have been established; and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or

(iii) Under extraordinary circumstances to solve an existing, immediate, and critical environmental problem that the Commission or Department may consider a waste load increase for an existing source on a receiving stream designated water quality limited under OAR 340-41-006(30)(a) during the period between the establishment of TMDLs, WLAs and LAs and their achievement based on the following conditions:

(I) That TMDLs, WLAs and LAs have been set; and

(II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and

(III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses; and

(IV) That any waste load increase granted under subsection (iii) of this rule is temporary and does not extend beyond the TMDL compliance deadline established for the waterbody. If this action will result in a permanent load increase, the action has to comply with subsections (i) or (ii) of this rule.

(D) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as evidenced by a statement of land use compatibility from the appropriate local planning agency.

(b) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values ecologically, and environmental quality generally. Allocation of any unused assimilative capacity could be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the Commission or Department shall consider the following:

(A) Environmental Effects Criteria:

(i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential gradation of groundwater from land application wastes;

(ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other

sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, as appropriate;

(iii) Beneficial effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.

(B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loading will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:

(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams are finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading;

(ii) Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives shall be evaluated.

(4)(a) A receiving stream shall be designated as water quality limited through the biennial water quality status assessment report prepared to meet the requirements of Section 305(b) of the Water Quality Act. Appendix A of the Status Assessment report shall identify: what waterbodies are water quality limited, the time of year the water quality standards violations occur, the segment of stream or area of waterbody limited, the parameter(s) of concern, whether it is water quality limited under OAR 340-41-006(30)(a) or (b) or (c). Appendix B and C of the status assessment report shall identify the specific evaluation process for designating waterbodies limited;

(b) The WQL list contained in Appendix A of the Status Assessment report shall be placed on public notice and reviewed through the public hearing process. At the conclusion of the hearing process and the evaluation of the testimony received and the evaluation of the testimony received, Appendix A will become the official water quality limited list. The Department may add a waterbody to the water quality limited list between status assessment reports after placing that action out on public notice and conducting a public hearing;

(c) For interstate waterbodies, the state shall be responsible for completing the requirements of section (3) of this rule for that portion of the interstate waterbody within the boundary of the state;

(d) For waterbodies designated WQL under OAR 340-41-006(30)(c), the Department shall establish a priority list and schedule for future water quality monitoring activities to determine; if the waterbody should be designated WQL under OAR 340-41-006(30)(a) or (b), if estimated TMDLs

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need to be prepared, and if an implementation plan needs to be developed and implemented;

(a) For waterbodies designated WQL under OAR 340-41-006(30)(b), requests for load increases shall be considered following subsection (3)(b) of this rule.

(5) For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved subject to the criteria in section (3) of this rule.

(6) No discharges of wastes to lakes or reservoirs shall be allowed except as provided in section (3) of this rule.

(7) Log handling in public waters shall conform to current EQC policies and guidelines.

(8) Sand and gravel removal operations shall be conducted pursuant to a permit from the Division of State Lands and separated from the active flowing stream by a water-tight berm wherever physically practicable. Recirculation and reuse of process water shall be required wherever practicable. Discharges, when allowed, or seepage or leakage losses to public waters shall not cause a violation of water quality standards or adversely affect legitimate beneficial uses.

(9) Logging and forest management activities shall be conducted in accordance with the Oregon Forest Practices Act so as to minimize adverse effects on water quality.

(10) Road building and maintenance activities shall be conducted in a manner so as to keep waste materials out of public waters and minimize erosion of cut banks, fills, and road surfaces.

(11) In order to improve controls over nonpoint sources of pollution, federal, state, and local resource management agencies will be encouraged and assisted to coordinate planning and implementation of programs to regulate or control runoff, erosion, turbidity, stream temperature, stream flow, and the withdrawal and use of irrigation water on a basin-wide approach so as to protect the quality and beneficial uses of water and related resources. Such programs may include, but not be limited to, the following:

(a) Development of projects for storage and release of suitable quality waters to augment low stream flow;

(b) Urban runoff control to reduce erosion;

(c) Possible modification of irrigation practices to reduce or minimize adverse impacts from irrigation return flows;

(d) Stream bank erosion reduction projects.

Stat. Auth.: ORS Ch. 183.500, 468.020, 468.705, 468.710 & 468.735

Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 1-1980, f. & ef. 1-9-80; DEQ 13-1989, f. & cert. ef. 6-14-89; DEQ 22-1990, f. & cert. ef. 7-5-90

### Biological Criteria

340-41-027 Waters of the State shall be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities.

Stat. Auth.: ORS Ch. 468.735

Hist.: DEQ 14-1991, f. & cert. ef. 8-13-91

340-41-029 [Renumbered to 340-40-001 thru 340-40-080]

### Beneficial Uses of Waters to be Protected by Special Water Quality Standards

340-41-030 [SA 26, f. 6-1-67; Repealed by DEQ 128, f. & ef. 1-21-77]

### Policy on Sewerage Works Planning and Construction

340-41-034 (1) Oregon's publicly owned sewerage utilities have since 1956 developed an increasing reliance on federal sewerage works construction grant funds to meet a major portion of the cost of their sewerage works construction needs. This reliance did not appear unreasonable based on federal legislation passed up through 1978. Indeed, the Environmental Quality Commission (EQC) has routinely approved compliance schedules with deadlines contingent on federal funding. This reliance no longer appears reasonable based on recent and proposed legislative actions and appropriations and the general state of the nation's economy.

(2) The federal funds expected for future years will address a small percentage of Oregon's sewerage works construction needs. Thus, continued reliance by DEQ and public agencies on federal funding for sewerage works construction will not assure that sewage from a growing Oregon population will be adequately treated and disposed of so that health hazards and nuisance conditions are prevented and beneficial uses of public waters are not threatened or impaired by quality degradation.

(3) Therefore, the following statements of policy are established to guide future sewerage works planning and construction:

(a) The EQC remains strongly committed to its historic program of preventing water quality problems by requiring control facilities to be provided prior to the connection of new or increased waste loads;

(b) The EQC urges each sewerage utility in Oregon to develop, as soon as practicable, a financing plan which will assure that future sewerage works construction, operation, maintenance and replacement needs can be met in a timely manner. Such financing plans will be a prerequisite to Department issuance of permits for new or significantly modified sewerage facilities, for approval of plans for new or significantly modified sewerage facilities, or for access to funding assistance from the state pollution control bond fund. The Department may accept assurance of development of such financing plan if necessary to prevent delay in projects already planned and in the process of implementation. The Department will work with the League of Oregon Cities and others as necessary to aid in the development of financing plans;

(c) No sewerage utility should assume that it will receive grant assistance to aid in addressing its planning and construction needs;

(d) Existing sewerage facility plans which are awaiting design and construction should be updated where necessary to include:

(A) Evaluation of additional alternatives where appropriate, and re-evaluation of costs of existing

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alternatives;

(B) Identification and delineation of phased construction alternatives; and

(C) A financing plan which will assure ability to construct facilities over an appropriate time span with locally derived funds.

(e) New sewerage works facility planning initiated after October 1, 1981 should not be approved without adequate consideration of alternatives and phased construction options, and without a financing plan which assures adequate funding for construction, operation, maintenance and replacement of sewerage facilities:

(A) The EQC recognizes that many cities in need of immediate sewerage works construction have completed planning and are awaiting design or construction funding. These cities have developed their program relying on 75% federal grants. They will have difficulty developing and implementing alternatives to fund immediate construction needs. Many are, or will be, under moratoriums on new connections because existing facilities are at, or near, capacity. The EQC will consider the following interim measures as a means of assisting these cities to get on a self-supporting basis provided that an approvable long-range program is presented:

(i) Temporary increases in waste discharge loading may be approved provided a minimum of secondary treatment, or equivalent control is maintained and beneficial uses of the receiving waterway are not impaired;

(ii) Installation and operation of temporary treatment works may be approved providing:

(I) The area served is inside an approved urban growth boundary and the proposal is consistent with State Land Use Planning laws;

(II) A master sewerage plan is adopted which shows how and when the temporary facilities will be phased out;

(III) The public agency responsible for implementing the master plan is the owner and operator of the temporary facilities;

(IV) Sewerage service to the area served by the temporary facility is necessary as part of the financing program for master plan implementation and no other option for service is practicably available;

(V) An acceptable receiving stream or method of effluent disposal is available for the temporary facility.

(B) Compliance schedules and other permit requirements may be modified to incorporate an approved interim program. Compliance with a permit so modified will be required at all times.

(f) Sewerage Construction programs should be designed to eliminate raw sewage bypassing during the summer recreation season (except for a storm event greater than the 1 in 10 year 24 hour storm) as soon as practicable. A program and timetable should be developed through negotiation with each affected source. Bypasses which occur during the remainder of the year should be eliminated in accordance with an approved longer term maintenance based correction program. More stringent schedules may be imposed as necessary to protect drinking water supplies and shellfish harvesting areas;

(g) Any sewerage utility that is presently in compliance and foresees a need to plan for future

expansion to accommodate growth but elects to wait for federal funds for planning and construction will make such election with full knowledge that if existing facilities reach capacity before new facilities are completed, a moratorium on new connections will be imposed. Such moratorium will not qualify them for any special consideration since its presence is deemed a matter of their choice;

(h) The Department will continue to assist cities to develop interim and long-range programs, and construction schedules and to secure financing for essential construction.

Stat. Auth.: ORS Ch. 183

Hist.: DEQ 29-1981, f. & ef. 10-19-81

**Special Water Quality Standards For Public Waters of Goose Lake in Lake County**

340-41-035 [SA 26, f. 6-1-67;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

**Special Water Quality Standards For Public Waters of the Main Stem Klamath River**

340-41-040 [SA 26, f. 6-1-67;  
DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

**Special Water Quality Standards For the Public Waters of Multnomah Channel and the Main Stem Willamette River**

340-41-045 [SA 26, f. 6-1-67;  
DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

**Special Water Quality Standards For the Public Waters of the Main Stem of the Columbia River From the Eastern Oregon-Washington Border Westward to the Pacific Ocean**

340-41-050 [SA 26, f. 6-1-67;  
DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

**Special Water Quality Standards For the Public Waters of the Main Stem of the Grande Ronde River**

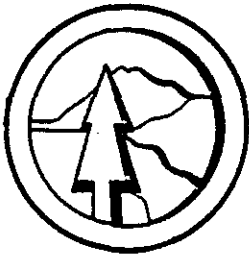
340-41-055 [SA 26, f. 6-1-67;  
DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

**Water Quality Standards For the Public Waters of the Main Stem of the Walla Walla River**

340-41-060 [SA 26, f. 6-1-67;  
DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]

**Water Quality Standards For the Main Stem of the Snake River in and Adjacent to Oregon**

340-41-065 [SA 26, f. 6-1-67;  
DEQ 55, f. 7-2-73, ef. 7-15-73;  
Repealed by DEQ 128,  
f. & ef. 1-21-77]



# LINN COUNTY

PLANNING AND BUILDING DEPARTMENT  
P.O. BOX 100, ALBANY, OREGON 97321 (503)867-3816  
COURTHOUSE ROOM 114

December 10, 1991

Jerry E. Turnbaugh  
Oregon Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, OR 97204

Dear Mr. Turnbaugh:

I am writing you in response to James River request for a National Pollutant Discharge Elimination System (NPDES) permit to discharge process wastewater from a new recycled-fiber de-ink mill located near Halsey. As you know, the Halsey Recycling Plant is nearly complete and will be operational in March, 1992. At that time, the plant will begin to produce pulp from recycled office paper. In addition to diverting solid waste from landfills, the new facility will provide jobs, reduce dependency on a decreasing wood supply and provide long-term stability at the Halsey Mill.

The recycling plant is consistent with the Linn County Comprehensive Plan which specifically supports the expansion of the paper mill. The paper mill and surrounding undeveloped land have been zoned Heavy Industrial in anticipation of the plant expansion. Expansion of the paper plant was discussed at the time the Linn County Comprehensive Plan was first amended (1980). Policies in support of future plant expansion were written into the plan and subsequently adopted by the Linn County Planning Commission and Board of Commissioners. After the land use plan was adopted, adjacent property was redesignated Heavy Industrial to accommodate plant expansion.

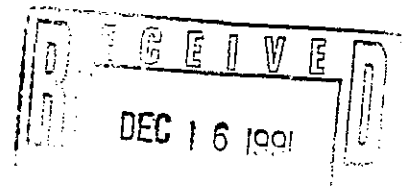
Recently, the county amended the Industrial Land Section of the comprehensive plan to recognize the importance of resource related industry. The plan states that a rural location is appropriate for certain industries such as the Halsey paper plant. The rural location of the plant and its proximity to transportation facilities and nearby water supply establish comparative advantages that are not found in other locations. It would be difficult to find a location better suited for paper production than the Halsey site.

In closing, we support the James River Recycling Plant and issuance of the NPDES permit. Thank you for the opportunity to comment. If you have any questions or need additional information, please contact me.

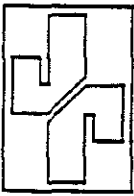
Sincerely,

Steve Michaels  
Planning Manager

cc: Steve Wolfe, James River Corporation



WATER QUALITY DIVISION  
PORTLAND, OREGON



**JAMES RIVER CORPORATION**

**Creating a new market for recycled office paper  
Helping reduce solid waste in landfills...**

## **JAMES RIVER'S OREGON RECYCLING PLANT**

James River's Halsey recycling plant will begin to produce pulp from recycled office paper in 1992. The recycled pulp will be transported to James River mills at Halsey and Wauna, Oregon, and Camas, Washington, to make products containing recycled fiber.

James River will buy recovered office paper from Oregon, Washington, other western states and Canada, to supply the plant.

The new recycling facility is consistent with the Oregon State Legislature's mandate and the governor's executive order to develop markets for post-consumer waste, and to divert municipal solid waste from landfills.

James River is constructing the recycling plant to:

- \* respond to customer and consumer demand for quality recycled paper products;
- \* assure long-term viability of the Halsey mill by creating 60 new jobs, preserving existing ones, supporting many indirect jobs that serve the recycling industry, and reducing dependency on virgin wood supplies;
- \* help reduce solid waste by recycling 450 tons of recovered office waste paper into 300 tons of pulp every day, saving nearly 74 dump truck loads of waste from going to landfills.

### **Creating a Used Office Paper Market**

James River will provide a new market in Oregon and other western states for grades of waste paper including:

- \* computer printout
- \* white & colored ledger
- \* envelopes, including window style
- \* fax
- \* sorted direct mail
- \* carbonless
- \* glossy, including brochures

This new market for office paper complements Oregon's existing markets for newspaper, magazines, and unbleached paper.

## Environmental Considerations in Plant Design

James River is committed to preserving the quality of the environment in Oregon and has taken many steps in the design of the recycling facility to ensure that there are no adverse impacts on air, land, or water.

### **State-of-the-Art Process Design**

Recycling waste paper into high-quality pulp will be accomplished by:

- \* physical means of contaminant removal rather than heat or chemical methods thereby minimizing energy and chemical use;
- \* extensive reuse of process water within the plant, resulting in water use which is only one-third of the industry average;
- \* use of a non-chlorine process for color stripping and brightening;
- \* extensive cleaning and screening steps to allow processing of more difficult-to-recycle grades, including laser, carbonless, and fax papers, window envelopes, and direct mail.

### **Wastewater Treatment Technology**

James River has provided for extensive treatment of process water designed to:

- \* consistently meet all Willamette River water quality standards which protect all beneficial uses of the river, including drinking water;
- \* remove 99% of solid material from the process water;
- \* provide for extensive biological treatment of wastewater;
- \* exceed current operating efficiencies of all other industrial dischargers on the Willamette River;
- \* maintain the high water quality of the Willamette River--the treated water will have no measurable impact on the river's dissolved oxygen, color, or temperature;
- \* minimize the possibility of discharge of improperly treated wastewater.

### **Solid Waste Handling**

The James River recycling plant will have a very positive impact on the solid waste crisis by providing a market for 450 tons of waste paper each day. The non-fiber material removed during recycling results in approximately 150 tons per day of waste, composed mostly of fiber fines, fillers, and coatings. This material initially will be transported to Coffin Butte landfill near Corvallis. James River is exploring alternative beneficial use for most or all of the solid waste generated.

**JAMES RIVER CORPORATION, HALSEY MILL**

**Key Contacts for:**

**Halsey Secondary Fiber Information**

**Jeff Manchester**

V.P., Resident Manager, Halsey Mill  
(503) 369-1222

**Dick Sleeter**

Project Manager, Halsey Secondary Fiber  
(503) 369-1413

**Steve Wolfe**

Operations Manager, Halsey Secondary Fiber  
(503) 369-1382

**Carolyn McGreevy**

James River Northwest Public Affairs  
Vancouver, WA  
(206) 896-7902 .

**Jack Brown**

James River Northwest Public Affairs  
Vancouver, WA  
(206) 896-4643



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OREGON OPERATIONS OFFICE  
PORTLAND, OREGON 97204

December 10, 1991

REPLY TO  
ATTN OF:

MEMORANDUM

SUBJECT: James River - Halsey Draft NPDES Permit

FROM: Tom Robertson *TEL 12-10-91*  
Oregon Operations Office

TO: Jerry Turnbaugh  
DEQ - Water Division

THRU: Bill Sobolewski, Chief *W.P. 12-10-91*  
Water Programs Section

The evaluation report (fact sheet) was very well written and complete. This evaluation report should be used as the basis or model for all industrial permits.

Comments specific to the permit:

- \* Page 3 - pH samples should be collected as grabs or as continuous monitoring rather than a 24 hour composite. pH tends to be unstable and can change over a 24 hour period.
- \* Page 4 - Section 1 - first sentence: leave out the "per year".

Though Selenastrum has previously been recommended for toxicity testing (plant species) in pulp mill effluent the presence of plant nutrients may cause interference. Also highly colored effluent may interfere with the toxicity test. If these are problems at the JR Mill then you may want to consider using Lemna.

- \* Page 5 - Part 5. The language in this section may need to be modified to include a schedule of the sequence of events leading up to resolution of a violation.
- \* Page 5 - Part 5. Second sentence: "If these tests confirm a violation..." A violation of a toxicity test for a specific sample taken during a specific time cannot be confirmed by testing a second sample taken at a later time. The reason for not being able to confirm or negate toxicity in this manner is because of effluent variability. The second sample will only establish whether the toxicity is ongoing or continuous rather than a pulse. The sentence should be

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DEC 12 1991



changed to reflect this.

- \* Page 5 - Part 5. First paragraph last sentence. EPA has been encouraging states to review but not approve TRE/TIE plans. The facilities have the responsibility to establish plans to eliminate the toxicity using whatever means necessary and the initial plan may not be enough of an effort. By approving the plan the appearance may be given that the plan is the final initiative needed when indeed it may not be. However a **schedule** for study and completion of the plan can and should be approved.
- \* If there is a violation of standards or a "reasonable potential" to violate standards then limits must be in the permit. Furthermore the permit can be reopened if there is a violation or **reasonable potential** to violate water quality standards.
- \* A point that was brought up by Rick Albright of RO is that de-inking mills may discharge dioxin that is contained in the paper they pulp. Apparently Peter Wong found this out as part of his consulting work. Is the wastestream from the pulping operation completely recycled or is there some discharge? If there is a discharge then that wastestream should receive some initial monitoring for dioxin (perhaps through two quarters). If the dioxin levels are non-detect, then frequent monitoring may not be necessary. However if dioxin is detected then frequent monitoring as well as limits, based on the TMDL, will be necessary. In either case the evaluation report should probably discuss the potential for dioxin.



December 10, 1991

Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Ave.  
Portland, Oregon 97204

**RE: James River NPDES Application**

Dear Application Review Committee,

The Lane County Waste Management Division submits the following testimony in support of the James River Paper Company's NPDES Application:

Lane County's Waste Management Division is responsible for the operation of 15 solid waste transfer stations and one landfill. At all sites we provide full-line recycling facilities, including a seasonal yard debris recycling program at our largest urban transfer station.

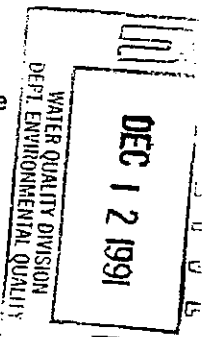
Further, we are actively involved in the curbside recycling activities within our jurisdiction, and also collect and divert approximately 120 tons of our own office waste paper per year. Finally, we give a 5% price preference to the purchase of paper products utilized by our organization that contain recycled content.

We mention this background and expertise to establish that we know something about the impact and importance of markets for recyclable materials. While we will not presume to comment on the adequacy of the environmental controls contained in James River's discharge application, we can assert that the availability of markets for recyclable material is of paramount importance in establishing the recycling loop.

To put it simply, if there is no demand or low demand for a commodity, it will either not be recycled, or will be "under recycled". The failure to recycle, or to maximize recycling, has well established energy and pollution implications, as well as impacts on the resource base. From a solid waste management perspective too, the failure to recycle clearly cuts short the number and extent of a community's disposal options.

While we lack the technical expertise to testify about the efficacy of the environmental controls and practices proposed, we do know that not approving the application involves significant environmental costs as well.

Unfortunately, there are no perfect solutions. Frequently one must give something to get something. We therefore urge you to

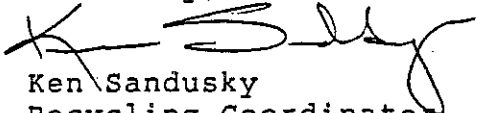


consider all of the environmental costs and benefits before making your best judgment on the application before you.

Clearly the value of diverting 300 tons of wastepaper per day with its attendant energy savings, pollution reductions, and natural resource conservation benefits, weighs heavily on the scales of environmental equity.

We appreciate this opportunity to testify in behalf of James River Paper Company's NPDES permit application.

Sincerely,



Ken Sandusky  
Recycling Coordinator



Public Works  
1245 NE 3rd Street  
P.O. Box 1083  
Corvallis, OR 97339-1083  
(503) 757-6916

December 9, 1991

Department of Environmental Quality  
Attention: Lydia Taylor  
Administrator, Water Quality Division  
811 S.W. Sixth Avenue  
Portland, OR 97204

PUBLIC HEARING SCHEDULE, NPDES PERMIT - JAMES RIVER

A news article published in the Gazette Times on Wednesday, December 4, 1991, indicated hearings would be held on December 18 in Albany and on January 2 in Portland. This hearing schedule does not afford the citizens of Corvallis a sufficient opportunity for meaningful input on this important issue affecting the Corvallis water supply and the Willamette River. Both the December and January dates fall during the University winter break period when many Corvallis residents have left the community. The January meeting is scheduled in Portland, a location not convenient for our citizens.

To correct this deficiency, Corvallis would be willing to host a meeting in Corvallis. We would suggest a date during the third or fourth week of January. Although this would require an extension to the comment period, the purpose of receiving public input would be better served. If we can assist you in scheduling the specific time and location for the hearing in Corvallis, please contact me at 757-6916.

The City does not wish to unreasonably prolong the process. We understand the importance of the permit to James River but can not support a public input process that limits participation. The City's own permit expired in 1988 and, given the lack of urgency in re-issuing that permit, a little additional time on the James River permit seems appropriate.

If we can be of assistance or if the action requested is unclear, please call.

Cordially,

ROLLAND BAXTER  
PUBLIC WORKS DIRECTOR

RB/eao

cc: Gerald Seals, City Manager  
R. Charles Vars, Mayor  
James River Corporation

NORTHWEST



NATURAL GAS COMPANY

ONE PACIFIC SQUARE  
220 N.W. SECOND AVENUE · PORTLAND, OREGON 97209

December 6, 1991

Mr. Jerry E. Turnbaugh  
Oregon Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, OR 97204

Re: Wastewater Treatment System Operating Permit  
James River Halsey Recycling Plant

Dear Mr. Turnbaugh:

I feel it is important that the James River Halsey Mill receive their wastewater treatment system operating permit so this important recycling effort can go on line as quickly as possible.

The 300 tons per day of recycled paper that this facility will process will dramatically reduce solid waste landfill needs. At the same time, the secondary fiber will reduce pressure on virgin fiber supplies allowing our existing timber supply base to be better utilized.

The Willamette Valley has seen enormous suffering as timber jobs have declined over the last few years. The addition of 50 jobs at the Halsey Mill will save many families, as these direct jobs, and the secondary jobs that will be generated in the economy, will impact the Willamette Valley.

By making the regional James River paper mills more competitive through the use of recycled fiber, we can also affect economies in the whole region and may make American products more competitive in world markets. That would bring a whole host of additional trade benefits.

The Halsey Mill has had a tradition of environmentally responsible operation attested by being a recipient of the "CUP" award. I wholeheartedly endorse issuance of this permit to allow this important environmental and economic benefit to occur in 1992.

Sincerely,

Werner A. Gerling, Manager  
Industrial Market Services

10 - 9 1991

Bruce W. Black  
850 NW Antelope Place  
Corvallis, Oregon 97330  
503 752-6844

December 5, 1991

DEQ, Water Quality Division  
811 S.W. Sixth Ave.  
Portland, OR 97204

Dear Sir:

Regarding James River Corporation discharging water into the Willamette River near Halsey, Oregon.

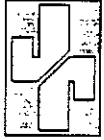
I have been a resident of Corvallis, Oregon since December 1980 and have used the river for canoeing every year since then. For this reason, I am all too aware of the murky appearance of the river. I understand that the river is clear upstream from Halsey. I further understand that the unpleasant appearance of the water is caused by industrial effluent discharge.

I hope that the river will not be further degraded and that some means will be found instead to improve on water quality. I wonder if it would be possible to develop a system of ponds such as is done by the City of Arcata, California to treat its sewage prior to discharge into Humboldt Bay.

I do support paper recycling and I believe that it should be done in a way to enhance other environmental conditions. The technology for this exists. It remains to be seen if there is the will.

Sincerely,

*Bruce W. Black*



**JAMES RIVER CORPORATION**  
Consumer Products Division  
P.O. Box 215, Halsey, Oregon 97348

THOMAS

DEC 09 1991

December 5, 1991

Thomas Robicheaux  
Rust International Corp.  
P.O. Box 25374  
Portland, OR 97225

Dear Thomas:

We appreciate your offer to write a letter of support for the Halsey Recycling Plant to the Oregon Department of Environmental Quality (DEQ).

The plant is nearly completed, and we expect to be operational next March. In order to launch this important business venture, it is crucial that we get an operating permit for the plant's wastewater treatment system. The DEQ is holding a public hearing on the permit on December 18, 1991, at Linn-Benton Community College, College Center Bldg., 6500 Pacific Blvd, Albany. Your letter showing community support for the plant will help assure that the permit is granted.

I've enclosed a fact sheet about the recycling plant and its wastewater treatment system to help you create your message. As we discussed by phone, your letter may be brief and general in terms of supporting the Halsey plant as an important business venture that will create jobs, will establish a major recycling market for the Northwest, and will contribute further to the environmental leadership of the State of Oregon.

You may send your letter to: Oregon Department of Environmental Quality, 811 SW Sixth, Portland, Oregon 97204; Attention: Jerry E. Turnbaugh.

Please give me a call at (503) 369-1322 if you have any questions. Again, thank you for lending your support for James River and the Halsey Recycling Plant.

Very truly yours,

  
Dick Sleeter

Secondary Fiber  
Project Manager

:sm

Enclosures



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

November 27, 1991

Mr. Jerry Turnbaugh  
Water Quality Division  
Dept. of Environmental Quality  
811 SW 6th Ave.  
Portland, OR. 97204

Re: James River Halsey

Dear Jerry:

James River received the draft NPDES Waste Discharge Permit and the Department's Evaluation Report for the Halsey Secondary Fiber Plant on November 19, 1991. We appreciate the opportunity to comment on the requirements, conditions, and limitations set forth in the draft permit, and on the information presented in the associated reports.

COMMENTS ON DRAFT NPDES PERMIT

1. Schedule A, Condition 1

Permit Definition of Summer Period - More stringent BOD<sub>5</sub> limitations are typically required for Willamette River dischargers during the summer months due to the warmer river temperatures and lower flows. Other industrial dischargers currently are required to comply with more stringent summer limits during the period of June 1 - October 31. This method of seasonal limitations has been found to adequately protect dissolved oxygen levels during this more sensitive period. James River requests a summer period defined as June 1 - October 31, consistent with the other industrial dischargers on the Willamette River and with the river conditions that warrant a lower limit, rather than the proposed May 1 - October 31 period. The remainder of the year would then be November 1 - May 31.

Summer BOD<sub>5</sub> Limit - The proposed monthly average BOD<sub>5</sub> limit for the summer period is less than two-thirds of the New Source Performance Standard (NSPS) established by the EPA Effluent Guidelines for the Deink Subcategory of the Pulp, Paper, and Paperboard Industry (40 CFR 430.175, Subpart Q). Water quality modeling conducted at a BOD loading equivalent to NSPS (3120 lb/day) under worst case river conditions (extreme low flow (7Q10), plus all dischargers discharging at permit limit) indicated no measurable impact on downstream dissolved oxygen. This was confirmed by



the no observable effect level of 2800-3500 lb/day developed by the Department. This level is based on modeling runs conducted using extremely conservative assumptions. These results demonstrate that a limit based on New Source Performance Standards is sufficient to protect the beneficial uses of the river and allow a level of wastewater treatment equivalent to our competitors within Oregon and across the country. However, James River understands and supports Oregon's policy to minimize discharges into the Willamette River. James River has designed a state-of-the-art facility employing best available technology to ensure that the more stringent proposed limits will be met.

Total Suspended Solids (TSS) Limit - The suspended solids levels and turbidity of the Willamette River are typically low, especially in the upper stretch of the river. A TSS discharge equivalent to the New Source Performance Standard (NSPS) of 4080 lbs/day as a monthly average would result in only a very slight increase above natural background level. This increase is well within water quality standards. Although this evaluation indicates that a TSS limit equivalent to NSPS will sufficiently protect Willamette River Water Quality, the extensive solids removal within the process and the conservatively designed secondary clarifier will ensure compliance with the more stringent TSS limit proposed by the Department.

## 2. Schedule C, Condition 1

Biomonitoring Requirements - The first paragraph should be corrected to indicate that the biomonitoring requirements outlined in Schedule C, Condition 1 should be conducted on both Outfall A and B, as required by Schedule B.

Due to the variability and lack of understanding of Selenastrum capricornutum test results, this monitoring requirement should be separated from the biomonitoring requirements of Condition 1 and be required as a special study.

It is well known that small additions of treated municipal wastes and some treated industrial wastes will cause some measure of enhanced algal growth. However, it is not known if this is detrimental to the aquatic environment or if it is even biologically relevant. Algae have variable sensitivity to various toxicants and may not be proper surrogates for testing. Testing requirements should have some relevance to established water quality criteria. This has not yet been demonstrated. Test methods have been published but have not been validated through inter- and intra-laboratory studies. A recent article in the peer reviewed "Environmental Toxicology And Chemistry" journal (Vol. 9, pp 1279-1284, 1990) reviews many of the shortcomings and problems with the present test methods. While some amount of concurrent testing with the various

organisms may be useful to evaluate organism sensitivity, a long term commitment to testing algae may be a waste of analytical time and money.

By requiring Selenastrum testing as a special study and associating it with a determinate time frame and review schedule, the issues associated with irrelevant and unnecessary testing are avoided. James River proposes a one year program of concurrent testing of the organisms, followed by a review of the algal test results. This data, coupled with data from Ceriodaphnia dubia and Pimephales promelas testing for this facility should give an adequate indication of the appropriateness of continued testing.

Suggested permit language for Schedule C:

"The permittee shall begin a one year chronic toxicity study to determine the occurrence and degree of toxicity of treated effluent from Outfalls A and B to Selenastrum capricornutum. This study shall commence six months after mill start up. The permittee shall prepare a report summarizing and evaluating the results of this study and submit it to the Department for review. The report shall make a recommendation on the appropriateness of continued testing.

3. Schedule C, Condition 4

Outfall Designation - Outfall 001 has not been defined in the draft permit. Schedule C, Condition 4 should be corrected to read ".... when the combined effluent of Outfall B mixes with the ambient river water, ...."

4. Schedule C, Condition 5

Bioassay Results - Bioassay testing of Outfall B, the combined effluent of James River and Pope & Talbot is the joint responsibility of both companies. However, James River can only be held responsible for the effluent it contributes to the combined Outfall. Further evaluations by the permittee should be required on effluent generated by James River, only. This procedure should be clearly defined in Schedule C, Condition 5:

"If the results of the bioassay tests of Outfall B indicate a violation of water quality standards for toxicity, the permittee shall further evaluate the toxicity of its Outfall A effluent and

its effects on the receiving waters. If these tests confirm a violation of water quality standards due to Outfall A, the permittee shall develop a plan to eliminate the violation. Upon approval of the plan by the Department, the permittee shall implement the plan and the process shall be continued until the violation has been eliminated.

These changes are critical to ensure that the ultimate goal, i.e. protecting the river from potential toxicity, is met. James River can not be held responsible for effluent or water quality violations that are clearly not its fault. It would also not be appropriate to require WET discharge limits in James River's permit for the combined discharge (Outfall B) as James River has only partial control over this discharge and could not ensure compliance with these limits.

5. Schedule C, Condition 7

Instream Water Quality - the language in Schedule C, Condition 7 indicates that James River and Pope and Talbot will be jointly liable for any violation of water quality standards at any point in the receiving stream. Although the intent is to ensure that a responsible party can be identified should the effluent from the combined discharge cause an instream water quality violation, this is not clear as proposed. The following suggested language may be more appropriately located in Schedule A, Condition 2, below paragraph 2:

"In the event of a violation of water quality standards outside the mixing zone defined above, that is directly attributable to the combined discharge from Outfall B, the permittee shall evaluate the effect of their effluent (Outfall A) on the receiving stream. If the evaluation confirms a violation of a water quality standard due to the effluent, the permittee shall develop a plan to eliminate the violation. Upon approval of the plan by the Department, the permittee shall implement the plan to eliminate the violation.

6. Pope and Talbot's NPDES Permit - James River's draft permit contains several provisions for the combined discharge of James River and Pope and Talbot, including Schedule B, Condition 2 and 6a, Schedule C, Condition 1 - 5 and 7, and Schedule D, Condition 1. Pope and Talbot's NPDES permit must be modified to include these provisions.

COMMENTS ON EVALUATION REPORT

1. Section III, B.2. - Raw Materials

The grade mix to be used as raw materials for the secondary fiber process has been updated to reflect current availability.

- 25% post-industrial coated book (slick paper)
- 32% post-consumer colored ledger
- 32% post-consumer office waste (mostly white)
- 11% post-industrial coated groundwood

2. Section III, C. - Water Use

Based on recent water balances, the makeup water requirement is estimated to be 1.45 mgd, rather than the reported 2.6 mgd.

3. Section III, D. 1-2-Excess Paper Machine White Water

Water balances indicate that approximately 2.3 mgd of excess clarified white water from No. 3 process clarifier and 1.2 mgd of first washer loop purge will be sent to secondary wastewater treatment.

4. Section III, H - Construction Schedule

The secondary fiber plant is scheduled to begin operation in early March, 1991. The wastewater treatment plant will precede this startup by 2- 3 weeks.

5. Section III, I - Environmental Impacts during Construction

To facilitate project completion in a timely manner, construction activities will expand to a two shift operation on December 2, 1991.

6. Section VIII, A. - Proposed BOD<sub>5</sub> & TSS Discharge Limits

The Low Flow Period as well as Remainder of Year should reflect those same periods identified in the draft NPDES permit, Schedule A, Condition 1. The same comments apply as were relayed in the Comments on Draft NPDES Permit, Number 1.

COMMENTS ON FACT SHEET

1. Description of Discharges

The water flow estimates should be changed to reflect the updated figures discussed in Comments on Evaluation Report, i.e.

Makeup Water Requirement:	1.45 mgd (Page 2, paragraph 3)
Excess Paper Machine White Water:	2.3 mgd (Page 2, paragraph 6)
Purge from 1st Washer Loop:	1.2 mgd (Page 3, paragraph 1)

Jerry Turnbaugh  
Page 6  
November 27, 1991

2. Special Conditions (Page 4)

Based on the comments made on the draft NPDES permit regarding the definition of the summer period, this section should be revised to reflect a June 1 to October 31 Summer Period and a November to May 31 Remainder of Year.

Please call me at (206) 834-8325 if you should have any questions on the enclosed comments.

Very truly yours,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc: F. A. Skirvin, Willamette Valley Region

**JAMES RIVER CORPORATION**

**SECONDARY FIBER PLANT**

**HALSEY, OREGON**

**FEBRUARY 1992**



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

RECEIVED JAN 10 1992

January 7, 1992

Mr. Jerry Turnbaugh  
Industrial Waste Section,  
Water Quality  
Dept. of Environmental Quality  
811 S. W. 6th Ave.  
Portland, OR 97204

Re: Letter from USEPA regarding Halsey Draft NPDES Permit

Dear Jerry:

James River has had an opportunity to review the comments submitted to you by Tom Robertson of the Oregon Operations Office of the USEPA, dated December 10, 1991, pertaining to the Halsey mill's draft NPDES permit. It is apparent that Mr. Robertson has done a thorough review of the draft permit and associated information. The following comments address some of the concerns raised in his letter.

1. Selanastrum Interferences

Effluent from the Halsey recycling plant will be nutrient deficient when sent to biological (secondary) treatment. Nutrients will be added to promote and sustain biological activity. The amount of nutrients added will be controlled based on the residual measured in the final treated effluent. As the effluent will not be "nutrient-rich" when discharged, interferences due to nutrients are not expected. The color of treated effluent from the recycling operation is expected to be only 20-50 color units compared to that of a typical pulp mill, which can exceed 3000 color units. Interferences due to color are not expected.

2. Toxicity Testing Requirements

Mr. Robertson indicated that, due to potential effluent variability, it may not be possible to confirm or negate actual toxicity by conducting additional testing. Both the Pope and Talbot and James River treatment systems have significant detention time that will minimize the variability of the effluent. Should a bioassay failure occur, it is important that the results and supporting data be reviewed by the Department and James River prior

Mr. Jerry Turnbaugh  
Page 2  
January 7, 1992

to classifying it as a violation. A failure of a bioassay test can result from test procedural problems, such as organism health, feeding regimes, control waters, test parameters, and organism performance during the test. Further testing to evaluate effluent variability and/or actual water quality impacts should be undertaken only after the violation has been confirmed. This verification process could be outlined in the permit by requiring that James River notify the Department of a failure within 15 days, and set up a review meeting within the next 15 days to review all pertinent information. If a violation is confirmed, we would then be in the plan development process.

We concur with Mr. Robertson's comment relative to DEQ approval of a TRE/TIE plan.

We appreciate the opportunity to comment on the above issues and trust that this information will be of assistance in drafting James River's final permit.

Sincerely,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc: Tom Robertson - USEPA Oregon Operations Office





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OREGON OPERATIONS OFFICE  
PORTLAND, OREGON 97204

December 10, 1991

REPLY TO  
ATTN OF:

MEMORANDUM

SUBJECT: James River - Halsey Draft NPDES Permit

FROM: Tom Robertson *TEL 12-10-91*  
Oregon Operations Office

TO: Jerry Turnbaugh  
DEQ - Water Division

THRU: Bill Sobolewski, Chief *WOP 12-10-91*  
Water Programs Section

The evaluation report (fact sheet) was very well written and complete. This evaluation report should be used as the basis or model for all industrial permits.

Comments specific to the permit:

- \* Page 3 - pH samples should be collected as grabs or as continuous monitoring rather than a 24 hour composite. pH tends to be unstable and can change over a 24 hour period.
- \* Page 4 - Section 1 - first sentence: leave out the "per year".

Though Selenastrum has previously been recommended for toxicity testing (plant species) in pulp mill effluent the presence of plant nutrients may cause interference. Also highly colored effluent may interfere with the toxicity test. If these are problems at the JR Mill then you may want to consider using Lemna.

- \* Page 5 - Part 5. The language in this section may need to be modified to include a schedule of the sequence of events leading up to resolution of a violation.
- \* Page 5 - Part 5. Second sentence: "If these tests confirm a violation..." A violation of a toxicity test for a specific sample taken during a specific time cannot be confirmed by testing a second sample taken at a later time. The reason for not being able to confirm or negate toxicity in this manner is because of effluent variability. The second sample will only establish whether the toxicity is ongoing or continuous rather than a pulse. The sentence should be

**FIVE**

DEC 11 1991

changed to reflect this.

- \* Page 5 - Part 5. First paragraph last sentence. EPA has been encouraging states to review but not approve TRE/TIE plans. The facilities have the responsibility to establish plans to eliminate the toxicity using whatever means necessary and the initial plan may not be enough of an effort. By approving the plan the appearance may be given that the plan is the final initiative needed when indeed it may not be. However a **schedule** for study and completion of the plan can and should be approved.
- \* If there is a violation of standards or a "reasonable potential" to violate standards then limits must be in the permit. Furthermore the permit can be reopened if there is a violation or **reasonable potential** to violate water quality standards.
- \* A point that was brought up by Rick Albright of RO is that de-inking mills may discharge dioxin that is contained in the paper they pulp. Apparently Peter Wong found this out as part of his consulting work. Is the wastestream from the pulping operation completely recycled or is there some discharge? If there is a discharge then that wastestream should receive some initial monitoring for dioxin (perhaps through two quarters). If the dioxin levels are non-detect, then frequent monitoring may not be necessary. However if dioxin is detected then frequent monitoring as well as limits, based on the TMDL, will be necessary. In either case the evaluation report should probably discuss the potential for dioxin.

RECEIVED JAN 13 1992



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

January 7, 1992

Mr. Scott Ames  
Northwest Environmental Defense Center  
10015 S. W. Terwilligar Blvd.  
Portland, OR 97219

Re: James River Halsey Recycling Plant Draft NPDES Permit

Dear Mr. Ames:

James River has had an opportunity to review your letter to Fred Hansen, Oregon DEQ dated December 31, 1991, in regard to the Halsey draft NPDES permit. We appreciate NEDC's support of this important project. A few very good questions were raised in your letter concerning the combined discharge from James River and Pope and Talbot that I would like to take this opportunity to respond to.

1. Types of Toxic Pollutants - treated effluents from pulp and paper recycling plants typically have only very low concentrations of some individual compounds that may be considered to be toxic. As such, effluent toxicity is determined by conducting whole effluent toxicity testing using bioassays to determine both an acute and chronic endpoint. James River estimated the levels of all parameters listed in EPA's priority pollutant list that are expected to be present in the treated effluent from the Halsey recycling plant in its NPDES permit application (attached).
2. Combined Discharge from James River and Pope and Talbot - effluents from James River and Pope and Talbot will receive extensive treatment prior to combining for discharge to the Willamette River. Any toxicity that may be present in the raw (untreated) wastewater will be treated in biological treatment such that the final effluent will not be toxic. The Halsey wastewater treatment system was designed specifically for recycling plant wastewater. The biological community will be acclimated to this type of waste, resulting in much more effective treatment. The effluents from the two facilities are not substantially different in the major constituents that they contain, and will therefore not be reactive.

Fred Hansen  
Page 2  
January 7, 1992

3. Combined Discharge Sampling - the sample of the combined effluent from James River and Pope and Talbot will be collected at the river immediately prior to its discharge. It will, therefore, have had ample opportunity to become completely mixed during the 3 1/2 mile distance to the river, and will be representative of the effluent actually discharged.
4. Monitoring Schedule - James River has over 20 years of experience with toxicity testing of effluents from a wide range of pulp and paper processes that indicate that the types of effluent to be discharged from James River and Pope and Talbot will not be toxic. The monitoring schedule proposed in the draft NPDES permit is comparable to, or in many cases, more extensive than other industrial dischargers on the Willamette River.

Again, we appreciate NEDC's support and trust that the above discussion addresses their concerns. We would be happy to discuss any of these in additional detail as necessary.

Sincerely,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc: Jerry Turnbaugh - DEQ

Attachment



## Northwest Environmental Defense Center

10015 S.W. Terwilliger Blvd., Portland, Oregon 97219  
(503) 244-1181 ext.707

December 31, 1991

Fred Hansen, Director  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

Dear Mr. Hansen:

I am writing this letter on behalf of the Northwest Environmental Defense Center (NEDC) concerning the draft NPDES permit for James River Paper Company, Inc.

My educational background includes a B.S. in Chemistry and a Masters degree in Hazardous Waste Management, both from Arizona State University. Prior to moving to Oregon, I worked for the State of Arizona as a manager within the State's environmental laboratory.

NEDC is extremely sensitive to the need for companies and facilities, such as James River, to recycle wastes. It is from this perspective that NEDC has chosen to comment on the proposed NPDES permit. It is not the goal of NEDC to hinder or prevent the issuance of a permit that would be used for such a beneficial purpose. We are only concerned that potential detriments be identified, if possible, and be minimized prior to the issuance of a final permit. NEDC has the following concerns with the findings of the Department, contained in the permit Evaluation Report, justifying the issuance of an NPDES permit to James River.

### Monitoring Requirements for Outfall B

Neither the information provided by James River nor the DEQ Evaluation Report specifies what types of toxic pollutants may be present in the discharge or what their individual concentrations or combined toxicity may be. The only specific compound or parameter mentioned other than BOD, TSS, pH, total phosphorus, and ammonia is that dioxin will not be a problem at James River due to the non-chlorinated process being utilized.

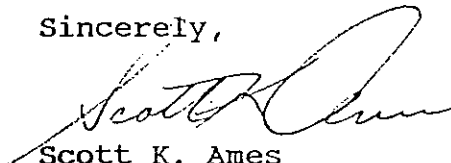
If the Department has information as to what possible toxic pollutants may be present, it should make all of that information available to allow for meaningful public comment. If the Department does not have any specific information as to toxic pollutants, the issuance of a permit should be delayed until this information can be obtained, distributed to the public, and another public comment period provided.

The fact that the proposed permit combines two dissimilar effluents only compounds the problem. Will there be any reactive chemical species present in either effluent that could produce toxic by-products not present in either effluent initially? The Department addresses the topic of toxic pollutants in their Evaluation Report but relies on data from other plants using similar technologies as the proposed James River operation. Do these other plants using technologies similar to James River combine their undiluted effluent with undiluted effluent, similar to that of Pope & Talbot, and then pipe the combined effluent four miles before discharging into a water body?

The sampling of the combined effluent is an issue not addressed in the Department's Evaluation Report, and thus is not contained in the draft permit, and NEDC feels the Department should consider and address this issue. The four mile discharge pipe provides a finite reaction time, dependant on flow rate, for the combined dissimilar effluents to mix and potentially react. Steps should be taken to insure that the samples taken from the combined effluents reflect the true nature of the discharge actually being emitted into the river. Field samples are routinely iced down to 4 degrees C immediately after sampling, therefore, samples taken near the point where the effluents are mixed may not be given ample opportunity to react prior to cooling. Samples for bioassay should be withdrawn from the pipeline at a point immediately prior to being discharged into the river so that any reactions that would be of concern would be allowed occur.

The initial monitoring schedule for the bioassays is not adequate to protect the river and the public from the combining of dissimilar effluents with unknown consequences. Other than the monitoring requirements specified for parameters with numerical standards enumerated in the draft permit, the public has no assurance that the combined effluent is not unacceptably toxic. Until the Department can demonstrate that the level of toxicity of the proposed effluent will routinely pass the required bioassay tests for Outfall B, monitoring by bioassay should be much more frequent than once every three months.

Sincerely,



Scott K. Ames  
Executive Director



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

January 27, 1992

Mr. Jerry Turnbaugh  
Water Quality Section  
Dept. of Environmental Quality  
811 S. W. 6th Ave.  
Portland, Or 97204

Dear Jerry,

James River has had the opportunity to review all written comments received through the end of the public comment period for the Halsey recycling plant draft NPDES permit. Several comments from the various submittals were substantially similar. James River offers the following additional information that may assist the Department in preparing responses to the issues being addressed in the staff report to the Environmental Quality Commission.

If you should have any questions on this information, or require additional information to respond to other issues, please call me at 206-834-8325 or Bob Gilbert at 206-834-8319.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'V. K. Sixour'.

Manager, Environmental  
Field Services-Northwest

VIRGINIA K. SIXOUR/jm

Enclosure

## I. TOXIC SUBSTANCES

Some concern has been expressed that toxic compounds may be present in the proposed discharge from the James River Halsey Paper Recycling Plant. These compounds, if present, would originate from the waste paper grades that James River will be processing. Compounds of concern include dioxin, furans, and heavy metals including cadmium, copper, selenium, thallium, and zinc. These contaminants may be found in the paper as a result of the virgin fiber processes; occur naturally in the wood; or may be in the dyes, inks, coatings, and fillers applied to the paper.

Dioxin and furans were first linked to pulp and paper manufacturing when EPA, in late 1985, unexpectedly discovered minute traces of dioxin in some mill sludges. In 1988, the USEPA/Paper Industry Cooperative Study, involving all 104 US bleached pulp mills, confirmed dioxin's presence as an unwanted by-product of the bleaching process and quantified the formation levels. At that time the median level of 2,3,7,8 TCDD was 4 ppt with an average of 8 ppt. During the next three years the industry responded by voluntarily implementing process changes that, by the end of 1990, lowered dioxin to a median level of 0.9 ppt and an average of 3 ppt according to an industry survey conducted by NCASI. It should be noted that these most recent data represent all US bleached pulp mills, some of which have not yet completed planned improvements.

James River mills, where reduction programs have been implemented, have non-detectable levels of TCDD in their bleached pulp, with detection levels being  $\leq 0.2$  to  $\leq 0.8$  ppt.

Limited, unpublished data indicate effluent from paper recycling plants have non-detectable levels of TCDD. Non-detects have ranged from  $\leq 3.8$  ppq to  $\leq 4.8$  ppq. These effluent values were obtained at the time TCDD levels in waste paper grades ranged from 1.6 to 4.8 ppt. There will continue to be trace levels of TCDD in recycled paper until process changes are made at all mills. However, it is reasonable to assume that, with TCDD levels in bleached pulp at non-detect or approaching non-detectable levels with implementation of planned process changes, the potential of TCDD being present in the James River Halsey effluent should also decrease.

It may be useful to look at specific results of dioxin reduction in effluent from bleached pulp mills. In 1988 only about 35% of the 104 mills in the US had levels at or below 10 ppq (the nominal detection limit for dioxin). By the end of 1990 fully 70% of all mills were below 10 ppq, again with the understanding that not all mills have made planned improvements. Similar results have been



observed in James River mills that have made process changes - dioxin levels in effluents from all these mills are less than 10 ppq. In fact, the following TCDD and TCDF levels in bleached pulp and treated effluent have been attained by the James River Marathon, Ontario, Canada and Naheola, Alabama Mills. Since bleached kraft mills have demonstrated the capability of obtaining non-detectable levels of TCDD in their effluents, effluent from a recycled mill should have significantly lower levels.

Mill	Pulp, ppt		Effluent, ppq	
	TCDD	TCDF	TCDD	TCDF
Marathon, Ontario	<0.8	<0.2	<3.9	<2.3
Naheola, Alabama	SW <0.3	<0.3	<6.4	<7.8
	HW <0.2	<0.4		

In summary, dioxin levels in the raw material (recyclable paper) have already been significantly reduced and will continue to decrease in the future. We expect that dioxin levels in the effluent from the recycled paper plant at Halsey will be non-detectable, and will be driven lower by reduced levels in raw material. However, we agree that a requirement to monitor the effluent, the wastewater treatment plant sludge, and the incoming waste paper grades on a quarterly basis is appropriate.

Concern about the discharge of low concentrations of certain heavy metals has also been raised. The estimated values have been submitted previously in James River's NPDES Permit Application. These values are well below the Willamette River water quality standards. Acute and chronic bioassays will be conducted to demonstrate that the effluent is not toxic. It may be useful to compare the effluents of a typical paper recycling plant to a typical municipal effluent insofar as heavy metals are concerned. Levels are generally found to be lower in paper recycling plant effluents. Some heavy metals may also be detected in the wastewater treatment plant sludge. A comparison of paper recycling sludge and municipal sludge for elemental metals is attached. Levels are typically lower for paper recycling plant solid waste than for that of municipalities.

## II. JAMES RIVER SECONDARY FIBER PLANT AS A NEW SOURCE

Prior to the construction and operation of the Secondary Fiber Plant, James River has received bleached Kraft pulp in slurry from the Pope and Talbot Pulp mill. This pulp is currently used in the production of consumer grades of towel and tissue. The effluent from the paper mill is piped to Pope and Talbot's wastewater treatment system. With the installation of the recycling facility and its dedicated wastewater treatment system at the James River site, James River will operate independently of Pope and Talbot. The paper mill effluent will no longer be discharged to Pope and Talbot, but will be reclaimed for use as process water for the Secondary Fiber operation. The James River facility will become an integrated pulp and paper mill, from wastepaper processing through the production of recycled grades of towel and tissue and recycled pulp for off-site shipping. The Pope and Talbot facility will be a separate bleached kraft market pulp business, using virgin wood fiber as a raw material source. James River and Pope and Talbot will treat and discharge their respective effluents separately, as the facilities will represent two unique and separate processes.

The James River secondary fiber facility meets the definition of new source as defined in 40 CFR 122.29, with further guidance given by the examples in 49 Federal Register 38044 (September 26, 1984).

### 40 CFR 129.29 (b)(1) Definition of New Source

- (i) It is constructed at a site at which no other source is located; or
- (ii) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
- (iii) Its processes are substantially independent of an existing source at the same site... [determined through consideration of] such factors as extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

### 40 CFR 129.29(b)(3):

Construction on a site at which an existing source is located results in a modification subject to §122.62 [the procedures governing modification], rather than a new source (or a new discharger), if the construction does not create a new building, structure, facility, or installation meeting the criteria of paragraph (b) (1) (i), (ii), or (iii) of this section, but otherwise alters, replaces, or adds to existing process or production equipment.

49 Federal Register at 38044 (September 26, 1984)--Guidance on New Source determinations:

- Example 1 You decide to improve a product's quality by installing a new purification step in the process. Such a minor change would be integral to existing operations and would not require reclassification of your facility as a new source. On the other hand, if the only connection between the new and old facilities is that they share the same source for their utilities or that they use the same treatment plant for their wastewater effluents, the new facility will be a new source.
- Example 2 You begin to produce a new product very similar to a current one, and the production process uses essentially the same equipment. In this case, the source is considered existing, rather than new. However, if you add equipment to produce the raw materials for the new product, the proposed structure would be considered a new source.

The James River facility clearly represents a separate operation that is substantially independent of the existing Pope and Talbot operation (40 CFR 122.29 (b) (i) (iii)). The new secondary fiber plant is not integrated with the existing Pope & Talbot plant. They are two separate facilities, technically, physically and operationally. Further, they are not engaged in the same general type of activity, as the two operations produce different products by completely different processing methods and raw materials.

III. OREGON ADMINISTRATIVE RULES (OAR) 340-41-026 AND 340-41-445

The Department has addressed James River's compliance with the general policies of OAR 340-41-026 and -445 in their Evaluation Report for the Application for NPDES Wastewater Discharge Permit for James River Halsey's secondary fiber plant. The antidegradation policy states, in part, that approval of new discharges on non-water quality limited streams that may have some theoretical or detectable impact on high quality waters will be allowed, provided that there is no significant adverse impact on water quality, that any change in water quality will not adversely affect recognized beneficial uses, and that highest and best practicable treatment and control of waste discharges is employed. James River and the Department have done extensive river water quality modeling to demonstrate that the proposed discharge loading will have no measurable impact on in-stream dissolved oxygen levels. In fact, the proposed load is less than two-thirds of the load that would result in a detectable change in dissolved oxygen, even under worst case river conditions (extreme low flow, all dischargers discharging at permit limits). The discharge is expected to be in compliance with all Willamette River water quality standards which protect all beneficial use of the river. James River intends to conduct river studies to demonstrate

compliance. The Halsey plant will employ highest and best practicable treatment and control in its process and wastewater treatment systems to minimize the impact on water quality. These are discussed in more detail in the following section (Improved Treatment Alternatives, #3).

James River has evaluated the feasibility of various improved treatment alternatives, non-discharge alternatives and limited discharge during the summer months, as required by OAR 340-41-026(3)(b). These are summarized below.

### **Improved Treatment Alternatives**

James River evaluated three options available to reduce the BOD loading in the final effluent to levels that would be significantly less than New Source Performance Standards (NSPS) as established by the EPA in their effluent guidelines for the Deink Subcategory of the Pulp, Paper, and Paperboard industry category (40 CFR 430.175, Subpart Q). NSPS are typically applied to new discharges on non-water quality limited streams.

#### **1. Tertiary Treatment Using Filtration Technology**

Achieving additional BOD removal subsequent to conventional secondary (biological) treatment is possible with the use of filtration equipment. This is typically accomplished with single (e.g., sand) or dual (e.g., sand/anthracite) media filters. Internal James River literature reviews and pilot plant work indicate that 25-35% additional BOD removal is possible with this type of system on pulp and paper mill effluents. A major problem with a filtration unit is the need for frequent backwashing of the filter media, and the subsequent handling and disposal of the filter mud. The media tends to become fouled over time, thus requiring replacement and disposal of the spent media. The life of the media can be extended by cleaning with an anti-slime chemical, such as hypochlorite.

The capital cost for a filtration unit capable of providing treatment for secondary effluent from the recycling plant is approximately \$2-3 million. This does not include the additional operating cost that would be incurred.

#### **2. Tertiary Treatment Using Wetlands Treatment**

Wetlands treatment of wastewaters is an emerging technology that has received limited study, but has not been implemented on a full-scale basis for pulp and paper effluent. Pope and Talbot is currently studying this technology on a pilot-scale level. At this point in time, wetlands treatment is not proven technology for the Northwest climate and growing conditions or for secondary fiber plant effluent. The Pope and Talbot study

will provide valuable information on the application of this technology in this part of the country at its conclusion in five years. James River is considering a similar study using the treated effluent from the Halsey recycling plant to determine the potential application and effectiveness of this type of treatment on secondary fiber effluent. Initial indications are that low BOD removal efficiencies are possible (30-35%), mainly due to filtration through the beds. It is unknown how this type of system will perform on a long-term basis. Plugging of the planting media, die-back of the crops, and general bed maintenance for a full-scale operation are identified concerns.

### 3. Conservatively Designed Secondary Treatment in Conjunction with Pollution Prevention Technology

Secondary biological treatment is necessary to achieve the BOD limits established by NSPS (3120 lb/day monthly average, 5760 lb/day daily maximum). At expected influent loadings for the Halsey recycling plant of 50,000 lb/day into primary and 27,000 lb/day into secondary treatment, NSPS limits require greater than 94% overall BOD removal and 89% BOD removal in secondary treatment. A 35% reduction in NSPS BOD loading can be accomplished in a conservatively designed high rate activated sludge system. This can be accomplished through extended aeration, high recycle rates, and application of conservative secondary clarifier design parameters. The James River wastewater treatment system was designed using these conservative parameters. It will be capable of achieving an overall BOD removal efficiency of 97% across the entire treatment system, and 94% BOD removal efficiency across the secondary treatment system, alone. These upgrades have been accomplished at an additional capital cost of approximately one million dollars.

James River has taken many steps in the design of the recycling plant to prevent pollution at the source, rather than concentrating on end-of-pipe treatment, alone. These include: (1) extensive recycling of process water, which results in water use that is less than a third of industry average and in minimizing the quantity of effluent to be treated; (2) use of a non-chlorine sequence for color-stripping and brightening to prevent the generation of chlorinated organics; and (3) use of mechanical, or physical, means of contaminant removal, thereby minimizing chemical and energy usage. These choices have been made at considerable additional capital and operating costs in order to minimize the impacts of this process on the environment. For example, specialized equipment is necessary to clean and reclaim the process water so that it is suitable for reuse. These water conservation efforts were accomplished at an additional cost of over \$2 million. The equipment and the chemical costs for the non-chlorine sequence is significantly higher than would be required for the more

conventional hypochlorite-based sequence: approximately \$1.5 million higher capital cost and \$30 per ton (\$3.24 million per year) in added operating costs. Much more specialized equipment for the extensive cleaning, screening, and separation stages is required for contaminant removal than would be required for the higher temperature or chemically-assisted processes.

### Summary

The high cost for the benefit achieved (low BOD removal) and the potential problems associated with filtration make this type of tertiary treatment a non-desirable option. Wetlands treatment is not proven technology at this point in time. Additional information will be required before a reasonable evaluation of this technology can be completed. The option of installing a conservatively designed secondary treatment system results in a similar reduction in BOD loading as the evaluated tertiary treatment options at a lower cost. This will also result in a discharge loading that has no measurable impact on the in-stream dissolved oxygen levels. As water quality will be maintained at current levels, James River has determined that installation of pollution prevention technologies within the process is more desirable to achieve further improvements in the quality of the effluent rather than pursuing additional end-of-pipe treatment technologies that have questionable environmental benefits. This combined option of enhanced secondary treatment and pollution prevention was determined to result in the most environmental benefits and the least risk.

### **Non-Discharge Alternatives**

The only non-discharge alternative evaluated for treated effluent from the James River Halsey recycling plant was spray irrigation. Wastewaters used for irrigation of crops must be applied at an agronomic rate, i.e., equal to the consumptive use of the crop. This limitation is applied such that there will be no impact (i.e., no statistical increase above background) on groundwater quality. Since the treated effluent contains low levels of some parameters that have drinking water limitations, application must be limited to crop uptake. This crop uptake value varies depending on crop selection. An average value of 0.2 inches per day was chosen for the typical crops grown in the Willamette Valley. An application rate based on this value and the average effluent flow rate of 3.5 mgd results in an average land use requirement of 640 acres per day, 360 days per year. The land can only be irrigated on days that receive no rainfall and when the soil is capable of absorbing this quantity, such that no ponding or runoff result. Since these conditions are potentially met only 4-6 months per year in the Willamette Valley, sufficient storage capacity would need to be available to hold the effluent during the winter months. This will double or triple the land use requirement for irrigating during the summer months (1200-2000 acres per day).

The cost for this non-discharge alternative would include capital costs for a storage lagoon and infrastructure for piping to nearby farmland, and operating costs for the irrigation operation. The capital for installing a lagoon capable of storing the required volume of effluent (600-800 mg) is approximately \$20-25 million. The availability of land, types of crops, and soil conditions have not been thoroughly investigated to determine the potential capital cost for piping and pumping the effluent for irrigation. The operating costs for the irrigation operation have been estimated to be \$4-6 million per year. Due to the high cost and potential environmental risk associated with this non discharge alternative, further evaluation was not conducted. It was determined that improved treatment and limited discharge to the Willamette River could be accomplished with no measurable impact on water quality.

### **Limited Discharge**

The final requirement under OAR 340-41-026(3)(b) is that limited discharge alternatives be investigated. The Willamette River is most sensitive to BOD loadings during the summer months when flow is low and temperature high. The DEQ has proposed BOD limits that restrict James River's discharge during the summer months (May 1 - October 31) to less than two-thirds of the winter limit.

ELEMENTAL METAL COMPOSITION OF VARIOUS SLUDGES  
(Concentrations in mg/L)

	<u>Typical Deinking Plant</u>	<u>U.S. Pulp and Paper Mills</u> <sup>1</sup>	<u>Municipal</u> <sup>2,3</sup>
Aluminum	2,100	1,200	NA
Cadmium	ND	4	16
Calcium	97,000	2,950	39,000
Chromium	8	40	890
Copper	19	67	850
Iron	275	2,930	11,000
Lead	ND	82	500
Magnesium	1,170	4,580	4,500
Manganese	14	257	260
Nickel	2	ND	82
Potassium	540	1,370	3,000
Zinc	76	127	1,740

NA - not available

ND - not detected

- 1 McGovern, J. N., "Characteristics of Combined Effluent Treatment Sludges from Several Types of Pulp and Paper Mills", TAPPI Environmental Conference Proceedings, April 1982.
- 2 Kendall, R. L.; J. R. Pait, "Land Treatment of Paper Mill Sludge", TAPPI Environmental Conference Proceedings, April 1982.
- 3 "Municipal Sludge Management: Environmental Factors", U. S. EPA, Washington, D.C., EPA 430/9-77-004, October 1977.





**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

RECEIVED 1 30 1992

January 29, 1992

Mr. Jerry Turnbaugh  
Industrial Waste Section  
Water Quality Division  
Department of Environmental Quality  
811 S. W. 6th Ave.  
Portland, Oregon 97204

Dear Jerry:

Several groups have submitted formal comments to the Department on James River's draft NPDES permit for the Halsey recycling plant regarding the perceived inequities between municipal and industrial dischargers on the Willamette River. The commenters include the Oregon Association of Clean Water Agencies (ACWA), the League of Oregon Cities, and the cities of Albany and Corvallis. The comments carried similar themes, most of which were directed at the DEQ. One of the central concerns expressed is that the approval of the James River discharge could potentially impact the wasteload allocations of the existing dischargers by using up a significant portion of the remaining assimilative capacity. The Department has made the statement that the river is not water quality limited for any of the parameters that would be impacted by the proposed discharge, including dissolved oxygen. The DEQ staff has done a very thorough review of James River's permit application, and has done extensive river water quality modeling to determine the impact that the proposed discharge will have on Willamette River Water Quality Standards. The results of the modeling have demonstrated that James River's discharge will not have a measurable impact on in-stream dissolved oxygen levels, even under worst case river conditions (extreme low flow and all dischargers at permit limits). This clearly indicates that the discharge will not have a significant impact on the remaining assimilative capacity and definitely would not impact the existing load allocations of other dischargers.

Mr. Jerry Turnbaugh  
Page 2  
January 29, 1992

The inequity concerns raised by the cities do not directly affect James River's proposed discharge. The permitting process has received rigorous DEQ review in compliance with all Oregon Administrative Rules. However, James River urges the Department to formally respond to this issue by giving the cities the assurance that the Willamette River is not water quality limited for dissolved oxygen and that approval of the James River discharge will not impact current wasteload allocations.

Very truly yours,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

cc:

Terry Smith - ACWA  
Joe Mc Laughlin - League of Oregon Cities  
Keith Rohrbough - City of Albany / Mayor  
Rolland Baxter - City of Corvallis / Public Works



**JAMES RIVER CORPORATION**  
CORPORATE ENVIRONMENTAL SERVICES-WEST  
904 N.W. Drake Street, Camas, WA 98607-1999 (206) 834-4444

RECEIVED JAN 30 1992

January 29, 1992

Hon. Charles Vars, Mayor  
City Hall  
501 SW Madison Avenue  
Corvallis, Oregon 97333

Dear Mayor Vars,

The following information is offered in response to the January 14, 1992 letter from Mr. Karl R. Huber of the Mary's Peak Chapter of the Sierra Club to the editor of the Corvallis Gazette-Times regarding the draft NPDES permit for the James River Halsey recycling plant. We hope that this information will assist you in discussions with the City Council Members and other interested residents of the City.

We have reviewed the Sierra Club letter and have identified eleven misleading or inaccurate statements. In an effort to make sure the Sierra Club had the best information possible, Mr. Huber visited the Pope and Talbot and James River facilities on January 20, 1992 to discuss the Sierra Club's concerns. This letter reviews those issues for which James River has the authority to respond. Any questions or issues regarding Pope and Talbot, Valley Landfills (Coffin Butte), or the Department of Environmental Quality should be directed to those parties.

James River has applied for a permit to discharge wastewater to the Willamette River in compliance with all Oregon and Federal government regulations. The Department of Environmental Quality has made the statement that the river is not water quality limited for any of the parameters that would be affected by the proposed discharge. The discharge will comply with all Willamette River water quality standards which protect all beneficial uses of the river, including drinking water. Based on these findings, the Department has proposed a NPDES Permit for the James River paper recycling plant.

DRINKING WATER IMPACTS:

James River and the City of Corvallis have been working cooperatively over the past several months to ensure that concerns over the potential impact of the James River discharge on the City's drinking water are addressed. Although James River will monitor the effluent to demonstrate that the discharge complies with all water quality standards, the City has requested and James River has agreed, that special studies will be conducted to ensure that drinking water quality is not impaired by the James River discharge. Levels of heavy metals in the effluent are expected to be well below water quality criteria, and will have no impact

on drinking water quality. Any metals present in the inks from the wastepaper will be removed with the solid waste fraction. These low levels will continue to decrease as the printing industry changes over to low metal formulation inks. No cadmium is expected to be present in the effluent or in the solid waste.

#### SOLID WASTE IMPACTS:

The wastepaper that is recycled at the James River plant will result in a net reduction in the amount of solid waste going to landfills of over 740 cubic yards (40 dump truck loads) per day. The solid waste that is generated as a result of the recycling process consists of the non-fiber fraction of the wastepaper, including coatings, fillers, inks, and adhesives. This material will initially be disposed of in Coffin Butte landfill. James River is pursuing several beneficial use options for this material to minimize the length of time that the landfill will be utilized for disposal. One option that is being considered is to use the James River residue as daily cover at the landfill, as Mr. Huber alludes to in his letter. This option would offset the current cost for Coffin Butte to purchase and haul in cover material from off-site, thus resulting in lower landfill costs, which would presumably be passed along to the rate payers.

Information from Valley Landfills indicates that James River will constitute about 25% of the incoming waste. Due to the steady flow of waste, and therefore revenue, from James River, rates are expected to remain more stable (i.e. not increase as rapidly). Valley Landfills is in a better position to project future costs for cell development. Based on information received from the landfill operator, if James River uses Coffin Butte for 5 years, the projected life of the landfill would go from 60 years to 59 years.

As per Mr. Rolland Baxter's letter's of January 8, 1992, James River has agreed to aggressively evaluate alternate waste disposal schemes with the emphasis of finding a beneficial use for the waste material. James River has agreed to a schedule that allows for studies and/or pilot scale trials of several of these options.

#### IMPACT ON WILLAMETTE RIVER WATER QUALITY

The DEQ has indicated that the proposed discharge will comply with the newly adopted anti-degradation standard. Implementation of this standard involves making a determination of the significance of the proposed discharge on water quality. If not "significant", further analysis would not be required; the anti-degradation standard is therefore, met. The DEQ has determined from extensive river water quality modeling that the proposed discharge will cause no measurable decrease in downstream dissolved oxygen levels. This finding of no measurable decrease would be considered by most to not be a "significant" impact on water quality.

Hon. Charles Vars, Mayor  
Page 3  
January 29, 1992

Sophisticated river water quality models are available to predict the downstream impacts of increased loads to the river. These models have been verified by actual river data under a variety of conditions. Therefore, not only is the river's capacity to assimilate the proposed James River discharge known, but the modeling results also indicate that the river can assimilate this load with no measurable impact.

The Willamette River water quality is currently very good, as it has been for the past 20+ years. In the years since wasteload allocations were assigned to industrial dischargers on the Willamette, several industrial dischargers have ceased operation. Plants that ceased operation include Boise Cascade at Salem, and Crown Zellerbach at Lebanon. These plant closures resulted in a significant reduction of 11,000 lbs per day of BOD being discharged to the river during the summer months. This load was equivalent to approximately 30% of the permitted industrial discharge at that time. Based on this data, the proposed discharge will be only a fraction of the industrial load reductions that have occurred on the river. Since other industrial and municipal load reductions have occurred as well, it is evident that the James River discharge will not be taking up all of the "room" created by the Willamette River cleanup efforts. Additional assimilative capacity exists.

James River has committed considerable additional expense to ensure that the proposed discharge will not have a measurable impact on the Willamette River. This will be accomplished through the installation of a conservatively designed high rate biological treatment system, and several pollution prevention technologies within the process. The cost for this additional treatment and in process control is in excess of \$4.5 million in capital costs, and \$3-4 million per year in added operating costs in comparison to the cost for what is typically recognized as best available technology (i.e. capable of meeting federal New Source Performance Standards). James River has received the DEQ's concurrence that the plant, as designed, meets the requirements of highest and best practicable treatment and control of wastes.

James River appreciates the opportunity to address some of the issues and concerns conveyed by the Mary Peak Group, Sierra Club. If you or members of the City Council or community have additional questions, please do not hesitate to call me at 206-834-8325.

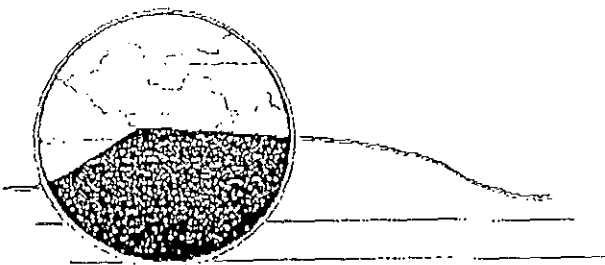
Very truly yours,



VIRGINIA K. SIXOUR/gh

Manager, Environmental  
Field Services-Northwest

RB



MARYS PEAK GROUP, SIERRA CLUB  
P.O. BOX 863  
CORVALLIS, OREGON 97330

RECEIVED  
JAN 16 1992  
PUBLIC WORKS

January 14, 1992

Mr. Norm Lewis, Editor  
Corvallis Gazette-Times  
600 SW Jefferson Avenue  
Corvallis, Oregon 97330

Re: James River Paper Company, Inc.'s proposed waste discharge permit

Dear Mr. Lewis:

The attached Op Ed Article started out as a letter to the editor, but proved too long. The issues are important to the City of Corvallis to its citizens and to its growth potential. The January 8, 1992 DEQ hearing was a revelation for many.

We would appreciate timely publication in order to contribute to informed public debate on these issues.

Sincerely yours,

KARL R. HUBER, CHAIR  
MARYS PEAK GROUP SIERRA CLUB

cc: Hon. Charles H. Vars,  
Mayor  
City Council Members

January 14, 1992

January 14, 1992

Mares Peak Group Sierra Club -- Proposed Opinion & Editorial Article for the Corvallis Gazette Times

Unless the City of Corvallis acts effectively, and does so now, the Environmental Quality Commission (EQC) will rubber stamp a Department of Environmental Quality (DEQ) recommendation for a James River Paper Company, Inc. waste permit. This action will increase waste pumped into the Willamette River at Halsey. It also will determine three crucial issues for the citizens of Corvallis.

Without public debate, DEQ's action will impact costs for clean drinking water, accelerate a doubling of garbage fees, and apply a financial tourniquet to the community's life line to the River. Each of these issues comes down to how much money the citizens are going to pay to subsidize James River Paper Company, Inc. in order to maintain livability here. The City of Corvallis is the only player that can change the outcome. But City officials are constrained by an irrational fear that Corvallis must not be perceived as anti-business. As a consequence, City officials are unable to act effectively.

When the permit is granted, combined Halsey Mill discharge to the River will jump from 2500 pounds of BOD per day to 4500. New quantities of cadmium and heavy metal ink residues will be added to the River above the City's fresh water intake pipe. Where is the City on this issue? The City is going to settle for face-saving long term studies of the impacts on water quality, while its 43,000 citizens drink the water.

When the plant starts operating in March, 175 tons per day of new solid waste will be taking up cheap cell space at Coffin Butte Landfill. The next cell at Coffin Butte will cost twice as much to construct. The sooner it opens, the sooner disposal rates for all citizens will double. Where is the City on this issue? It's lost sight of the ball. It has accepted skyrocketing costs as inevitable, and is bogged down trying to figure out how to justify combined inevitabilities to its citizens. Use the waste to cover other waste, perhaps arguing that "but for" the new waste cost increases would be even higher. Talk about economies of scale. So while James River thinks about what's good for James River, it's going to be business as usual, and everyone will pay, as usual.

January 14, 1992

DEQ's proposed discharge level is based on a new anti-degradation standard which was dreamed up just for this case. The new standard does not apply to Corvallis's discharge, nor to that of any other permit holder downstream. The River's capacity to absorb, dilute, and process waste is unknown. There's no data. To accommodate its own growth Corvallis will have to build a 30 million dollar tertiary treatment plant. James River isn't being held to the same standard, and its waste even could reduce the River's capacity to take Corvallis's present level of discharge. Where is the City on this issue? First it begged James River to accept responsibility. James River knows how to Just say No! It passed the buck to DEQ. So now the City's going hat in hand to DEQ, seeking "assurances" that whatever the River's physical capacity (Total Daily Minimum Loading) may turn out to be, reality won't have any impact on ratepayers in Corvallis. That's Corvallis-in-Wonderland! No public agency can give any meaningful assurances.

Either you control pollution at its source, or you live with the costs and consequences.

The citizens of Corvallis who fought successfully for forty years to clean up the Willamette River did so to make Corvallis a better place to live. They didn't clean up the River to make room for waste from James River's expanded plant.

The January 8, 1992 DEQ Hearing in Corvallis was the first revelation for many citizens. James River was unwilling, or unable, to disclose the cost of treating its waste so that its expansion would have no impact on the River and the Citizens of Corvallis. Its Halsey neighbor, Pope & Talbot, Inc., is tripling production capacity, and spending the money necessary to treat the additional waste so that discharges remain within existing permit limits. Pope & Talbot is trying to act responsibly. James River Paper Company, Inc. seems unaware of responsible alternatives.

Since Pope & Talbot's expansion is incomplete, there ought to be sufficient slack within the existing permit so that James River can begin operating in March, on schedule, without an additional waste discharge permit. Let the private parties work out their own accommodation to live within existing limits.

Parents who say "No" aren't anti-child, even if their children claim their parents don't love them. Eventually the children learn both respect and responsibility. Nor will the City of Corvallis be perceived as anti-business



January 14, 1992

when it says "No." Like children, industrial entrepreneurs want to know their limits, so that they can learn to live responsibly. By requiring that the private parties operate within existing permit levels, James River will be forced to confront technical, if disagreeable, alternatives, reach an accommodation with Pope & Talbot, and coordinate installation of additional waste treatment facilities to fit within Pope & Talbot's timetable for its own disposal needs.

To have jobs and maintain livability requires creative leadership, and the courage to say "No." City officials need to keep their eyes on the ball. It's time for all concerned citizens to help them by telling them what we think.

Suggested wording for permit condition dealing with the solid waste issue:

The permittee shall evaluate alternatives to landfilling the wastewater treatment plant sludge with the emphasis of finding a beneficial use for the waste material according to the following schedule:

By no later than January 1, 1994 a Solid Waste Feasibility Study and Solid Waste Plan shall be completed and submitted to the Department.

By no later than January 1, 1996 laboratory studies and/or pilot scale studies shall be completed. A written report summarizing the results of these studies shall be submitted to the Department.

By no later than January 1, 1997 a program and time schedule to implement the selected alternative[s] shall be submitted to the DEQ for review and approval.

Public meetings will be held at <sup>each</sup> stage of this process to share information and provide an opportunity for public input.

Post-It™ brand fax transmittal memo 7671		# of pages ▾
To <i>Jeff Manchester</i>	From <i>Jack Brown</i>	
Co.	Co.	
Dept.	Phone #	
Fax #	Fax #	

**REQUEST FOR EQC ACTION**

Meeting Date: February 18, 1992  
Agenda Item: B  
Division: MSD  
Section: Administration

**SUBJECT:**

Approval of Tax Credit Application TC-3470 for Chemical Waste Management.

**ACTION REQUESTED:**

- Work Session Discussion
  - General Program Background
  - Potential Strategy, Policy, or Rules
  - Agenda Item  for Current Meeting
  - Other: (specify)
  
- Authorize Rulemaking Hearing
- Adopt Rules
  - Proposed Rules Attachment
  - Rulemaking Statements Attachment
  - Fiscal and Economic Impact Statement Attachment
  - Public Notice Attachment
  
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
  - Proposed Order Attachment
  
- Approve Department Recommendation
  - Variance Request Attachment
  - Exception to Rule Attachment
  - Informational Report Attachment
  - Other: Attachment

Unless the EQC chooses to develop new policy regarding the eligibility of waste disposal facilities, it is the Department recommendation that TC-3470 application be approved for tax credit certification.



811 SW Sixth Avenue  
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Meeting Date: February 18, 1992  
Agenda Item: B  
Page 2

**Tax Credit Application Review Report:**

TC-3470

Chemical Waste Management

Hazardous waste landfill  
liner.

**DESCRIPTION OF REQUESTED ACTION:**

Issue Tax Credit Certificate for TC-3470.

**AUTHORITY/NEED FOR ACTION:**

- |   |            |     |
|---|------------|-----|
| <input checked="" type="checkbox"/> Required by Statute: <u>ORS 468.150-468.190</u> | Attachment | ___ |
| Enactment Date: _____   |            |     |
| <input type="checkbox"/> Statutory Authority: _____                                 | Attachment | ___ |
| <input checked="" type="checkbox"/> Pursuant to Rule: <u>OAR 340 Division 16</u>    | Attachment | ___ |
| <input type="checkbox"/> Pursuant to Federal Law/Rule: _____                        | Attachment | ___ |
| <input type="checkbox"/> Other:   | Attachment | ___ |
| <input type="checkbox"/> Time Constraints:  |            |     |

**DEVELOPMENTAL BACKGROUND:**

- |   |            |     |
|---|------------|-----|
| <input type="checkbox"/> Advisory Committee Report/Recommendation       | Attachment | ___ |
| <input type="checkbox"/> Hearing Officer's Report/Recommendations       | Attachment | ___ |
| <input type="checkbox"/> Response to Testimony/Comments                 | Attachment | ___ |
| <input type="checkbox"/> Prior EQC Agenda Items: (list)                 |            |     |
| <input type="checkbox"/> Other Related Reports/Rules/Statutes:          | Attachment | ___ |
| <input checked="" type="checkbox"/> Supplemental Background Information | Attachment | ___ |

Refer to Director Hansen's February 11 memo and  
Assistant Attorney General February 11 letter.

**REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:**

None.

**PROGRAM CONSIDERATIONS:**

As requested by the EQC at the January 23, 1992 meeting, legal  
counsel has provided guidance on EQC authorities relating to the  
eligibility of waste disposal businesses.

Meeting Date: February 18, 1992  
Agenda Item: B  
Page 3

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

None.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the Environmental Quality Commission approve certification for tax credit application 3470.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Yes.

Note - Pollution Tax Credit Totals:

Proposed February 18, 1992 Totals

	<u>Certified Costs*</u>	<u># of Certificates</u>
Water Quality	\$ 10,119,299	1

1992 Calendar Year Totals through January 23, 1992

	<u>Certified Costs*</u>	<u># of Certificates</u>
Air Quality	\$ 207,800	3
CFC - AQ	21,175	8
Hazardous Waste	0	0
Noise	0	0
Plastics	0	0
Solid Waste	0	0
Underground Storage Tanks	11,497	2
Water Quality	<u>105,543</u>	<u>4</u>
TOTAL	\$ 346,015	17

\* These amounts represent the total facility costs. To calculate the actual dollars that can be applied as credit, the total facility cost is multiplied by the determined percent allocable of which the net credit is 50 percent of that amount.

Meeting Date: February 18, 1992  
Agenda Item: B  
Page 4

INTENDED FOLLOWUP ACTIONS:

Notify applicant of Environmental Quality Commission actions.

Approved:

Section:

Division:

Director:

Roberta Young  
Feb A. Yelle  
Jul Hansen

Report Prepared By: Roberta Young

Phone: 229-6408

Date Prepared: February 11, 1992

RY:y  
MY102520  
February 11, 1992

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Chemical Waste Management of the Northwest  
Chemical Waste Management  
Star Route Box 9  
Arlington, OR 97812

The applicant owns and operates a chemical hazardous waste landfill in Arlington, Oregon.

Application was made for tax credit for a hazardous waste pollution control facility.

2. Description of Facility

The facility is a liner consisting of 3 feet compacted clay, 60-mil thick high density polyethylene liner, leachate drainage system, leachate detection and collection sumps.

Claimed Facility Cost: \$10,119,299  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met the statutory deadline in that construction of the facility was substantially completed on November 13, 1989. The application for certification was submitted on May 6, 1991 and was found to be complete on November 13, 1991, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department (DEQ) and the federal Environmental Protection Agency (EPA), to prevent groundwater pollution. This prevention is accomplished by the proper disposal of hazardous waste as defined in ORS 466.005.

DEQ and EPA issued a joint permit for the Storage, Treatment and Disposal of Hazardous Waste Permit No. ORD 089 452 353 for a hazardous waste landfill to Chemical Waste Management of the Northwest (CWMNW). The permit requires CWMNW to dispose hazardous waste in Landfill unit L-13 containing no free liquid. The landfill was designed to prevent groundwater pollution by the installation of the liner.

CWMNW received several formal and informal enforcement actions from the Department for the operation of the hazardous waste landfill. However, these enforcement actions were not related in anyway to the claimed facility.

CWMNW is in compliance with the conditions of its permit.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment for this facility because there is no income derived from the liner.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There are no known alternatives. The liner was a specific requirement of the hazardous waste storage, treatment and disposal permit.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings realized from the installation of the facility.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.



There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department and the federal Environmental Protection Agency to prevent groundwater pollution and accomplishes this purpose by proper disposal of hazardous waste as defined in ORS 468.005.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$10,119,299 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3470.

RCDulay  
IW\WC9\WC9432  
(503) 229-5876  
12-16-91

February 4, 1992

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

MEMORANDUM

TO: Environmental Quality Commission

FROM: Fred Hansen, *Fred Hansen* Director *by KP*

SUBJECT: Pollution Control Tax Credit Issues

Significant pollution control tax credit issues emerged from the December and January EQC meetings. Department staff also met with Commission Chair Wessinger and Commissioner Squier on January 13 to examine in depth the two main issues raised at the December EQC meeting: 1) tax credit eligibility for nonpoint sources; and 2) definition of alternative methods to open burning. At the January 23 EQC meeting, Chemical Waste Management's application for certification of a landfill liner raised additional issues related to tax credit eligibility. The Commission deferred action on the application until legal counsel provides further guidance on the Commission's eligibility authorities.

Over the past two months, Department staff and legal counsel have sought to define more clearly the tax credit issues the Commission needs to address. Staff and counsel plan to present the EQC with information and advice for the special EQC meeting on February 18. The Chemical Waste Management application will also be on the agenda for Commission action.

This memo summarizes the tax credit issues to be considered at the February meeting and frames specific questions and issues on which staff or counsel will prepare written responses.

The pollution control tax credit program has become more complex in recent years. Factors adding to the complexity include broader environmental regulations and related pollution control practices. The issues that the Commission will discuss on February 18 will assist in resolving some of the concerns arising from these factors. These include:



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- Facilities for agriculture and other nonpoint source pollution have not generally been eligible under the program. How does eligibility apply given recent regulations imposed in this area, e.g., Total Maximum Daily Loads, groundwater management areas?
- Solid and hazardous waste landfills elicit questions about the applicability of tax credit eligibility. On the one hand, EPA and DEQ impose numerous requirements on such activities, leading one to conclude that any "required facilities" should be eligible for tax credits. On the other hand, the very nature of some of these "required facilities," specifically liners, seems an integral part of the business operation rather than an added pollution control device. In this regard, such facilities raise the question of whether or not they should be eligible for tax credits.

It should be noted that while we certainly have had both solid and hazardous waste landfills in this state for a number of years, we have not faced applications for tax credits for such things as liners until December 1991.

Does the law allow the Commission to make distinctions among different types of facilities required by federal or state law? If so, should the nature of these businesses, specifically the relationship of required pollution facilities to the business product, affect the eligibility or degree of eligibility?

- The law allows tax credit eligibility when the facility is not "required" if the facilities are installed voluntarily and solely for pollution benefit. Does "sole" mean, in the Webster dictionary definition, "only"? If there are de minimis or other benefits derived from the facility, does this eliminate eligibility under the "sole" provision of the law?
- Under ORS 468.150, alternatives to open field burning are eligible for tax credits. Historically, these have been used to assist in reducing open field burning in the Willamette Valley. Does the Commission have the authority to restrict eligibility by type of facility or by geography? If so, should the Commission do so and what guiding policy should be used?

Prior to the February 18 special EQC meeting, Commission members will receive a staff report which will consist of Department and Assistant Attorney General responses to the following:

Environmental Quality Commission

Page 3

February 4, 1992

1. Is there any statute or other legal regulation which mandates the EQC to grant tax credit certification for new business investment to meet existing environmental law and regulations?

If the answer to the above is no, are there other factors that relate to the Chemical Waste Management application which would mandate the Commission to grant certification?

2. Has the Commission a legal basis to determine that certain required pollution facilities are integral components of a business such as waste disposal? Would the integral components be eligible for pollution control tax credit certification?

If there is no discretion for this determination, what is the Commission's authority for determining the portion of the facility that is allocable to pollution control? On what basis does the return on investment apply?

3. One definition for whether a facility is being installed pursuant to a requirement (and, therefore, eligible for a tax credit under the principal purpose authority) is whether the Department may take formal enforcement action if the facility is not installed or properly functioning. Are there any legal constraints on the Commission's ability to define the range of enforcement authority to substantiate an environmental requirement?
4. Under the "sole purpose" definition, what are the legal and policy options for dealing with minor or de minimis benefits derived from the pollution control facility?
5. The purpose of authorizing alternatives to open field burning for tax credit eligibility is to reduce the amount of open field burning. What options are available to the Commission to ensure that approved tax credits will actually result in acreage removed from open burning?
6. What frameworks might provide a clearer definition of eligibility for alternative methods to open field burning, including definitions of specific types of facilities which are and are not eligible for tax credit relief? Are there statutory limits or legislative intent which would limit eligibility to the Willamette Valley?

Environmental Quality Commission

Page 4

February 4, 1992

Within the framework provided by the Department and legal counsel, it is my hope that the Commission will be able to give us policy direction on how you wish to have the current statutes applied. In addition, for any areas where the statutes limit what the Commission believes should be done, I would expect that we can prepare proposed legislation to be considered by the Governor for possible submission to the 1993 Legislature.

February 11, 1992

**MEMORANDUM**

To: Environmental Quality Commission  
From: Fred Hansen, Director *Fred*  
Subject: Tax Credit Eligibility

The attached self-explanatory Attorney General's (AG) opinion answers most of the issues facing the Department and the Environmental Quality Commission in the implementation of the tax credit program. There are, it seems to me, four issues needing direction from the Commission and possible further work by the Department.

1. The AG makes it clear that the Commission may not limit tax credit eligibility for a solid waste landfill or for other environmental service businesses if the facilities at issue meet the principal purpose test of the statute. The AG does indicate that there is an ability for the Commission to define the percent of the facility allocable to tax credits. In the case of liners (the concern which brought this issue before the Commission) we are not certain as to how one could define differently the percent allocable to the liner system. If the Commission would like to be able to have this thinking pursued, however, we ask that you give us direction as to what such an approach would contain.

We will, of course, await your direction in this regard. The Department would recommend, however, that to apply a different "percent allocable" or "return on investment calculation" to liners or other similar pollution control facilities requires stretching the statute further than we think best.



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2. The AG outlined the discretion available to the Commission in determining whether a particular facility met the "requirement" provision of the statute. The issue before the Commission is whether the narrower or broader definition articulated by the AG should be used. Based on the Commission's stated desire to assist nonpoint source pollution efforts and the Department's belief that these programs, if properly constructed, meet the statutory definition for "required," we believe that the broader interpretation should be used.
3. The AG outlines a modest amount of flexibility available to the Commission in interpreting sole purpose: effectively the difference between applying an "exclusive" or "only" definition or a slightly broader definition including "de minimis" other purposes.

In this regard, the Department recommends the narrower interpretation for sole purpose of "exclusive" or "only."

4. The AG outlines that under the statute the Commission has the discretion to determine eligibility for alternative methods to open field burning. The AG outlines two general categories: 1) a geographic area of eligibility; and 2) eligibility based on the type of alternative, possibly including whether verifiable acreage reductions of open field burning will be realized.

The Department recommends that a geographic distinction not be used by the Commission. We further recommend that the alternatives which are eligible for tax credits be explicitly defined within the rule and that there be a requirement that verification of permanent reductions in open field burning be a criteria of eligibility.

There are, of course, other issues that the Commission may wish to address but I hope that the preceding four items cover the main questions needing answers.

/kp

Attachment



## DEPARTMENT OF JUSTICE

PORTLAND OFFICE  
1515 SW 5th Avenue  
Suite 410  
Portland, Oregon 97201  
Telephone: (503) 229-5725  
FAX: (503) 229-5120

February 11, 1992

Environmental Quality Commission  
811 SW Sixth Avenue  
Portland, OR 97204

Re: Legal Issues Relating to the Pollution Control Tax Credit Program

This letter provides advice on a number of legal issues relating to the pollution control tax credit program. Each question is set out separately below along with a brief answer and the supporting analysis.

1. Are facilities erected, constructed or installed by a new business to comply with existing regulations eligible for tax credit certification under the "principal purpose" provisions of ORS 468.155 and 468.170 and the rules adopted by the Commission? If so, does the Commission have authority to exclude such businesses from eligibility?

### Brief Answer

Facilities developed by new businesses to comply with new or existing rules are eligible for certification under the statutes. We conclude that the Commission does not have authority to adopt rules excluding such facilities from eligibility.

### Analysis

#### A. Background

Historically, the Commission has found both new and existing businesses to be eligible for tax credits under the principal purpose test. Similarly, the Commission has certified facilities that were necessary to comply with pre-existing rules. These certifications were consistent with advice from the Attorney General's office.<sup>1</sup>

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<sup>1</sup> This advice generally has been oral and no formal opinions have been written on these issues.



This interpretation of eligibility is consistent with the literal language of the tax credit statutes. Under ORS 468.165(1), "any person" may apply for certification if (1) the facility in question meets the definition of "pollution control facility" in ORS 468.155 and (2) the facility was constructed or installed within the time period specified in ORS 468.165.<sup>2</sup> If these requirements are satisfied and proper application is made, then the facility is eligible, so long as the facility "is necessary to satisfy the intents and purposes" of the state statutes relating to treatment works, sewage disposal and treatment, solid waste, recycling, hazardous waste, noise control, used oil recycling, air quality, and water quality. ORS 468.170(4)(a).<sup>3</sup>

We have located no provisions in the statutes that show an intent to limit tax credit eligibility to existing businesses or to limit eligibility under the principal purpose test to facilities necessary to comply with requirements imposed after a business began operation.

#### B. Legislative History

The tax credit statutes were enacted in 1967 and they have been amended in almost every subsequent legislative session.<sup>4</sup> The legislative record provides clear evidence that new businesses were intended to be eligible for certification. Further, the legislature considered and then rejected statutory language that would have limited the ability of new businesses to use the tax benefits available for a certified facility. The various amendments in subsequent years do not indicate a change of legislative intent.

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<sup>2</sup> There are certain other requirements relating to solid waste, hazardous waste, and used oil facilities that are not at issue here.

<sup>3</sup> As discussed in the response to question 3, the Commission does exercise discretion with respect to the costs properly allocated to the facility.

<sup>4</sup> Attachment A to this letter provides a brief history of the tax credit statutes.

During the 1967 legislative session, three pollution control tax credit bills were introduced in Oregon. One measure (SB 272) apparently was sponsored on behalf of industry and another (SB 471) was sponsored on behalf of the Sanitary Authority (the Commission's predecessor). Eventually a compromise bill, SB 546, was drafted and, after numerous debates and amendments, enacted. Or Laws 1967, ch 592.

Each of the three bills shared the purpose of accelerating the installation of air and water pollution control equipment. "General Explanation of Tax Incentive Measure Based on SB 272 and SB 471," Exhibit (unnumbered), Senate Committee on Air and Water Quality Control, April 11, 1967. Tax benefits were intended to be available to both new and existing businesses. See, e.g., Testimony of Herb Hardy,<sup>5</sup> Senate Committee on Air and Water Quality Control, April 11, 1967. The bills varied, however, in their tax treatment of existing businesses that had already installed equipment or that might be required to retrofit existing plants. Id.

Under the compromise provisions in SB 546, the Sanitary Authority was required to issue a certificate if the principal purpose of the facility was the prevention, reduction or control of air or water pollution and if the facility would be effective to that end. A taxpayer with a certified facility could elect to take an income or corporate excise tax credit or, alternatively, to have the facility removed from the ad valorem property tax rolls.

Under the original version of the bill, a taxpayer could have taken a tax credit (as opposed to the exemption from ad valorem taxation) only in two circumstances. First, a taxpayer could have taken the credit if the certified facility was constructed within five years of the effective date of the act. (Sections 8(2)(a) and 11(2)(a).) The objective of this requirement was to create the incentive for accelerated installation of any new pollution control equipment and the credit was intended to be available to new or existing business ventures. Second, a taxpayer could have taken the credit if

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<sup>5</sup> Mr. Hardy, a lobbyist for the canneries, was a principal figure in the drafting of the legislation.

the certified facility was constructed after December 31, 1957<sup>6</sup> and was used "in connection with a trade or business conducted by the taxpayer on the effective date of [the] Act. (Id. at Sections 8(2)(b) and 11(2)(b).) The objective of this provision was retroactive relief to existing businesses that had already installed equipment and relief for the costs of retrofitting existing plants.

The conditions in SB 546 for qualifying to use a certified facility for tax credit purposes were amended several times prior to enactment. First, the qualification period for any new facilities was enlarged to include the period from January 1, 1967 to December 31, 1978. Then, the provisions authorizing tax credits for facilities constructed between 1958 and 1967 and for retrofitting of existing businesses were deleted. Finally, tax credits were made available for new facilities. The intent and the effect of these amendments was to remove any distinction in the tax treatment of certified facilities operated by new or existing businesses.

This legislative history points out that the Legislature did not intend to distinguish between new and existing businesses when certifying a facility and that it considered and then rejected language that would have distinguished between new and existing business with respect to the type of tax benefits available from a certified facility.

### C. Commission Authority

Agency rulemaking authority is generally divided into two categories: completion of an incompletely expressed legislative policy or the interpretation and application of an expressed legislative policy. See Springfield Education Ass'n. v. Springfield School District No. 19, 290 Or 217 (1980). The Commission's authority to define the standards for eligibility for tax credit certification generally falls in the latter category, because the statutes set out both the general policy

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<sup>6</sup> Apparently, 1957 was the effective date of the first statute requiring pollution control equipment. See Testimony of Herb Hardy, supra.

and specific requirements that must be satisfied.<sup>7</sup>  
ORS 468.155 to 468.170. In defining statutory terms, an agency must try to give effect to the legislature's intent. Fifth Avenue Corp. v. Washington County, 282 Or 591 (1978). Generally, the Commission's interpretation will be upheld if the definitions are reasonable and consistent with the statutory provisions and legislative purpose. In our opinion, a Commission rule excluding facilities constructed by new business ventures would be inconsistent with legislative intent.<sup>8</sup>

D. Conclusion

In light of the broadly stated eligibility provisions, past Commission interpretation, lack of any express or implied exclusion for new business and the relevant legislative history, we conclude that the Commission does not have the authority to limit eligibility for tax credits to existing business enterprises.

2. Could the Commission determine that certain facilities that otherwise meet the statutory requirements are not eligible for certification because they are integral components of a waste disposal business or other environmental service enterprise?

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<sup>7</sup> This conclusion does not apply to provisions relating to alternative methods of field sanitation (ORS 468.150) and exclusion of portions of facilities that make insignificant contributions (ORS 468.155(2)(d)).

<sup>8</sup> This conclusion is bolstered by the fact that the legislature has delegated the Commission significant substantive authority with respect to other aspects of the tax credit program. As discussed below, ORS 468.190(1) sets out an incomplete expression of legislative policy with respect to allocation of costs. There are four specific factors that the Commission must consider when determining cost allocation. The statute goes on to allow consideration of "any other factors which are relevant" to establishing the cost properly allocated to pollution control. The Commission is then given express authority to adopt rules establishing methods to be used to determine the portion of costs properly allocable." ORS 468.190(3).

Brief Answer

Probably not.

Analysis

The tax credit statutes do not include any express provisions that would allow the Commission to determine eligibility based upon whether the facility is a component of a business producing traditional goods or services as opposed to one providing waste disposal or other environmental services. This issue has been before the legislature. It was debated during the 1983 legislative session with respect to the eligibility of waste incinerators. Later, in 1989, the legislature amended the statutes to exclude waste-to-energy incinerators from the definition of eligible solid waste facilities, but it has not excluded otherwise eligible pollution control facilities merely because they are components of a waste disposal business. Or Laws 1989, ch 802.

This does not mean, of course, that all components of a waste disposal business are eligible for certification. Facilities must still satisfy the principal or sole purpose test. As early as 1967, the record indicates legislators were told that facilities necessary for the operation of the business per se would be treated differently from those that are necessary for the purpose of pollution control. See, e.g., Discussion between Rep. Jim Redden and Herb Hardy, House Taxation Committee, May 11, 1967, at 1159.<sup>9</sup>

Following the same reasoning used in question 1 above, we believe it is likely that a court would find that the Commission does not have authority to exclude facilities from eligibility merely because they are components of a waste disposal or other environmental service business.

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<sup>9</sup> In the case of a landfill, it would seem that the land and excavation would be necessary for the operation of the business per se, while liners and leachate collection and treatment systems ordinarily would not be required in the absence of environmental concerns.

3. If the answer to question 2 is no, what is the Commission's authority with respect to the determination of the portion of the facility allocable to pollution control?

Brief Answer

The Commission could determine that some portion of the cost of facilities integral to a waste disposal or similar environmental service business is not properly allocable to pollution control. However, if the determination is not based on the methodologies established by existing Commission rules, then the determination should be based on carefully articulated reasoning and supported by findings. There is some risk that such a determination would not be upheld by the courts.

Analysis

The Commission is responsible for determining the actual cost of a facility and the portion of such costs that is properly allocated to the pollution control or waste facility. ORS 468.190. In making this determination the Commission is required to consider four specific factors (recovery of usable commodities, return on investment, alternative methods or equipment, and increased or decreased costs). The Commission also must consider "any other factors which are relevant in establishing the portion of actual cost of the facility properly allocable" to pollution control. Id. These "other factors" must have the same general characteristics as those expressly stated by the legislature. See, e.g., Employment Div. v. Pelchat, 108 Or App 395 (1991).

In previous cases, the Commission has rejected the notion that disposal businesses should be treated differently for purposes of cost allocation. See, e.g., Minutes of Special Meeting of the Oregon Environmental Quality Commission, December 19, 1986 (Ogden-Marten waste incinerator). The Commission can change its position, of course, but if it does, it will need to explain its reasoning and make findings explaining how it will calculate the allocable costs for such components. ORS 468.170(3).<sup>10</sup>

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<sup>10</sup> It might be tempting to conclude that all pollution control facilities are integral to a landfill business or other environmental service industry and that no costs of facilities are properly allocable. The result would be the same as concluding that such facilities are ineligible for certification. As previously discussed, this interpretation appears to be contrary to legislative intent.

For example, the Commission might determine that some disposal businesses are essentially marketing compliance with environmental laws and that the pollution control facilities, in some sense, are of greater value to these businesses than it is to other businesses where a pollution control facility is merely incidental to production. Such a factor might be considered a factor similar to return on investment.

If the Commission were to determine that there is a reasonable basis for allocating costs differently for some pollution control facilities that are integral to waste disposal businesses, it would also need to develop a methodology for calculating the allocation costs. For example, the Commission has adopted a methodology for determining return on investment. OAR 340-16-030(5), but this rule does not treat facilities differently based upon the nature of relationship between the facility and the applicant for certification.

The likelihood that the courts would uphold an allocation determination based upon an "other factor" depends upon the persuasiveness of the reasoning supporting the distinction, the extent to which this "other factor" is similar to one of the four specific factors, and the logical nexus between the factor identified and the methodology used to reduce the cost allocation.

**4. May the Commission defer action on the pending Chemical Waste Management application until after the Commission has amended the rules for the pollution control tax credit program and then apply the amended rules to the application?**

Brief Answer

In theory, yes. However, the application is supposed to be approved or denied within 120 days. This time frame will make it difficult to complete amendments to the rule prior to taking action on the application.

### Analysis

There is no general legal prohibition against retroactive application of an administrative rule. See Gooderham v. AFSD, 64 Or App 104, 108 (1983).<sup>11</sup> Retroactive application is not allowed, however, if it would be "unreasonable." The courts determine reasonability by applying a balancing test to determine whether retroactive application would be contrary to statutory design or recognized legal principles. Gooderham, supra. In performing this balancing test, the courts often look to whether the matter is a case of first impression and the rule merely attempts to fill a void or, to the contrary, whether the new rule represents an abrupt departure from well established practice. Id. at 109. The courts also will consider the extent to which an applicant has relied on the former rule and whether there is a statutory interest in applying the new rule despite reliance by the applicant. Id.

Thus, whether the Commission may retroactively apply an amendment to the tax credit rules will depend largely upon the nature of the amendment and the extent, if any, to which Chemical Waste Management has relied on the existing rules or past practice.

It should be noted, however, that ORS 468.170(2) requires the Commission to reach a decision within 120 days of the filing of the application. The Chemical Waste Management application was found to be complete on November 13, 1991. As a result, the 120 day deadline appears to be March 22, 1992.<sup>12</sup> It would be difficult to adopt a regular rule amendment by that date. Similarly, it might be difficult to justify the adoption of a temporary rule with an immediate effective date.

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<sup>11</sup> The intent to apply a provision retroactively should be expressed in the rule. See Guerrero v. AFSD, 67 Or App 119 (1984).

<sup>12</sup> Failure to certify within 120 days does not result in automatic certification. An applicant could seek a court order, though, requiring the Commission to act.



5. What is the Commission's authority to further define the term "requirement" as used in the principal purpose test in ORS 468.155?

Brief Answer

The Commission has relatively broad authority to define the term "requirement" so long as the definition is consistent with ordinary usage of the term and legislative intent. The Commission could limit the term to requirements specifically imposed by rules or permits and enforceable by actions for permit revocation, civil penalties or court order.

Analysis

The term "requirement" is not defined in the statute. It was added to the statutes as a part of the reformulation of the principal purpose test in 1983. Or Laws 1983, ch 637. There was very little discussion of the new language during the legislative committee hearings. (The discussion in 1983 centered around solid waste incinerators.)

When a word in a statute is not defined, the courts will usually give the term its ordinary and common meaning so long as that meaning is consistent with legislative intent. ORS 174.020; Fletcher v. SAIF, 48 Or App 777, 781 (1980). While not controlling, dictionary definitions can provide some guidance. Webster's defines "requirement" as something required, wanted, or needed or as an essential requisite or condition. See also City of Portland v. State Bank of Portland, 107 Or 267 (1923) (definition of "required by law"); Beakey v. Knutson, 90 Or 574 (1919) ("direct" means mandatory and synonymous with "require").

As discussed in the answer to question 1 above, the Commission has authority to define statutory provisions as part of its implementation of the tax credit program. So long as an interpretation is reasonable and is consistent with legislative intent, it will generally be upheld. Accordingly, we believe that the Commission could define the term "requirement" narrowly to include only those agency directives that are mandatory and that are enforceable against the taxpayer by virtue of a specific regulation or permit condition. Ordinarily, such enforcement authority would include civil penalties, permit revocation, or court order.

The Commission could also adopt a somewhat broader construction of the term that includes requirements imposed under areawide management plans even though such requirements are enforceable by another government entity. An example would be mandatory management practices imposed by the designated management agency in a basin in which TMDLs are in place. There is a risk that the courts would reject a Commission's definition of "requirement" that includes directives that are not enforceable by any means.

6. What is the Commission's authority to further define the phrase "sole purpose" as used in ORS 468.155?

Brief Answer

The Commission has authority to further define the phrase "sole purpose."

Analysis

The "sole purpose" test was also added by the 1983 legislation. As with the term "requirement," it is not defined in the statute and there is very little helpful legislative history. Again, we conclude that the Commission has authority to define the term, so long as the definition is consistent with the statutory scheme.

The present "principal purpose" and "sole purpose" tests replaced the "substantial purpose" test and the legislative history does indicate an intent to restrict eligibility for certification. See Testimony of Bill Young, Director of DEQ, (SB 112) Senate Committee on Energy and Environment, March 2, 1983 at 383. Accordingly, we assume that the phrase "sole purpose" should not be defined so broadly that it essentially duplicates the previous substantial purpose test.

The Commission presently defines the term narrowly as the "exclusive purpose." OAR 340-16-010(9). This definition is clearly consistent with the statutory scheme. A somewhat broader interpretation that overlooked incidental or de minimis purposes would probably be upheld as well.

7. What is the Commission's authority to adopt rules governing approval of "alternative methods" to open field burning under ORS 468.150 and could such rules limit approval of some or all alternative methods to those used in the Willamette Valley?

Brief Answer

The Commission has broad authority to approve or to refuse to approve alternative methods. So long as there is a rational basis for the classification, the Commission could limit approval of some or all alternative methods to the Willamette Valley. Similarly, the Commission could base approval on its estimation of whether the use of the alternative method would result in an actual decrease in acreage burned or increased air quality.

Analysis

In 1975, the legislature added "approved alternative methods for field sanitation" to list of facilities eligible for certification. ORS 468.150. Or Laws 1977, ch 559, section 15. We previously advised that "approved alternative methods" are eligible for certification. However, the legislature has delegated significant authority to the Commission<sup>13</sup> to approve or disapprove such methods in the first place.

The legislature has not provided express standards for approval. Accordingly, it falls upon the Commission to

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<sup>13</sup> ORS 468.150 actually gives the authority to approve alternative methods to the department and to "the committee." The Commission, however, has general authority to adopt rules directing the Department's decisions with respect to approval of methods. ORS 468.015, 468.020. The exercise of this supervisory authority would not appear to be inconsistent with ORS 468.150.

The committee referred to in the statute is the Oregon Field Sanitation Committee. This committee was abolished and its duties transferred to the Department. Or Laws 1977, ch 650, section 6. See also Or Laws 1991, ch 920, section 24 (abolishing the 1977 advisory committee established to assist the Department).

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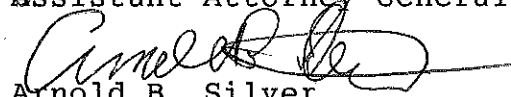
complete the expression of legislative policy. See Springfield Education Assn., supra. Rules that are reasonable and consistent with the underlying statutes will ordinarily be upheld. (See discussion at page 5, supra.)

The record of the proceedings leading to the enactment of ORS 468.150, shows that the legislature wanted to create an incentive to develop practices and equipment that would reduce the need for open field burning in the Willamette Valley. See Comments of Sen. Betty Roberts, (SB 311) Senate Committee on Agriculture, March 18, 1975. Thus, rules that limit approval of some or all alternative methods to the Willamette Valley would be consistent with the statute. See also ORS 468A.005(6); 468A.025; 468A.035 (authorizing different air quality regulations for different areas of the state).<sup>14</sup>

Similarly, rules limiting approval to alternative methods that the Commission determines are likely to result in an overall reduction of air pollutants or the actual removal of acreage from open burning are consistent with legislative intent. These were objectives of the 1975 package of field burning statutes that included ORS 468.155. Or Laws 1975, ch 559.

Sincerely,

  
Larry Knudsen  
Assistant Attorney General

  
Arnold B. Silver  
Assistant Attorney General

LK:dld 0938N  
cc: Fred Hansen  
Peter Dalke  
Roberta Young

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<sup>14</sup> Although we believe that approval could be limited to the Willamette Valley, such a limitation is not required. The statute itself contains no provision limiting eligibility to the Willamette Valley.

## ATTACHMENT A

### History of Pollution Control Tax Credit Statutes

Following is a brief history of the more important eligibility and cost allocation provisions of the tax credit statutes. Provisions relating to tax treatment of the certificate, fees and required dates for construction and application are not discussed.

The pollution control tax credit program was established by statute in 1967. Or Laws 1967, ch 592. Apparently, 23 states and the federal government already had pollution control tax credit programs at that time and Oregon may have borrowed some of its original provisions from these other jurisdictions. Testimony of Herby Hardy on SB 546, House Taxation Committee, May 11, 1967, at 1147, 1168. Always controversial, the tax credit statutes have been significantly amended during nearly every legislative session since 1967.

The original version of the statute was remarkably similar to the present law. There were a number of important differences, however. Facilities (defined essentially as they are today) were eligible for certification if the "principal purpose" of the facility was preventing, controlling, or reducing air or water pollution. The pollution control had to be by means of waste disposal, air pollutant disposal, elimination of air contaminant sources, or use of air-cleaning devices. There was no general mandate that the principal purpose be compliance with requirements imposed by the Sanitary Authority (the Commission's and department's predecessor) or Environmental Protection Agency. Similarly, there was no "sole purpose" provision. The Sanitary Authority was not given express authority to determine the allocation of costs.

In 1969, the legislature replaced the "principal purpose test" with a "substantial purpose test." Or Laws 1969, ch 340, section 4. The 1969 amendments also gave the Sanitary Authority the ability to determine the portion of cost properly allocable to pollution control. *Id.* at section 5. Allocation of costs was limited to increments of 20 percent, however. In addition, the Sanitary Authority was given express authority to adopt procedural rules for administering the tax credit program. *Id.* at section 8. A bill enacted later in 1969 transferred the responsibilities of the Sanitary Authority to the Commission and department. Or Laws 1969, ch 593.

Amendments in 1973 authorized a tax credit for certain solid waste facilities. Or Laws 1973, ch 831, section 4. The legislature also adopted standards for allocating actual cost

of the facility. Id. at section 6. See also Or Laws 1973, ch 835 (a different bill with several of the same provisions); Or Laws 1974 special session, ch 37 (resolving conflicts between the two 1973 bills).

In 1975, the tax credit statutes were recodified and placed in ORS chapter 468 and new provisions relating to solid waste were added. Or Laws 1975, ch 496. Provisions were adopted requiring preliminary certification by the department. Id. at section 5. The legislature also enacted ORS 468.150, which provides that approved alternative methods to open field burning are eligible for pollution control tax credits. Or Laws 1975, ch 559, section 15.

Amendments in 1977 made noise pollution control facilities eligible for tax credits and further refined the requirements for solid waste control facilities. Or Laws 1977, ch 795. Similar amendments in 1979 made hazardous waste and used oil facilities eligible. Or Laws 1979, ch 802. The 1979 amendments also excluded from eligibility of solid or hazardous waste facilities a list of items found to make an "insignificant contribution" (e.g., office buildings, cars and parking lots). Id. at section 1.

The next major revision in eligibility requirements occurred in 1983. Or Laws 1983, ch 637. The legislature repealed the substantial purpose test and reinstated the principal purpose test. Id. at section 1. Rather than readopt the specific list of purposes, however, the amendment stated that the principal purpose must be "to comply with a requirement imposed by the department, the federal Environmental Protection Agency, or regional air pollution authority. The legislature also added the sole purpose test. Id. In addition, recycling facilities were made eligible for certification.

The legislature also addressed the issue of replacement or reconstruction of facilities. Id. The legislature limited eligibility to replacements due to regulatory requirements and to costs greater than the "like for like" costs of replacement.

The legislature also replaced the Commission's authority to allocate costs based on 20 percent increments with authority to allocate costs from 1 to 100 percent. Id. at section 4. The Commission was given express authority to adopt rules establishing methods to be used for calculating such costs.

In 1987, the legislature excluded "property installed, constructed or used for clean up of emergency spills or unauthorized releases" from eligibility. Or Laws 1987, ch 596,

section 4. The legislature gave the Commission express authority to adopt rules further defining this particular exclusion. Id.

The 1989 legislature extended the exclusion for portions of facilities making "insignificant contribution" (office buildings, fences, parking lots, etc.) from solid waste and hazardous waste facilities to all facilities. Or Laws 1989, ch 802, section 4. Asbestos abatement facilities and solid waste incinerators were excluded. Id. In addition, the legislature continued to fine tune the provisions on cost allocation, this time by limiting actual cost of the taxpayer's own cash investment in the facility. Id. at section 6. The provisions for preliminary certification by the department were repealed. Id. at section 8.

FAX - 35M

JAN 28 '92 13:43 FROM DIXIE NORTHERN

PAGE.002

WENDY HOLDEN  
Director



~~H. A. BARBER~~ WANC.

- Info  
Dick Wenger  
1/31/92

STATE OF WASHINGTON

DEPARTMENT OF GENERAL ADMINISTRATION

278 General Administration Building, Mail Stop AX-22 • Olympia, Washington 98504-0622

FOR IMMEDIATE RELEASE:  
November 6, 1991

FOR MORE INFORMATION:  
Bob Clingman, 586-8954  
Public Information Officer

**MULTI-STATE PURCHASING ALLIANCE GAINING MOMENTUM**

OLYMPIA - Seventeen western states have formed a purchasing alliance to create market incentives for recycled products and save taxpayer dollars. The first multi-state contract should be in place by early 1992.

The Department of General Administration's Office of State Procurement provided the initial spark that attracted interest from 16 other states. The Environmental Protection Agency provided a grant that paved the way for formation of the Western States Contracting Alliance (WSCA). The new group has elected Kay Hawley, Deputy Assistant Director for the Office of State Procurement as its chair.

According to Hawley, first priority of the organization is to develop specifications and award multi-state contracts for recycled products, with paper at the top of its list. By early next year, a buying program for copier paper containing a specified percentage of recycled post-consumer waste is expected to be in place. Other paper products will follow. Hawley sees this as a boon to manufacturers, environmentalists and taxpayers. "To meet the increased demand, manufacturers will step up their use of recycled paper...good news for recycling organizations and the environment, and a relief to landfill operators. The strong market will also ensure that products will be available at competitive prices...good news for state agencies and taxpayers," Hawley said.

- MORE -





**Multi-state add 1-1-1-**

The Office of State Procurement buys more than 10,000 tons of paper supplies each year for its customers.

WSCA is also developing specifications that will lead to contracts for disposable paper products, (cups, plates, etc.), computer paper, light bulbs and fixtures, and plastic bags. Up for future consideration are contracts for tires, insulation, lead acid batteries, and even compost.

Recent reports indicate that paper and yard waste are the highest contributors to landfills. Recycling these two items could reduce the volume sent to landfills by 52 percent.

"The progress we have made so far is very exciting," Hawley said. "And the potential for cost saving and for developing additional markets for environmentally sensitive products is enormous. Under our charter, WSCA will permit cities, counties, colleges, and other units of government to benefit from our combined buying power."

States participating in WSCA include Alaska, Arizona, California, Colorado, Hawaii, Idaho, Minnesota, Montana, Nebraska, Nevada, New Mexico, Oregon, Utah, South Dakota, Washington, Wisconsin and Wyoming, plus American Samoa and Guam.

The Office of State Procurement buys approximately \$1 billion in goods and services per biennium. It also administers the state's successful recycling program, Government Options to Landfill Disposal (G.O.L.D.)

greenwood

Approved _____
Approved with Corrections _____

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
MAR 09 1992  
AIR QUALITY DIVISION

*Minutes are not final until approved by the EQC*

**ENVIRONMENTAL QUALITY COMMISSION**

Minutes of the Two Hundred and Eighteenth Meeting  
January 23, 1992

**Regular Meeting**

The Environmental Quality Commission regular meeting was convened at 8:30 a.m. on Thursday, January 23, 1992, in Conference Room 3A, Oregon Department of Environmental Quality (DEQ), 811 S. W. Sixth Avenue in Portland, Oregon. The following commission members were present:

- William Wessinger, Chair
- Dr. Emery Castle, Vice Chair
- Henry Lorenzen, Commissioner (arrived late)
- Anne W. Squier, Commissioner
- Carol Whipple, Commissioner

Also present were Larry Knudsen, Assistant Attorney General, Oregon Department of Justice, Fred Hansen, Director, DEQ, and other DEQ staff.

**Note:** Staff reports represented at this meeting, which contain the Department's recommendations, are on file in the Office of the Director, DEQ, 811 S. W. Sixth Avenue, Portland, Oregon 97204. Written material submitted at this meeting is made a part of this record and is on file at the above address. These written materials are incorporated into the minutes of the meeting by reference.

Chair Wessinger called the meeting to order.

**A. Approval of Minutes of the November 19, 1991, Special Meeting and December 13, 1991, Regular EQC Meeting.**

Commissioner Squier moved that the November 19, 1991, and December 13, 1991, EQC minutes be approved; Commissioner Whipple seconded the motion that the minutes be approved as written; the minutes were approved with four votes in favor.

Environmental Quality Commission Minutes

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January 23, 1992

**B. Commission Member Reports:** Commissioner Whipple indicated that the Governor's Watershed Enhancement Board (GWEB) conference was successful and well attended.

**C. Director's Report.**

Director Hansen reported that the Governor would be presenting the State of the State message and would indicate at that time a reduction in state general fund revenue.

Chair Wessinger asked Director Hansen about the Request for Proposal (RFP) for Technical Advice on Mining Rules. Director Hansen replied that the RFP would be mailed soon, and that the Department would be looking at an affordable bid that did not focus on issues already considered by the Department. He said that the Department would be using the expertise of a retired professor from the Colorado School of Mines, who was referred to the Department by Commissioner Castle, to assist in the evaluation of proposals. Chair Wessinger asked Director Hansen about the timeline involved. Lydia Taylor, Administrator, Water Quality Division, replied that a 20-day notice would be given and that 30 days would be allowed for proposal submittal.

Director Hansen also discussed the Environmental Cleanup Division's annual report to the legislature, provided an update on enforcement activities and notified the Commission about the Smith's Frozen Foods civil penalty of \$75,000.

Chair Wessinger asked if the enforcement matrix would be changing. Director Hansen said that the Department would be looking at several points: 1) certain issues in the matrix are not appropriate classifications (Class I, II and III); and 2) repeat violations need to be addressed in a more effective way. Director Hansen said that few civil penalty cases become contested cases because if a company presents new facts, civil penalties are adjusted as if the Department were originally determining the assessment based on the new information.

Director Hansen provided the Commission with an update on the Reidel composting plant and indicated that the company would completely shut down when the existing waste was processed. He said the Department promotes composting and would like to see that type of activity return if odor requirements could be met.

There were no hearing authorizations to report. A copy of the Director's Report is included as a part of the meeting record.

(Commissioner Lorenzen arrived at this time.)

**D. Approval of Tax Credit Applications.**

The Department recommended approval of the following tax credit applications:

<b>Application Number</b>	<b>Applicant</b>	<b>Facility</b>
TC-2604	Portland General Electric	Oil spill stop valve system.
TC-2696	Portland General Electric	Two oil stop valve systems.
TC-3470	Chemical Waste Management	Hazardous waste landfill liner.
TC-3567	Portland General Electric	Downturn elbow and vane in sump to capture oil spills.
TC-3568	Portland General Electric	Modifications to secondary containment structure.
TC-3617	Younger Oil Company	Installation of leak detection equipment (submersible pump) on an underground storage tank.
TC-3666	Neil Reiling	Straw storage shed.
TC-3668	Courtesy Automotive, Inc.	Automobile air conditioner coolant recycling machine.
TC-3669	Cummins N. W. Inc.	Automobile air conditioner coolant recycling machine.
TC-3670	Cummins N. W. Inc.	Automobile air conditioner coolant recycling machine.
TC-3671	Cummins N. W. Inc.	Automobile air conditioner coolant recycling machine.
TC-3672	Cummins N. W. Inc.	Automobile air conditioner coolant recycling machine.
TC-3673	L3 Farms, Inc.	Straw storage shed.

Application Number	Applicant	Facility
TC-3674	Brian David Standiford/Automotive Technologies	Automobile air conditioner coolant recycling machine.
TC-3675	Jefferson Automotive, Inc.	Automobile air conditioner coolant recycling machine.
TC-3676	K. Farms, Inc.	Straw storage shed.
TC-3677	Ware's Auto Body, Inc.	Automobile air conditioner coolant recycling machine.
TC-3678	Pioneer International, Inc.	Installation of impressed current cathodic protection of three underground storage tanks.

**Quincy Sugarman**, Oregon State Public Interest Research Group (OSPIRG), read and submitted a statement to the Commission about the pollution control tax credit program. That statement is made a part of the meeting minutes. Ms. Sugarman provided a brief history and purpose of the tax credit program. She said that, in particular, a tax credit application being considered by the EQC at this meeting was a concern to OSPIRG. The applicant, Chemical Waste Management, applied for tax credit on a liner at the chemical hazardous waste landfill. Ms. Sugarman added that OSPIRG would like to work with the EQC in examining and changing the tax credit program during the 1993 legislative session.

Chair Wessinger said that the Commission would like to examine this issue. He said that with a \$10 million tax credit, he would like to review justification for the Chemical Waste Management application. Chair Wessinger added that he would like the Commission to consider this application as a separate item.

Director Hansen said that the liner was a requirement of state and federal law, and that the liner meets the statutory requirement and principal purpose test of the tax credit rules.

Chair Wessinger asked if the liner was an integral part of the total facility because if it were, the entire facility would make a profit. Commissioner Castle asked Director Hansen to comment on the timing, as to when the requirement was imposed in regard to the landfill being established. Commissioner Castle said the reason he asked this question was that if the requirement existed in the beginning, it seemed that the logic of the chair was persuasive. Director Hansen said this was an issue that Commission Squier had raised. He said this issue raises a legal question and the date would be prior to the liner system installation. **Paul Christiansen**, Hazardous and Solid Waste Division, indicated the liner requirements had been adopted by the Department in 1985/1986. He said the liner was constructed in 1985, and the facility received a permit in March 1988 which included the liner requirement. Mr. Christiansen added that the facility was constructed before the federal government required the liner.

**Larry Knudsen**, Assistant Attorney General, stated the Department of Justice and the EQC had interpreted the tax credit statutes to apply to newly constructed facilities and facilities complying with existing requirements. He said that legislative history of the early enactments of the tax credit statutes was being examined to find out if that construction was required by legislative intent or if the EQC would have flexibility to interpret the statutes. Mr. Knudsen indicated that this process takes time but he would report back in three or four weeks. He said the Department of Justice intended to provide a summary of past advice, and that the recommendation was consistent with the past interpretation.

Commission Lorenzen stated the difference between this application and others was the size. He said that while not being a proponent of the tax credit program, he was concerned that the Commission treat this application differently only because of the size of the application as opposed to any methodology applied in the past.

Commissioner Squier asked if the product created for this type of facility is the receptacle for waste which is sold off in increments to people who want to get rid of waste. Commissioner Lorenzen said he would like to defer deciding on this application until they could receive information on the past advice. Commissioner Castle agreed that this application should be deferred until the criteria could be reworked.

Representatives from Chemical Waste Management told the Commission that DEQ performed a long and thorough examination of the tax credit application. He said based on that review, the company believes the facility qualifies for the tax credit. A company representative said that leachate, which is collected by the liner, is created by the materials accumulated from rainfall and other liquids moving into the landfill. He said the charge to dispose of waste is the same from unlined landfills built before these rules. He noted that a great deal of revenue goes to pay for costs other than the liner including financial assurance and safety. He stated that the liner is not containing waste; it is protecting against other factors such as rain. A company representative also stated that the landfill was started before liners were a requirement and that there are units without liners at the site.

Commissioner Lorenzen, referring back to Commissioner Squier's explanation, provided an example of underground tanks at a service stations, noting that tanks were not eligible but extra costs for leak protection were. He asked if it was necessary that Chemical Waste Management provide their product with the liner in any event. Chemical Waste responded that the geology could qualify for no migration petition (that the landfill provides enough protection) and reiterated that the liner does not contain the waste.

Action: Commissioner Castle moved deferral of the Chemical Waste Management application until the report from the Attorney General's Office could be received, and that the Commission then consider the tax credit application subsequent to a work session; Commissioner Whipple seconded the motion. Commissioner Whipple also added that she shared Commissioner Castle's concern and noted she was not sure the Commission was locked into decisions made in the past.

Chair Wessinger said he was not sure about this application and was persuaded by the fact that this was a new requirement, coming about after the landfill was constructed. Commissioner Lorenzen said that he agreed with the Chair but still would be more comfortable in studying the application.

Commissioner Squier said that she would prefer to delay. She said she had three questions to consider: 1) that of timing, was it a pre-existing regulation; 2) based on the Attorney General's advice to the Commission, what would be the legitimate differentiating factor; and 3) whether a return on investment was an issue that should be further considered.

Commissioners Squier, Castle, Whipple and Lorenzen voted yes; Chair Wessinger voted no.

Director Hansen said that when the Commission reexamines this issue, several items need to be deliberated:

1. Flexibility: if there is a change, should it be prospective or retrospective?
2. The program is an entitlement program: what criteria meets the requirements and is the applicant entitled to tax credits?
3. If there are policy choices the Commission would like to make but statutory and history limits action, how could they best present these to the legislature?

Commissioner Whipple said that the tax credit size was not an issue; Director Hansen said that he believed the issue was the nature of the liner. Chair Wessinger said he would like to have a response from the Attorney General's Office as soon as possible.

Action: Commissioner Castle moved that the remaining tax credit applications be approved; Commissioner Squier seconded the motion. The motion was approved unanimously.

#### Rule Adoption

#### **E. Proposed adoption of open field burning phase down rules.**

Purpose: Chapter 920, Oregon Laws 1991, (House Bill 3343) requires the Department to amend OAR 340, Division 26, to establish a schedule for reducing the acreage open field burned and limiting the acreage propane flamed, increasing the registration and burn permit fees for open field burning and establishing fees for propane flaming and stack and pile burning. The bill also establishes emission standards for propane flaming.

Discussion: Chair Wessinger asked staff about page 4, **Program Considerations**, second paragraph, first sentence, of the staff report. Steve Crane, Air Quality Division, responded that the field burning rules submitted to the U. S. Environmental Protection Agency (EPA) under the State Implementation Plan (SIP) were rejected because the Department had not included a control on stack burning. EPA requested the Department to determine the emissions from stack burning and to perform computer modeling for ascertaining impacts on air quality. Chair Wessinger asked if those determinations are affected by the Commission's action today; Mr. Crane replied no.



Director Hansen added if a state-only requirement is included in the SIP, submitted, approved and adopted by EPA, that it is federally enforceable which limits the state's flexibility and makes changes more difficult.

Action: Commissioner Squier moved that the staff report be approved with the two corrections dated January 14; Commissioner Lorenzen seconded the motion. The motion was unanimously approved.

Mr. Crane told the Commission that the Air Quality staff was involved in ongoing discussions with the grass seed industry. He said that there had been a difference of opinion on interpretation of the statutes and required regulations. Mr. Crane told the Commission that the Department will continue to discuss these issues with the seed council and industry, and that this issue may be revisited at a later date. He added that the Department believes that it is important to adopt the rules at this session so that the growers can register their fields before April 1.

**F. Rule adoption for amending the State Implementation Plan (SIP) to revise the existing source Sampling Manual and to add a Continuous Monitoring Manual.**

Purpose: The Source Sampling Manual (State Implementation Plan, Volume 3, Appendix A4) was last revised in 1981. Since that time, new methods were developed and existing methods have been revised. The Continuous Monitoring Manual is intended to be a support document for Oregon Administrative Rules and Air Contaminant Discharge Permits. Both documents must be included in the SIP to be federally enforceable.

Discussion: Commissioner Lorenzen expressed a concern about providing public access to information. Mark Fisher, Air Quality Division, said the manuals allow access to information through the DEQ; once the information has been submitted to the Department, the information is made available to the public. He said that no public access is available directly at the source. Commissioner Lorenzen asked how much time occurs between when the information is gathered and submitted to DEQ. Mr. Fisher replied that the manual has a default reporting period of 30 days. Commissioner Lorenzen asked about the two-year period referred to in the report. Mr. Fisher indicated that sources must maintain records for two years for Department review. Commissioner Lorenzen asked what happened to information held by the sources; Mr. Fisher said that the information can be destroyed after the two years.

Commissioner Lorenzen said he believes greater access to information by watchdog groups provides the Department with another level of assuredness that companies are in compliance but at the same time he recognized that availability also creates an extra burden or can expose trade secrets. He said that the manuals may not go far enough in providing access to information.

Commissioner Squier said she was in favor of the Department's approach. She added that if anyone wanted access to the raw data, that a request could be accommodated. She also commented about PGE and N.W. Paper expressing concerns about the continuous monitoring manual requirements. Mr. Fisher replied that he had talked with the companies about their concerns. He said the issues had been resolved: the manual does not apply to PGE at this time, and several discussions have occurred with the pulp and paper industry.

Director Hansen added that the statute in House Bill 2175 does not prohibit adoption of more stringent standards if the state's standards are more stringent and were scientifically defensible. He noted that the Department does not believe the standards are more stringent. Mr. Knudsen added that the statute requires the adoption of these technical standards.

Action: Commission Squier moved adoption of the revised manuals; Commissioner Whipple seconded the motion. The motion was unanimously approved.

**G. Proposed adoption of air quality major source emission fee rules.**

Purpose: Rules are proposed to provide the Department and affected permittees (major sources with Air Contaminant Discharge Permits) with criteria and procedures to calculate air emissions and interim fees based on actual or permitted air emissions for calendar years 1992 and 1992.

Discussion: Department staff summarized the rule development process. Staff also reported that prior to the meeting, Commissioner Squier had suggested clarifying potential confusion in the rules. In response to the Commissioner's suggestions, staff proposed clarifying amendments to the rules and distributed the proposed changes to the Commission.

Action: Commissioner Castle moved that the new interim emission fee rules including the proposed clarifying amendments be adopted; Commissioner Squier seconded the motion. The motion was unanimously approved.

**H. Request for adoption by the Commission of proposed amendments to the illegal drug lab clean up rules.**

Purpose: To amend OAR 340-140-010 to 100 to reflect the directions of the 1991 legislature for eliminating mandatory cost share of law enforcement agencies requesting drug lab cleanup assistance from the Department.

Discussion: Director Hansen provided a brief summary of this issue. He discussed a letter from Representative Ted Calouri to the Commission about the proposed amendments. He said Representative Calouri expressed concern about rescinding the current rules which would require a 50 percent match unless waived. The Department interpreted the legislature's intent by searching for another method of funding. He said public hearings did not produce new funding ideas and that direction must now come from the legislature.

Commissioner Lorenzen asked if a provision existed for collecting the clean up cost through restitution requirements upon the criminal defendant, and if there was a provision for applying the proceeds of asset forfeitures as a result of a drug bust to the drug lab clean up cost. Ed Wilson, Environmental Cleanup Division, replied that within the courts using the state laws, restitution is a major factor, and the Department receives a small amount of money from those prosecuted and convicted. Commissioner Lorenzen asked if a provision existed for that money to come back to DEQ. Mr. Wilson responded that the money did come back to DEQ, and that the Department's statute provides that any money coming back is returned to be reused for another lab clean up. Mr. Wilson added that in the federal court system, the penalties are higher for these crimes and the sentences are longer. He said the federal judges have much less interest in restitution because if a criminal is put in prison no money will be available when the prisoner is released.

Commissioner Lorenzen asked if the Department conducted clean up of labs for the federal government. Mr. Wilson said some federal agencies use the Department's clean up program for direct cost reimbursement. He said the Forest Service, Bureau of Land Management and Marshall's Office have used the Department's program.

Director Hansen asked Mr. Wilson to explain how any assets seized at the time of the bust are handled. Mr. Wilson indicated that asset forfeiture in Oregon is handled under a separate statute, and formulas are applied to agencies and programs receiving any money or real estate after forfeiture. He added that during an arrest, if money is seized and the court claims and divides the money among the victims, the Department will receive some of the money.

Commissioner Squier said the last line of the budget report suggested that the Department should be seeking throughout the biennium a method to receive voluntary cost share, and she added that now would be the time for the Department to ensure cost sharing if local governments receive forfeited assets with a pro rata sharing for the clean up costs. She added that the Department should not wait until the next legislative session to seek a voluntary arrangement with local government where significant assets may exist.

Action: Commissioner Whipple moved that the amendments to the illegal drug lab clean up rules be adopted; Commissioner Squier seconded the motion. The motion was unanimously passed.

Director Hansen asked Mr. Wilson to respond to Representative Calouri explaining the Commission's action and Department's intent to pursue this matter during the 1993 legislative session.

- I. **This item was removed from the agenda. (James River recycle facility: proposed approval of waste load allocation)**
- J. **City of Brookings: request for approval of wastewater mass load increase.**

Purpose: Request for a mass load increase for the City of Brookings. An exception to OAR 430-41-026(2) (an EQC policy requiring growth and development be accommodated within existing permitted loads unless otherwise approved by the Commission).

Discussion: **Barbara Burton**, Water Quality Division, provided a brief summary of the issue. Commissioner Lorenzen asked if the facility had experienced combined sewer problems. He asked if during winter the storm drains empty into the municipal waste treatment facility. Ms. Burton replied that the city does not have a combined system but the area does receive about 80 inches of rain which reaches the sewer system through leaks. Commissioner Lorenzen also asked, if since water can leak into the system during winter, can sewage leak out during summer and if this could present a problem and exposure to groundwater. Ms. Burton said the situation he described could be possible.

Commission Castle stated he thought the report was clear and well written. He asked how the Department and Commission viewed the ocean. Director Hansen replied that the State of Oregon has applied the requirements for highest and best technology.

**Lydia Taylor**, Administrator, Water Quality Division, said the Water Quality Division has very limited resources to devote to the ocean. She said that the Department has five ocean discharges from municipal sewage treatment plants along the Oregon Coast. Ms. Taylor indicated the Department requires highest and best technology because of the limited resources to evaluate the effects of the discharges. She said that the City of Brookings is required to analyze the effect of their discharge on the ocean. She indicated that the Department has some resources devoted to estuaries and near coastal water studies.

Commissioner Wessinger asked Ms. Burton if a constructed wetlands situation was considered in this case; Ms. Burton responded no. She said that the wetlands application was site specific and depended on the treatment process. Ms. Burton further stated that there was no space available for a constructed wetlands at the City of Brookings site.

Commissioner Whipple said this issue brought to mind a previous matter occurring between Charleston and Coos Bay. Director Hansen said that no resolution had been achieved.

Commissioner Squier asked Ms. Burton to review the history of the Brookings facility and referred to the Stipulated Final Order. Ms. Burton gave a brief background of the plant and discussed the order between DEQ and the city. She indicated that the city has complied with the previous stipulation.

**Dennis Cluff**, City of Brookings, responded to a question about U. S. Borax, the land owner who will be developing a destination-type resort in that area. The company has expressed interest in using the city's system.

Action: Commissioner Lorenzen moved adoption of the wastewater mass load increase for the City of Brookings; Commissioner Whipple seconded the motion. The motion was unanimously approved.

#### Other Business

##### *James River*

Chair Wessinger indicated he had received a request that the James River Recycle Facility: Proposed Approval of Waste Load Allocation item be acted upon before the March 12 meeting. Chair Wessinger said that he would agree to this request on the basis that the Commission set up a special meeting because of the following reasons: 1) the issue is important enough not to have on a regular meeting where time would be limited and the March agenda is quite full; and 2) the Commission would receive the material in adequate

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time to study the issue and also to consider other items that could be moved off the next meeting, thus reducing the items scheduled for the March meeting.

Director Hansen suggested the week of February 18 or the following week. In regard to a second item for the special meeting, Director Hansen said that he had talked with Mr. Knudsen about including the tax credit interpretation from the Department of Justice. Because Director Hansen was scheduled to speak at the Albany Rotary Club on Tuesday, February 18, the Commission decided to hold the meeting on that day in Albany. It was decided that the meeting would be held at 9:00 a.m., Tuesday, February 18, in Albany.

### Public Forum

Harry Demaray, Salem, spoke to the Commission about the Boise Cascade tax credit issue he raised at the December 13 EQC meeting. He said he believed the Department was stonewalling the issue, and that he had not received an answer from the Department. Mr. Demaray reiterated that the Boise Cascade tax credit was not for pollution control, and that the Department had just ignored the rules. He said he wanted to find a way to resolve complaints between Commission meetings.

Director Hansen indicated that the Commission looked at the items Mr. Demaray had raised, and the Commission had made a decision to approve the tax credit contrary to what Mr. Demaray had recommended. Director Hansen said he believed the loop had been closed and said that the difference of opinion was whether the Commission agreed with the information presented by Mr. Demaray or made a different decision. Director Hansen said the Commission asked the Department to come back at the end of the meeting with additional information. Commissioner Castle told Mr. Demaray that the Commission deferred action at the time the tax credits were considered and, at the end of the meeting, the Commission returned to the Boise Cascade tax credit. Commissioner Castle further stated the Department made some arguments at that point addressing the issues raised by Mr. Demaray, and the Commission voted unanimously to approve the Department's recommendation.

Mr. Demaray agreed that occurred but there was no indication to him that action was going to occur. He said he thought the Commission would reconsider the tax credit between the last EQC meeting and this meeting.

The Commission then discussed a date for a work session. April 24 was chosen as the day for the work session after the April 23 regular EQC meeting. The location for the work session was not determined at that time.

**Mike Downs**, Administrator of the Environmental Cleanup Division, provided information about the current status of east county groundwater where TCE and chlorinated solvents were found to be threatening six different water systems including the City of Portland backup water supply to Bull Run. He said the two major sources contributing to this problem were identified as the Boeing and Cascade Corporations. He said the companies are working to control the contaminated sources on their property. Mr. Downs further stated that the unresolved issue was the contamination that has spread off of the corporations's property.

Mr. Downs said the Department has been working to develop a groundwater model for determining what is happening to the groundwater and where the movement of the contamination is occurring in the area. He added that the Department believes that the City of Portland wells in the Blue Lake aquifer can be used under close observation. At this time, in terms of area-wide contamination, he said the issue still needs to be dealt with and the Department is working with Boeing and Cascade Corporations to reach agreement about funding additional studies for determining cleanup or containment technologies. Mr. Downs indicated that if the companies are not able to assist in the studies, the Department cannot sell bonds which is the funding method when responsible parties do not provide participate in clean up activities.

**Mary Kyle McKurdy**, staff attorney for 1000 Friends of Oregon, spoke to the Commission about a proposed parking structure by Pacific Development near the Lloyd Center. She said that this matter was brought to the Commission's attention because the proposed project raises significant land use and air quality issues for the EQC and the City of Portland. She added that 1000 Friends was concerned that an appropriate forum may not exist under current regulations to address the issues raised by this proposed development. Ms. McKurdy handed out and read a written statement to the Commission. This written statement is made a part of the meeting record.

Director Hansen said that the parking lid in the Portland area was established to allow the state to meet carbon monoxide requirements under the State Implementation Plan (SIP). He said the Department is concerned about ozone, an area-wide pollution problem, which depends on the prevailing winds. Director Hansen said ozone violations are the key concern of the Department, and that carbon monoxide is a localized problem.

Director Hansen said the Department is participating in the Central City Management Plan which is looking at alternatives to the parking lid and other methods of providing offsets. He said that what is at issue is this type of activity that compounds the ozone problems and frustrates the broader policy issues concerning general livability in the Portland Metropolitan area. He added that two processes are in place to improve this situation: 1) the Governor's Task Force on Motor Vehicle Use in the Portland Metropolitan area which will report to the Governor and legislature about specific strategies; and 2) the indirect source permit which is required to show that ambient air quality standards will not be violated. He said the Department would require modelling analysis to insure ambient air quality standards will not be exceeded.

**Howard Harris**, Air Quality Division, spoke to the Commission about the difference between carbon monoxide and ozone problems in the airshed. He indicated that the downtown area developed a strategy to meet the former Clean Air Act deadline of 1987, and that the strategy entailed a comprehensive treatment of parking and traffic circulation. Mr. Harris said the strategy contains a parking policy which includes tight ratios for new office development and the creation of a parking inventory for the downtown area.

Commissioner Lorenzen asked if the proposed parking structure for the east side would have an impact on the carbon monoxide levels in the downtown area. Mr. Harris responded that, in general, the impacts from a site occur adjacent to the site. He said the Department follows the traffic generation out of the site and from any one development, the traffic will fan out from within a quarter to half mile of the site. Director Hansen added that the pollution created at a parking structure will not be the result of carbon monoxide affecting the Central Business District (CBD) but by the traffic patterns caused in the CBD which will compound those carbon dioxide problems. Commissioner Lorenzen said that he saw a problem with this proposed structure adjacent to the light rail line which was designed to serve buildings rather than reduce air pollution and automobile dependency.

Chair Wessinger asked if the proposed parking structure would be a park and ride lot. Ms. McKurdy replied that the proposed structure is not a park and ride lot but is meant to serve only the building.

Commissioner Squier asked why the Department is indicating that the effect of ozone is not considered in the indirect source permits. Mr. Harris indicated that when the Department models for ozone, the modelling is performed on the basis of examining the total emissions of hydrocarbons, nitrogen oxides and carbon monoxide. He said difficulty occurs because the concentration models used for ozone are established for regional analysis and are geared to the maximum concentration downwind from urban areas. Additionally, he said, connecting a small portion of the emissions to the actual measured emissions is difficult.



Director Hansen said the Department will be considering the technical modelling issue. He said he wants the Department to explore more creative ways of examining major parking structures. Ms. McKurdy suggested that the parking lid rules be a method of accomplish this examination. She said there is a Central City Transportation Management plan underway that is determining region-wide strategies for air quality. Director Hansen added that Mr. Knudsen pointed out that the Department must be in compliance with the land use requirements including Goal 12 in the new transportation rule. This rule was a comprehensive effort developed by the Land Conservation and Development Department to ensure that vehicle miles of travel and other indicators are considered. Mr. Hansen said DEQ will have to perform an analysis against that rule under Goal 12.

Commissioner Lorenzen summarized that the Department has two issues to consider: 1) the long-range outlook on how the air quality program should be managed in regard to traffic and development patterns in the Portland area; and 2) the immediate proposal to bring a large parking structure that appears to be contrary to the goals of light rail line and mass transit systems within that area. Commissioner Squier suggested that the Commission raise their focus away from the specific issue. She said the Department needs to find a way to address if additional sources that cause formation of ozone will be permitted and, if so, on what rationale. She concluded that she would not like to take any action at this meeting but would like some indication of how much the Commission can reexamine during the direct source permitting process.

Commissioner Lorenzen said there was one further matter he would like to discuss that related to this specific proposal and that was whether the rules in place are adequate to address the concerns that may apply to this particular project. Director Hansen indicated that the Commission can adopt rules and apply the rules at the time of adoption against existing or pending projects. Commissioner Lorenzen suggested the Commission review the existing rules relating to this type of construction to determine if deficiencies exist. Director Hansen said that the indirect source rule is broad. He said there were two actions he will take: 1) in regard to the indirect source permits issued by the Air Quality Administrator, that authorization will revert back to the Director for signature; 2) in reviewing indirect source permits, the Department will notify the Commission if weaknesses seem to exist which do not allow broad Department examination.

The meeting was adjourned at 12:05 p.m.