Part 2 of 2 OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING MATERIALS 04/26/1991



State of Oregon
Department of
Environmental
Quality

This file is digitized in color using Optical Character Recognition (OCR) in a standard PDF format.

Standard PDF Creates PDF files to be printed to desktop printers or digital copiers, published on a CD, or sent to client as publishing proof. This set of options uses compression and downsampling to keep the file size down. However, it also embeds subsets of all (allowed) fonts used in the file, converts all colors to sRGB, and prints to a medium resolution. Window font subsets are not embedded by default. PDF files created with this settings file can be opened in Acrobat and Reader versions 6.0 and later.

Blank Sheet Have Been Removed, which is the reason for any discrepancies in the page numbers



ENVIRONMENTAL		
QUALITY		
COMMISSION		

REQUEST FOR EQC ACTION

Meeting Date:	April 26, 1991
Agenda Item:	K
Division:	HSW
Section:	SW Permits and Comp.

SUBJECT:

Request for Extension of a Variance from Rules Prohibiting
Open Burning of Solid Waste, (OAR 340-61-040(2)) for Nineteen
Disposal Sites

PURPOSE:

Grant an extension to May 31, 1994, of variances to continue open burning at sixteen solid waste disposal sites, and require each permittee to begin planning for an alternative to open burning at the sites. Deny the extension of variances to three additional disposal sites.

ACTION REQUESTED:

General Program Background Potential Strategy, Policy, or Rules Agenda Item for Current Meeting Other: (specify)	
Authorize Rulemaking Hearing Adopt Rules Proposed Rules Rulemaking Statements Fiscal and Economic Impact Statement	Attachment Attachment Attachment



811 SW Sixth Avenue Portland, OR 97204-1390 (503) 229-5696

Meeting Date: April 26, 1991 Agenda Item: K Page 2	
Issue a Contested Case Order Approve a Stipulated Order Enter an Order Proposed Order	Attachment
<pre>X Approve Department Recommendation</pre>	Attachment 3 Attachment Attachment Attachment

DESCRIPTION OF REQUESTED ACTION:

On June 13, 1986, the Environmental Quality Commission (Commission) granted variances from Department of Environmental Quality (Department) rules--OAR 340-61-040(2) ("No person shall conduct the open burning of solid waste at a landfill, except in accordance with plans approved and permits issued by the Department prior to such burning. . . . ") for twenty solid waste disposal sites to allow continued open burning of solid waste. While the rule allows the Department to approve plans and issue permits for burning, the Commission was involved in the original variances, and the Department believes they should be involved in any extension. Solid waste disposal permit addenda including the variances were issued for these twenty The permits expire May 31, 1991. A major reason for the Department recommending approval of these variances in 1986 was because of reduced staffing in the Solid Waste Program and the low environmental priority of these disposal sites. The five-year variance was envisioned as a "postponement" of enforcement until either additional staff resources became available, or changing circumstances required the Department to address the issue.

The Department has received requests from nineteen of the permittees for an extension of the variance. All are located in arid Eastern Oregon. A list of these sites including the population served are attached (Attachment 1). Also attached are the letters from each permittee (Attachment 3). The nineteen sites serve a combined population of approximately 5,000. Two of the sites serve a population of 900-1000 and four additional sites serve a population of 500 or more.

The one permittee of the original twenty not requesting a variance is the City of Powers, located in Coos County. Because of the climatic difference in Western Oregon and the higher population served by this disposal site, Department staff met with the city, and informed them that another

Agenda Item: K

Page 3

variance would not be supported. The city has agreed to apply for a solid waste closure permit and to begin planning for replacement or upgrade of the disposal site. Open burning may continue at the site for awhile. The closure permit will contain a compliance schedule for planning and implementing a replacement system for solid waste disposal for the area. Preliminary estimates are that the burning will end during 1992.

Three of the sites for which variances were requested are located on land leased from the U.S. Bureau of Land Management (BLM). These are Richland and Halfway in Baker County and McDermitt in southern Malheur County. BLM recently adopted a policy of not allowing open burning of solid waste on property under their ownership, and, in fact, Richland and Halfway have stopped the practice. Department has received a letter from BLM stating this prohibition (Attachment 6). The permittees of the three sites have applied to the Commission for a variance with the hope that BLM will reconsider, or possibly sell the sites. However, BLM does not think this will happen soon, if ever. It is the opinion of the Department that variances should not be granted in the face of BLM's stand as the property owner. Therefore, the Department is recommending that the variance requests for Richland, Halfway and McDermitt be denied.

The Department is recommending that new five-year permits be issued for the remaining sixteen disposal sites. This would include a three-year variance period, followed by a one-year planning period for plans and an implementation schedule to be developed and submitted at the end of the year. During the last year of the permit the Department could negotiate for an acceptable time schedule before issuing the new permit (or closure permit) for the disposal site.

AUTHORITY/NEED FOR ACTION:

	Required by Statute: Enactment Date:	Attachment
<u>X</u>	Statutory Authority: ORS 459.225 Pursuant to Rule: OAR 340-61-040(2) Pursuant to Federal Law/Rule:	Attachment 4 Attachment 5 Attachment
X	Other: Time Constraints: Variances granted by the June 13, 1986, expire on May 31, 1991. Unleare continued, the sites must either stop but May 31, or violate their solid waste disposa Department's Administrative Rules.	ss the variances rning after

Agenda Item: K

Page 4

DEVELOPMENTAL BACKGROUND:

	Advisory Committee Report/Recommendation	Attachment	
	Hearing Officer's Report/Recommendations	Attachment	
	Response to Testimony/Comments	Attachment	
X	Prior EQC Agenda Items:		
	6/13/86 Meeting, Agenda Item L, "Request		
	for a Variance from Rules Prohibiting	•	
	Open Burning of Solid Waste, OAR 340-16-040(2)	
	for 20 Disposal Sites (List of Disposal	•	
	Sites - Attachment II)"		
		Attachment	2
	Other Related Reports/Rules/Statutes:		
	· · · · · · · · · · · · · · · · · · ·	Attachment	
	Supplemental Background Information	Attachment	
	Dupprementar Dackarouna Throtmacton		<u> </u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The nineteen sites serve very small communities. The permittees cite lack of funds, inadequate equipment, small land area of their sites which would quickly fill up, and lack of alternative landfill locations as reasons to continue to open burn. All sites are located east of the Cascade Mountains, in relatively dry areas with sparse population. The amount of smoke generated confines air pollution concerns to the immediate areas of the disposal sites.

During the current five-year variance period the permittees have made no attempt to plan for upgrading these disposal sites. However, Lake County voters have passed a major funding measure relating to solid waste disposal. A new disposal site has been constructed near Lakeview and the old Lakeview Disposal Site has been properly closed. The County has indicated they would like to continue the planning process to develop alternatives to open burning dump conditions existing at their seven disposal sites, but at the present time, they have expended their available capital budget on the higher priority Lakeview area.

The Department's Solid Waste Advisory Committee (Committee) considered this issue at its January 22, 1991 meeting. There was general consensus on the part of the Committee that the Department should move towards enforcement on these sites, setting definite closure dates for at least some of them. On March 5, 1991, the Committee reviewed and by consensus agreed with the staff recommendation to allow extension of the variance with planning required at the end of three years.

Agenda Item: K

Page 5

PROGRAM CONSIDERATIONS:

Open burning violates OAR 340-61-040(2); the Department believes that open burning of solid waste in most cases is not an acceptable practice. It violates the Federal Resource Conservation and Recovery Act (RCRA) landfill criteria, and is subject to citizen suit. At the time the variances were granted, it was anticipated that new criteria would be adopted by the Environmental Protection Agency (EPA) by March 1988. The criteria are expected to continue to prohibit open burning. If states do not have a permit program at the time of adoption which enforces the new criteria, EPA is given enforcement authority to override the state. It is now projected that these criteria will be in effect by early 1993.

The Department supported the variances in 1986 because of low environmental impact from these sites and a reduction of staffing levels in the solid waste program. Based on present staffing levels and program priorities, the Department is again supporting a variance in most cases. The three disposal sites located on BLM land which have been required to stop burning under their lease will create an unexpected workload for Eastern Region staff to assist the jurisdictions in locating alternatives to open burning. The three-year variance period was agreed to by staff from the Eastern and Central Region in discussions with Headquarters solid waste staff. This would allow each regional office time to plan for the projected workload increase related to the remaining sixteen sites.

At the time of the 1986 request, the Department supported granting a five-year variance with the following conditions:

- No tires, asphaltic shingles or hazardous waste may be disposed by burning, and
- (2) When EPA adopts new criteria, variances will be reviewed.

The Commission could require operational conditions which might have some environmental benefit; such as access control, limited burning (once or twice a week), periodic covering of ash, or requiring an attendant. However, such conditions would require enforcement efforts on the part of the Department in excess of the corresponding environmental gain.

Agenda Item: K

Page 6

There appears to be some disagreement among the county governments in Eastern Oregon over the open burning issue. Counties that have open burning sites are generally in favor of continuance for some period of time. Some counties that have halted the practice and expended resources for upgraded systems are not in favor of continued open burning.

The Department believes that the permittees should be required to develop alternatives and present a time schedule for eventual elimination of open burning. A three-year variance period appears appropriate, with the alternatives and time schedule for implementation to be submitted at the end of four years. The new solid waste planning grant program could assist these jurisdictions in developing alternatives. Rules regarding these funds are currently ready for adoption. The affected counties will be invited to apply for planning grants when the draft Solid Waste Disposal Permits are issued.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

Deny the variance requests.

This would support RCRA criteria and the Department's belief that open burning of solid waste is normally not an acceptable practice. It would not "reward" permittees who have made no effort to upgrade their sites since receiving the original variance.

However, these permittees have few resources to be able to develop alternative solid waste disposal methods in a short time frame. It would cause a hardship on local populations, and likely create dislocations which could be lessened with a longer phase-in period. In addition, if these sites are closed very soon, open dumping on public lands would probably occur.

2. Approve the variance requests with operational conditions.

In approving variances, the EQC could impose operational conditions such as access control, limited burning, attendant on duty while the site is open and periodic covering of ash. Imposing additional conditions on operation would likely result in noncompliance and the need to take enforcement action that would have little environmental benefit.

Agenda Item: K

Page 7

3. Approve the variance requests with "phase-out" conditions.

The permittees could be required to develop alternatives and present a time schedule to the Department for implementation of a solid waste system to replace the open burning disposal sites. A three-year variance extension could be granted, followed by a one-year planning period and one year for the Department to negotiate a new permit (or closure permit) for the existing sites. These conditions could be incorporated into a five-year permit.

4. Approve the request for extension of the variance with no conditions.

The variances could be extended without special conditions. This would allow the disposal sites to continue the present practices and again postpone the issue.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends denial of open burning variances for the three sites located on BLM property. BLM has indicated that they will not allow open burning of solid waste on their property and these sites also serve a relatively high population in relation to the other open burning sites.

For the remaining sixteen disposal sites the Department recommends approval of Alternative 3, allowing three-year open burning variances with conditions.

The Department concurs with the applicants that the variance should be extended for the following reasons which comply with ORS 459.225:

- a. Conditions exist that are beyond the control of the applicant.
- b. Special conditions exist that render strict compliance unreasonable, burdensome or impractical.
- c. Strict compliance would result in substantial curtailment or closing of a disposal site and no alternative facility or alternative method of solid waste management is available.

Agenda Item: K

Page 8

Based upon the above findings, it is recommended that the variances for the sixteen disposal sites listed in Attachment 1 be extended until May 31, 1994, with the following conditions:

- 1. Prior to July 31, 1994, the permittee shall begin a program of planning for replacement or upgrade of the disposal site.
- 2. Prior to June 30, 1995, the permittee shall submit a time schedule for implementation of the chosen option.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Although Department rules allow the Commission to grant variances for open burning, this is in general not an acceptable practice. It is a violation of RCRA rules. Granting a three-year extension of the variances followed by a phase-out period would put these sites on a compliance schedule for ending this practice.

ISSUES FOR COMMISSION TO RESOLVE:

- 1. Should the Department postpone the open burning dump compliance issue for another three to five years, or indefinitely?
- 2. Is a phase-out of open burning rather than an immediate halt the best way to bring the sixteen sites into compliance?
- 3. Should the three sites on BLM property be allowed to continue their variance along with the other sixteen with hope that they can negotiate acquisition of the properties from BLM?

INTENDED FOLLOWUP ACTIONS:

1. The Department will notify the nineteen jurisdictions of the Commission's variance decision, and proceed to amend their solid waste permits accordingly.

Meeting Date: April 26, 1991 Agenda Item: K

Page 9

The Department will verify that the permittees submit appropriate alternatives to open burning by June 30, 1995. 2.

Approved:

Section:

Division:

Director:

Report Prepared By: Bob Brown

> Phone: 229-5157

Date Prepared: 2/22/91

bb:dmc:k SW\SK33\SK3325

2/22/91

JURISDICTIONS REQUESTING OPEN BURNING VARIANCES

Department Recommends Approval

Jurisdiction	<u>Population</u>
Grant County Dayville Long Creek Monument Seneca	500 245 260 190
Lake County Adel Christmas Valley Fort Rock Plush Silver Lake Summer Lake Paisley	150 500 400 150 600 400 500
Malheur County Jordan Valley Juntura Wallowa County	450 200
Imnaha Troy	100 210
Wheeler County Mitchell	210

Department Recommends Denial of Variance

<u>Jurisdiction</u>	<u>Population</u>
Baker County	
Halfway	1000
Richland	400
Malheur County	
McDermitt	900

SW\SK3374 (3/91)



Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207 522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To:

Environmental Quality Commission

From:

Director

Subject:

Agenda Item I, June 13, 1986, EQC Meeting

Request for a Variance from Rules Prohibiting Open Burning of Solid Waste. OAR 340-16-040(2) for 20 Disposal Sites

(List of Disposal Sites - Attachment II)

Background

As a result of an informational report, "Status of Open Burning Solid Waste Disposal Sites," presented to the Commission at the September 14, 1984 EQC meeting, a Department interdivisional task force was established. The task force examined the practice of open burning for impact on air and groundwater quality.

Based on the work of the task force, proposed rules were drafted. At the January 25, 1985 EQC meeting, the Commission granted authorization to conduct public hearings relating to these proposed rules.

Six public hearings were held throughout the state in March 1985. At all of the public hearings, except Portland, objections were voiced to the proposed rules. The Department reevaluated the proposed rules and at the January 31, 1986 EQC Meeting, the Department recommended to the Commission (Agenda Item R - Attachment I) that the proposed rules not be adopted, but rather the remaining disposal sites that open burn garbage be contacted and a variance procedure be initiated to allow for continued open burning.

The Department has received requests for the continuation of open burning at 20 disposal sites. A list of these sites and their letter requests are attached (Attachments II and III).

The 20 sites serve a combined population of approximately 6,000 persons. They vary in size from Troy in Wallowa County with a population of 50 to Powers in Coos County with a population of 775. The majority of the sites serve under 400 persons.

EQC Agenda Item i June 13, 1986 Page 2

Alternatives

There are three alternatives available. They are to deny the variance requests, approve the variance requests with conditions or approve the variance requests with no conditions.

1. Deny the Variance Requests

The Department believes that open burning of solid waste in most cases is not an acceptable practice. Reasons for prohibition far outweigh advantages. The practice is in violation of Federal sanitary landfill criteria which prohibits all burning of domestic, commercial, and industrial waste at disposal sites. Operators are subject to citizen suit to force closure or upgrade to sanitary landfill criteria under the Federal Resource Conservation and Recovery Act (RCRA). The 1984 amendments to RCRA direct EPA to rewrite the criteria (with emphasis placed on groundwater and small quantities of hazardous waste) by March 1988. If states do not have a permit program at that time which enforces the new criteria, EPA is given enforcement authority to over-ride the state.

Denying the variances would require the Department to order open burning stopped at the disposal sites. They would have to be upgraded to sanitary landfills or closed. The applicants for variances have cited lack of funds, inadequate equipment, small acreage sites that would not allow for conversion to landfill, and lack of alternative landfill locations.

2. Approve the Variance Requests with Conditions

In approving variances, the EQC could impose operational conditions. An example of conditions which could be imposed closely follow the operational criteria which were established by the open burning dump task force and were contained in the proposed rules. They are:

- (1) Controlled access (site fenced with a gate).
- (2) Attendant on duty while site is open and while burning solid waste.
- (3) Burning limited to two times per week and only when the site is closed.
- (4) Ash buried at least twice per year.
- (5) No burning of tires, asphaltic shingles or hazardous waste.

EQC Agenda Item L. June 13, 1986
Page 3

Imposing these conditions on the variances would likely result in noncompliance at many of the sites and the need to take enforcement action that would have very little environmental benefit.

3. Approve the Variance Request with No Conditions

The variances could be approved as requested without special conditions. This would allow the 20 disposal sites that presently open burn and have requested a variance to continue the present practice.

Evaluation

Before granting a variance under ORS 459.225, the Commission must find that:

- a. Conditions exist that are beyond the control of the applicant; or
- b. Special conditions exist that render strict compliance unreasonable, burdensome or impractical; or
- c. Strict compliance would result in substantial curtailment or closure of the disposal sites and no alternative facility or alternative method of solid waste management is available at this time.

The Department believes that open burning, while not an accepted solid waste disposal practice, should be allowed in a few rural areas for specified periods. All of the applicants for a variance have cited significant increased cost of operation, lack of equipment and distance from any other active disposal site. Most have a limited area for their sites. The Department concurs with the applicants' reasons for variance requests.

The January 31, 1986 staff report indicated the Department's position that variances should only be granted by exception with the permittee taking the burden of showing need. It was also indicated that variances could be conditioned to maintain the most possible control over the disposal sites.

Subsequent to the January 31 meeting, however, 4 FTE from the Solid Waste Program have been transferred to the Hazardous Waste Program resulting in the need to reassess program priorities. Staff prioritized disposal sites according to environmental impact since then and all of the open burning disposal sites requesting variance fell into the lowest category of concern. It is anticipated that very little attention can be directed toward these sites. Therefore, we are now recommending that only the most environmentally significant conditions of the variances be adopted.

With the exception of the city of Powers, the Department recommends that only two conditions, 1) no tires, asphaltic shingles or hazardous waste may

EQC Agenda Item L June 13, 1986 Page 4

be disposed by burning (these items cause dense, black smoke and heavy particulate or other health hazards); and 2) when EPA adopts new criteria, variances will be reviewed and may have to be terminated; be imposed by the Commission as conditions of the variance.

The Department feels that the city of Powers presents a special problem and would impose the conditions listed in alternative 2. Powers is the largest site (775 population) and is the only remaining open burning disposal site in Western Oregon. The city in the past has agreed to operate under the listed conditions. In fact the city has mandatory collection and only opens the disposal site to the collection vehicle. By imposing the conditions, the status of the site would remain unchanged.

After evaluation of the requests for variances by the local jurisdictions and weighing the environmental effects of allowing continued open burning at the 20 disposal sites, the Department concurs with the applicants that variances should be granted. To ensure a review of the status of open burning disposal sites in the future, variance length should be limited to no more than five years. Should any environmental or public health hazards occur at these disposal sites, the Department could return to the EQC for action, such as a revocation of the variance.

Summation

- 1. On January 31, 1986, the Commission accepted a staff report recommending that small rural open burning dumps be allowed to continue open burning with a variance from the Commission.
- 2. Local governments representing 20 open burning dumps have requested a variance to allow continued open burning of solid waste.
- 3. Environmental impact at small, rural disposal sites is minimal.
- 4. Applicants have cited high costs, lack of equipment and distance from any acceptable landfill as reasons to allow the variance.
- 5. The Department concurs with the applicants that a variance should be granted for the following reasons which comply with ORS 459.225:
 - a. Conditions exist that are beyond the control of the applicant.
 - b. Special conditions exist that render strict compliance unreasonable, burdensome or impractical.
 - c. Strict compliance would result in substantial curtailment or closure of the disposal sites and no alternative facility or alternative method of solid waste management is available at this time.

EQC Agenda Item Liver June 13, 1986
Page 5

- 6. Because of the size and location of the city of Powers' disposal site, operating conditions as outlined in alternative number 2 should be a condition of the variance.
- 7. The Department feels that tires, asphaltic shingles, and hazardous wastes should not be burned and that variances should be limited to five years, with a review at the time EPA adopts new criteria to determine if variances should be terminated.

Director's Recommendation

Based upon the findings in the summation, it is recommended that variances be granted for five years to allow continued open burning of solid waste at the 20 disposal sites listed in Attachment II with the following conditions:

- 1. Tires, asphaltic shingles and hazardous wastes shall not be disposed by open burning.
- 2. When EPA adopts new criteria, variances will be reviewed and may have to be revoked or modified.

It further recommended that the city of Powers also be required to comply with the following additional conditions:

- 1. Controlled access (site fenced with a gate).
- 2. Attendant on duty while site is open and while burning solid waste.
- 3. Burning limited to two times per week and only when the site is closed.
- 4. Ash burial at least twice per year.

Fred Hansen

Attachments:

I. Agenda Item No. R, January 31, 1986, EQC Meeting

II. List of Sites

III. Application Letters

R.L.Brown:b 229-6237 May 14, 1986 SB5696

1-2

CITY OF HALFWAY

Post Office Box 738 HALFWAY, OREGON 97834

Department of Environmental Quality 811 S.W. Sixth Avenue Portland, Oregon 97204

RE: Solid Waste Disposal Permit No. 181

Dear Sirs,

Our current population for the City of Halfway is 325, down from 1986. Our landfill services the residents of the valley where Halfway is located and the residents living at Brownlee and Oxbow villages, on the Snake River. All totaled, we estimate service to approximately 1000.

The City of Richland has a sanitary landfill, 12 miles away. Otherwise, the nearest landfill is 58 miles away in Baker City.

BLM owns the land where Halfway's landfill is located. We lease 10 acres from them for this purpose. Our current lease was renewed November 1, 1990 and will expire November 1991.

Lester LaRue has the franchise with the City and operates and maintains our landfill. The landfill is open 2 days a week from 12 noon to 5 p.m. The gate is kept locked except on the open days. There is an attendent there on these days.

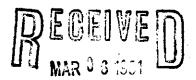
There are no changes in our operation other than the ones required, such as no tires, batteries, car bodies, appliances or dead animals.

The City and citizens are working on a way to implement a recycling program. Practicalities are a problem here as we are so isolated. The cost to transport recyclables would be more than their worth.

Sincerely,

Clarine Kissire

A-3



Hazardous & Solio Waste Division Department of Environmental Quality

CK/dg

CITY OF RICHLAND RICHLAND, OREGON 97870

February 20, 1991

Ernest A. Schmidt, Acting Manager Solid Waste Permits and Compliance Hazardous and Solid Waste Division Oregon Dept. of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390

Re: Richland Disposal Site
Baker County
SW Permit No. 323
Renewal & Burnign Variance

Dear Sir:

The City of Richland wishes to renew our SW Permit No. 323 and continue the variance to burn.

The Richland Disposal Site is located in Eagle Valley in Eastern Baker County. Approximately 400 people reside in Richland and in the unin-corporated area of the surrounding valley. The site is approximately 2 1/2 miles south of Richland on Daly Creek Road. Situated on the top of a sloping ridge. Elevation about 2450 feet. The City has 30 acres of land for this purpose leased from the B.L.M. Prevailing winds are from south to southwest in the opposite direction from the valley below.

The same conditions exist at present, as when we originally applied for the burning variance. Remote location, limited access by the public, site is fenced and accessed through a locked gate. Is open to the public with an attendant present 1/2 day per week. A low population is served and there is little or no environmental impact.

Under our present lease with the BLM we are not allowed to burn at the site, but we do want to continue maintaining the burning variance, as we are pursueing the possibility of purchasing the site from the B.L.M.

Enclosed please find the application for the renewal of our existing permit and the application fee.

Thank you very much for your consideration.

Sincerely,

A-3

Geraldine Stevens

City Recorder

P.O. Box 266

Richland, CR 97870

ENC.

GRANT COUNTY ROAD DEPARTMENT

CANYON CITY, OREGON

March 4, 1991

Ernest A. Schmidt
Department of Environmental Quality
811 S. W. Sixth Ave.
Portland, Oregon 97204-1390

Dear Mr. Schmidt,

I feel continuation of the variance for the Dayville disposal site (SW permit #332) is justified by the remote area the Dayville disposal site serves. Also, I feel we would witness indiscriminate dumping of refuse on remote county and other puplic roads due to lack of patrols in this area.

Although it is only about 38 miles to the nearest landfill, I feel the public would not accept this travel at this time.

The site covers 5 acres and is owned by Grant County. Location of the site is about 1 mile east of Dayville, just south of Highway 26, on fairly flat terrain. This disposal site serves approximately 500 people.

Drift fencing to help control litter is planned as soon as the weather permits. The site is open 2 days a week, Wednesdays and Saturdays. Other days the gate is locked.

If there are any other questions or any problems that need to be addressed on this matter, please call me.

Regards.

Bob Kowing

Road Supervisor

Bolkowing

Enc: 2

City of Long Creek

P.O. Box 547° + 89 Long Creek, Oregon 97856

Feb.21, 1991

Oregon Department of Environmental Quality 811 S.W. Sixth Avenue Portland OR 97204-1390

Dear Mr. Schmidt:

Re: Long Creek Disposal Site , Grant County,

S.W. Permit No. 127

Operational Plan:

The Site is open two days a week in winter and three days in summer. An operator is present to contral the the proper disposal of the garbage.

The site is fenced with multiple wires. The gate is locked when the site is

not in use.

There is no leachate. LIquids are not accepted. The area is level with no drainage channels.

There is no methane. The garbage is burned so there is no accumulation of wet debri

Odor is kept to a minimum. All dry garbage is burned regularly.

Road leading to the pit is gravelled and well maintained. Usually there is not traffic to cause a dust problem. The site is about 13/4 from the City of Long Creek and is located in a ranching and pasture area.

When there is some accumulation, the area is levelled and compressed by a

D8-Cat. Then that area is covered with earth.

Sincerely Yours,

Edward Shanks- Recorder

CITY OF MONUMENT P.O. BOX 426 MONUMENT, OREGON 97864

March 7, 1991

Department of Environmental Quality Solid Waste Division Ernest A. Schmidt 811 SW Sixth Avenue Portland, Oregon 97204-1390

Mr. Schmidt:

The City of Monument would like to apply for a variance to allow continued open burning of the solid waste in our landfill. The City has a population within the City limits of 160 with an additional population in the surrounding community of approximately 100 who use the landfill with any regularity. The nearest sanitary landfill that can be of use to these people is in John Day at the Grant County landfill which is from 60 to 80 miles distant.

The area served by this landfill is along the North Fork of the John Day River from Hamilton to Kimberly. At this time our landfill is not manned but we have met all requirements of the DEQ to present. We are in the process of improving the fencing around the trench and purchasing an easement through the neighboring property to better insure the correct and legal usage of the landfill.

There have been few if any changes in the population or demographics of the area since the 1986 variance was issued. Therefore, we would like to again be allowed to burn our solid waste.

A-3

Thank you,

Laurie Mulkey, City Manager

Programme of Continuous and Augilian Department of Continuous and Augilian SENECA, OREGON 97873

(503) 542-2161

February 22,1991

Oregon Department of Environmental Quality 811 SW 6th Avenue Portland, OR 97204-1390

Re: Seneca Disposal Site

Grant County

SW Permit No. 201

On February 5, 1991 the City of Seneca received notice from your office of the need to renew the Solid Waste Disposal Permit and ask for a variance to continue burning at the site.

The City of Seneca hereby requests continuance of the variance for burning at the disposal site. The City of Seneca's population is 190. The geographic area is Bear Valley which is a valley of gently rolling hills. The site is 15 acres in size and is owned and operated by the City of Seneca. The nearest landfill is approximately 35 miles away in John Day.

There are fire trenches all the way around the site. The sagebrush has been cleared out to prevent spread of fire. The wind blows the smoke that comes from burning the pit away from town. There are no buildings close by. The City has removed the tires and no longer accepts them.

The City is in the process of getting materials to build a fence around the pit. This project should be complete by summer.

If there are any questions regarding this site don't hesitate to call.

Thank you

Kristin L. Long Recorder, City of Seneca A-3

Enclosure

Board of Commissioners

Lake County STATE OF OREGON

LAKEVIEW, OREGON 97630

March 4, 1991

Mr. Robert Brown Solid Waste Division Department of Environmental Quality 811 SW 6th Avenue Fortland, OR 97204

Ladies and Gentlemen:

Enclosed please find our permit applications and fees for the seven small disposal sites we have around Lake County. We are requesting that you allow us to continue open burning at these sites as Lake County, at this time, does not have capabilities to provide complete attendance and covering of waste daily at these sites. These seven sites serve a population of approximately 3,000 which amounts to a very small waste shed at each of the disposal sites.

As you may be aware. Lake County has spent nearly \$450,000 in development of its new landfill here at Lakeview which serves a waste shed of approximately 5,500 residents.

Due to the need to develop this new landfill and comply with DEO regulations, we do not have any remaining funds to do any planning or increase our operation procedure on these surrounding landfills. Therefore, it is important that we be able to keep the open burning variance and continue operating these landfills as our exsisting permits allow.

Lake County would like to continue the planning process, including these surrounding landfills, so that we can arrive at a solid waste plan which would enable us to phase out these landfills or begin operating them more in line with DEQ regulations. However, at this time Lake County does not have the resources to do this. Currently the landfills are being monitored by the Road Department as they carry out their normal duties throughout the County. New pits are dug and the old ones are covered periodically by the Road Department. Between these times, the refuse is burned as required. In this way we are keeping the sites as clean as possible.

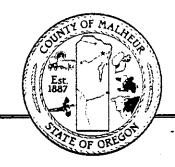
Thank you for considering continuation of our variance. If you have any questions, please call.

Sincerely,

A-3

Robert M. Pardue

Lake County Commissioner



County of Malheur

251 'B' STREET WEST • VALE, OREGON 97918

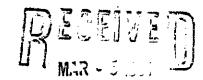
PUBLIC WORKS DEPARTMENT 473-5191

February 27, 1991

Department of Environmental Quality 811 SW. Sixth Avenue Portland, OR 97204

RE: Jordan Valley Disposal Site

Permit No. 295



Hezardous à Brita Alecte Division Department of Entiremmental Quanty

Greetings:

As part of our permit renewal for the above site, we are asking for a renewal of the variance to allow open burning there.

The Jordan Valley Disposal Site consists of a fenced 10 acre rectangular tract owned by Malheur County and located 1 mile north of the city of Jordan Valley. It is 0.4 miles west of Highway 95 and is almost entirely out of sight from the highway. It is operated jointly by the City of Jordan Valley and Malheur County.

A city employee unlocks the gate during open hours (Wednesdays and weekends) but does not stay at the sight. He is also responsible for the burning (usually weekly on Mondays). He is periodically reminded to exclude the materials not approved for burning. There have been no problems or complaints from the burning that I am aware of.

This site serves a small population of about 450 (375 within the city limits). Although open to all, the effective limit to the physical area served is probably no greater than 15 miles in any direction, including Idaho. There are no practical alternative landfills: Pickles Butte in Idaho is 60 miles away, Lytle Boulevard near Vale is 80 miles, and McDermitt is 100 miles. The continued acceptance of out-of-state waste at Pickles Butte is uncertain.

Although the waste volume here is small, it is still important that it be reduced by burning. Trench excavation is extremely difficult due to rock. Any means of extending the life of each trench is therefore very beneficial. There is also no equipment

Department of Environmental Quality February 27, 1991 Page 2

available from either the city or county to provide monthly, let alone daily, covering.

It is possible that the expected revised regulations in Subtitle D of the Resource Conservation and Recovery Act will change how we operate this site: However, until this occurs we ask that the burning variance be granted again. Thank you for your consideration of this request.

Sincerely,

Jun Kundrling
Jim Kimberling

Public Works Director



County of Malheur

251 'B' STREET WEST • VALE, OREGON 97918

PUBLIC WORKS DEPARTMENT 473-5191

February 27, 1991

Department of Environmental Quality 811 SW. Sixth Avenue Portland, OR 97204

RE: Juntura Disposal Site

Permit No. 272

DE TOUR

Proceeds a successor Division of American Services of American mental Quality

Greetings:

As part of our permit renewal for the above site, we are asking for a renewal of the variance to allow open burning there.

The present Juntura Disposal Site is a fenced 5-acre parcel within a 40 acre county-owned tract. It is located 1 mile southwest of the Juntura community and Highway 20 and is visible from both. It is operated by a local advisory committee set up by the county.

One of the advisory committee opens the locked site to the public during Saturday afternoons only. This person also sees to the burning, which is done on an as-needed basis. There have been no problems or complaints from the burning that I am aware of.

This site serves an unincorporated community and the surrounding ranches. Estimated population involved is 200 and the physical area is probably no more than 15 miles in any direction. There are no practical alternative landfills: Burns is 60 miles away, Harper Transfer Station is 35 miles, and Lytle Boulevard near Vale is 65 miles.

There is no equipment available to provide weekly or monthly covering. Reducing the volume through burning extends the life of this site and minimizes the amount of material handling necessary.

Department of Environmental Quality February 27, 1991 Page 2

It is possible that the expected revised regulations in Subtitle D of the Resource Conservation and Recovery Act will change how we operate this site. However, until this occurs we ask that the burning variance be granted again. Thank you for your consideration of this request.

Sincerely,

Jim Kimberling

Public Works Director

Jim Kimbeling



County of Malheur

251 'B' STREET WEST • VALE, OREGON 97918

PUBLIC WORKS DEPARTMENT 473-5191

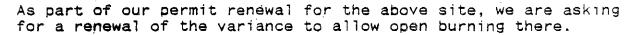
February 27, 1991

Department of Environmental Quality 811 SW. Sixth Avenue Portland, OR 97204

RE: McDermitt Disposal Site

Permit No. 310

Greetings:

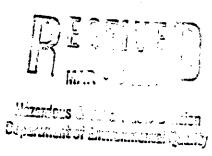


The McDermitt Disposal Site is a 30 acre tract owned by the BLM and leased to Malheur County. It is located 1 mile north of McDermitt, Nevada, and 0.3 mile east of Highway 95. It is partially visible from the highway. McDermitt straddles the state line but most of it is in Nevada.

Although the site is fenced there is no access control, i.e., no gate and no attendant. The site is operated by the McDermitt Community Fund under a joint agreement between Malheur County, Humboldt County (Nevada), and the town of McDermitt. A local member of this Fund is responsible for the burning on an asneeded basis (usually several times each week).

This site serves a population of about 900 (mostly Nevadans) and an area of perhaps 10 miles in radius. There are no practical alternative landfills at the present time: Winnemucca in Nevada is 70 miles away, Jordan Valley is 100 miles, and Burns is even further.

There is no equipment available for daily covering at this site. A large part of the waste material comes from the McDermitt School and is mainly papers. Burning both reduces the volume considerably and practically eliminates litter problems.



Department of Environmental Quality February 27, 1991 Page 2

It is possible that the expected revised regulations in Subtitle D of the Resource Conservation and Recovery Act will change how we operate this site. However, until this occurs we ask that the burning variance be granted again. Thank you for your consideration of this request.

Sincerely,

Jim Kimberling

Public Works Director

Jim Knibling

WALLOWA COUNTY COURT

Office of the Judge Phone: 503-426-3586 101 South River Street, Room 202

State of Oregon

Enterprise, Oregon 97828

Imnaha Disposal Site, No. 300 Imnaha Landfill Wallowa County 101 South River Street, Room 202 Enterprise, Oregon 97828

SUBJECT: Application for renewal of existing permit

Letter of justification for continuance of variance to allow for open burning of solid waste.

- 1. This site consists of approximately 3 acres of land owned by A.L. Duckett and is under lease to Wallowa County for the operation of a modified landfill.
- 2. The nearest landfill available for this area is located 4 miles Northeast of Enterprise and is 45 miles from the Imnaha landfill site.
- 3. The Imnaha landfill is situated within the very steep canyon country of Big Sheep Creek and the Imnaha River borders upon the Hell's Canyon National Recreation Area and serves approximately 100 people.
- 4. The landfill is presently being operated at a much higher degree of care supplemented by improved fencing and access and a more responsible attendant.
- 5. If Wallowa County should not be permitted to burn solid waste at this site, the life expectancy of the present site would only be about one year at the most. The non-availability of another site would probably lead to the discontinuation of the solid waste disposal program for this area.

WALLOWA COUNTY COURT

Office of the Judge Phone: 503-426-3586 101 South River Street, Room 202

State of Oregon

Enterprise, Oregon 97828

Troy Disposal Site, No. 192 Troy Landfill Wallowa County 101 South River Street, Room 202 Enterprise, Oregon 97828

SUBJECT: Application for renewal of existing permit

Letter of justification for continuance of variance to allow for open burning of solid waste.

- 1. This site consists of approximately two acres of land owned by the Oregon State Department of Fish and Wildlife and is under lease to Wallowa County for the operation of a modified landfill.
- 2. The nearest landfill for this area is located four miles Northeast of Enterprise and is 56 miles from the Troy Landfill site.
- 3. The Troy Landfill is situation within the Grande Ronde River canyon which is very steep with a very small amount of level or gently sloping land along the river. The landfill serves a population of approximately 125 people.
- 4. The landfill is presently under the supervision of the Wallowa County Road Department with the direction of the County Court. It is anticipated at this time that a more strict policy concerning access and hours of operation will be initiated.
- 5. If Wallowa County should not be permitted to burn solid waste at this site, the life expectancy of this site would be about three months. If open burning is to be continued, the useable area remaining would probably last for about two years at which time the County will be confronted with an almost impossible task of providing a solid waste program for this area.



Re: Mitchell Disposal Site Wheeler County SW Permit No. 175

February 18, 1991

Department of Environmental Quality Ernest A. Schmidt, Acting Manager Solid Waste Permits and Compliance

Dear Mr. Schmidt;

The City of Mitchell respectfully asks that the variance to allow burning at out disposal site be continued.

We have had the burning variance for a number of years, and this type of operation works best for this area.

We are a small community of 160 city residents with very limited resources and finances, and approximately 50 rural families, mostly with low and fixed income, that use this landfill.

The next nearest sanitary landfill is 50 miles from us, and a mountain pass must be gone over to get to it.

Our landfill is 6 acres fenced with an 8 foot chain link fence on all accessible sides.

We are countinually trying to maintain and upgrade our landfill as much as possible with the limited resources. At the present we have a person who keeps the landfill organized, recycles metals and oversees the burning.

If we are unable to burn it would make the maintenance of this landfill unreasonable, burdensome and impractical with no alternatives available.

Sincerly,

Jeff Bourland, Mayor

4-3

JB/aw

Mandous 2. 8. de ville la Unision expanded of Englandation (Builty 459.225 Variances or conditional permits authorized. (1) If the commission finds that a disposal site cannot meet one or more of the requirements of ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.385 or any rule or regulation adopted pursuant thereto, it may issue a variance from such requirement either for a limited or unlimited time or it may issue a conditional permit containing a schedule of compliance specifying the time or times permitted to bring the disposal site into compliance with such requirements, or it may do both.

- (2) In carrying out the provisions of subsection (1) of this section, the commission may grant specific variances from particular requirements or may grant a conditional permit to an applicant or to a class of applicants or to a specific disposal site, and specify conditions it considers necessary to protect the public health.
- (3) The commission shall grant a variance or conditional permit only if:
- (a) Conditions exist that are beyond the control of the applicant.
- (b) Special conditions exist that render strict compliance unreasonable, burdensome or impractical.
- (c) Strict compliance would result in substantial curtailment or closing of a disposal site and no alternative facility or alternative method of solid waste management is available.

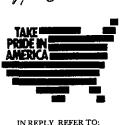
a -

(2) Open Burning. No person shall conduct the open burning of solid waste at a landfill, except in accordance with plans approved and permits issued by the Department prior to such burning. The Department may authorize the open burning of tree stumps and limbs, brush, timbers, lumber and other wood waste, except that open burning of industrial wood waste is prohibited.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT OREGON STATE OFFICE P.O. BOX 2965 (1300 N.E. 44th Avenue) PORTLAND, OREGON 97208

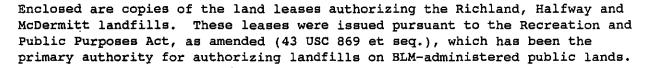


2740 (933.1)

MAR 25 1991

Ernest A. Schmidt
Hazardous and Solid Waste Division
Oregon Department of Environmental
Quality
811 SW Sixth Avenue
Portland, Oregon 97204

Dear Mr. Schmidt:



Specifically as to open burning, Stipulation 1 of Exhibit A (Additional Terms and Conditions) enclosed to the Halfway and McDermitt leases provides that:

Burning of any material at the sanitary landfill site is prohibited.

The Richland lease is structured somewhat differently and provides in Exhibit A to the lease that "All items addressed in the operational plan must be adhered to ...". Under the operational plan section entitled "Access Control, Fencing, Sign and Fire Trail" the following sentence is included:

A sign will be posted at the entrance of the site containing the following: name of site, emergency phone number, restricted materials, days and hours site is open to public, <u>burning</u>, <u>prohibited</u> and request the load be covered during transport to prevent litter. (Emphasis supplied)

These stipulations are incorporated in the lease terms because Federal Environmental Protection Agency regulation 40 CFR 257.3-7(a) requires that open burning of solid waste be prohibited at municipal solid waste landfills.



Our experience has been however that it is difficult to assure continual compliance with the lease terms and regulations by the lessees because of the number of sites and locations involved and because the communities or counties themselves cannot fully regulate activities at the landfills. We are aware of and concerned about violations at these and other leased sites and through an intensified compliance monitoring program hope, in cooperation with your agency, to ensure that operation of the leased sites is consistent with Federal and state regulatory requirements.

Sincerely,

UV Elaine Y. Zielinski

Deputy State Director for Lands and Renewable Resources

Villiam J- Bradley

Enclosures: As stated



ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date:	April 26, 1991
Agenda Item:	L
Division:	Water Quality
Section:	Industrial Waste

SUBJECT:

Request by Oregon Metallurgical Corporation (OREMET) for an Increase in Permitted Discharge Limitations for Total Dissolved Solids (TDS).

PURPOSE:

An increase in discharge limitations for TDS would allow OREMET to complete their plant expansion and increase production.

Oregon Administrative Rules require Commission ruling because OREMET is considered a major discharger for permitting purposes.

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 Rulemaking Statements Fiscal and Economic Impact Statement Public Notice	Attachment Attachment Attachment Attachment



811 SW Sixth Avenue Portland, OR 97204-1390 (503) 229-5696

Issue a Contested Case Order Approve a Stipulated Order	
Enter an Order Proposed Order X Approve Department Recommendation	Attachment
<pre>Variance Request X Exception to Rule Informational Report</pre>	Attachment Attachment Attachment
Other: (specify)	Attachment
DESCRIPTION OF REQUESTED ACTION:	
The Department is asking the Commiss request for an increase in permit lidentifies several alternatives inclalternative for the Commission's cor	imitations. This report Luding a recommended
AUTHORITY/NEED FOR ACTION:	
Required by Statute: Enactment Date:	Attachment
<pre>Statutory Authority: X Pursuant to Rule: OAR 340-41-026 (2)</pre>	Attachment Attachment A
Oregon Administrative Rules (OAR 340 "In order to maintain the quality of Oregon, it is the general policy of growth and development be accommodate efficiency and effectiveness of wast such that measurable future discharge existing sources do not exceed preseloads except as provided in Section outlines decision-making criteria for consider.	the EQC to require that the EQC to require that the EQC to require the EQC to re
Pursuant to Federal Law/Rule:	Attachment
Other:	Attachment
X Time Constraints:	
A timely decision on OREMET's request Department to renew the company's diexpires on August 31, 1991 and it wood of what their future discharge limit	scharge permit before it ould inform the company

Meeting Date: April 26, 1991 Agenda Item: L Page 2

Agenda Item: L

Page 3

DEVELOPMENTAL BACKGROUND:

Advisory Committee Report/Recommendation X Hearing Officer's Report/Recommendations Response to Testimony/Comments Prior EQC Agenda Items: (list)	Attachment B Attachment B Attachment D
Other Related Reports/Rules/Statutes:	Attachment
X Supplemental Background Information	Attachment
Draft NPDES Permit Permit Evaluation Report Addendum	Attachment <u>C</u> Attachment <u>D</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

OREMET operates a titanium manufacturing and forming facility in Albany, Oregon. They have operated in Albany at the same site since 1956.

They are in the process of expanding from eight to twelve furnaces to increase production which will result in an increase in the quantity of total dissolved solids (TDS) in their wastewater. Permit limitations for TDS were established by the Department in 1976. OREMET has generally operated within these limitations until recently.

TDS is a broad term used to describe the dissolved materials found in water. These materials generally include calcium, magnesium, sodium, chloride, sulfate, carbonate, and other dissolved ions, sometimes generically referred to as salts.

The treatment technologies for removing TDS from water are limited and expensive. These desalinization processes are directly analogous to the processes used to remove salt from sea water to make it suitable for drinking. Treatment processes include: ion exchange, reverse osmosis, electrodialysis, and possibly distillation. TDS removed from water using these processes are left in the form of concentrated brine solutions and solids that can be difficult to dispose.

Agenda Item: L

Page 4

The Department has not established limits for any permittee so stringent that it would require treatment for removal of salts. Removal of salts has not been necessary because few dischargers have high concentrations of salts in their effluent. In low concentrations, salts have little or no impact on waters and their beneficial uses. However, in high concentrations, salts can cause adverse impacts including acute and chronic toxicity.

OREMET's existing discharge permit is near expiration. They have applied for a permit renewal with modifications, including an increase in effluent limitations for TDS. They have not asked for higher limitations on any other regulated parameter.

Department staff have reviewed OREMET's request and drafted a proposed permit and a permit evaluation report (Attachments C and D). The draft permit maintains the existing TDS discharge limitations during the months when the receiving streams have low flow rates and low assimilative capacity. The permit proposes higher TDS limitations during months when higher flowrates exist in the receiving streams.

Public Comment: A public hearing was held on the draft permit in Albany on March 12, 1991. Twenty six people attended the hearing; six testified. A summary of the hearing and testimony is presented in the Hearing Officer's Report (Attachment B).

PROGRAM CONSIDERATIONS:

Program considerations are discussed in the Permit Evaluation Report Addendum (Attachment C). This document discusses OREMET's unusually long (1.5 mile) mixing zone, the results of acute and chronic toxicity testing on OREMET's effluent, the water quality guidance concentration for TDS, their practice of flow augmentation with groundwater, and the wetland area that has developed near their discharge.

In reviewing the various program considerations and public comment on the draft permit, the Department has determined that the unusually long mixing zone (permitted in the past and proposed in the draft permit) is not consistent with Oregon Administrative Rules (OAR 340-41-442 (4)). The mixing zone is too long, it occupies the entire width of the stream, virtually no mixing takes place in it during the dry summer months, and the guidance concentration for TDS is not met at its boundary. Therefore, the Department intends to redefine the permitted mixing zone as follows:

Agenda Item: L

Page 5

When the flowrate in Oak Creek is less than or equal to 10 cubic feet per second: no discharge to Oak Creek.

When the flowrate in Oak Creek is greater than 10 cubic feet per second: the mixing zone shall extend 150 below the discharge.

The new mixing zone will not become effective immediately, however. An implementation schedule will be incorporated into the renewed discharge permit as provide for by Oregon Administrative Rules (OAR 340-41-120 (3) (b)). The new mixing zone definition will become effective following the term of the renewed permit. During the five-year interim period, the existing mixing zone definition will apply.

The Department cannot forecast what OREMET's discharge needs will be after the new mixing zone definition takes effect. They may elect to hold their effluent during the nondischarge period or they may elect to move their discharge to a larger receiving stream. For this reason, the present request for a TDS discharge load increase will be limited to a consideration of the five-year interim period only.

Alternatives considered by the department:

For the five-year interim period where the existing mixing zone definition is effective:

1. OREMET could be required to stay within existing TDS discharge limitations and maintain existing production levels.

Alternative 1 would provide the existing level of protection of the receiving streams and their beneficial uses. However, OREMET has already made significant capital investment towards plant expansion and maintaining existing limitations would not allow them to increase production and benefit from these investments.

2. They could negotiate with a municipality to accept all or portions of their effluent.

Alternative 2 has been investigated by OREMET. They have estimated that the cost to have the City of Albany accept their wastewater would be approximately \$1,200,000 which they believe would be prohibitive. This alternative would amount

Agenda Item: L

Page 6

to routing OREMET's effluent through Albany's treatment plant to be discharged into the Willamette River. The treatment processes used by Albany and other municipalities would not remove any significant quantity of TDS from wastewater.

3. They could provide treatment to remove a percentage of the TDS.

Alternative 3 would allow OREMET to increase production while staying within their existing discharge limitations. However, OREMET believes that the cost of installing desalinization technology and operating and maintaining it would be prohibitive. OREMET has estimated that the cost to install this type of technology would be much higher than the \$1,200,000 estimated for Alternative 2.

4. They could construct holding facilities that would give them better control over the timing of discharges.

OREMET is in the process of completing Alternative 4. They have recently constructed a holding pond that will allow them to hold a portion of their high TDS wastestream until the receiving streams have higher flowrates. OREMET's capital cost for this investment has been approximately \$500,000.

5. The permit limitations could be increased as requested by OREMET (average increase of 30% during the four summer months and 105% during the eight winter months).

Alternative 5 is not recommended because of the Department's concern that it would cause adverse impacts on water quality and the beneficial uses of the receiving streams. The primary reason for concern is that Oak Creek and the Calapooia River have inadequate flowrates during the summer/fall low flow periods to assimilate greater waste loads.

6. A seasonal increase in permit limitations could be granted during times when the receiving streams have higher flows and a greater capacity to assimilate the effluent.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends Alternative 6. This alternative would provide approximately the same level of environmental protection as the existing limitations while allowing the industry to increase production. These limitations would

Agenda Item: L

Page 7

apply only during the five-year interim period before the new mixing zone definition becomes effective, as discussed under the program considerations section of this report. The existing and proposed limitations are listed below for comparison.

Existing (year-round) TDS limitations in milligrams per liter (mg/L) and pounds per day (lbs/day):

Proposed (seasonal) TDS limitations:

(August and September) <u>Concentration</u> Mass 2,000 mg/L month avg., 20,000 lbs/day month avg. 2,500 mg/L daily max., 25,000 lbs/day daily max. (July and October) Concentration Mass 2,000 mg/L month avg., 30,000 lbs/day month avg. 2,500 mg/L daily max., 37,000 lbs/day daily max. (November through June) Concentration Mass 3,000 mg/L month avg., 40,000 lbs/day month avg. 3,750 mg/L daily max., 50,000 lbs/day daily max.

For the Commission to grant an exception to the general rule that prohibits waste load increases, specific findings must be made according to OAR 340-41-026 (a). The Department believes that the following findings are appropriate for the recommended alternative.

(1) The new or increased discharge load would not cause water quality standards to be violated. The increased discharge load is for a parameter that is listed in Oregon Administrative Rules as a guide concentration and not a water quality standard. An exceedance of the guide concentration may be allowed by the Department.

Agenda Item: L

Page 8

- (2) The new or increased discharge load would not threaten or impair any recognized beneficial uses. The recommended alternative would not allow any load increase during the critical low stream flow months; the proposed load increase would occur during the high stream flow months where the increase in discharge load would not threaten or impair any recognized beneficial uses.
- (3) The new or increased discharge load shall not be granted if the receiving stream is classified as being water quality limited unless 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. Oak Creek and the Calapooia River are not considered water quality limited for total dissolved solids.
- (4) 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. A proper land use compatibility statement was submitted by OREMET with their permit renewal application.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The Department's recommended alternative is consistent with the strategic plan, agency policy, and legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

The Commission can approve the Department's recommended alternative, one of the other alternatives, or they can request further evaluation before making a decision.

Agenda Item: L

Page 9

INTENDED FOLLOWUP ACTIONS:

The Department would like to renew OREMET's permit before it expires in August. The TDS limitations that would be placed in the permit are contingent upon the Commission's decision.

OREMET's request for an increase in their TDS discharge limitations will likely have to be revisited in the future. The Department cannot predict what OREMET's discharge needs will be after the newly defined mixing zone becomes effective.

Approved:

Section:

Division:

Report Prepared By: Ken Vigil

Phone: 229-5256

Date Prepared: 4/9/91

KMV:crw IW\WC8\WC8129 April 9, 1991 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)(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 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), (4), and (5), and nonpoint source activities shall follow guidelines (6), (7), (8), (9) and (10).

(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 Director may grant exceptions to sections (2) and (5) and approvals to section (4) 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 threaten or impair any recognized beneficial uses:

C: The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited unless 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; and

(D) The activity, expansion, or growth necessicating 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. The strategy that has been followed in stream management has hastened the development and application of treatment technology that would not have otherwise occurred. As a result, some waters in Oregon have assimilative capacity above that which would exist if only the minimum level of waste treatment was achieved. This 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 Director 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 or two general

(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams are duite, 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 increase loading.

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

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)(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 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), (4), and (5), and nonpoint source activities shall follow guidelines (6), (7), (8), (9) and

(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 ailowed discharged loads except as provided in section (3) of this rule.

(3) The Commission or Director may grant exceptions to sections (2) and (5) and approvals to section (4) 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 snail make the following findings:

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

- (E) The new or increased discharge load would not threaten or impair any recognized beneficial
- ·C) The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited unless 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; and
- (D) The activity, expansion, or growth necessicating 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. The strategy that has been followed in stream management has hastened the development and application of treatment technology that would not have otherwise occurred. As a result, some waters in Oregon have assimilative capacity above that which would exist if only the minimum level of waste treatment was achieved. This 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 Director 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

(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 b 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. 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

(ii) Value of Assimilative Capacity. The assimilative capacity of Oregon's streums 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 increase loading.

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

3 - Div. 41

(January, 1990)

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 15, 1991

TO:

Environmental Quality Commission

FROM:

Mark Ronayre, Hearing Officer

Ken Vigil Environmental Engineer

SUBJECT: OREMET Titanium, Public Hearing

A public hearing was held on the draft surface water discharge permit that has been prepared for the Oregon Metallurgical Corporation of Albany (OREMET). The hearing was held on March 12, 1991 in Albany at Linn Benton Community College. The hearing started promptly at 7:00 p.m. in Room F-104.

Mark Ronayne, who served as the Hearing Officer, began the hearing with introductory comments on hearing format and protocol. He also informed the audience that comments would be summarized and presented to the Commission for their consideration prior to ruling on OREMET's request for an increase in discharge limitations.

Ken Vigil, who served as the Department's technical representative, gave the audience a description of the permit focusing on the difficult and perhaps controversial issues. He explained that one of the key questions associated with the permit is the question of whether the discharge limitations for total dissolved solids should be increased or not.

A brief question and answer period followed. Members of the audience raised questions about the toxicity of chromium, ammonia, and lead. They were concerned that the toxicity of chromium may be underestimated because the oxidation state is not known. They were concerned about the toxicity of ammonia as it is influenced by changes in pH. They were concerned about the toxicity of lead because high effluent concentrations have been reported in the past. Department staff and staff from OREMET addressed these questions and agreed to evaluate them further.

Mr. Ronayne opened the hearing for receiving formal testimony after the question and answer period. Twenty six people attended the hearing; six people testified. Their testimony is summarized below.

Frank Caputo (Oremet General Manager). Mr. Caputo said that he will mail in his testimony. He expressed the company's position emphasizing that they are trying to meet all regulations in an open, honest way. They have already spent considerable funds on environmental protection. He also lives on Oak Creek and said that the Creek and surrounding area support a large population of fish and wildlife.

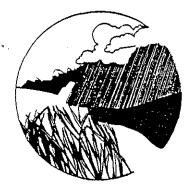
Steve Bryant (Albany City Manager). Mr. Bryant read a statement prepared by the Albany-Millersburg Economic Development Corporation (Mel Joy) and submitted it for testimony. He also read a statement prepared by the mayor of Albany (Keith Rohrbough). They support the company's plans for growth and encourage us to complete our review as quickly as possible. He mentioned that they had earlier discussions with Oremet on accepting Oremet's effluent at the Albany sewage treatment plant but that alternative did not appear to be beneficial for either party at the time. He said they would be open to further discussions in that regard over the long term.

Tom Sanderson (Property owner who lives on Oak Creek near a place where the Creek is ponded and referred to as Barry's pond). Mr. Sanderson is concerned about the environmental impact of Oremet's discharge to species in Oak Creek and he is also concerned about public health implications. He mentioned that Oak Creek meanders through a developed park area where there is easy public access. He said that he believed the Creek has been damaged over the years and is in worse condition today than when he was young.

Wes Du Mont (Property owner who lives on Oak Creek at Barry's pond). Mr. Du Mont is a 30-year resident of the area. He is concerned about the environmental impacts of the discharge. He mentioned that he has noticed the loss of insects and frogs in the pond. He believes that the vegetation on the pond has died over the years. He is concerned that the pond is serving as no more than a settling basin for Oremet's wastewater. He offered the Department access to Oak Creek from his property.

<u>Buford Thomas</u> (Union Local President) Mr. Thomas does not think that Oremet's effluent is causing a detrimental impact to the environment. He said that he is concerned about the environment and believes that Oremet's discharge improves the quality of Oak Creek and the Calapooia River. He supports the company's efforts.

William Buskirk (Property owner who lives on Oak Creek) Mr. Buskirk is concerned about the environmental impact of Oremet's discharge. He believes that the permit allows discharge up to the acute toxicity criteria and would prefer that the chronic criteria be used instead. He says that the creek bottom is bare and wonders why. He has a low area on his property that is fed intermittently by Oak Creek. He keeps fish in this area and is concerned about protecting them.



Northwest Environmental Defense Center 10015 S.W. Terwilliger Blvd., Portland, Oregon 97219 (503) 244-1181 ext.707

Mr. Ken Vigil
Department of Environmental Quality
Water Quality Division
5th Floor
811 SW 6th Avenue
Portland, Oregon 97204

March 18, 19 ECELV MAR 1 8 1991

AND CONTROL OF ENVIRONMENTAL QUALITY

Re: Renewal of NPDES Permit #100280, Oregon Metallurgical Corporation.

Dear Mr. Vigil;

The Northwest Environmental Defense Center (NEDC) has reviewed the proposed modification and renewal of the Oregon Metallurgical Corporation (Oramet) Discharge Permit and has the following concerns:

The Clean Water Act

A goal of the Clean Water Act (CWA) is to attain fishable, swimmable waters by 1985. Obviously, this goal has not yet been reached. And it will never be reached if DEQ continues to propose permit renewals such as the one proposed for Oramet. This permit renewal would increase pollutant discharges into waters already plagued by water quality problems. The proposal is inconsistent with the goal of the CWA and DEQ's own policy to reduce discharges of pollutants into waterways.

Past Compliance

Oramet is unable to comply with existing TDS standards set forth in its NPDES Permit, as evidenced by its extensive history of violations of TDS, in both Concentration Limits and Loading Limits at its discharge point, as well as TDS standards exceeding the 100 mg/L standard set forth for the Calapooia River. The Permit Evaluation Report contends, "Formal enforcement actions were not pursued because Oramet had requested a permit modification. The Department has yet to decide on the appropriateness of formal enforcement." Because of DEQ's hesitancy in taking formal enforcement action, NEDC is left with the only option of filing a 60 day Notice of Intent to sue pursuant to section 505 of the CWA. The NPDES Permit functions to regulate and reduce pollutant discharges. DEQ now proposes to accommodate Oramet's apparent inability to comply with the permit by granting them more lenient pollutant limits.

Furthermore, DEQ was fully aware of the fact that Oramet was planning to increase operations, which would "require an increase in the limits and the [holding] pond would not mitigate expected additional poundage of TDS." (Letter to DEQ from Oramet, July 16,

1990.) If DEQ allows Oramet to increase operations, DEQ must ensure that Oramet has provided a solution to prevent TDS discharges from exceeding standards. Instead of a remedy, DEQ proposes to give Oramet what they asked for on July 16: an increase in limits.

The Mixing Zone

The existing Mixing Zone is the total width of Oak Creek, extending 1.5 miles from Oramet's discharge point to the confluence of the Calapooia River. NEDC objects to the currently defined mixing zone. OAR 340-41-442(4) lists several factors the Department shall consider when defining a mixing zone, including "less than the total stream width as necessary to allow passage of fish and other aquatic organisms." First, it is absurd to think that "fish and other aquatic life" avoid or go around these zones. Second, the Permit Evaluation Report concedes that the current mixing zone violates this rule. ("The currently defined mixing zone may not be consistent with some of [these] criteria...However, we do not have enough information to change the permitted mixing zone immediately or to require a change in the outfall location immediately.") Finally, NEDC is vehemently opposed to allowing a mixing zone that will kill fish and violates it's own rules on the grounds that DEQ doesn't have enough information. If there is not enough information, there should be no discharge until information is available.

The Report states that the Department did find a change in aquatic habitat of Oak Creek within the mixing zone from limited field studies, but concludes, "It is unclear if this change in aquatic habitat has adversely impacted the beneficial uses of Oak Creek." According to DEQ's 1990 305(b) Report, two beneficial uses, aquatic life and fishing, are currently affected in Oak Creek. Also, the 305(b) Report noted that Oak Creek is chronically toxic in Oramet's mixing zone. A previous Mixing Zone Report, on August 16, 1989, shows TDS levels increased 200 times in Oramet's mixing zone. Common sense would suggest that these factors may very well impact beneficial uses. DEQ does not conclude that beneficial uses are unaffected. Before renewing this Permit with the existing mixing zone, DEQ must conclusively determine that beneficial uses in Oak Creek will not be adversely impacted.

The Calapooia River

TDS from Oramet's discharge has been detected at levels over 4 times the standard of 100 mg/L set forth in OAR 340-41-445(2)(0), see August 16, 1989 Mixing Zone Report. Additionally, waters that are chronically toxic within Oramet's mixing zone are discharging into the Calapooia River. Despite this, the Permit Evaluation Report seems to suggest "that the beneficial uses of the Calapooia River are not being adversely affected." Again, common sense and DEQ's own 305(b) Report prove otherwise.

The Permit Proposal

Instead of addressing the existing problem of high levels of TDS discharging into Oak Creek, DEQ proposes to permit increased discharge of TDS into Oak Creek, in order to accommodate Oramet's plan to increase their operation. To achieve this, DEQ proposes: 1) to grant a variance to the 100mg/L guide concentration for TDS for tributaries of the Willamette Basin, and 2) increase Oramet's Loading limitation of TDS during most of the year, accompanied by flow augmentation. This proposal directly contradicts OAR 340-41-026(2):

In order to maintain the quality of water 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 [below]:

(3)(A): The new or increased discharged load would not cause water quality

standards to be violated.

(3)(B): The new or increased discharge load would not threaten or impair any recognized beneficial uses.

Allowing this increased discharge load would violate water quality standards for TDS. Furthermore, in order to allow a limit in excess of current standards, EQC must make a finding that beneficial uses will not be adversely impacted. The Permit Evaluation Report states, "a guide value of 500 mg/L would protect the beneficial uses of the receiving stream." However, there is no factual basis for this conclusion. In fact, DEQ's 305(b) Report and other data demonstrate the opposite is true. DEQ cannot conclude that the increase will not "threaten or impair" the beneficial uses of the Calapooia River and Oak Creek.

Granting a Variance to the TDS Guide Concentration for the Willamette Basin

The Permit Evaluation Report states that the TDS Standard of 100 mg/L for the Willamette Basin is a 'guide concentration' "that shall not be exceeded unless otherwise specifically approved by the Department." This misstates OAR 340-41-445(2)(0) which provides: "TDS: 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." (emphasis added) The function of DEQ is to maintain the quality of waters in the State of Oregon. To allow an increased guide concentration of 500mg/L in the Calapooia River clearly contradicts this function.

DEQ recognizes that TDS concentrations are already exceeding guide concentrations by more than four times in the Calapooia River. DEQ's rationale for increasing the TDS limit in the permit from 100 mg/L to 500 mg/L is that TDS levels are not exceeding guide concentrations in other rivers around Oregon. This is neither a legally nor logically defensible reason for increasing the TDS limit. Merits of any increase in TDS must be based upon the conditions in this river. Obviously, 100 mg/L was chosen because of the ambient levels of TDS existing in the Willamette Basin, not in other regions. The Department fails to follow its own rules, as well as the CWA, by making this comparison.

Allowing Increased Seasonal TDS Load Limitations Accompanied by Flow Augmentation

The Evaluation Report concludes that increased discharge from Oramet will adversely affect the Calapooia River because chronic toxicity will not be prevented without flow augmentation. Consequently, DEQ's remedy to potential chronic toxicity is elevating the TDS Loading Limit during high flow months, along with increasing flow augmentation. As DEQ is well aware, dilution is not the solution to pollution. The aquatic resources in both Oak Creek and the Calapooia River are already stressed. By eliminating the limit on flow in the proposed Permit, DEQ would enable Oramet to discharge unlimited amounts of water and pollutants into Oak Creek. DEQ cannot allow this without first determining there will be no adverse effects. Additional TDS poundage and additional water will have additional impact on this environment.

In addition, flow augmentation is premised on the assumption that the Oregon Water Resources Department (WRD) will issue Oramet a permit to appropriate

groundwater. DEQ should not allow any increase in TDS discharge unless and until a WRD permit is issued.

Furthermore, DEQ recommends that a condition be added to the Permit, requiring Oramet to investigate possible effluent alternatives. A similar study was conducted by Oramet at the request of DEQ in 1990 because of the low dilution factor of effluent discharging into Oak Creek, and the high level of TDS being discharged. A letter sent to DEQ, dated July 16, 1991, mentioned several alternatives, eg. Tie-in to City of Albany Sewage Treatment Plant, Directly piping to the Willamette River, or Treating the Effluent. Oramet claims that these proposals are unrealistically expensive. That is Oramet's problem, not DEQ's problem. Approving this Permit with a requirement of a later study, is unacceptable, especially in light of the extent of variances proposed here. It is unclear what "too expensive" means, given the heavy costs to the environment and beneficial uses of both the Calapooia River and Oak Creek. Spending money to further study the problem while at the same time allowing increases of pollutant into these water bodies is not the solution. DEQ should be requiring best available technology—like treating the effluent—in order to meet the statutory goals of the CWA and it's own rules.

In summary, DEQ's proposal of flow augmentation and increasing the TDS standard are not a solution to the problem. Granting this permit renewal as currently proposed would merely be accommodating a polluter's inability to meet it's existing permit requirements without attempting to remedy the existing water quality problems of the Calapooia River and Oak Creek. This is contrary to the CWA and DEQ's own rules. DEQ should be reducing pollutants, not increasing pollutants merely to benefit the profit margin of an already recalcitrant and illegal polluter. For the forgoing reasons, NEDC requests that DEQ not issue the NPDES Permit renewal as proposed. Please contact us if you have any questions.

Sincerely,

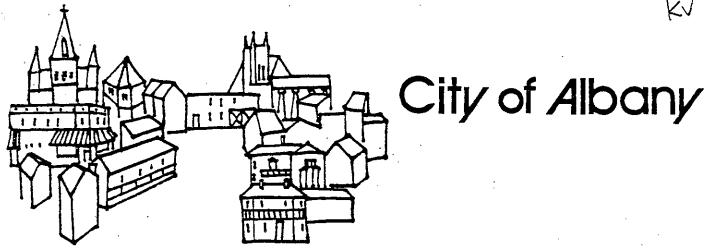
Karen Russell

NEDC Board Member

Karen Cherrell

Paula Meske NEDC Volunteer

cc: WaterWatch of Oregon Oregon Trout



March 11, 1991

Environmental Quality Commission Department of Environmental Quality Water Quality Division 811 SW Sixth Avenue Portland, OR 97204

Dear Commission Members:



WATER QUALITY DIVISION DEPT. OF ENVIRONMENTAL QUALITY

SUBJECT: Proposed Discharge Permit for Oregon Metallurgical Corporation

Thank-you for the opportunity to comment on OREMET's proposed discharge permit. The City of Albany has been closely following OREMET's operation over the past several years, and we have been very supportive of their current expansion project. OREMET is a dynamic industry that provides much needed diversification in our otherwise timber-dependent economy. Despite their heavy manufacturing processes, they have been a good neighbor in our community with a strong environmental program emphasis. In addition, they have worked closely with the City of Albany staff to assure compliance with the City's development and environmental standards. It appears to us that OREMET's augmentation to Oak Creek stream flows has been beneficial to wildlife and vegetation between its facility and the Calapooia River. In the summer months, this is an area that would otherwise be dry or stagnant.

We have reviewed the draft NPDES permit and related conditions as well as OREMET's response to the draft. While we do not have a great deal of environmental engineering expertise, it appears to us that OREMET's requests for modifications to the permit are all prudent and reasonable. We would certainly hope that the State and OREMET could reach consensus on the conditions necessary to protect the public's interest.

You may also be interested to know that OREMET has explored with the City an alternative of complete or partial wastewater discharge to Albany's sanitary sewer system; however, our analysis of these alternatives has not proven beneficial to either OREMET or the City at this time. Nevertheless, the City remains open to further review of these alternatives over the long-term. In the

(503) 967-4300

Environmental Quality Commission Page 2 March 11, 1991

meantime, we fully support OREMET's permit modification requests, and we hope that the State of Oregon will assist us in assuring this important industry's future success.

Thank-you for the opportunity to address this matter. Please contact me for any further information.

Siacerely,

Keith Rohrbough

Mayor

SWB*:kg

c: Steve Stocks, OREMET Steve Bryant, City Manager John Joyce, Public Works Director Albany City Council Read File

DECEIVED MAR 14 1991

WATER QUALITY DIVISION DEPT. OF ENVIRONMENTAL QUALITY





Corvailis Office

March 15, 1991

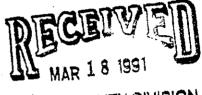
CVO28500.A0

Mr. Ken Vigil
Oregon Department of Environmental Quality
Water Quality Division (5th Floor)
811 SW 6th Avenue
Portland, OR 97204

Dear Ken:

Subject:

OREMET NPDES Permit Comments



WATER QUALITY DIVISION DEPT. OF ENVIRONMENTAL QUALITY

Oregon Metallurgical, Inc. (OREMET) is located in Albany, Oregon. They process titanium and discharge their treated wastewater into Oak Creek, an intermittent tributary to the Calapooia River. Before entering Oak Creek, the wastewater passes through a wetland created by OREMET. Their wastewater currently maintains a base flow of about 2.5 cubic feet per second in Oak Creek during the summer months when it would normally go dry.

Considerable environmental information has been developed for OREMET's wastewater, the Calapooia River and Oak Creek through this NPDES permit modification/renewal process. Studies assessing water quality, wastewater toxicity, the beneficial uses of the Calapooia River and Oak Creek, the ecology of the Calapooia River and Oak Creek, the nature of OREMET's created wetland, and Oak Creek flows were conducted during 1989 and 1990. This information has been shared with the Oregon Department of Environmental Quality (DEQ) to ensure that OREMET's discharge permit requirements would be based on scientific fact and would be protective of the environment.

Mr. Ken Vigil Page 2 March 15, 1991 CVO28500.A0

Toxicity Testing

Water quality testing, bioassays, and ecological assessments have been conducted to assess the potential adverse effects of OREMET's wastewater on Oak Creek and the Calapooia River.

The water quality results indicate that undiluted wastewater does not exceed the acute criteria for the protection of aquatic life and is in compliance with all health-based (primary) drinking water parameters tested. It also meets all the secondary drinking water criteria tested except for total dissolved solids (TDS) and manganese. Secondary drinking water criteria are not health-based, but address potential taste, odor, and aesthetic problems. Although OREMET's wastewater TDS and manganese levels exceed the secondary drinking water criteria, this does not preclude its use by native plant or wildlife populations or its use for livestock watering, irrigation, and other beneficial purposes. OREMET's wastewater manganese levels are lower than background Oak Creek concentrations. OREMET does not use manganese in their manufacturing process. The manganese in their wastewater is likely a background component of their process water source.

Whole effluent bioassay tests have been run with rainbow trout, bluegill sunfish, fathead minnows, and two species of waterfleas (Daphnia magna, Ceriodaphnia dubia) to determine the effects of wastewater exposures. Acute bioassay tests have been conducted on post-wetland wastewater with five different test species over a 1-year period. The results of this testing indicate that OREMET's undiluted wastewater exhibits an LC50 at concentrations greater than 100 percent and is therefore not acutely toxic (as defined by DEQ) within their designated mixing zone (lower 1.5 miles of Oak Creek) as required by DEQ (Oregon Administrative Rules).

Chronic bioassay tests were conducted in July and September 1990 with fathead minnows, Ceriodaphnia dubia, and Daphnia magna on wastewater samples collected below OREMET's wetland. The results of these tests indicate that OREMET's undiluted wastewater generally exhibits no chronic toxicity. In five of the six tests, no chronic effects were observed. In the single test where chronic effects were observed, they were minimal. Based on these results with undiluted wastewater, no chronic toxicity should occur in the Calapooia River at the edge of OREMET's mixing zone (mouth of Oak Creek) as required by DEQ (Oregon Administrative Rules).

Mr. Ken Vigil Page 3 March 15, 1991 CVO28500.A0

Ecological studies were conducted for fish and invertebrates in background and down-stream, wastewater-influenced areas of Oak Creek and the Calapooia River. No change in downstream area fish species use was indicated for Oak Creek compared to background. An increase in downstream fish density was noted in Oak Creek compared to background. This increase is likely because OREMET's effluent discharge maintains stream flows in downstream areas while background areas in Oak Creek dry up and become stagnant in the summer. Fish habitat conditions in the Calapooia River near the mouth of Oak Creek are poor (wide, shallow channel; no cover or holding places). For this reason, fish would not be expected to use the area and too few fish were observed to assess possible changes in the Calapooia River.

Background and downstream site evaluations of aquatic invertebrates in Oak Creek indicate a downstream "community shift". This "shift" was denoted by changes in the types of organisms using background and downstream areas. The downstream invertebrate community is similar to background in the number of different species (taxa) it supports; exceeds background in species diversity (an indication of community stability and balance); supports as many different feeding groups as background; and supports more species considered "pollution intolerant" than background areas. Therefore, it is likely that the "community shift" noted does not indicate an adverse effect from OREMET's wastewater, but indicates the presence of a "different" invertebrate community in Oak Creek below OREMET's outfall. No differences were noted in the invertebrate communities assessed from background and downstream sections of the Calapooia River.

Beneficial Use Assessment

The Oregon Administrative Rules indicate that Oak Creek and the Calapooia River have the following beneficial uses:

Livestock watering
Irrigation
Public water supply
Private water supply
Industrial water supply
Anadromous fish passage
Resident fish and aquatic life
Salmonid fish rearing

Salmonid fish spawning
Fishing and hunting
Terrestrial wildlife
Water contact recreation
Boating
Aesthetic quality
Hydropower

Mr. Ken Vigil Page 4 March 15, 1991 CVO28500,A0

The water quality, bioassay and ecological assessment data provide no indication that OREMET is adversely affecting the potential beneficial uses of Oak Creek or the Calapooia River. It is evident that OREMET's wastewater discharge to the creek currently ensures year-round attainment and/or enhances the viability of several beneficial uses for the lower 1.5 miles of Oak Creek (livestock watering, irrigation, resident fish and aquatic life, fishing and hunting, water contact recreation, terrestrial wildlife, aesthetic quality). In the absence of OREMET's outfall, it is likely that many of these uses would not be attained during the summer or their viability would be substantially reduced.

Conclusions

Water quality, whole effluent toxicity, and ecological study results indicate that OREMET's treated wastewater currently has no measurable adverse affect on the environment or the beneficial uses of Oak Creek and the Calapooia River.

The only proposed discharge increase in the NPDES permit concerns increased TDS during high flow winter months. Bioassay results indicate no correlation between TDS levels and OREMET's wastewater toxicity. Monitoring these releases (bioassay testing, water quality analyses, and aquatic organism surveys) will be required to document that no adverse environmental or beneficial use effects occur due to the proposed discharge change during the winter months. Therefore, the proposed discharge increase requested by OREMET is not expected to adversely affect the attainment of the beneficial uses acknowledged for Oak Creek or the Calapooia River.

Summer wastewater releases will continue as in the past, maintaining a base flow for riparian plants, fish, wildlife, agriculture, and other beneficial uses of lower Oak Creek and the Calapooia River. Summer releases will also be monitored through bioassay testing, water quality analyses, and aquatic organism surveys to document that no adverse environmental effects are occurring.

Information from the following CH2M HILL reports was used to prepare this letter:

- 1. OREMET Discharge Effects on the Beneficial Uses of Oak Creek near Albany, Oregon.
- 2. Ecological Assessment of Oak Creek near Albany, Oregon.

Mr. Ken Vigil Page 5 March 15, 1991 CVO28500.A0

- 3. OREMET Wetland Assessment
- 4. Toxicity Summaries for OREMET Titanium, Albany, Oregon.
- 5. Oak Creek Surface Water Discharge
- 6. Water Right and Water Use Assessment for Oak Creek

Sincerely,

CH2M HILL

Roger W. Ovink

Environmental Scientist

Dennis W. Shelton

Aquatic Toxicologist

jeo/CVOC9/059.51



March 12, 1991

Hearings Officer
Department of Environmental Quality

Subject:

Oregon Metallurgical Corporation (Oremet)

Waste Water Discharge Permit Renewal

The Albany-Millersburg Economic Development Corporation has been working with the management of Oremet on their planned expansion. Their continued growth is extremely important to the overall economy of Albany, Linn County, and the State of Oregon.

It is our understanding that the renewal has been pending for over 12 months. Because no date has been identified for approval, their expansion has gone on hold, impacting not only their financial income, but the delay or loss of qualified subcontractors and the hiring of 40 new employees.

We ask the Department of Environmental Quality to please do your review and inspection with due diligence so that this needed and environmentally sound expansion can be completed by Oremet without further delay.

Sincerely,

Mel Yoy President

PELIMINARY DRAFT

Expiration Date: 8-31-96

Permit Number:

File Number: 64300 Page 1 of 8 Pages

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WASTE DISCHARGE PERMIT Department of Environmental Quality 811 Southwest Sixth Avenue, Portland, OR 97204 Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

ISSUED TO:

SOURCES COVERED BY THIS PERMIT:

Oregon Metallurgical Corporation 530 W. 34th Avenue

P.O. Box 580

Albany, OR 97321

Type of Waste

Treated Process Wastewater

Outfall Outfall Number_ Location

> RM 2.0 Oak Creek

001

PLANT TYPE AND LOCATION:

Primary & Secondary Titanium Manufacturing & Titanium

Forming

RECEIVING STREAM INFORMATION:

Major Basin: Willamette Minor Basin: Calapooia Receiving Stream: Oak Creek Hydro Code: 22E-OAKC 2.0D

County: Linn

Applicable Standards: OAR 340-41-445

EPA REFERENCE NO: OR-000171-6

Issued in response to Application No. 998502 received July 27, 1990.

This permit is issued based on the land use findings in the permit record.

Lydia R. 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 waste water collection, treatment, control and disposal system and discharge to public waters adequately treated waste waters 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:

Schedule A - Waste Discharge Limitations not to be Exceeded.. Schedule B - Minimum Monitoring and Reporting Requirements... 4-5 Schedule C - Compliance Conditions and Schedules...... Schedule D - Special Conditions...... 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.

File Number: 64300 Page 2 of 8 Pages

SCHEDULE A

1. Waste Discharge Limitations not to be Exceeded After Permit Issuance Date

Outfall Number 001

FINAL DISCHARGE (Treatment system effluent + non contact cooling water and storm drain system)

	Concentrat	ions	Load	lings
- Mo	onthly Ave.	Daily Max.	Monthly Ave. lb/day	Daily Max. 1b/day
Chromium	-		0.70	1.67
Lead	•	•	0.67	1.35
Nickel	-	•	2.47	3.68
Zinc	-	=	2.14	4.84
Ammonia	•		112.61	256.16
Fluoride	-	-	10.89	19.60
Oil and Grease	-		128	248
Total Suspended Solids	30	4 5	300	450
Total Dissolved Solids	S			
Aug & Sept	2,000	2,500	20,000	25,000
July & Oct	2,000	2,500	30,000	37,000
Nov June	3,000	3,750	40,000	50,000
Other Parameters		Limitatio	ns	
pH	·	Within th times.	e range of 6.0 - 9	.0 at all

2. TREATMENT SYSTEM DISCHARGE (Settling Ponds Effluent)

	Loadings	
	Monthly Ave:lb/day	Daily Maxlb/day
Chromium	0.67	1.64
- Lead	0.59	1.26
Nickel	1.86	2.77
Zinc	1.89	4.59
Fluoride	10,11	18.72
Titanium	1.06	2,43
Oil and Grease	108	215
Total Suspended Sol	ids 300	450

Other Parameters

Limitations

pН

Within the range of 6.0 - 9.0 at all times.

File Number: 64300 Page 3 of 8 Pages

3. TITANIUM FORMING SOURCES

Loadings

Monthly Ave. 1b/day____ Daily Max.

1b/day

Cyanide

Non detectable or 0.03 (See Schedule D Condition #3)

Non detectable or 0.08 (See Schedule D Condition #3)

Ammonia

Non detectable or 15.20 (See Schedule D Condition #3)

Non detectable or 34.58 (See Schedule D Condition #3)

Fluoride

7.11

15.72

4. 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 340-41-445 except in the following defined mixing zone:

Oak Creek from the point of discharge to its confluence with the Calapooia River.

File Number: 64300 Page 4 of 8 Pages

SCHEDULE B

<u>Minimum Monitoring and Reporting Requirements</u> (unless otherwise approved in writing by the Department)

1. FINAL DISCHARGE (Outfall Number 001)

Item or Parameter	Minimum Frequency	Type of Sample
Ammonia	Monthly	Composite
/ Chromium	Monthly	Composite
Fluoride	Weekly	Composite
Lead	Weekly	Composite
Nickel	Monthly	Composite
Zinc	Monthly	Composite
Oil and Grease	Weekly	Grab
Total Dissolved Solids	Daily (Except weekends)	Composite
Total Suspended Solids	Daily (Except weekends)	Grab
pH	Daily	Continuous measurement
Flow	Daily —	Continuous measurement
Conductivity	Daily	Continuous measurement
Temperature	Daily	Continuous measurement
Acute and Chronic Bioassays	2/year (Apr,Sep)	Composite

2. TREATMENT SYSTEM DISCHARGE (Settling Pond Effluent)

Item or Parameter	Minimum Frequency	Type of Sample
Chromium	Monthly	Composite
Lead	Weekly	Composite
Nickel	Monthly	Composite
Zinc	Monthly	Composite
Fluoride	Weekly	Composite
Titanium	Weekly	Composite
Oil and Grease	Weekly	Grab
Total Suspended	2/Week	Composite
Solids	•	<u>-</u>
pH	Daily	Continuous
•	•	measurement
Flow	Daily	Continuous

File Number: 64300 Page 5 of 8 Pages

WETLAND DISCHARGE

Item or Parameter Minimum Frequency Type of Sample

Acute and Chronic 6/year Composite

Bioassays (Jan,Apr,Jul,Aug,Sep,Oct)

Depth 5/Week Observation

4. TITANIUM FORMING SOURCES

Item or Parameter	Minimum Frequency	Type of Sample
Cyanide	Annually (If non detectable) or 10/month (If detected see Schedule D Condition #3)	Composite
Ammonia	Annually (If non detectable) or 10/month (If detected see Schedule D Condition #3)	Composite
Fluoride	Weekly (See Schedule D Condition #4) Composite

5. REPORTING PROCEDURES

Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the following month.

6. NOTES FOR SCHEDULE B

Acute Bioassays shall be conducted on Fathead Minnow (<u>Pimephales promelas</u>), and Cladoceran (<u>Ceriodaphnia dubia</u>) according to the procedures outlined in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms", Third Edition, March 1985 (EPA/600/4-85/013) or an equivalent method approved by the Department.

Chronic bioassays shall be conducted on these same species according to the procedures outlined in "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Second Edition, March 1989 (EPA/600/4-89/001) or an equivalent method approved by the Department.

File Number: 64300 Page 6 of 8 Pages

SCHEDULE C

Compliance Conditions and Schedules

- 1. By June 1, 1991, the permitee shall submit a program plan for conducting water quality and instream biota surveys in Oak Creek and the Calapooia River for Department review and approval. These surveys shall be conducted twice per year (spring and fall) until otherwise approved in writing by the Department. Beginning fall of 1991, the surveys shall commence according to the approved plan. The purpose of these studies is to evaluate the impact that the permittee's discharge is having on water quality and the beneficial uses of the receiving streams.
- 2. If the results of bioassays tests or instream biota surveys indicate a violation of water quality standards for toxicity, the permittee shall further evaluate the toxicity of the 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 and schedule to eliminate the violation. Upon approval of the plan by the Department, the permittee shall implement the plan and continue evaluations until the violation has been eliminated.
- 3. As soon as practicable, but not later than June 1, 1991, the permittee shall develop a plan for determining the flowrates and instream waste concentrations in Oak Creek and the Calapooia River and submit it to the Department for review and approval. By August 1, 1991, the permittee shall include flowrate and instream effluent concentration information, according to the approved plan, in the monthly discharge monitoring reports.
- 4. By June 1, 1991, the permittee shall install a permanent reference depth gauge in its wetland and include 5/week readings, until otherwise approved, as part of the regular monthly discharge monitoring reports; and by June 1, 1992, the permittee shall further characterize its wetland area with respect to (at a minimum) flow distribution, retention time, area, depths and identification of any other water inputs including storm water.
- 5. By June 1, 1992, the permittee shall complete a study that thoroughly evaluates other effluent disposal alternatives and submit a written report to the Department. The study shall include an evaluation of discharge and nondischarge alternatives developed to the extent that reasonably detailed cost estimates can be made for each alternative. The plan shall include conceptual design and other engineering aspects and a thorough evaluation of the potential environmental impacts associated with each alternative. The plan shall compare the costs and environmental impacts of the identified alternatives with the existing practice of discharging into Oak Creek.
- 6. By June 1, 1992, the permittee shall complete a hydrogeologic characterization of the new wastewater holding pond site according to Department guidelines and submit a written report to the Department.

File Number: 64300 Page 7 of 8 Pages

7. By January 1, 1993, the permittee shall prepare a groundwater monitoring program plan for the new holding pond and submit it to the Department for review and approval.

8. By June 1, 1993, the permittee shall initiate the groundwater monitoring program. Groundwater quality sampling shall be conducted at least quarterly and reported on the monthly discharge monitoring reports according to the approved groundwater monitoring program plan.

File Number: 64300 Page 8 of 8 Pages

SCHEDULE D

Special Conditions

- 1. The total discharge shall be controlled to maintain a reasonably constant flow rate throughout each 24 hour operating period.
- 2. Annual samples for cyanide and ammonia in the Titanium forming sources may be flow proportioned grab composite over a 24-hour period and representing the several source streams.
- 3. The second sets of cyanide and ammonia loading limits listed in Schedule A for Titanium forming sources are applicable only when the parameters are detected in the annual samples. If the parameters are detected, OREMET must (1) identify the source of the pollutant, (2) must conduct the alternate monitoring frequency list in Schedule B, and (3) must demonstrate compliance with the monthly average loading limits with the average of 10 consecutive samples.
- 4. Fluoride monitoring requirements and loading limits are applicable to all wastewaters which contain treatable amounts of fluoride; other Titanium forming wastewaters must be monitored annually and must demonstrate an absence of fluoride significantly above the background concentration of fluoride in the water coming into the plant.
- 5. Loading limitations listed in Schedule A for ammonia and fluoride are only interim. They will be modified after the installation of ammonia and fluoride removal systems.
- 6. Sanitary waste shall be disposed of to a septic tank and subsurface disposal systems (or by other approved means) which is installed, operated, and maintained in accordance with the requirements of the Department of Environmental Quality and the local health department and in a manner which will prevent inadequately treated waste water from entering any waters of the state or from becoming a nuisance or health hazard.
- 7. 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.
- 8. A continuing program shall be initiated to reduce total fresh water consumption by increased utilization of soiled waters.
- 9. 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.

P64300W (CRW) (2/12/91)

OREGON METALLURGICAL CORPORATION PERMIT EVALUATION REPORT NPDES PERMIT NUMBER 100280 ADDENDUM 1

Several important issues must be addressed as the Department considers renewing the subject permit and the permittee's request for an increase in discharge limitations. Below are discussions on the existing mixing zone, acute and chronic toxicity, the water quality standard for total dissolved solids (TDS), the marsh area, and the practice of flow augmentation with groundwater, and the developed wetland area

Mixing Zone

Oremet's existing permitted mixing zone is defined as "Oak Creek from the point of discharge to its confluence with the Calapooia River." This mixing zone, (which is approximately 1.5 miles long) was first established in 1974 according to the permit file. The mixing zone is shown in Figure 1 (attached).

According to the mixing zone policy set forth in the Oregon Administrative Rules, the Department may suspend all or part of the water quality standards, or set less restrictive standards, in the defined mixing zone under specified conditions. Presumably, this policy would allow water quality standards to be exceeded for the entire 1.5 mile length of Oak Creek defined as the mixing zone but would require them to be maintained outside of the mixing zone in the Calapooia River.

The Department should consider the appropriateness of continuing to permit this unusually long mixing zone. As stated in the Oregon Administrative Rules (OAR 340-41-442 (4)), "Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a waste water discharge to: be as small as feasible; avoid overlap with any 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; 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; not threaten public health; and to minimize adverse effects on other designated beneficial uses outside the mixing zone."

The currently defined mixing zone may not be consistent with some of the criteria listed above.

The Department has information from limited field studies suggesting that the beneficial uses of the Calapooia River are rebeing adversely affected outside of the mixing zone. However, the limited field studies, Department staff did find a change in the aquatic habitat of Oak Creek below the permittee's discharge. It is not clear if this change in aquatic habitat has adversely impacted the beneficial uses of Oak Creek.

The Department has reason to be concerned about the practice of permitting the 1.5 mile length of Oak Creek as the mixing zone. This practice may not be adequately protecting the beneficial uses of Oak Creek and it may not be consistent with existing mixing zone policy. However, we do not have enough information to change the permitted mixing zone immediately or to require a change in the outfall location immediately.

Recommended Permit Action:

In the renewed permit, a compliance condition should be added to Schedule C that requires the permittee to investigate other effluent disposal alternatives. The plan should compare the costs and environmental impacts of other alternative with the existing practice of discharging to Oak Creek. Additional instream biota surveys should be conducted in Oak Creek and the Calapooia River to further evaluate the impact of effluent disposal on the receiving streams.

Acute Toxicity

OAR 340-41-442 requires that: "The waters within the regulatory mixing zone shall be free of materials in concentrations that will cause acute (96HLC50) toxicity to aquatic life. Acute toxicity is measured as the lethal concentration that causes 50 percent mortality of organisms within a 96-hr hour test."

This requirement would mean that, following initial mixing of Oremet's effluent with the Oak Creek, the resultant concentration of effluent must be below the concentration that causes 50 percent mortality in a 96-hr bioassay.

Oremet's consultant (CH2M HILL) has prepared a summary of the acute toxicity testing that has been conducted during the past two years. Tables 1 and 2 (attached) are summaries of acute toxicity testing on effluent collected at two locations before the effluent reaches Oak Creek. Effluent samples were collected at the Parshall flume and at the exit of the marsh that is on the permittee's property. All 19 of the tests on effluent collected after the marsh resulted in 96HLC50s greater than 100% effluent. 22 of the 25 tests on effluent collected at the Parshall flume resulted in 96HLC50s greater than 100% effluent. The three tests that resulted in 96HLC50s less than 100% effluent had 96HLC50s of 41.5%, 83.2%, and 56.0%.

Based on the current definition of acute toxicity in the Oregon Administrative Rules and the results of the last two years of toxicity testing, acute toxicity is generally not occurring due to Oremet's effluent discharge at the existing discharge limitations. Even for the three cases were the 96HLC50s were less than 100%, acute toxicity would not be expected to occur under most of the flow conditions in Oak Creek. However, acute toxicity could occur if the 96HLC50s below 100% occurred at the same time as low stream flows.

Unfortunately, the Department and Oremet have little flow information on Oak Creek. The data that we do have is summarized in Table 3 in units of cubic feet per second (cfs).

Table 3
Measured and Predicted Flowrates in Oak Creek

	Measured ¹ Average Flowrate	Predicted ² Average Flowrate
Month	(cfs)	(cfs)
January	as as.	500
February		259
March	48.3	197
April	8.9	109
May	8.5	58
Jūne	11.3	23
July	2.5	8
August	0.9	4
September	0.8	26
October	2.9	160
November	85.5	510
December	109.6	490

¹ Based on data collected from March 1990 to February 1991.

Although not acutely toxic by existing definition, Oremet's effluent has caused some mortality of test organisms. These results are shown in the percent survival column of Tables 1 and 2.

In addition, Department staff and staff from CH2M HILL found moderate to severe impairment of Oak Creek below Oremet's discharge based on field studies using EPA rapid bioassessment protocol. The permittee and their consultants have suggested that the impairment that has been measured is due, in part, to a storm drain that also empties into Oak Creek below the permittee's

² Based on regression analysis of nearby streams.

discharge. Based on the lengthy discussions that we have had on this matter, Department staff do not believe that we have sufficient evidence to clearly conclude that Oremet's discharge is impacting the beneficial uses of Oak Creek. However, we do believe that this matter should be investigated further by conducting additional studies.

Recommended Permit Action:

Because some mortality has occurred during laboratory testing and because some changes in aquatic habitat have been measured below the permittee's discharge, no increase in effluent limitations should be allowed during the low flow periods in Oak Creek. Acute toxicity testing should be continued.

Chronic Toxicity

OAR 340-41-442 states that: "The waters outside of the mixing zone boundary shall: be free of materials 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."

This requirement would mean that at the end of the mixing zone boundary (where Oak Creek runs into and mixes with the Calapcoia River) the resultant concentration of effluent must be below the concentration that causes Chronic toxicity.

Chronic toxicity testing has been conducted on Oremet's effluent with three species of organisms: Fathead minnow, <u>Daphnia magna</u>, and <u>Ceriodaphnia dubia</u>. In Table 3, the results of these tests are listed in terms of the concentration of effluent that caused no observed effect on the test organisms (NOEC). The corresponding flowrate in the Calapooia River that would be necessary to prevent chronic toxicity from occurring is also listed.

Table 3
Chronic Toxicity Results for Analysis
Conducted on effluent from the Parshall Flume and Marsh

Date	Organism	Lab	Location	NOEC % Effluen	Discharge Flow t (cfs)	Required Stream Flow (cfs)
6/12/89	Fathead	CH2M	Flume	50	1.52	1.52
7/13/90 7/13/90	Fathead Fathead	CH2M	Marsh Flume	100	2.65	0.00
7/13/90	Fathead Fathead	CH2M DEQ	Flume	100 10	2.65 2.65	0.00 23.81
9/14/90	Fathead	CH2M	Marsh	100	2.89	0.00
9/14/90	Fathead	DEQ	Flume	50	2.89	2.89
6/12/89	Daphnia	CH2M	Flume	50	1.52	1.52
7/13/90	Daphnia	CH2M	Marsh	100	2.65	0.00
7/13/90	Daphnia	CH2M	Flume	25	2.65	7.94
7/13/90	Daphnia	DEQ	Flume	100	2.65	0.00
9/14/90	Daphnia	CH2M	Marsh	100	2.89	0.00
9/14/90	Daphnia	CH2M	Flume	100	2.89	0.00
7/13/90	Cerio.	CH2M	Marsh	100	2.65	0.00
7/13/90	Cerio.	CH2M	Flume	100	2.65	0.00
7/13/90	Cerio.	DEQ	Flume	10	2.65	23.81
9/14/90	Cerio.	CH2M	Marsh	100	2.89	0.00
9/14/90	Cerio.	CH2M	Flume	50	2.89	2.89

The highest flowrate in the calapooia that would have been required to prevent chronic toxicity was 23.8 cfs. For all but that one low NOEC, a flowrate greater than or equal to 7.9 cfs would have been sufficient to prevent chronic toxicity.

The recorded flowrates in the Calapooia River, at the gauge station 0.6 miles below Oak Creek, are listed in Table 4.

Table 4
Long-Term Average Flowrates Measured in the Calapooia River (1941-1981)

	Month	Minimum Flowrate (cfs)	Mean Flowrate (cfs)	Maximum Flowrate (cfs)
<i>i </i>				
1	January	102	2276	4214
1	February	108	1845	4872
	March	358	1447	3020
	April	280	914	2137
	May	174	537	1598
	June	84	228	586
	July	38	84	227
	August	16	40	103
	September	18	49	157
	October	20	201	1293
	November	34	1042	3408
4,40	December	69	2123	5688

Based on the chronic toxicity data presented in Table 3 and the Calapooia River flowrate data presented in Table 4, it would not be advisable to allow an increase in discharge concentration or loading during the critical low flow months (August and September). The flowrate in the Calapooia River during this time period may not be high enough to prevent chronic toxicity from occurring.

Moreover, actual flowrates in the Calapooia have been measured below the statistical minimums listed in Table 4. On August 16, 1989, staff from the DEQ laboratory conducted a mixing zone survey of Oak Creek and the Calapooia River. The measured flowrate in the Calapooia River on that date, in the riffle above the confluence of Oak Creek, was 7.1 cfs and in Oak Creek above the Oremet it was 0.1 cfs.

The data does not support a strong need for a reduction in discharge limitations to prevent chronic toxicity during this time period either. The existing limitations have generally protected the Calapooia River from chronic toxicity based on the data in Tables 3 and 4 and the instream biota field studies.

For future reference: it would be a good idea to consider an NOEC of 25% effluent as a trigger to investigate chronic toxicity further during the low stream flow period.

Recommended Permit Action:

During the high flow periods in the Calapooia River there would be little chance for chronic toxicity to occur and an increase in discharge limitations may be acceptable with respect to chronic toxicity. However, since the low flowrates during the months of October and July are only 20 and 38 cfs respectively, the Department should not consider allowing an increase in poncentration limitations during these time periods. An increase in effluent loading limitations may be acceptable during August and July if the concentration limitations are maintained.

Water Quality Standard for TDS

Oregon Administrative Rules (OAR 340-41-442) contains a listing of the water quality standards for the Willamette basin. For TDS, the water quality standards are listed as "guide concentrations" that shall not be exceeded unless otherwise specifically approved by the Department. The guide concentration for TDS in the Willamette River and tributaries, including Oak Creek and the Calapooia River is 100 mg/L.

Under the currently defined mixing zone, the guide concentration for TDS may be exceeded in Oak Creek below the permittee's discharge but must be met in the Calapooia River below its confluence with Oak Creek.

With the existing permit limitations for TDS, the guide concentration is being violated. This conclusion is based on three observations. (1) Department staff conducted a mixing zone survey of Oak Creek and the Calapooia River on August 16, 1989. The concentration of TDS in the Calapooia River above Oremet's discharge was 75 mg/L. The concentration of TDS in the Calapooia River below Oremet's discharge, and outside of the mixing zone, (2) The Department maintains an ambient monitoring was 440 mg/L. site on the Calapooia River just below Oak Creek. concentration of TDS at this site is often above 100 mg/L during the months of July, August, September, and October, presumably due to Oremet's discharge. (3) Mass balance calculations using different ambient flow conditions and the existing discharge limitations confirm that the concentration of TDS in the Calapooia River would be above 100 mg/L. Exceedance of the guide concentration would occur under both minimum and during some mean ambient flow conditions.

The highest concentration of TDS in the Calapooia River caused by Oremet's discharge is near 450 mg/L, based on ambient monitoring and calculations. Although this concentration exceeds the recognized TDS guide concentration for the Willamette River and tributaries, it does not exceed the guide concentration for other rivers. The TDS guide concentration on parts of the Columbia River, for example, is 500 mg/L.

These TDS guide concentrations have been set historically and the range from 100 to 750 mg/L across the state. Presumably, they were established based on the "background" TDS concentrations found in the various river basins. The concentration of TDS (consisting of magnesium, calcium, chloride, sulfate, and other dissolved ions) in a particular waterbody depends largely on the native geologic material in the area and to some degree on the amount of precipitation an area receives.

Since all of the TDS guide concentrations (100 to 750) have been set at levels that are protective of the beneficial uses of the receiving streams, it may be reasonable to consider applying a site-specific guide concentration of 500 mg/L to the Calapooia River below Oremet's discharge.

If the existing guide concentration for TDS of 100 mg/L must be achieved, then there would be no choice but to reduce Oremet's discharge concentration limitations for TDS. The existing guide concentration is not being achieved with the existing concentration limitations. However, these values were presumably established as guide concentrations to allow the Department to consider establishing higher values on a site-specific basis. They were established as guide values so the Department would have to make a conscious decision to allow them to be exceeded or to establish alternate values.

Because a guide value of 500 mg/L would protect the beneficial uses of the receiving stream and partially allow Oremet the discharge increase they have requested, the Department should consider establishing that value.

Oremet has requested the following discharge limitations:

Four Summer Months:

2000 mg/L month avg., 26000 lbs/day month avg. 2500 mg/L daily max., 34000 lbs/day daily max.

Eight Winter Months:

3000 mg/L month avg., 41000 lbs/day month avg. 3750 mg/L daily max., 52000 lbs/day daily max.

These limitations would not be acceptable based on the previous discussion of acute/chronic toxicity and the seasonal low flow conditions in the Calapooia River and Oak Creek.

However, the discharge limitations in Table 5 may be acceptable since they would meet a TDS guide concentration of 500 mg/L and prevent toxicity in the receiving streams to the degree that it is being prevented now.

Table 5
Recommended Permit Limitations for TDS

Period	Month avg. (mg/L)	Daily Max (mg/L)	Month Avg. (lbs/day)	Daily Max. (lbs/day)
Aug & Sep July & Oct	2000 2000 3000	2500 2500 3750	20,000	25,000 37,000
Nov - Jun	3000	3750	40,000	50,0

The resultant concentration of TDS in Oak Creek and the Calapooia River with the recommended permit limitations are listed in Tables 6 and 7.

Table 6 Resultant Concentration of TDS in Oak Creek

Month	Low ^l Flowrate (cfs)	Upstream TDS (mg/L)	Effluent Flowrate (cfs)	Effluent TDS (mg/L)	Effluent TDS (lbs/day)	Oak Creek Resultant TDS (mg/L)
Jan	109.6	75	2.48	3750	50,000	156
Feb	109.6	75	2.48	3750	50,000	156
Mar	48.3	75	2.48	3750	50,000	254
Apr	8.9	75	2.48	3750	50,000	876
May	8.5	75	2.48	3750	50,000	905
Jun	11.3	75	2.48	3750	50,000	736
Jul	2.5	75	2.75	2500	37,000	1345
Aug	0.9	75	1.86	2500	25,000	1709
Sep	0.8	75 .	1.86	2500	25,000	1771
Oct	2.9	75	2.75	2500	37,000	1255
Nov	85.5	75	2.48	3750	50,000	179
Dec	109.6	. 75	2.48	3750	50,000	156

¹ Based on stream data collected from March 1990 to February 1991.

Table 7
Resultant Concentration of TDS in Calapooia River

Month	Low ¹ Flowrate (cfs)	Upstream TDS (mg/L)	Oak Ck Flowrate (cfs)	Oak Ck TDS (mg/L)	Oak Ck TDS (lbs/day)	Calapooia Resultant TDS (mg/L)
1 1						
Дan	102	75	112.1	156	94,269	118
Feb	108	75	112.1	156	94,269	116
Mar	358	75	50.8	254	69,531	97
Apr	280	75	11.4	876	53,632	106
May	174	75	11.0	905	53,470	124
Jun	84	75	13.8	736	54,600	168
Jul	38	75	5.3	1345	38,001	229
Aug	16	75	2.8	1709	25,383	315
Sep	18	75	2.7	1771	25,343	293
oc t -	20	75	5.7	1255	38,162	335
Nov	34	75	88.0	179	84,543	150
Dec	69	75	112.1	_ 156	94,269	125

¹ Based on USGS statistical summary (1941-1981).

Recommended Permit Action:

The permit should be drafted with the limitations listed in Table 5. The Department should encourage the permittee and the public to comment on the recommended TDS limitations during the permit review process. Following the permit review process, a request to increase the TDS limitations to specified levels must be taken to the Environmental Quality Commission for ruling.

Flow Augmentation with Groundwater

Currently, the permittee adds groundwater to the treated process effluent before the combined waste stream is discharged. This practice results in a more dilute wastewater being discharged into the receiving stream.

This practice was recommended by the Department according to information in the permit file. A document entitled Permit Application Review Report (2/28/73) recommends "dilution by well water after treatment to improve effluent quality."

Federal regulations appear to allow this practice on a case-by-case basis. 40 CFR Part 125.3 states that "Technology based treatment requirements cannot be satisfied through the use of "non-treatment" techniques such as flow augmentation and in-stream mechanical aerators. However, these techniques may be considered

as methodology for achieving water quality standards on a caseby-case basis when: (1) The technology-based treatment requirements applicable to the discharge are not sufficient to achieve the standards; (2) The discharger agrees to waive any opportunity for a variance; and (3) The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards...."

No state environmental regulations exist, to my knowledge, that would prohibit this practice. However, the Department should still be concerned over using the valuable groundwater resource in this manner. It is a practice that should be discouraged in general.

The permittee applied to the Oregon Water Resources Department for a permit to appropriate groundwater on October 30, 1990. The permit application requests to be allowed to operate 10 wells with a combined capacity of 2,750 gallons per minute (3.96 million gallons per day). The permit has not been issued yet.

Recommended Permit Action:

Because Federal and State environmental regulations would not appear to prohibit flow augmentation in this instance, and because flow augmentation provides some environmental benefit by reducing the concentration of the effluent, no changes should be made to the permit at this time. However, if the Oregon Water Resources Department does not grant the permittee a permit to appropriate groundwater for this use, then the DEQ will have to revisit this issue. The permittee could not meet the existing or proposed limitations for TDS, using current treatment technology, without practicing flow augmentation.

Developed Wetland

After being mixed with groundwater, the permittee's effluent is discharged into a wetland area that has developed on the Company's property. Staff from the Division of State Lands have used aerial photographs (from 1963, 1970, 1975, and 1978) and soils information to conclude that the wetland area has been created by Oremet's discharge. They have also concluded that this wetland area meets their criteria for being classified as "waters of the state" for purposes of Oregon's Removal-Fill Law.

The Department has not attempted to classify this wetland area for the purpose of our regulations; We are only now in the process of establishing a wetland policy and formulating an approach for regulating wetlands. The status of the wetland area that has developed on the permittee's property and how it will ultimately be regulated is an unresolved issue at this point.

Recommended Permit Action:

All permit limitations and requirements must be met prior to discharge into the wetland. Acute and chronic bioassays should be required at the Parshall flume and at the exit of the wetland since the bioassay data generally shows a reduction in toxicity as effluent passes through the wetland. This data would allow us to further evaluate the degree of toxicity reduction that is occurring in the wetland prior to discharge into Oak Creek.

Prepared by:

Ken Vigil Francisco Vigineer Environmental Engineer Water Quality Division (2/4/91)

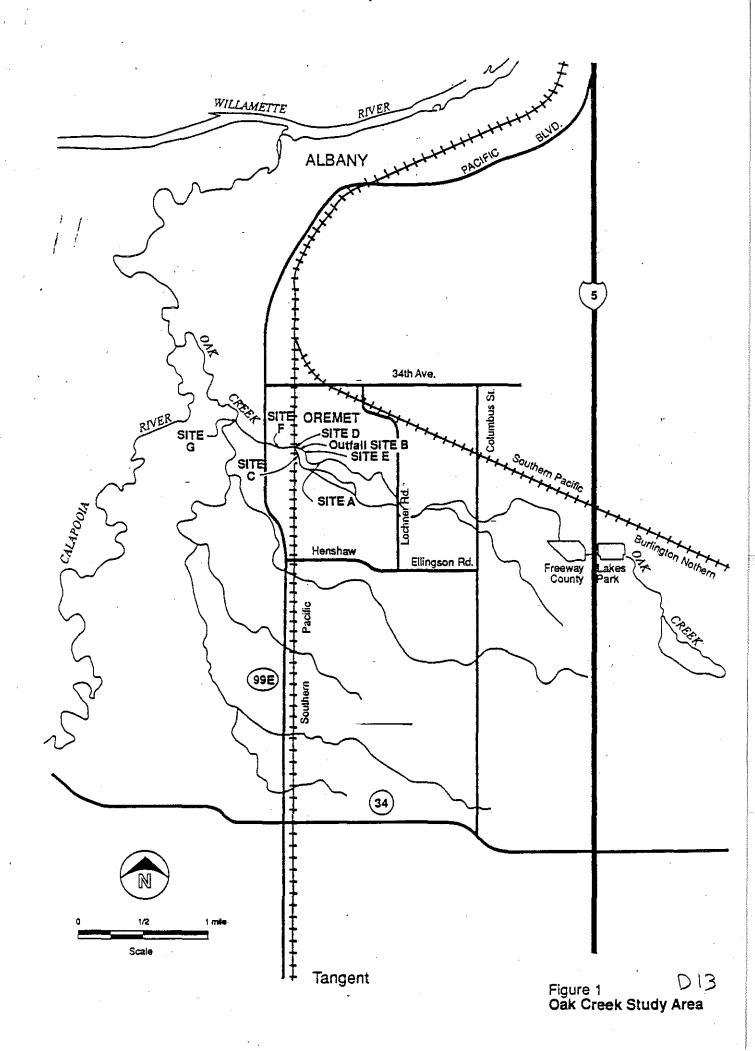


TABLE 1	SUMMARY OF ACUTE TOXICITY RESULTS FOR
	POST MARSH EFFLUENT SAMPLES,
•	OREMET TITANIUM. ALBANY OREGON

			MEDIAN LETHAL	PERCENT SURVIVAL	TOTAL DISSOLVED
		EXPOSURE	CONCENTRATION	IN UNDILUTED	SOLIDS IN UNDILUTED
TEST DATE	TEST SPECIES	ENDPOINT	(LC50)	EFFLUENT	EFFLUENT (MG/L)
CH2M HILL LAB					
9/18/89	Rainbow Trout	96 Hr	> 100 %	100 %	2505 a
	Fathead Minnow	96 Hr	> 100 %	93 % b	2505 a
10/23/89	Rainbow Trout	96 Hr	> 100 %	100 %	1480 a
	Bluegill	96 Hr	> 100 %	100 %	1480 a
	Fathead Minnow	96 Hr	> 100 %	85 % b	1480
general section	Daphnia magna	96 Hr	> 100 %	100 %	1480
5/24/90	Rainbow Trout	96 Hr	> 100 %	100 %	1741
	Fathead Minnow	96 Hr	> 100 %	80 % b	1741
	Daphnia magna 1	96 Hr	> 100 %	100 %	1741
7/13/90	Ceriodaphnia	96 Hr (Ch)	> 100 %	100 %	2290
	Fathead Minnow	96 Hr (Ch)	> 100 %	100 %	2290
- 	Daphnia magna	96 Hr (Ch)	> 100 %	80 % b	2290
9/14/90	Fathead Minnow	96 Hr	> 100 %	100 %	1037
	Ceriodaphnia	96 Hr (Ch)	> 100 %	100 %	985
. 10 (2003)	Fathead Minnow	96 Hr (Ch)	> 100 %	100 %	985
	Daphnia magna	96 Hr (Ch)	> 100 %	100 %	985
DEQ Lab		en were mining to be the a week	Caracter and a contraction	. William Control to the control of	
5/24/90	Ceriodaphnia	48 Hr	>100 %	75 % b	1741
	Fathead Minnow	96 Hr	> 100 %	100 %	1741
·/::::::::::::::::::::::::::::::::::::	Daphnia magna	48 Hr	> 100 %	95 % b	1741

Notes:

(Ch) = a 96 hr LC50 was calculated from test results of a 7-day chronic toxicity test.

a = Estimated from measured conductivity values.

b = Organism survival in undiluted effluent was not statistically

reduced when compared to control survival using Fisher's Exact Test, (p=0.05).

1/8/91

TABLE 2

SUMMARY OF ACUTE TOXICITY RESULTS FOR PARSHALL FLUME EFFLUENT SAMPLES, OREMET TITANIUM, ALBANY OREGON

			MEDIAN LETHAL	PERCENT SURVIVAL	TOTAL DISSOLVED
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		EXPOSURE	CONCENTRATION	IN UNDILUTED	SOLIDS IN UNDILUTED
TEST DATE	TEST SPECIES	ENDPOINT	(LC50)	EFFLUENT	EFFLUENT (MG/L)
CH2M HILL LAB					
6/12/89	Fathead Minnow	96 Hr	41.5 %	0 %	2260
	Fathead Minnow	96 Hr (Ch)	83.2 %	25 %	1688
	Daphnla magna	96 Hr (Ch)	> 100 %	100 %	1688
9/18/89	Rainbow Trout	96 Hr	> 100 %	100 %	2600
2 - 26,00	Bluegili	96 Hr.	> 100 %	100 %	2600
	Fathead Minnow	96 Hr	> 100 %	93 % a	2600
	Daphnia magna	96 Hr	> 100 %	100 %	2600
10/23/89	Rainbow Trout	96 Hr	> 100 %	100 %	1684
u	Bluegill	96 Hr	> 100 %	100 %	1684 1684
	Fathead Minnow Daphnia magna	96 Hr	56.0 %	100 %	1684
5/24/90	Rainbow Trout	96 Hr 96 Hr	> 100 % > 100 %	100 %	1884
2/64/30	Bluegili	96 Hr	> 100 %	100 %	1884
1 v 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Fathead Minnow	96 Hr	> 100 % > 100 %	80 % a	1884
1 - 1175/847 (2017)	Daphnia magna	96 Hr	> 100 %	100 %	1884
7/13/90	Cerlodaphnla	96 Hr (Ch)	> 100 %	90 % a	2120
the first of the second second of	Fathead Minnow	96 Hr (Ch)	> 100 %	100 %	2120
1. 4	Daphnia magna	96 Hr (Ch)	> 100 %	100 %	2120
9/14/90	Fathead Minnow	96 Hr	> 100 %	100 %	1047
4 11 1 1 1 2 2 2 2 2 3 4	Cerlodaphnla	96 Hr (Ch)	> 100 %	90 % a	1027
	Fathead Minnow	96 Hr (Ch)	> 100 %	100 %	1027
	Daphnia magna	96 Hr (Ch)	> 100 %	100 %	1027
DEQ Lab b	_				
5/24/90	Ceriodaphnia	48 Hr	> 100 %	多數數數數數數 na 到 100 高級的	1884
	Fathead Minnow	96 Hr	> 100 %	na	1884
· · · · · · · · · · · · · · · · · · ·	Daphnia magna	48 Hr	> 100 %	na // .	1884

Notes:

(Ch) = a 96 hr LC50 was calculated from test results of a 7-day chronic toxicity test.

a = Organism survival in undiluted effluent was not statistically reduced when compared to control survival using Fisher's Exact Test, (p=0.05).

b \sim Chronic tests run by DEQ on 7/13/90 showed 7-day LC50s of >100 percent using fathead minnows and Daphnia magna.

na - Information was unavailable.

1/8/91

D = =

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

April 25, 1991 DATE:

TO:

Environmental Quality Commission

FROM:

Fred Hansen

SUBJECT: Director's Memo

Budget Update

The Department will begin presentations before the Ways & Means committee on Tuesday The discussions on DEQ's budget - which will focus on several proposed fee increases - will probably last about three weeks.

wed.

Gold Mining

The Governor's work group on heap leaching, headed by Martha Pagel continues to meet. Three main issues are being discussed: 1) Application process - have one application made up of applications from each agency, with one process for review, hearings and appeal. existing powers would be left with individual agencies and Commissions)

Reclamation - should be pit be filled in? Should there be funds set aside for social disruption caused by

the boom/bust nature of mining?

Moratorium - should one be put in place until the state process for review is set up by rule? (Governor's office says yes, with time limit on rulemaking to set up the process)

Dioxin

Bill Reilly has announced that EPA will conduct a one year review of dioxin criteria. Because the review will look at several factors used to determine risk of dioxin, the final result could be that the standard could go up or down - its too early to tell.

Out of State Waste Injunction

A Morrow County Circuit Court judge issued an injunction stopping the Department from collecting the surcharge on out-of-state waste. The issue was whether the E-Board had authority to overrule the EQC.

Memo to: Environmental Quality Commission September 20, 1990 Page 2

Clean Water Act Reauthorization

The Clean Water Act is expected to be up for reauthorization this year. Oregon (Lydia Taylor) has suggested improvements through the National Water Quality Administrators Association including requiring consistency by federal agencies with the Clean Water Act, i.e. that US Forest Service comply with Clean Water Act in management of forest lands.

An important issue - not agreed to by other states - would require nonpoint sources to comply with Clean Water Act and require that BMPs for nonpoint sources be developed. This issue would be extremely controversial - and have a potentially significant effect on forestry and agriculture. (This issue needs to be raised with EQC & Governor before Oregon would advocate the position to

Other issues that will be raised by national environmental groups are a national groundwater amendment and better wetlands protection.

Nina Bell Memo

Congress)

At the last EQC meeting, the Commission asked how Portland compared to other cities in treating sewage. You told the Commission it was at a 10/10 level. Nina Bell pointed out that a recent compliance report on the columbia boulevard Sewage Treatment Plant shows it is not meeting that level, but is rather closer to a 20/20 level.

Transit PSA

Governor Roberts kick-off a public service campaign last week, encouraging people to use alternative transportation. DEQ was one of 9 agencies that joined in a partnership to produce TV, radio and newspaper public service ads, along with a small poster.

1. How to discuss - Log/Policy

2. Transition

- 1. Legislation action plan
- 2. Strategic Plum
- 3. Foresty- Tunlitia
- 4. Mining Reg.
- 5. Self laws
- 6. Latiguation Ptld AIN-OEC

Admin

7. Statefficitien intensive lime early.

Inportant stuff early

Line work sprison

Speed - Axed to slow down

some on big Issues (CSO, not quicker

from now J

Triffered Review

AUF -

bringbock issues as ortion, ACT request

Was Ylong

Bernil Bruance , 3rd Party Appeals

Maybe we want a modified ATA valla-

then full contested case

ADResolution - Should embrace.

Rob will check which sample swisk341 SK3460

Date: 4-29-91 9:49am From: Bob Brown: HSW: DEQ

To: Kelly Scharbrough: MSD: DEQ

cc: Bob Brown: HSW: DEQ

Subj: EQC Minutes

I don't know the format that this goes in ...

Agenda Item K April 26, 1991 EQC Meeting

"Request for Extension of a Variance from Rules Prohibiting Open Burning of Solid Waste, (OAR 340-61-040(2)) for 19 Disposal Sites"

Ernie Schmidt presented a short history of the open burning problem in the state. Chairman Huchinson asked if we could possibly shorten the time frame to under the proposed three year variance. Staff responded that this schedule had been worked out with the regional offices, and would allow for planned regional involvement when the compliance conditions became effective.

Commissioner Castle asked if we were trying to impose "valley" standards on small rural communities. Director Fred Hansen and staff responded that this was probably the case but these standards were being imposed by EPA through the criteria developed under RCRA.

Commissioner Castle moved and Commissioner Wessinger seconded, to approve the staff report. Motion carried 5-0.

I think this goes in some form to Hal Sawyer: OD

Permit Review Report Columbia Ridge Landfill and Recycling Center Page 2

Conceptual approval of a Monofill Area for special wastes, to be located at the southwest corner of the property.

A change in the permit to allow disposal of ash by other methods than monofill.

Numerous wording changes to clarify the intent of the permit.

In addition, the Department is proposing to update the environmental monitoring requirements, including sampling frequencies, and update the wording of conditions which were written prospectively before landfilling commenced.

Rationale for Changes

After a year of daily operation, it became apparent to both the permittee and the Department that numerous wording changes are needed to clarify the intent of the permit and better describe the actual operating conditions at the disposal site. In addition, the Department approved the final monitoring program for the disposal site after the original permit was issued. The monitoring requirements in the current permit are not consistent with the final approved monitoring plan.

Solid waste landfill permits are normally issued for five-year periods. While the permit is open for modification, the permittee requested that a permit be issued which had a new five-year life. Extension of the expiration date is considered a time and cost savings to both the permittee and the Department. Extending the expiration date will require the approved fill area to be expanded. The current permit allows filling in Modules 1-4. Based on the current and projected rate of fill, Module 4 will be full in 1995 and Module 5 may be full by early 1996, thus making it necessary to add both Modules 5 and 6 to the areas approved in the permit to receive waste. It is noted, however, that Oregon Waste Systems is reconsidering the location of the sixth module. Module 6 of the conceptual design is located in the south half of the landfill footprint. Because of major construction costs in moving into this area, the company may remain in the current area of operation.

The City of Seattle/OWS contract requires OWS to provide an emergency backup disposal facility with capacity for six weeks' waste production. Seattle has agreed to OWS establishing a backup cell in the area of Module 12 with the necessary capacity to meet the contract requirements. The area consists of 3.4 acres which will be constructed to the same specifications as the regular modules. However, it will be a shallow excavation and intended

The Boeing Company P.O. Box 3707 Seattle, WA 98124-2207



April 24, 1991 4-1242-RGB-266

OFFICE OF THE DIRECTOR

William P. Hutchinson, Jr. Chairman, Environmental Quality Commission Tooze, Marshall, Shenker, Holloway & Duden 333 S.W. Taylor Street Portland, Oregon 97204

Dear Mr. Hutchinson,

BOEING

The Department of Environmental Quality is proposing a new air quality regulation on Aerospace Component Coating Operations (OAR 340-22-175). Under the proposed regulation, aerospace facilities whose annual volatile organic compound (VOC) emissions from surface coatings are between ten and forty tons will no longer be exempt from the regulation. The Boeing Commercial Airplane facility located in Gresham, Oregon emits approximately 39 tons per year and will, therefore, be required to meet specified coating limitations for the first time.

Nearly one hundred different surface coatings and thinners are used at the Boeing facility during a production year. Many of these coatings do not meet the low VOC content limits proposed by the rule requirements. A couple of low VOC candidates are currently undergoing manufacturing feasibility studies. If implementation is required prior to study completion as the rule proposes, problems may arise which could jeopardize the performance and safety of our products.

On the other hand, the proposed rule allows for exceptions and/or alternatives to meeting the coating requirements; they must be approved through an EPA-approved source-specific SIP revision. Such a revision could take a year or more for DEQ and EPA approvals and would leave the facility in question as to compliance in the interim. In either case, whether through low VOC coatings or a SIP revision, more time is needed to phase-in the coating requirements including the determination of effective equivalent emission reduction or control methods for other coatings which have no low VOC alternatives.

Time is also critical for the implementation of the recordkeeping requirement included in the proposed regulation. The establishment of a daily recordkeeping program at a facility previously required to submit only annual reports will necessitate adequate time and resources to develop a tracking system and to train employees. Based on the experience of other aerospace facilities where similar requirements exist, the program

4-1242-RGB-266 Mr. Hutchinson Page 2

implementation could take over a full year. No phase-in period is allowed by the proposed rule.

In light of these problems, The Boeing Company recommends two changes to the proposed VOC rule. First, the coating limitations and recordkeeping requirements should not take effect immediately upon promulgation of the rule, but should be implemented through compliance schedules incorporated into individual permits. This would allow reasonable time for sources such as Boeing to submit evidence supporting alternative emission limits and equivalent means of VOC removal for specific coatings that present the kind of technical, economic and environmental problems previously discussed. This would not create a substantial administrative burden on the Department because there are only twenty-five existing sources, and permits must be written for each in any event. This approach is also consistent with the 1990 Clean Air Act Amendments, in which Congress adopted operating permits as the preferred mechanism, as opposed to SIP's, for implementing emission limits and related requirements. This change could be accomplished by amending OAR 340-22-104(4) as follows:

Unless otherwise exempted in these rules, and subject to the exceptions and alternative emission controls provided for herein, all new and existing sources inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology (RACT) in accordance with compliance schedules established in Air Containment Discharge Permits issued to such sources.

Second, the language requiring that each alternative emission limit and equivalent means of VOC removal cannot take effect unless and until approved by EPA as a source specific SIP revision should be stricken from the rule. That may well be EPA's position but there is no reason for the State of Oregon to codify it as part of its implementations plan. The state should not cede its authority to decide, as a matter of state law, whether to approve an alternative emission limit of equivalent VOC control. Once DEQ has made such a determination, sources should not be held hostage to a lengthy and unpredictable federal review process. We understand there are risks involved in relying upon DEQ's decision without an EPA sign-off, but those risks are preferable to the situation created under the proposed rules in which sources are technically in noncompliance during the period it takes EPA to decide whether to agree with DEQ. The EPA approval language appears throughout the proposed rule [eg. 340-22-175(c) and 10(c) and should be removed entirely.

30eing

4-1242-RGB-266 Mr. Hutchinson Page 3

The Boeing Company would like to work with the Oregon Environmental Quality Commission in developing effective regulations to improve air quality in the Portland area. We believe that significant emission reductions can be achieved provided that sufficient time exists to implement efficient and practical technology. Should you wish to discuss this issue further, we will be present at the next EQC meeting. We look forward to sharing with you our mutual concerns on the environment.

Very truly yours,

BOEING

CORPORATE SAFETY, HEALTH, AND ENVIRONMENTAL AFFAIRS

D. J. Smarkowski

Manager

Phone: (206) 393-4780 M/S 7E-EH

Environmental Operations

cc: Fred Hansen, Department of Environmental Quality

STOEL RIVES BOLEY JONES & GREY

ATTORNEYS AT LAW
SUITE 2300
STANDARD INSURANCE CENTER
900 SW FIFTH AVENUE
PORTLAND, OREGON 97204-1268

Telephone (503) 224-3380 Telecopier (503) 220-2480 Cable Lawport Telex 703455 Writer's Direct Dial Number

(503) 294-9181

April 25, 1991



OFFICE OF THE DIRECTOR

BY MESSENGER

Mr. William Hutchinson, Chairman Oregon Environmental Quality Commission 811 SW Sixth Avenue Portland, OR 97204

Re: Proposed Adoption of Amendments to Industrial
Volatile Organic Compound ("VOC") Rules

Dear Mr. Hutchinson:

On August 15, 1990 we submitted comments to the rules proposed by DEQ concerning emissions of VOCs on behalf of several industries represented by our firm that emit VOCs as a part of their manufacturing operations. We are now supplementing our earlier comments because the rules DEQ proposes today have undergone significant changes since last summer. In addition, since DEQ first proposed its rules, Congress passed the Clean Air Act Amendments ("CAAA") of 1990. In light of these changes, we ask that you refer a portion of the rules back to DEQ for further consideration of the modifications we offer in these comments.

We ask that you not adopt the portion of the proposed rules which would require the application of reasonably available control technology ("RACT") to sources of air emissions for which EPA has given no guidance. The 1990 CAAA has eliminated the basis for this part of the proposed rules and, as DEQ recognized in its initial proposal, the adoption of these rules will produce little measurable air quality benefit. Alternatively, if you determine that RACT should be imposed on all major sources, we ask that you remand the proposal to DEQ for further clarification as to how RACT will be developed for major sources for which EPA has issued no guidance. As explained in more detail below, this portion of the rules is not required by the 1990 CAAA and no federal sanctions will result if they are delayed or not issued at all.

SRBp9220 62232/32 72940/38

I. RACT Is Not Required for Non-CTG Sources.

DEQ originally proposed amendments to its VOC rules in August 1990. According to the summary accompanying the proposal, DEQ sought to align the Oregon rules with EPA guidance interpreting the 1977 Clean Air Act amendments ("1977 Act"). In the same summary, however, DEQ noted that "[the proposal] is expected to achieve only a small reduction in VOC emissions." June 29, 1990 Proposal at 5.

Under the 1977 Act, state implementation plans ("SIPs") for nonattainment areas such as the Portland area had to require reasonable further progress toward attainment by requiring sources to apply reasonably available control technology ("RACT"). To assist states in evaluating RACT, EPA published a number of control technique guidelines ("CTGs"). CTGs describe specific types of control technology that can be used to meet RACT, and they formed the basis for the Oregon RACT rules approved by EPA and now codified as OAR 340, Division 22.

Prior to the 1990 CAAA, areas were classified as either attainment or nonattainment; the Act made no provision for recognizing degrees of attainment. Because many nonattainment areas failed to meet the Act's goal of achieving attainment by 1987, EPA issued a series of "SIP calls" in 1988. SIP calls prompted states like Oregon to revise their SIPs to provide additional measures to achieve attainment. Included in measures suggested by EPA was a provision that states require RACT for all sources emitting over 100 tons per year of VOC even if no CTG had been issued. Consistent with this suggestion, DEQ last summer proposed the rules now under consideration.

Since last summer, Congress passed the CAAA. The CAAA more accurately recognizes that some ozone nonattainment areas such as Portland are very close to attainment while others such as the Los Angeles Basin will require years of drastic curtailments to meet ozone standards. Accordingly, Congress created five classes of nonattainment areas ranging from "marginal" to "extreme." DEQ recently proposed that Portland be classified as marginal, and we have every reason to believe that EPA will accept this proposal.

STOEL RIVES BOLEY JONES & GREY

Environmental Quality Commission April 25, 1991 Page 3

The five classes of nonattainment areas require increased control measures with severity. Under the 1990 CAAA, some measures previously suggested for all nonattainment areas, such as imposing RACT on major sources without CTGs, now apply only to the more severe ozone nonattainment areas. CAAA only requires marginal areas such as Portland be regulated by RACT rules consistent with existing CTGs; nothing in the 1990 CAAA requires RACT for major sources when EPA has not issued a CTG. In fact, such a requirement would be more stringent than the 1990 CAAA provision for moderate areas which do not require RACT for non-CTG sources until late 1992. For this reason, the RACT portion of the rules DEQ is proposing today go beyond what is required under the new CAAA. In short, the proposal for requiring RACT for non-CTG sources is a relic from the days when the Clean Air Act made no distinctions between degrees of nonattainment.

Although the 1990 CAAA contain no clear requirement in marginal areas that RACT be developed at major non-CTG sources, the CAAA does require other types of controls at many of these sources. Under the air toxics provision many sources that emit more than 10 tons per year of certain listed hazardous air pollutants will be required to install "maximum available control technology" ("MACT"). Many hazardous air pollutants are also VOCs. Thus, the air toxics program likely will help reduce VOC emissions in the Portland area.

More importantly, the air toxics program's MACT requirement may result in control technology on VOC sources that is as strict or even more strict than what would be required under RACT. Because RACT is a less well defined concept (when EPA has not issued a CTG), however, requiring RACT for non-CTG sources now could result in a source having to re-evaluate its technology when MACT is required. A more consistent approach with the overall thrust of the 1990 CAAA would be to require RACT only when EPA has clearly defined it in a CTG and let the air toxics program's MACT provisions control non-CTG VOC emissions.

In preparing these comments, we recognize that DEQ always has the ability to impose restrictions that go beyond those called for by federal law. However, contrary to the statements in the preamble to today's proposal, failure to adopt RACT for non-CTG sources will not result in the loss of any state delegation to enforce this portion of the rules because it is simply not required under federal law. Moreover,

as discussed in more detail below, the RACT rule for non-CTG sources DEQ has proposed is ambiguous and confusing, and would force Oregon industry to bear the burden of developing and applying new technology when DEQ has identified little, if any, commensurate air quality benefit. For these reasons we ask that adoption of the rules requiring RACT for non-CTG sources be delayed for further review. Such a delay will not violate the Clean Air Act and will allow DEQ to adopt rules that better fit the air needs of the Portland area. Accordingly, we suggest the rules be modified as follows:

- "(4) All new and existing sources located inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology ("RACT") for any emissions unit covered by categorical standards set forth in OAR 340-20-106 through OAR 340-22-300. The Department from time to time may supplement these categorical standards."
 - "(5) [Delete]."
 - "(6) [Delete]."

II. The Proposed Rules Should be Revised Before Adoption.

If the Commission desires to require RACT for non-CTG sources even though not required by the 1990 CAAA, the proposed rules as recently modified by DEQ should be revised for clarity and ease of implementation. The following paragraphs detail specific areas where we have identified potential problems and conclude with proposed language for your consideration:

A. The Rules Fail to Provide a Cutoff Point For Small Emission Units.

As we commented last summer, the proposal has the potential to unfairly penalize sources that operate a variety of processes. Some sources in Oregon's high technology and other industries operate a multitude of small VOC emission units at a single facility that emit a total of more than 100 tons of VOC per year. Under a literal interpretation of the proposal's requirement that 100 tons per year be from

"aggregated emission units," a source would be required to develop RACT for each category of minuscule emissions unit (for instance bottles of typewriter correction fluid). A better approach would be to require RACT only for emissions units emitting more than a de minimis threshold, such as ten tons per year, of VOCs (which would be consistent with the air toxics program).

Also, some such sources may have a few emissions units subject to a CTG combined with many small emission units with no CTG. By subjecting the entire source, rather than just the relevant emission unit, to RACT, the rule requires a RACT analysis for minuscule emissions units. This problem could be corrected by clarifying that RACT only applies to emissions units subject to a CTG and emissions units larger than some de minimis threshold. Furthermore, EPA guidance clearly indicates that a 100 TPY non-CTG source does not take into account regulated CTG sources. EPA, "Issues Relating to VOC Regulation Cutpoints, Deficiency, and Deviations" at 2-3 (1988). Thus, the rules should make clear that RACT for non-CTG source only is triggered if aggregate emissions from sources for which a categorical RACT standard exists exceeds 100 TPY.

B. The Provision For Eliminating RACT are Inconsistent With the Remainder of the Rules.

Under the proposal, once a source became subject to RACT, it would be virtually impossible to eliminate the RACT requirement even if production were reduced drastically. A source becomes subject to RACT when its "potential emissions before add on equipment" for all emissions units aggregate to greater than 100 tons per year of VOC. To remove the RACT requirement, a source must show that emissions fall "below the level that initially triggers RACT." Because RACT would be triggered by potential emissions, this showing would be virtually impossible to make unless a source completely dismantled a portion of its manufacturing operations. A better rule would be to allow a source to remove the RACT requirement by adding pollution control equipment, changing its production process, or adding a permit provision limiting allowable VOC emissions.

C. The Rules Fail to Provide Adequate Notice as to When RACT Will Be Required For Sources Without a CTG.

The proposal's requirement that sources submit a RACT analysis "within 3 months of notification by the Department of the applicability of this rule" leaves sources open to uneven enforcement of the rule. Presumably, a source would not need to apply RACT on emissions units without CTGs before DEQ gives some sort of notice. Yet, the proposal gives no indication as to when notice would be given. Because no notification process is described, sources will have difficulty determining what triggers the RACT requirement. For example, would a notice in the Oregon Administrative Bulletin that these rules have been adopted constitute notice under these rules? Without a better indication of when RACT is required, sources are left confused as to their current compliance status.

D. EPA Approval Adds an Unnecessary Layer of Enforcement Oversight.

Since the 1990 CAAA does not require that DEQ impose RACT for non-CTG sources, any RACT provision for non-CTG sources goes beyond a federally-mandated requirement. Without a federal requirement, there is no reason for EPA approval of source specific RACT. To the extent allowed by the 1990 CAAA, DEQ should retain its autonomy from EPA so that it can exercise its discretion in response to local air quality needs.

EPA approval of SIP amendments is a complicated process that can take several years. It is an inappropriate mechanism for dealing with the details of an individual source permit. Additionally, once such permit provisions are incorporated into the SIP, they become virtually impossible to modify. Lastly, inclusion of the individual RACT requirements into the SIP will give EPA authority to enforce the individual permits. Because one reason for proposing these rules in the first place was the perceived need to avoid added federal control of the Oregon air program, we see no need for EPA approvals. Thus, the provisions in the proposal for EPA approval should be eliminated.

E. Daily Monitoring of Small Surface Coating Operations Will Not Translate Into Air Quality Benefits.

The proposal incorrectly assumes that the federal and state standard for ozone (0.12 ppm over a one hour averaging

period) justifies a requirement that small surface coating operations demonstrate daily compliance. Low level ozone formation results from a complex photochemical reaction between sunlight and certain organic chemicals (including VOC). There is little reason to believe that short term emissions that may occur in one part of the Portland airshed would have any immediate effect on ozone levels in another part. Instead, ozone violations are far more likely to occur due to aggregate emissions from many sources over a period of time. Thus, since daily recordkeeping of emissions is extremely difficult for small surface coaters, the lack of a corresponding immediate air quality benefit makes this rule meaningless. A meaningless rule which is costly to small businesses should not be adopted.

F. Suggested Modifications.

To better align the proposed rules with these comments, we suggest the following modifications to 340-22-104(4)-(6):

- "(4) All new and existing sources subject to categorical RACT requirements set forth in OAR 340-22-300 or described in subsection (5) that are located inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology (RACT) unless otherwise specifically exempted in these rules. Compliance with the conditions set forth in OAR 340-22-106 through 340-22-300 shall be presumed to satisfy the RACT requirement.
- "(5) Sources with emission units for which no RACT categorical requirements exist and which have potential emissions before add-on equipment of over 100 tons per year ("TPY") (exclusing emissions units already subject to a RACT categorical standard) of VOC from aggregated emission units shall have RACT developed on a case-by-case basis by the Department for each

New material is underlined, deleted material is bracketed.

emissions unit with the potential to emit more than 10 TPY of VOC. Once a source becomes subject to RACT requirements under these rules, it shall continue to [be subject to] apply RACT to each emission unit with the potential to emit more than 10 tons per year of VOC unless the total allowable VOC emissions falls below 100 tons per year. [If emissions fall below the level that initially triggered RACT, the source may request RACT not be applied, providing the source can demonstrate to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity].

"(6) Within 3 months of a request from [notification] the Department for a RACT <u>analysis</u> [by the Department of the applicability of this rule], the source shall submit to the Department a complete analysis of RACT for each category of emission unit at the source with the potential to emit more than 10 tpy of VOC, taking into account technical and economic feasibility of available control technology and the emission reductions each technology would provide. This analysis does not need to include any emission units subject to a specific RACT requirement under these These RACT requirements approved by the Department shall be incorporated into the source's Air Containment Discharge Permit, and shall be effective not more than one year after the date the Department approves the proposed RACT [not become effective until approved by EPA as a source specific SIP revision. The source shall have one year from the date of notification by the Department of EPA approval to comply with the applicable RACT requirements]."

III. Summary.

In summary, we recognize the need to bring certain provisions of the SIP in line with what Congress has required

STOEL RIVES BOLEY JONES & GREY

Environmental Quality Commission April 25, 1991 Page 9

under the 1990 CAAA. We see no justification, however, for imposing RACT on non-CTG sources, especially when many of these sources will soon be subject to MACT. Thus, our preferred alternative would be to have the Commission eliminate the provisions for non-CTG RACT as discussed in Section I of our comments.

If the Commission determines that RACT for non-CTG sources may be warranted, we urge the Commission to remand the portion of the rules to DEQ for further consideration as discussed in Section II of these comments. As we have discussed, we can find nothing in the 1990 CAAA to indicate federal sanctions would result from such a remand and further clarification is needed before these rules can be properly implemented.

Thank you for the opportunity to submit these comments.

Very truly yours,

Stephen R. Brown

cc: Mr. Fred Hansen

Mr. Steve Greenwood Mr. John Kowalczyk

Ms. Wendy Sims

Mr. Brian Finneran

Date: 2-15-91 8:19am

From: Harold Sawyer: OD: DEQ

To: Julie Schmitt:OD

cc: Angela Garner:OD, HalS:OD

Subj: Legislative Reports

Several of the transmittal letters are signed, several remain to be signed. I'll give you what I have for the ones signed. Others will follow as soon as all signatures are obtained. For each one:

- Please check with the appropriate division to make sure that everything is complete. (Some divisions are expecting to make copies and handle distribution; I'm not sure what other divisions have or are planning.)
- · Assure necessary copies are made.
 - Assure distribution to at least the following:

President of the Senate

Speaker of the House

Chair and all many

Chair and all members of the Senate Ag & Natural Resources Committee Chair and all members of the House Environment and Energy Committee

Martha Pagel

Fred

John

 Carolyn Retain 5-10 for requests.

Thanks.

Jan Whitworth - Sent to MP 2/26

Stave Crane - copies being made

3/28 -- Sent to Martha Pagel 2/20 (SHUTTLE) Phosphate report (D. Sturdevant): _ Debi is sending to legislators. also to FH, JHL, CY 2/20 Will get 20 copies to me to send to dotted names

above + extras.

<u>Rich Volpel-</u> Same as Debi, above. I'll get labels to him, he'll get 20 copies to me.

Marianne Litzgrald.

Same as R. Volpel, above.

Steve Desmonds report (Wasterwater Got.

These two sent to MP via Also to FH, JHL, CY

Sent to MP, FH, JHL, CY on Sent to MP, FH, JHL, CY 2/20

State of Oregon

Department of Environmental Quality

Memorandum

Date: April 1, 1991

To:

Environmental Quality Commission

From:

Harold Sawyer

Subject:

Schedule for July Meeting and Future Special Work Sessions

Potential Change in the July Meeting

Chair Hutchison has advised that he would like to consider rescheduling the July 18-19, 1991 EQC meeting for a week or two later in the month. Please bring your calendars to the April meeting and be prepared to discuss future meeting dates.

Special Work Sessions

There will also be a discussion of potential dates for a couple of special "work sessions" (retreats) during the Summer and Fall as follows:

July -- Special Meeting to review the final results of the legislative session:

- Budget Status
- Bills Passed that require action
- Things to do different next time
- Potential modifications to strategic plan goals and priorities based on final legislative actions.

Time options:

- Regular EQC Work Session -- Currently scheduled for Thursday, July 18, 1991, but may be rescheduled (see above note). The regular Work Session could be targeted as an all day work session for the purpose of legislative review.
- → or -- Any other time the Commission members could make it.

Memo to: Environmental Quality Commission

April 1, 1991

Page 2

September -- Special Meeting to review Proposed Operating Plans for the 1991-93 biennium. These plans would be prepared by each Division based on final budget and legislative decisions, and the EQC/DEQ strategic plan. Modifications to the Strategic Plan could also be discussed and finalized.

Time options:

- → Regular EQC Work Session -- Currently scheduled for Thursday, September 12, 1991. The regular Work Session could be targeted as an all day work session for the purpose of EQC/DEQ planning.
- → or -- Any other time the Commission members could make it.

Locations for the July and September meetings have not been selected. It would be possible to seek a location for the September Work Session that would be a little more relaxed and suitable for a good planning session. (We have checked on the Silver Falls Conference Center, but it is not available.)

Thoughts on a potential location would be appreciated.

to EQC 4-12-9/ NEED to send: (1,3,XX (if available), X, X2, (A) & EQC 4-18 (Fed Ex & Tran Serv). DEMORANDEM

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

HINOKANDOR

DATE: April 12, 1991

TO:

Environmental Quality Commission

FROM:

Julie Schmitt, Director's Office

SUBJECT: Staff reports for 4/25,26/91 EQC Work Session and

Regular Meeting

Enclosed are the following:

o Agenda

o Work Session Item: #2

o Regular Meeting Items: B, D, E, F, G, H, I, J, K, L

The remaining reports will be forwarded to you upon availability.

Sent to EQ 7 on 4-15-91 NEED to send: (13) XXX (if available),

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

MEMORANDUM

DATE: April 12, 1991

ent Xs U-18

TO:

FROM:

Julie Schmitt, Director's Office

SUBJECT:

Staff reports for 4/25,26/91 EQC Work Session and

Regular Meeting

Enclosed are the following:

o Agenda

o Work Session Item: #2

o Regular Meeting Items: B, D, E, F, G, H, I, J, K, L

The remaining reports will be forwarded to you upon availability.

NORTHWEST ENVIRONMENTAL ADVOCATES



Memorandum

Date: April 25, 1991

To: Environmental Quality Commissioners

From: Nina Bell, Executive Director

OFFICE OF THE DIRECTOR

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Re: Work Session agenda item Triennial Review

It is with a certain degree of regret and reluctance that I provide members of the Commission with the attached memoranda. I do not suggest that you attempt to read and understand the full scope of these documents today. However, I think it is imperative that the Commission not act on any of the subject matters discussed in these memoranda until it has had a chance to fully comprehend their import.

In my view, these memoranda show that the Department is being "blackmailed" by the Association of Oregon Industries (AOI). AOI has said, in essence, that if DEQ does or does not do certain specific things that the Association requests, AOI will support DEQ's budget request 91-93 in the current legislative session. While I think that AOI's actions reflect most poorly on AOI, my concern is with the response of DEQ and the Commission.

The Clean Water Act specifically requires DEQ to conduct its "Triennial Review" of water quality standards in a public forum. Regardless of how innocuous AOI's requests may seem on their substantive merit, and I do not believe that they are, it is wholly inappropriate for the Department to make decisions regarding the triennial review in some "backroom deal." The decision to go forward or not on the water quality standards should be made following DEQ staff's full written evaluation of comments received in the public process.

DEQ Director Fred Hansen will hasten to point out that, from a substantive perspective, DEQ is not acting in any way or asking the Commission to act in any way that compromises either the Department's or the Commission's ability to protect the environment. I would say that, under the circumstances,

^{1.} Section 303(c)(1) reads as follows:
The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with October 18, 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. * * *

each member of the Commission should go behind the statements of DEQ management and carefully make a finding on each item prior to taking any action.

I am sorry that I cannot be present at your work session but due to obligations of the Lower Columbia River Bi-State Water Quality Program I am in meetings all day.

7 P.O. Sox 12519 1149 Court St. N.E., Salem, OR 97309-0519

> Telephone: Salem 503/568-0050 Ponland 503/227-5634 Oregon 800/452-7862 FAX 503/588-0052

> > Portland Office S03/227-3730

> > > OFFICERS

Chairman of the Board RIPLEY W. GAGE Gage Industrics

First Vice-Chairman RON SCHIFF Pay Less Drug Stoms NW

RICHARD M. BUTRICK

Tigasurer CECIL W. DRINKWARD Hoffman Construction

> Secretary CHARLES H. FROST Tektronix

Immediate Past Chairman DONALD J. COOK Perdiaton Grain Growers

EXECUTIVE COMMITTEE

RICHARD ALEXANDER Viking Industrics JOAN AUSTIN A-dec

> DAVID E, BECKER Becker Company *JERRY FISHER

Hewiett-Packard
*THOMAS FREEDMAN

Les Schwab Tire Centers
JOHN HAMPTON

ndemud enimelli W MOZNAČE HTJZOL nepano te kneg pilipse vrinupse

*WILLIAM JUNE
Portland General Flecting

DOUGLAS McKEE
Pay I ess Drug Stores NW

MORTON MICHELSON Cascade Steel Rolling Mills

> R. GENE MORRIS Oak Street Tank & Stoct

*9RUCE O'NEII
Westcom Productions

TOM PETERSON Xonix Technologies

RICHARD RUDISILE Buse Cascade

RONALD G. SCHMIDT Pihas. Schmidt, Westerdahl

BARBARA SUE SEAL Barbara Sue Seal Properties

JOHN J. SUPPLE Axiona Wardhousing STEPHEN M. LELFER

Legacy Health System
*District Vice Chamber

MAJOR DIVISIONS

OREGON RETAIL COUNCIL OREGON FOREST

INDUSTRIES COUNCIL

MAJOR AHHLIATED ASSOCIATIONS

orthwest Christmas Tree Assn. Oregon Association of Realtors Oregon Chamber Executives Oregon Land Title Assn. Oregon Restaurant Assn.

regon Small Woodlands Assn. Oregon Soft Drink Assn.

nortestand Adventising Bedesation

E mail

OREGON

INDUSTRIES

Mr. Fred Hansen
Director
Department of Environmental Quality
811 S. W. Sixth Avenue
Portland, Oregon 97204-1390

SUBJECT:

DEQ'S 1991-93 BUDGET

Dear Fred:

April 16, 1991

On behalf of Associated Oregon Industries' (AOI) Hazardous Materials Committee, I want to take this opportunity to thank the Department for working with AOI with the Department's concerns regarding DEQ's 1991-93 budget. We appreciate the time pertaining to effort and responses we have received from the Department in addressing our inquiries, as the committee has tried to more fully understand the proposed budget and the purposes of the various decision packages.

Based upon our several discussions, it is our understanding that the Department anticipates receiving a written response from AOI relating to its 1991-93 budget package. We want you to know that, after lengthy discussion, AOI will generally support the agency's proposed 1991-93 budget. In fact, from an overall standpoint, AOI is positioned to support approximately 95% of the agency's overall decision packages. However, there is approximately 4% of the proposed decision packages which AOI cannot support. In positioning AOI to generally support the DEQ's budget, AOI would impress upon the Department that AOI's support is for the Department programs themselves and not an endorsement of the actual dollars. Because of the limited time which we have had to review the budget package, we must trust that the decision package dollars will accurately reflect the true cost of the programs. Nevertheless, we are alarmed at the continued escalation in program budgets and costs which we have seen over the past several legislative sessions. Therefore, AOI would propose that during the forthcoming biennium the Department and industry sit down to carefully review the costs of the various programs and see what can be done to use those monies in the most cost-effective manner.

In lending its support to the DEQ 1991-93 budget, it should be understood that AOI's support is conditional upon resolution of certain overriding concerns which transcend individual program boundaries, as well as the specific concerns within given programs. These overriding concerns include:

TET PROPERTY

-

AOI desires that DEQ attempt, if possible, to maintain a neutral position on the pollution control tax credit program.

DEQ to make inspections of previously uninspected hazardous waste generators an agency priority and that the DEQ to make a diligent effort to get all hazardous waste inspection reports to the generators in a timely manner. In many instances, generators are now waiting as much as a year from the time of inspection to receive inspection reports from the agency.

DEQ to make the speedy processing of permits an agency priority, dedicating as many FTE's as necessary for prompt processing. Furthermore, that the DEQ require staff reports on the status permit issuance at each monthly EQC meeting. The DEQ should either accept or deny essentially complete permit applications within 45 days of submittal.

The state environmental programs should, as a general rule, be no more stringent than corresponding federal programs, absent a compelling need for more stringent state rules. Existing state rules which are more stringent should be reviewed and then either modified or repealed, absent a compelling need for their continued existence.

annulto

Some of these state regulations of concern include, but are not limited to:

) no Fed stondard WATER QUALITY RULES Fish tissue standard b) Dissolve Oxygen (DO) Fecal standard Wetlands HAZARDOUS WASTE (a) Aquatics toxicity rule: (b) 3% and 10% solvent rule-(c) (d) PCBs as hazardous waste Change DEQ's quarterly hazardous waste reporting to annual hazardous waste reporting. 3. HAZARDOUS SUBSTANCES

Letter to Fred Hansen April 16, 1991 3

ECD cleanup levels should be federal health based cleanup standards rather than based on background.

Set forth below is AOI's position on each of the major program areas:

A. AIR PROGRAM

AOI proposes to support approximately 93% of the proposed air program decision packages, provided agreement can be reached on the following issues:

- DEQ agrees to conform the industrial clean air program to the federal requirements. AOI generally opposes state regulations which are more stringent than the federal regulations.
- AOI will support House Bill 2175 consistent with the minimum federal requirements under CAA for industry. However, to the extent that HB 2175 provides additional income to the air program (e.g., the \$2,429,000 decision package), the budget should be proportionately reduced.
- Since DEQ is no longer funding the noise program, the ORS's for noise pollution should be repealed. Furthermore, the DEQ's new enforcement proposal for noise, which would increase noise related civil penalties from \$500 a day to \$10,000 a day, should be deleted.
 - AOI opposes the proposed indoor air program. AOI believes that indoor air concerns are adequately addressed and regulated by both OR-OSHA and the Oregon State Health Division programs and does not believe a third agency needs to be involved in this matter.

AOI opposes the new asbestos program, as contained in SB 185. AOI supports the movement of the existing federal and state asbestos program to OR-OSHA while keeping the NESHAPS notification program (air toxics) within the department.

B. HAZARDOUS AND SOLID WASTE PROGRAM

AOI supports approximately 86% of DEQ's proposed decision packages on hazardous and solid waste. However, it is unable to support approximately 14% of those decision packages. AOI's support for the

Letter to Fred Hansen April 16, 1991

4

hazardous and solid waste programs is conditioned upon the following:

- AOI supports the solid waste program increases as set forth in Senate Agriculture & Natural Resources Committee version of SB 66 B-Engrossed, limited to DEQ's additional responsibilities under the Opportunity to Recycle Act consistent with DEQ's legislative testimony on SB 66.
- AOI opposes the added solid waste certification program as proposed. However, AOI would support a solid waste certification program based upon a self-policing certification statement from the shipper of the solid waste stating that they have local rules and regulations for waste minimization consistent with those of the State of Oregon. Such a certification program should be self-policing and compliance could be verified by intermittent random checks of solid waste shipments delivered to solid waste disposal facilities in Oregon.
- AOI supports the proposed incremental additions to the Hazardous Waste Disposal Fee at Arlington pursuant to the conditions set forth below. This includes immediate \$4/ton disposal fee, with an additional \$1.50/ton increase on January 1, 1992, July 1, 1992, January 1, 1993 and July 1, 1993. AOI opposes further increases in the Hazardous Waste Disposal Fee. AOI's support for the increase in the Hazardous Waste Disposal Fee is expressly conditioned upon the following:
 - 1. The fee increase will be used to make up current budgetary shortfalls in the hazardous waste program.
 - 2. DEQ will prioritize hazardous waste generator inspections to include those facilities which have not previously been inspected by the department.
 - 3. AOI supports use of the fund to pay for two additional FTEs at the Arlington facility.
 - 4. AOI supports technical assistance and hazardous waste minimization programs for SQGs and CEGs. However, AOI opposes use of the Hazardous Waste Disposal Fee to fund Toxic Use Reduction. AOI believes the Toxic Use Reduction program is most appropriately funded through the Fire Marshal's fee and solid waste tipping fees. It is not

Letter to Fred Hansen April 16, 1991

5

necessary to provide three independent funding sources for that program.

C. ENVIRONMENTAL CLEANUP

AOI is prepared to support 100% of the Environmental Cleanup Program decision packages. This support is conditioned on DEQ's willingness to commit that the Hazardous Substances Cleanup Program will expend not less than 80% of the program budget on specific site-related activities; and not to utilize these funds for the ongoing drafting and enactment of state rules and regulations which are more stringent than corresponding federal regulations. Furthermore, that the Hazardous Substance Cleanup Program will utilize the federal health-based standards in establishing cleanup levels and not adopt clean-up standards which are more stringent than the federal standards.

D. WATER QUALITY PROGRAM

AOI is prepared to support approximately 97% of the proposed water quality program decision packages consistent with the following:

AOI supports the EPA delegated programs (e.g., water quality standards, TMDLs, 401 certification programs.) provided those programs are funded by the general fund; all state standards are consistent with corresponding federal regulations; and the NPDES permit fees are based upon effluent flows to the receiving streams and not upon the classification of the NPDES permit holders (e.g., municipal or industrial).

AOI opposes the proposed oil spill planning proposals, SB 242, inasmuch as the proposal creates a duplication of efforts between agencies (e.g., DEQ and Coast Guard). AOI believes the Coast Guard is adequately addressing those concerns at the present time.

A01 is currently unable to support the Cross Media Risk Reduction proposal because it is unclear as to who will be paying the fees related to the \$88,000 decision package and it is unclear as to the actual intent of the program. Furthermore, what are the benefits to Oregon industry for supporting such a proposal?

AOI appreciates the opportunity to respond to the agency regarding its 1991-93 budgetary decision packages. As the Department is aware, AOI's position with the 1991-93 budgetary decision package is consistent with the support which the Department has received over the past bienniums from AOI. We believe that AOI's ability to

Tuderim

Basegam

Ø ,e

Merita de la companya della companya

Letter to Fred Hansen April 16, 1991 6

continue to support the Department's budget and decision packages is based in large part upon the ongoing communication between the Department and AOI. We encourage the Department to continue its efforts to maintain those lines of communication with Industry and to work with AOI to resolve those issues which preclude AOI from giving its full support to the Department in these budgetary matters.

If the Department has further question regarding AOI's position, please do not hesitate to contact us so that we may continue our ongoing dialogue.

Sincerely,

Yames M. Whitty

Legislative Counsel

JMW:jkh

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE:

April 17, 1991

TO:

J. - 3

Fred Hansen

FROM:

John Loewy

SUBJECT: Response to AOI

WATER QUALITY DIVISION DEPT. OF ENVIRONMENTAL QUALITY

What follows are the responses, in the same order as in the AOI letter, based on input from the Division Administrators.

GENERAL

1. Tax Credits Nez

I believe you indicated a willingness not only to be neutral but to serve as a messenger to the Governor regarding the industry's position.

we will inspect previously uninspected generators and respond in a timely manner. We are already negotiating this commitment with EPA in the State/EPA agreement this commitment with EPA in the State/EPA agreement.

Speedy Permits

DEQ agrees that dealing with permit backlogs and improving the permitting process is a high priority. We have, in fact, begun a process to deal with the issue for the Department as a whole, and individual programs have developed strategies for reducing their backlogs in e.g. NPDES and SW (perhaps give them a copy of memo we just sent to all managers re: permitting, which shows our commitment). We do not necessarily agree that the only way to solve this problem is to add FTE; we believe the process can be streamlined. If, however, our evaluation of the process shows that we simply must have more people to do permits, we are prepared to address that issue and hope that AOI will support us. We intend to seek input from AOI and others as we evaluate the permitting process. With regard to the reports on permit status which are currently provided to the EQC, we will make those available to the interested public, as we have in the past. Finally, our goal is to renew all permits before they expire, and to respond to complete applications for major modifications and new permits within 90 days (assuming the public review process can be

god.

completed during that timeframe). We believe, however, that we must eliminate the backlogs and streamline our processes before we can attain those goals, and are committed to this activity as a priority in the '91-93 biennium.

4. Program Stringency

The Department agrees to propose a rule change to the EQC which would limit state environmental programs generally to no more stringent than corresponding federal programs, absent a specific finding by the EQC that the more stringent state rule is justified by special circumstances.

However, the Department should point out that federal regulations are often performance based, with the expectation that states will develop more explicit language in their rules. Determining whether state rules are "more stringent" will not always be an easy task.

The Department also agrees to appoint an advisory committee to review our existing rules for the same criteria, and have that committee recommend rules for modification to more closely conform to federal standards.

Water Quality Rules

Water Quality standards are not developed by EPA on a national basis. Each state must develop and adopt its own. Often they provide guidance, sometimes with specific numbers, sometimes not. Therefore, it will not be clear cut when DEQ is equal to or more stringent than EPA in WQ because of the structure of the Clean Water Act.

The specific standards which are currently being reviewed by DEQ for our triennial standards review which are expressed as areas of concern by AOI:

a) Fish Tissue Standard...we will delay taking to the EQC and have a technical advisory committee review. We have concerns, however, about the fish tissue information we have available now; what we should say about it to the public if asked; and the public perception damage which can occur if we don't have some internal guidance or strategy about fish tissue information. We would like to prepare either a fact

Constitution

Some Eaction

Constitution

Co

go

Talentidactions

Talentidactions

relownered No.

Le ownered action

we would action

we would action

we would action

- New a standard

- sheet or strategy document on fish tissue information. Would AOI object to that concept?

 b) Dissolved Oxygen (DO)...we will form a test advisory committee and recommend that modified (now) but during the new review. This would allow about specifics on helpful in a strategy document on fish tissue information. Would AOI object to that concept?

 b) Dissolved Oxygen (DO)...we will form a test advisory committee and recommend that modified (now) but during the new about specifics on helpful in a strategy document on fish tissue information. b) Dissolved Oxygen (DO)...we will form a technical advisory committee and recommend that this not be modified (now), but during the next triennial standards review. This would allow us to have more information about specifics on the Willamette and which would be
 - advisory committee and recommend to the EQC that this not be reviewed now, but during the (next) triennial standards review when our program direction is better defined and EPA's position is clearer.
 - d) Fecal Standard: We don't understand what AOI's concern is and have some human health concern with not moving forward on this standard. Clarification on what AOI issues are here would help us in making a response to the request. We aren't trying to say yes or no, just asking for further information on the problem.

<u>Hazardous Waste Rules</u>

- a) Aquatic toxicity rule: this rule affects the woodtreaters and the agricultural community. woodtreater waste fails aquatic toxicity, they are subject to Part B RCRA permitting as a TSD. If in the ag business they must get a WQ permit. In light of the new EPA rules for wood treaters, we believe our regulation merits reevaluation and are willing to do so through our normal advisory committee process.
- b) 3% and 10% solvent rule: we agree that this rule needs to be either revised or deleted to be consistent with the feds, and we will proceed to de ratew ← so through our normal rulemaking process, including advisory committee input. and sex whitemer out.
 - c) PCBs as hazardous waste: quite frankly, we are surprised that this is perceived to be a big deal, as we only adopted federal rules by reference; we don't do anything in this program, and PCBs are not listed as a (HW) in Oregon. We have recently received a grant from EPA to evaluate what kind of a PCB program, if any, DEQ ought to have. We would very much welcome AOI's participation in our program evaluation for EPA.

mare have as some as a service of a mark property traditions.

Change quarterly HW reporting to annual: we are in the process of doing so and are delighted to have AOI's support.

<u>Hazardous Substances</u>

The Department commits to revisiting the issue of background with the Environmental Cleanup Advisory Committee (ECAC), and taking ECAC recommended changes to the cleanup standards to the EQC for action during. No commitment on white to take to the '91 93 biennium. EQC, or it to take anything.

AIR PROGRAM

No Regulations Which Are More Stringent Than Federal Regulations

We support taking rule to EQC. However, odors and Am ALL nuisance conditions should be kept, even though they are not federally mandated.

2. Reduce Permitting Budget So That Industry Is Not Double-Hit By Fee Increases And HB 2175 Emission Fees

.not on others. Yes. We have already planned that the regular permit fee Yell will be dropped on those sources once they begin paying the federally-mandated fee in HB 2175.

3. Noise

Drop Indoor Air Program

on both Staduty principle - whily statement

No. We do not believe it is responsible to completely nlo. delete all noise pollution statutes. and no to pend they but to take

W NO - W+M Although we would be willing to defer funding for this program during this biennium, and would be willing to discuss with OR-OSHA and Health Division how these concerns can best be addressed, we are not willing to drop indoor air from all further consideration. EPA has identified indoor air as one of the greatest health risks of all environmental problems.

5. Drop SB 185, And Move Existing Federal And State Asbestos Programs To OR-OSHA

We believe SB 185 should be decided by the Legislature on its merits. The Department opposes transfer of the asbestos program / because the program is environmentally

1125/40 to 12,740

Later Me only die Di there we

> oriented and not related solely to worker safety. OR-OSHA currently coordinate well on this program.

HAZARDOUS AND SOLID WASTE PROGRAM

SB 66 1.

ror statewide solid waste planning (\$1.1 million in budget). With regard to AOI's desire to remain new the \$600,000 for HHW and \$600,000 to Metro for an information clearinghouse, while we recognize that are not really AOI issues, it is important to note these are critical pieces to the City of Portland and Metro, as programs for the metropolitan Portland and Metro, as programs for the metropolitan Portland and Metro, as programs is if asked, we hope they will support so the whole bill doesn't go down in flames, that they will at least say that these are issues, although we would around the support so the whole bill doesn't go down in flames, that they will at least say that these are issues, although we would around the support so the whole bill doesn't go down in flames, that they will at least say that these are issues, although we would around the support so the support so the would around the support so the support so the would around the support so the support so the would support so the support so the would support so the would support so the support so the would suppor We assume that AOI's statement of support includes support budget). With regard to AOI's desire to remain neutral on information clearinghouse, while we recognize that these are not really AOI issues, it is important to note that these are critical pieces to the City of Portland and Metro, as programs for the metropolitan Portland area. AOI may be able to remain silent unless asked directly support so the whole bill doesn't go down in flames, or that they will at least say that these are not their issues, although we would argue that HHW is an AOI issue.

We cannot agree with AOI on this. There is legislative history on the statute (ORS 459.055 and 459.305) that goes back several sessions. Many people other than DEQ care about this issue, e.g. Shirley Gold. The Senate Ag.

Committee has thoroughly discussed and already passed SB 475, which strengthens the above statutes. DEQ's Solid Waste Advisory Committee is on record as stating that:

"Out-of-state generators shall act to reduce and record the waste at least as well as Oreganian do." The Department of the Department of the Department of the Department of the Senate of Senat waste Advisory Committee is on record as stating that:

"Out-of-state generators shall act to reduce and recycle
the waste at least as well as Oregonians are required to
the waste of the Department never has been given the resources to
do these certifications, and if our budget request is

the property of the behavior with a timely manner with existing state

\$2.25/ton surchasses do these certifications, and if our budget request is every representation of the extremely difficult to do the work of the strength of the pay for this action. given the resources to given the resources to give the request is at the second our budget request is

will be extremely difficult to do the work

for a timely manner with existing staff. Only \$.05 of the

\$2.25/ton surcharge on out-of-state waste would be needed

to pay for this activity.

What a standard waste Dispose?

Hazardous Waste Disposal Fee Increase

We agree with the schedule for phasing in the fee and with the four uses proposed by AOI. We also agree not to request further increases in the fee in our 1993-1995 budget request. (Fred - I wasn't sure in the changes in federal law conditions of the changes in federal law conditions.) budget request. (Fred - I wasn't sure if you wanted the | almake Solus specifically. Your call.)

Agree white and several start of the several severa / specifically. Your call.) curent that it +117) 17 14 1 oncided -all bets off-no condre 1

our- Gov., but not

mour request.

ENVIRONMENTAL CLEANUP

1. 80 Percent - Site Related Activities

The Department is already meeting this condition, and commits to continuing to meet this goal.

WATER QUALITY

1. EPA Delegated Programs

Our understanding of the discussion is that AOI supports DEQ performing 401 certifications and doing TMDL work...they aren't comfortable with SB 330 as it stands and would like to have these two activities supported by General Fund dollars...the decision package (101) contains .416 FTE for TMDLs on fees and \$100,000...also contains \$120,000 fund shift from general to other funds for 401 certification...the rest of the package deals with permitting activities and it is our understanding that AOI is not objecting to those particular portions of the decision package...

Response: We would be happy to use General Fund dollars for TMDL work...our Governor's recommended budget, however, doesn't have excess...can we suggest an alternative for internal shift of something else onto fees that AOI might be more comfortable with and shift general funds from those activities onto TMDL work...for example...if SB 330 allowed us to have a fee on plan reviews for industrial and municipal permits (new ovanyhi applications and major modifications), we could substitute those fees for the plan review function and shift \$100,000 into TMDL work. We would be happy to continue to discussneed mony with AOI any other solution, such as a ceiling on fees 441) 1) 4 2 cm under SB 330 which would resolve this issue. The 401 certification fee is to allow timely review of 401 certification applications. Again, we would be willing to seek a solution to find General Fund dollars or to somewhen continue discussions about what could be modified in SB else. 330 to make it palatable to AOI.

The second portion of AOI's discussion on fees relates to equity in charging NPDES permit holders. AOI suggests that permit fees should be based upon effluent flows to receiving streams rather than classification of permit holder. DEQ would propose that we establish a permanent WQ advisory committee. The committee would have as one of its tasks, a look during the legislative interim, at Water program permit fees, as well as other funding mechanisms

lenguest conditions conditio

toward property

Trayens ", 100 mg 100 m

> to come up with a recommendation prior to the budget being developed for 1993-95 to provide equity in charging permit holders.

2. Oil Spill, SB 242

is not opposed to DEQ

planning requirements. DEQ

package related to SB 242

1/10 of an FTE to deal with review of Coast

if the inspection of the matter, but would prefer to have the legislature decide the issue on its merits. We understand that AOI would not support the entire decision package.

Cross-Media Risk Reduction

DEQ provided clarification at the meeting decision package. Do they need meeting decision not to support holds

respond. AOI opposes some portions of the oil Oil Spill Planning:

med to know

need to know

hvar vetalished your washy

Support be wishy washy

AOI/HSW Issues

An overall comment: are we committed to doing all of this even if our fees are not approved by the legislature?

We will inspect previously uninspected generators and respond in a timely manner. We are already negotiating this commitment with EPA in the state/EPA agreement.

I volunteered to prepare the Department's response on permits (not limited to HSW).

DEQ agrees that dealing with permit backlogs and improving the permitting process is a high priority. We have, in fact, begun a process to deal with the issue for the Department as a whole, and individual programs have developed strategies for reducing the backlogs in e.g. NPDES and SW (perhaps give them a copy of memo we just sent to all managers re permitting, which shows our commitment). We do not necessarily agree that the only way to solve this problem is to add FTE; we believe the process can be streamlined. If, however, our evaluation of the process shows that we simply must have more people to do permits, we are prepared to address that issue and hope that AOI will support us. We intend to seek input from AOI and others as we evaluate the permitting process. With regard to the reports on permit status which are currently provided to the EQC, we will make those available to the interested public, as we have in the past. Finally, our goal is to renew all permits before they expire, and to respond to complete applications for major modifications and new permits within 90 days (assuming the public review process can be completed during that timeframe). We believe, however, that we must eliminate the backlogs and streamline our processes before we can attain those goals, and are committed to this activity as a priority in the 91-93 biennium.

Specific HSW issues:

More stringent rules:

- 1) aquatic toxcity rule: this rule affects the woodtreaters and the agricultural community. If a woodtreater waste fails aquatic toxicity, they are subject to Part B RCRA permitting as a TSD. If in the ag business they must get a WQ permit. In light of the new EPA rules for wood treaters, we believe our regulation merits reevaluation and are willing to do so through our normal advisory committee process.
- 2) 3% and 10% solvent rule: we agree that this rule needs to be either revised or deleted to be consistent with the feds, and we will proceed to do so through our normal rulemaking process, including advisory committee input.
- 3) PCBs as hazardous waste: quite frankly, we are surprised that this is perceived to be a big deal, as we only adopted federal rules by reference; we don't do anything in this program, and

PCBs are not listed as a HW in Oregon. We have recently received a grant from EPA to evaluate what kind of a PCB program, if any, DEQ ought to have. We would very much welcome AOI's participation in our program evaluation for EPA.

4) Change quarterly HW reporting to annual: we are in the process of doing so and are delighted to have AOI's support.

Solid waste/SB 66:

We assume that AOI's statement of support includes support for statewide solid waste planning (\$1.1 million in budget). With regard to AOI's desire to remain neutral on the \$600,000 for HHW and \$600,000 to Metro for an information clearinghouse, while we recognize that these are not really AOI issues, it is important to note that these are critical pieces to the City of Portland and Metro, as programs for the metropolitan Portland area. AOI may be able to remain silent unless asked directly what their position is; if asked, we hope they will support so the whole bill doesn't go down in flames, or that they will at least say that these are not their issues, although we would argue that HHW is an AOI issue.

Cetification of out-of-state waste reduction programs: We cannot agree with AOI on this. There is legislative history on the statute (ORS 459.055 and 459.305) that goes back several sessions. Many people other than DEQ care about this issue, e.g. Shirley Gold. The Senate Ag. Committee has thoroughly discussed and already passed SB 475, which strengthens the above statutes. DEQ's Solid Waste Advisory Committee is on record as stating that: "Out-of-state generators shall act to reduce and recycle the waste at least as well as Oregonians are required to do." The Department never has been given the resources to do these certifications, and if our budget request is eliminated it will be extremely difficult to do the work in a timely manner with existing staff. Only \$.05 of the \$2.25/ton surcharge on out-of-state waste would be needed to pay for this activity.

\$10/ton hazardous waste disposal fee:

We agree with the schedule for phasing in the fee and with the four uses proposed by AOI. We also agree not to request further increases in the fee in our 1993-1995 budget request. (Fred - I wasn't sure if you wanted the changes in Federal law caveat in here or not. I've discussed with Zweig but not with Whitty or Diane specifically. Your call.)

RESPONSE TO POINT #4: THAT STATE PROGRAMS SHOULD BE NO MORE STRINGENT THAN CORRESPONDING FEDERAL PROGRAMS, ABSENT A "COMPLEILING" NEED.

The Department agrees to propose a rule change to the EQC which would limit state environmental programs generally to no more stringent than corresponding federal programs, absent a specific finding by the EQC that the more stringent state rule is justified by special circumstances.

However, the Department should point out that federal regulations are often performance based, with the expectation that states will develop more explicit language in their rules. Determining whether state rules are "more stringent" will not always be an easy task.

The Department also agrees to appoint an advisory committee to review our existing rules for the same criteria, and have that committee recommend rules for modification to more closely conform to federal standards.

Specifically, AOI has identified several rules it would like reviewed.

Water Quality Rules: Fish Tissue, Dissolved Oxygen, Fecal standard, Wetlands.

DEQ response: All of these proposed Water Quality rules will be reviewed by a technical committee before being adopted.

Hazardous Waste Rules: Aquatics toxicity, 3%-10% solvents, PCB's, Hazardous Waste reporting requirements.

DEQ response:

- 1) aquatic toxcity rule: In light of the new EPA rules for wood treaters, we believe our regulation merits re-evaluation and are willing to do so through our normal advisory committee process.
- 2) 3% and 10% solvent rule: we agree that this rule needs to be either revised or deleted to be consistent with the feds, and we will proceed to do so through our normal rulemaking process, including advisory committee input.
- 3) PCBs as hazardous waste: quite frankly, we are surprised that this is perceived to be a big deal, as we only adopted federal rules by reference; we don't do anything in this program, and PCBs are not listed as a HW in

Oregon. We have recently received a grant from EPA to evaluate what kind of a PCB program, if any, DEQ ought to have. We would very much welcome AOI's participation in our program evaluation for EPA.

4) Change quarterly HW reporting to annual: we are in the process of doing so and are delighted to have AOI's support.

Environmental Cleanup Rules: cleanup levels; mcl's versus background.

DEQ response:

The Department agrees to reopen the question of cleanup standards, including the option of using health-based cleanup standards rather than background as the cleanup goal. DEQ will involve industry, and others, in review of the cleanup standards.

RESPONSE TO SPECIFIC POINTS MADE ON THE AIR PROGRAM:

1. NO REGULATIONS WHICH ARE MORE STRINGENT THAN FEDERAL REGULATIONS.

DEQ response: We support taking rule to EQC. However, odors and nuisance conditions should be kept, even though they are not federally mandated.

2. REDUCE PERMITTING BUDGET SO THAT INDUSTRY IS NOT DOUBLE-HIT BY FEE INCREASES AND HB 2175 EMISSION FEES.

DEQ response: Yes. We have already planned that the regular permit fee will be dropped on those sources once they begin paying the federally-mandated fee in HB 2175.

3. REPEAL NOISE POLLUTION STATUTE, AND DELETE NOISE FROM THE ENFORCEMENT BILL BEING PROPOSED.

DEQ response: No. We do not believe it is responsible to completely delete all noise pollution statutes.

4. DROP THE INDOOR AIR PROGRAM AND STAFFING PROPOSED IN DECISION PACKAGES.

DEQ response: Although we would be willing to defer funding for this program during this biennium, and would be willing to discuss with OR-OSHA and Health Division

how these concerns can best be addressed, we are not willing to drop indoor air from all further consideration. EPA has identified indoor air as one of the greatest health risks of all environmental problems.

5. DROP SB 185, AND MOVE EXISTING FEDERAL AND STATE ASBESTOS PROGRAMS TO OR-OSHA.

DEQ response:

We believe SB 185 should be decided by the Legislature on its merits. The Department opposes transfer of the asbestos program, because the program is environmentally oriented and not related solely to worker safety. DEQ and OR-OSHA currently coordinate well on this program.

From: Fred Hansen: OD: DEQ

To: Stephanie Hallock: HSW: DEQ cc: division administrators: deq

Subj: AOI

In-Reply-To: Message from Stephanie Hallock: HSW: DEQ of 4-17-91

Your question gives me a chance to say something which in the speed of things I didn't say and which answers your question. I believe that what we propose to do and what each of you give me is what we feel the merits of the specific situation merit. Consequently, it is not a "compromise" which we give up something for something else in return. Rather, it is what we think is a reasonable action, based on merit. example, Stephanie, in your case you suggested deleting or revising the 3 and 10 rule. I think this is a reasonable issue to have the advisory committee look at-not as a compromise but on the merits. recall, we adopted the 3 and 10 rule as a way to pick up mixed solvents which might not be captured otherwise. Now that the Feds have adopted TCLP we effectively get the same result without two hoops for people to jump through or for our inspectors to know and understand. Whether this is sufficient or if a loophole is not captured by TCLP and which the 3 and 10 rule would catch is something that an advisory committee ought to review. We make no commitment about whether we will agree with a CAC recommendation or what we will do with it. And that is appropriate becausewe haven't seen the recommendation yet.

In a similar vein, I know when Lydia recommended putting the DO standard revision through a technical advisory committee that she had essentially come to that conclusion even before the issue was even raised by AOI. know in this one it was real important to Lydia that since the proposed changes we were making it would have had the effect of relaxing the standard (actually more closely tracking actual DO levels so that we were not unecessarily high) we still maintained a higher level of environmental protection during the review process. I might add, from my standpoint, almost without regard to the issue of stringency, when we are proposing a change which we think relaxes the standard and many permit holders are coming to us with the exact opposite view, something is wrong. When there is this much of a fundamental differnce it says we are not communicating well at a technical level, and I believe a technical review group is the place to resolve it. The policy issue of how stringent is of course our call, but it should be argued on the policy issues, not on whether 2+2=4 or 5.

I believe that this is how each of you approached what you sent me and what I relayed to AOI. I have to be in Salem this afternoon so I will not be able to brief you on what I said. I modified some of your recommnedations to not go as far, for example MJD said we would ask ECAC to revisit "how clean is clean" and we would take that to the EQC. I am happy to ask ECAC to revisit (as we should be willing to do with any of our major policies) but I am unwilling to commit to take anything forward until we have seen the recommendation and agree with it or propose any appropriate modifications.

I will brief you on Monday at budget dry run.

Thanks for the very quick turnaround on all this stuff. It is essential to have as much lined up before we hit W & M as possible. he is

----- Replied Message Body -----

Date: 4-17-91 7:26am

From: Stephanie Hallock: HSW: DEQ

To: fred hansen:od, division administrators:deq Subj: AOI

Sorry I had to leave before the discussion ended. Did you talk about an "all bets are off" piece of this if we don't get our fees, regardless of AOI support? Or, do we have to fulfill these commitments to AOI regardless of whether or not the legislature approves the fees?

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 17, 1991

TO:

John Loewy

FROM:

Lydia

SUBJECT: AOI comments

page 2, comments on state regulations: Water Quality standards are not developed by EPA on a national basis. Each state must develop and adopt its own. Often they provide guidance, sometimes with specific numbers, sometimes not. Therefore, it will not be clear cut when DEQ is equal to or more stringent than EPA in WQ because of the structure of the Clean Water Act.

The specific standards which are currently being reviewed by DEQ for our triennial standards review which are expressed as areas of concern by AOI:

Fish Tissue Standard...we will delay taking to the EQC and have a technical advisory committee review. We have concerns, however, about the fish tissue information we have available now; what we should say about it to the public if asked; and the public perception damage which can occur if we don't have some internal guidance or strategy about fish tissue information. We would like to prepare either a fact sheet or strategy document on fish tissue information. Would AOI object to that concept?

Dissolved Oxygen (DO)...we will form a technical advisory committee and recommend that this not be modified now, but during the next triennial standards review. This would allow us to have more information about specifics on the Willamette and which would be helpful in discussing any proposed standard.

Wetlands....we will recommend for a technical advisory committee and recommend to the EQC that this not be reviewed now, but during the next triennial standards review when our program direction is better defined and EPA's position is clearer.

Fecal Standard: We don't understand what AOI's concern is and have some human health concern with not moving forward on this standard. Clarification on what AOI issues are here would help us in making a response to the request. We aren't trying to say yes or no, just asking for further information on the problem.

Memo to: John Loewy April 17, 1991 Page 2

page 5, Water Quality Program decision packages:

Our understanding of the discussion is that AOI supports DEQ performing 401 certifications and doing TMDL work...they aren't comfortable with SB 330 as it stands and would like to have these two activities supported by General fund dollars...the decision package (101) contains .416 fte for tmdl's on fees and \$100,000....also contains \$120,000 fund shift from general to other funds for 401 certification...the rest of the package deals with permitting activities and it is our understanding that AOI is not objecting to those particular portions of the decision package....

response: We would be happy to use general fund dollars for TMDL work....our governor's recommended budget, however, doesn't have excess.....can we suggest an alternative for internal shift of something else onto fees that AOI might be more comfortable with and shift general funds from those activities onto TMDL work....for example....if SB 330 allowed us to have a fee on plan reviews for industrial and municipal permits (new applications and major modifications), we could substitute those fees for the plan review function and shift \$100,000 into TMDL work. We would be happy to continue to discuss with AOI any other solution, such as a ceiling on fees under SB 330 which would resolve this issue. The 401 certification fee is to allow timely review of 401 certification applications. Again, we would be willing to seek a solution to find general fund dollars or to continue discussions about what could be modified in SB 330 to make it palatable to AOI.

The second portion of AOI's discussion on fees, relates to equity in charging NPDES permit holders. AOI suggests that permit fees should be based upon effluent flows to receiving streams rather than classification of permit holder. DEQ would propose that we establish a permanent WQ advisory committee. The committee would have as one of its tasks, a look during the legislative interim, at Water program permit fees, as well as other funding mechanisms to come up with a recommendation prior to the budget being developed for 1993-95 to provide equity in charging permit holders.

Oil Spill Planning: AOI opposes some portions of the oil spill planning proposed under SB 242....specifically those activities dealing with vessel inspection and review of the US Coast Guard program. AOI is not opposed to DEQ plan review and contingency planning requirements. DEQ has in its decision package related

Memo to: John Loewy April 17, 1991 Page 3

to SB 242 approximately 1/10 of an FTE to deal with review of Coast Guard activities and actual vessel inspection. The legislation, however, authorizes DEQ to perform this function. DEQ doesn't hold strong feelings on the matter, but would prefer to have the legislature decide the issue on its merits. We understand that AOI would not support the entire decision package. (DEQ worked closely with Senate subcommittee on this, and would find it somewhat awkward to backtrack completely at this time. John...let me know if we need to express that).

Cross Media Risk Reduction: DEQ provided clarification at the meeting with AOI on this decision package...Do they need more, or does their decision not to support hold...we need to know in order to respond.

Date: 4-19-91 11:09am

From: Stephanie Hallock: HSW: DEQ

To: Fred Hansen:OD:DEQ

cc: division administrators:deq

Subj: AOI

In-Reply-To: Message from Fred Hansen: OD: DEQ of 4-19-91

Fred - I agree that what we proposed was on the merits. Just want to be sure that everyone has the same understanding as we go through the legislative process. Thanks.

----- Replied Message Body -----

Date: 4-19-91 8:04am From: Fred Hansen:OD:DEQ

To: Stephanie Hallock: HSW: DEQ cc: division administrators: deq

Subj: AOI

In-Reply-To: Message from Stephanie Hallock: HSW: DEQ of 4-17-91

Your question gives me a chance to say something which in the speed of things I didn't say and which answers your question. I believe that what we propose to do and what each of you give me is what we feel the merits of the specific situation merit. Consequently, it is not a "compromise" which we give up something for something else in return. Rather, it is what we think is a reasonable action, based on merit. For example, Stephanie, in your case you suggested deleting or revising the 3 and 10 rule. I think this is a reasonable issue to have the advisory committee look at-not as a compromise but on the merits. As recall, we adopted the 3 and 10 rule as a way to pick up mixed solvents which might not be captured otherwise. Now that the Feds have adopted TCLP we effectively get the same result without two hoops for people to jump through or for our inspectors to know and understand. Whether this is sufficient or if a loophole is not captured by TCLP and which the 3 and 10 rule would catch is something that an advisory committee ought to review. We make no commitment about whether we will agree with a CAC recommendation or what we will do with it. And that is appropriate becausewe haven't seen the recommendation yet.

In a similar vein, I know when Lydia recommended putting the DO standard revision through a technical advisory committee that she had essentially come to that conclusion even before the issue was even raised by AOI. I know in this one it was real important to Lydia that since the proposed changes we were making it would have had the effect of relaxing the standard (actually more closely tracking actual DO levels so that we were not unecessarily high) we still maintained a higher level of environmental protection during the review process. I might add, from my standpoint, almost without regard to the issue of stringency, when we are proposing a change which we think relaxes the standard and many permit holders are coming to us with the exact opposite view, something is wrong. When there is this much of a fundamental differnce it says we are not communicating well at a technical level, and I believe a technical review group is the place to resolve it. The policy issue of how stringent is of course our call, but it should be argued on the

policy issues, not on whether 2+2=4 or 5.

I believe that this is how each of you approached what you sent me and what I relayed to AOI. I have to be in Salem this afternoon so I will not be able to brief you on what I said. I modified some of your recommedations to not go as far, for example MJD said we would ask ECAC to revisit "how clean is clean" and we would take that to the EQC. I am happy to ask ECAC to revisit (as we should be willing to do with any of our major policies) but I am unwilling to commit to take anything forward until we have seen the recommendation and agree with it or propose any appropriate modifications.

I will brief you on Monday at budget dry run.

Thanks for the very quick turnaround on all this stuff. It is essential to have as much lined up before we hit W & M as possible. he is

------ Replied Message Body

Date: 4-17-91 7:26am

From: Stephanie Hallock: HSW: DEQ

To: fred hansen:od, division administrators:deg

Subj: AOI

Sorry I had to leave before the discussion ended. Did you talk about an "all bets are off" piece of this if we don't get our fees, regardless of AOI support? Or, do we have to fulfill these commitments to AOI regardless of whether or not the legislature approves the fees?

Date: 4-17-91 8:04am

From: Michael Downs: ECD: DEQ

To: John Loewy: OD

cc: Division Administrators: DEQ

Subj: Response to AOI letter

With respect to the comment on page 3 that "ECD cleanup levels should be federal health based cleanup standards rather than based on background.", the proposed response is:

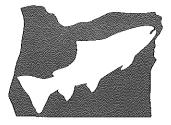
The Department commits to revisiting the issue of background with the Environmental Cleanup Advisory Committee (ECAC), and taking ECAC recommended changes to the cleanup standards to the EQC for action during the 1991-93 biennium.

With respect to the comment on page 5 that "This support is conditioned on DEQ's willingness to commit that the Hazardous Substances Cleanup Program will not expend less than 80% of the program budget on specific site-related activities;", the proposed response is:

The Department is already meeting this condition, and commits to continuing to meet this goal.

With respect to the remainder of the comments concerning Environmental Cleanup on page 5, they are already addressed by earlier commitments to be made by the Department in response to the comments on page 2.

Let me know if you need further information John.



April 20, 1991

Oregon Trout

Speaking out for Oregon's fish

P.O. Box 19540 • Portland, Oregon 97219 • (503) 244-2292

Environmental Quality Commission Department of Environmental Quality 811 S. W. 6th Av. Portland, OR 97204

Subject: Agenda Item F

EQC Meeting April 25, 1991

Dear Commissioners:

Oregon Trout is pleased to see that the department has now drafted rules for the implementation of its instream water right authority. Oregon Trout supports the department's request to hold public hearings to solicit comment on the draft rules.

After a cursory review of the proposed rules, it looks like alternative #3 would be the best avenue for the department to take. Oregon Trout looks forward to participating during the public comment period of this process.

Oregon Trout understands the reasons for the delay in getting draft rules written, and we are hopeful that the department will be able to respond in a more timely manner once the rules have been adopted. Its imperative that the department apply for instream water rights on all water quality limited streams at the earliest opportunity.

Sincerely,

Jim Myron

Regional Director

cc: Bakke

WaterWatch

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

APR 23 1951

OFFICE OF THE DIRECTUR





April 25, 1991

Neil Mullane Department of Environmental Quality 811 S.W. 6th Avenue Portland, OR 97204

Re: Rules for Establishment of Instream Water Rights for

Pollution Abatement, EQC Agenda Item F

Dear Mr. Mullane:

WaterWatch is a nonprofit environmental organization dedicated to promoting water policies for Oregon that provide the quality and quantity of water needed to support fish, wildlife, ecological values, public health and a sound economy. We support the DEQ's decision to move forward on rules for instream water rights for pollution abatement under the 1987 Instream Water Rights Act. It is important for DEQ to finally begin to protect the assimilative capacities of the State's rivers by linking water quality and water quantity through the establishment of instream water rights.

We offer two comments regarding the scope of the proposed rules. First, the rules should reflect the ultimate goal of applying for instream water rights on all waters of the state needing protection. DEQ should not rely solely on other agencies and the public to request rights for the "other waters" of the state. Second, the goal of the Clean Water Act is to eliminate discharges of pollutants into public waterways. However, until that goal is reached, DEQ must face the reality that it is the agency that is authorizing the discharge of millions of gallons of polluted effluent every year. DEQ's rules should reflect both the goal but also the reality. Instream rights should be requested to protect uses at existing discharge levels. Once target loadings are achieved, the instream water right can be adjusted accordingly.

We look forward to participating in the public comment period on these rules.

Sincerely,
Well Rusell
Karen Russell

Executive Assistant

c. Fred Hansen, Director
 Bill Huchison, Chair EQC
 Karl Anuta, NEDC
 Jim Myron, OT



County of Malheur

251 'B' STREET WEST • VALE, OREGON 97918

PUBLIC WORKS DEPARTMENT 473-5191

February 27, 1391

Department of Environmental Quality 811 SW. Cixth Avenue. Portland. OR 97204

RE: Jordan Valley Disposal Site

Permit No. 295

Mizadous & Alife Ali I. Design Department of Englanmenter Spaces

Arestings:

As part of our permit renewal for the above site, we are asking for a renewal of the variance to allow open burning there.

The Jordan Valley Disposal Site consists of a fenced 10 acre rectangular tract owned by Malheur County and located 1 mile north of the city of Jordan Valley. It is 0.4 miles west of Highway 95 and is almost entirely out of sight from the highway. It is operated jointly by the City of Jordan Valley and Malheur County.

A city employee unlocks the gate during open hours (Wednesdays and Weekends) but does not stay at the sight. He is also responsible for the burning (usually Weekly on Mondays). He is periodically reminded to exclude the materials not approved for burning. There have been no problems or complaints from the burning that I am aware of.

This site serves a small population of about 450 (375 within the city limits). Although open to all, the effective limit to the physical area served is probably no greater than 15 miles in any direction, including Idaho. There are no practical alternative landfills: Pickles Butte in Idaho is 60 miles away, Lytle Boulevard near Vale is 80 miles, and McDermitt is 100 miles. The continued acceptance of out-of-state waste at Pickles Butte is uncertain.

Although the waste volume here is small, it is still important that it be reduced by burning. Trench excavation is extremely difficult due to rock. Any means of extending the life of each trench is therefore very beneficial. There is also no squipment

Department of Environmental Quality February 27, 1991 Page 2

available from either the city or county to provide monthly, let alone daily, covering.

It is possible that the expected revised regulations in Subtitle D of the Resource Conservation and Recovery Act will change how we operate this site. However, until this occurs we ask that the burning variance be granted again. Thank you for your concideration of this request.

Simperely,

Jim Kembrhing

Jim Kimberling

Public Works Director



County of Malheur

251 'B' STREET WEST . VALE, OREGON 97918

PUBLIC WORKS DEPARTMENT 473-5191

February 27, 1391

Department of Environmental Quality 811 SW. Sixth Avenue Portland, OR 97204

RF: Juntura Disposal Site

Permit Mo. 272



Greetings:

As part of our permit renewal for the above site, we are asking for a renewal of the variance to allow open burning there.

The present Juntura Disposal Site is a fenced 5-acre parcel within a 40 acre county-owned tract. It is located 1 mile southwest of the Juntura community and Highway 20 and is visible from both. It is operated by a local advisory committee set up by the county.

One of the advisory committee opens the locked site to the public during Saturday afternoons only. This person also sees to the burning, which is done on an as-needed basis. There have been no problems or complaints from the burning that I am aware of.

This site serves an unincorporated community and the surrounding ranches. Estimated population involved is 200 and the physical area is probably no more than 15 miles in any direction. There are no practical alternative landfills: Burns is 60 miles away, Harper Transfer Station is 35 miles, and Lytle Boulevard near Vale is 65 miles.

There is no equipment available to provide weekly or monthly covering. Reducing the volume through burning extends the life of this site and minimizes the amount of material handling necessary.

Department of Environmental Quality February 27, 1991 Page 2

It is possible that the expected revised regulations in Subtitle D of the Resource Conservation and Pecovery act will change how we operate this site. However, until this occurs we ask that the burning variance be granted again. Thank you for your consideration of this request.

Sincerely,

Jim Kimberling

Public Works Director



County of Malheur

251 'B' STREET WEST . VALE, OREGON 97918

PUBLIC WORKS DEPARTMENT
472~5191

February 27, 1991

Department of Environmental Quality 811 SW. Sixth Avenue Portland, OR 97204

RE: McDermitt Disposal Site

Permit No. 310

Greetings:

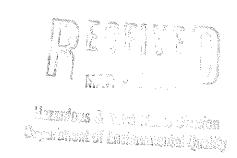
As part of our permit renewal for the above site, we are asking for a renewal of the variance to allow open burning there.

The McDermitt Disposal Site is a 30 acre tract owned by the BLM and leased to Malheur County. It is located 1 mile north of McDermitt, Nevada, and 0.3 mile east of Highway 95. It is partially visible from the highway. McDermitt straddles the state line but most of it is in Nevada.

Although the site is fenced there is no access control, i.e., no gate and no attendant. The site is operated by the McDermitt Community Fund under a joint agreement between Malheur County, Humboldt County (Nevada), and the town of McDermitt. A local member of this Fund is responsible for the burning on an asneeded basis (usually several times each week).

This site serves a population of about 300 (mostly Nevadans) and an area of perhaps 10 miles in radius. There are no practical alternative landfills at the present time: Winnemucca in Nevada is 70 miles away, Jordan Valley is 100 miles, and Surns is even further.

There is no equipment available for daily covering at this site. A large part of the waste material comes from the McDermitt School and is mainly papers. Surring both reduces the volume considerably and practically eliminates litter problems.



Department of Environmental Ouslity February 27, 1991 Page 2

It is possible that the excepted revised regulations in Subtitle D of the Resource Conservation and Recovery Act will change how we operate this site. However, until this occurs we ask that the burning variance be granted again. Thank you for your consideration of this request.

Sincersly,

Jan Kimberling

Public Works Director

Oregon

AIr

Quality

CRITERIA AIR POLLUTANTS

/Particulate Matter

Sulfur Dioxide

Carbon Monoxide

/Ozone

Nitrogen Dioxide

Lead

NEW EMISSION STANDARDS FOR

HAZARDOUS AIR POLLUTANTS (NESHAPs)

Asbestos

Beryllium

Mercury

Radon

Benzene*

Vinyl Chloride*

Radio Nuclides*

*No applicable sources in Oregon

Key Features of The New Clean Air Act

Nonattainment 🛭

A new round of State Implementation Plans — Tightened controls to achieve a 15% reduction in total VOC emissions by November 15, 1996, and demonstration of compliance by specified deadlines.

Federal Implementation Plans and other sanctions if states fail to meet SIP obligations.

Tightened controls on existing industrial plants, and more plants subject to such controls — EPA to issue Control Technique Guidelines for many more industrial categories.

Tougher restrictions on new plants and expansions.

Transportation plans must conform with SIPs; new efforts to restrict vehicle miles travelled and to improve Inspection and Maintenance of autos.

Motor Vehicles and Clean Fuels

New rounds of tightened tailpipe emission standards.

Requirements to produce clean alternative fuels — methanol, ethanol, reformulated gasoline.

Fleet vehicle program to require use of clean fuels in many nonattainment areas.

On-board vapor recovery and evaporative emission controls.

Air Toxics

.189 designated substances to be regulated.

Maximum Achievable Control Technology (MACT) regulations for specific industrial categories.

Incentives for early achievement of 90% reductions.

Residual risk requirements can mandate further controls.

Accidental releases — new requirements for planning and preparedness.

Acid Rain 🛮

Controls designed to dramatically cut acid rain precursors — 10 million ton reduction in SO_2 emissions and 2 million ton reduction in NO_x .

Phase I controls for 111 coal-fired power plants beginning 1995.

Phase II controls on most power plants effective beginning 2000.

Market mechanisms allow trading in control credits to promote cost effectiveness.

Permits

New federally-required air permits for emission sources.

States to develop approved permit programs. Permit terms will specify emission limitations, schedules for compliance, monitoring, and reporting.

Permit fees payable annually of at least \$25 per ton of emissions.

Enforcement 🛭

EPA authorized to impose administrative penalties up to \$25,000 per day.

EPA investigators authorized to issue field citations with penalties up to \$5,000 per day.

Criminal felony sanctions for knowing violations, with fines up to \$250,000 per day, plus imprisonment.

Fines for knowing endangerment up to \$1 million per day.

NON ATTAINMENT AREAS

CARBON MONOXIDE	ACT ATTAINMENT DATE	SIGNIFIC & SOURCES
Portland-Vancouver Salem Grants Pass Medford Area Klamath Falls Area	December 1995 December 1995 December 1995 December 1995	Motor Veh cle Wood Stoves
OZONE		
Portland-Vancouver Metro Area	December 1993	Motor Vehicle & Industry
Salem	December 1993	Motor Vehicle, Industry, & Impact from Portland Area
<u>PM</u> 10		
Eugene-Springfield Grants Pass Medford Area	December 1994 December 1994 December 1994	Wood Stoves & Industry Wood Stoves & Industry Wood Stoves, Industry, & Slash Burning
Klamath Falls Area Oakridge LaGrande	December 1994 December 1994 December 1994	Wood Stoves Wood Stoves, Industry, Road Dust, & Slash Burning

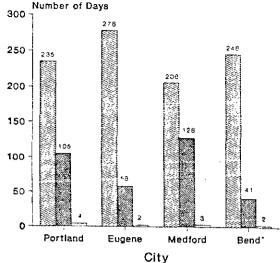
Table 3

Number of Days Exceeding Standards for Selected Cities
1984 through 1989

CITY	1984	1985	1986	1987	1988	1989	1990
	Fine Particulate (PM10)						
Bend	0	1	0	1	0 .	0	0
Eugene/Springfield	na	12	1	2	0	0	0
Grants Pass	na	na	na	3	0	0	0
Klamath Falls	na	na	na	22	28	<u>45</u>	18
La Grande	na .	na	<u>0</u>	1	5	2	1
Medford*	<u>5</u>	<u>13</u>	<u>2</u>	<u>5</u>	7	<u>6</u>	1
Pendleton	na	na	0	0 .	0	0	0
Portland*	0	0	1.	0	0	0	0
White City	na	16	2	<u>2</u>	<u>1</u>	<u>2</u>	0
the second secon	Carbon Monoxide						
Eugene/Springfield	0	1	0	O 100 100 m	0	0	0
Grants Pass	9	10	2	4:	2	1	1 .
Medford*	18	35	16	4	2	15	0
Portland*	2	1 .	٦.	1	1	2	0
Salem	0	4	0	0	0	0	0
٠.			Oze	one		-	ř
Eugene/Springfield	0	0	0	0	1	0	0
Medford	0	0	0	0	0	0	0
Portland*	2	2	3	1	2	0	4
Salem	0	0	0	na	na	na	na

^{*} Denotes combined data from multiple sites in area
Underlined values indicate years of annual standard violations
na = Data not available

1990 Air Pollution Index Values Summary



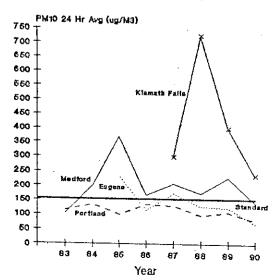
* Only Feb - Dec data

Category Good Good

Moderate Unhealthful

Figure 2

Ambient Particulate Trends in Selected Oregon Cities (Second Highest Day)



Aigure 3

Ambient Particulate Trends in Selected Oregon Cities (Annual Arithmetic Mean)

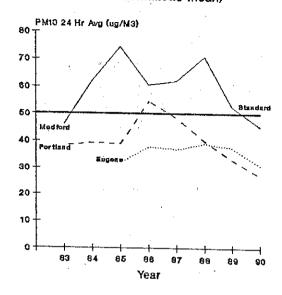


figure 5

Ambient Carbon Monoxide Trend in Selected Oregon Cities (Second Highest Day)

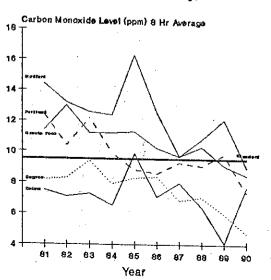
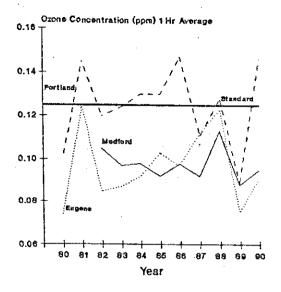


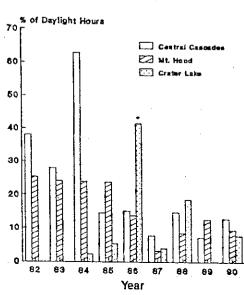
Figure 4

Ambient Ozone Trends in Selected Oregon Cities (Second Highest Day)

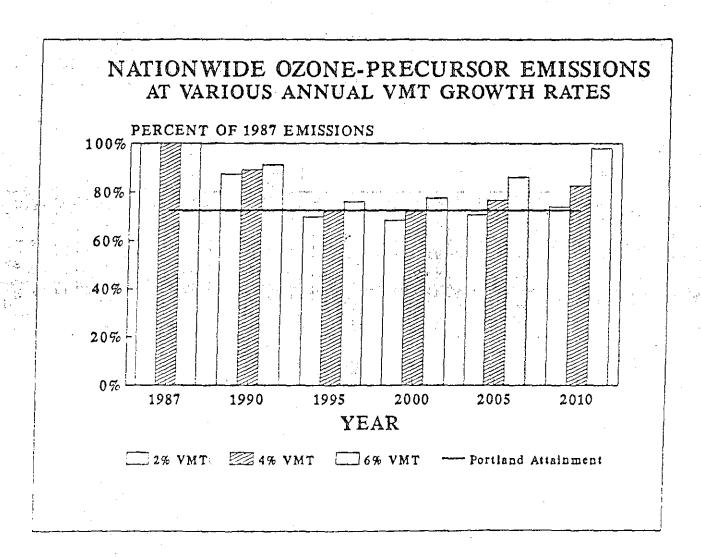


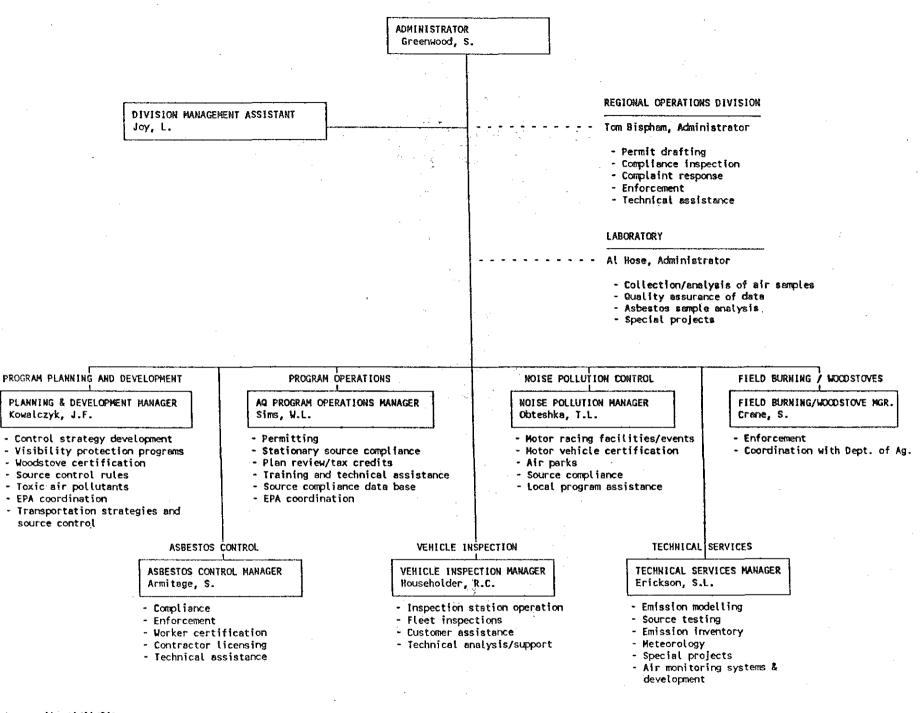
of gureu

Visibility Impairment Frequency July 4 - Labor Day Period



· Crater Lake Wildfires





COMPREHENSIVE AIR EMISSION FEE

Department of Environmental Quality

House Bill 2175

THE NEED

Air pollution continues to be a problem in many areas of Oregon—a threat to public health and the environment which will increase with anticipated population and economic growth. Further tightening of the existing traditional regulatory controls will be difficult, especially for significant non-industrial sources of air pollution such as woodstoves and motor vehicles. New and innovative approaches to reducing air pollution are needed to augment current regulatory controls.

THE PROPOSAL

House Bill 2175 addresses Oregon's present and future air quality problems through a non-regulatory, market-based incentive program. It would establish a comprehensive air pollution emission fee on contaminants from industry, residential wood heating, motor vehicles, forest slash burning and agricultural field burning. Revenue from the fees would be used to develop and lower the cost of less-polluting alternatives.

This comprehensive Emission Fee Program has the potential to reduce air pollution statewide by up to 40 percent within 5-10 years. At the same time, it would conserve energy and encourage orderly growth and development.

THE HIGHLIGHTS

The Emission Fee Program authorizes application of a \$25 per ton fee for air pollution from industry. The federal Clean Air Act of 1990 requires states to implement such a fee on industrial emissions. HB 2175 extends the fee concept to emissions from all other major sources of air pollution in Oregon.

HB 2175 does not specify the amount of the fee to be applied to each source. It requires the Environmental Quality Commission to develop fee schedules based on the amount of emissions produced and the potential environmental impact involved.

Both emission fees and revenues from those fees provide an incentive to reduce air pollution. Emission fees make the polluting activities more expensive, while fee revenues will be used to make alternative, less-polluting activities more available and affordable. People can decide for themselves whether to pay the fees or switch to less-polluting activities.

The table (see other side) shows the major sources of air pollution in Oregon and the percentage of statewide emissions each source produces. The approximate fees shown and projected revenue are based on average emission rates.

Source Category	% of Statewide · Emissions*	Approx. Fee (\$25/ton basis)	Total Annual Revenue
Motor Vehicles	36.1%	\$ 3 per vehicle yearly**	\$7.8 million
Forest Slash Burning	18.0%	\$16 per acre burned	\$3.6 °
Woodstoves	11.6%	\$ 3 per cord sold	\$3.3 *
Industry	5.7%	\$25 per ton emitted	\$2.7 "
Field Burning	2.4%	\$ 4 per acre burned	\$0.9 "

^{*}The remaining 26.2% of emissions are from a wide variety of smaller sources (for example, windblown dust), for which emission fees cannot be readily collected.

Eighty percent of the fees collected from a source category would be dedicated to funding air quality improvement programs for that category. The remaining fees would be pooled to fund the highest priority projects.

Examples of projects that may be funded include improvements in mass transit, development of alternative fuel supplies and vehicle conversions, subsidies of power-plant construction and operation to burn forest slash and grass-straw residue, subsidies for weatherization and upgrading of traditional residential wood-heating systems, and financial assistance to local governments to operate wood-heating emissions reduction programs.

Air quality improvement projects would be selected for funding by the Environmental Quality Commission based on recommendations from an advisory board composed of inter-agency representatives and the general public.

The Emission Fee Program would be evaluated every two years by DEQ on its effectiveness in reducing emissions and by the Executive Department on its overall effectiveness in meeting program objectives.

^{**}The fee on motor-vehicle emissions would be statewide. A supplemental fee is proposed for areas which violate ozone pollution standards (Portland only, at the present time). The supplemental fee is needed to change driving habits and fund needed transit programs in major urban areas.



April 23, 1991

1120 S.W. 5th Avenue Room 400 Portland, Oregon 97204-1972 (503) 796-7740 FAX (503) 796-6995

> William W. Wessinger Environmental Quality Commission 1133 W. Burnside Street Portland, Oregon 97209

> > nam T. nolan

Dear Mr. Wessinger:

The Bureau of Environmental Services briefed the City Council on the proposed NPDES permit and draft Stipulation and Final Order regarding combined sewer overflows (SFO) on Tuesday, April 23. Council members were provided with the enclosed background information.

Commissioner Earl Blumenauer will be available at the EQC workshop Thursday to discuss the implications of the permit and SFO. I look forward to seeing you then.

Sincerely,

Mary T. Nolan

Director

MN:em Enc

eqcbkgnd.mn



CSO Briefing Book

Bureau of Environmental Services April 23, 1991



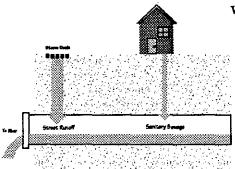
What is a CSO?

The letters stand for combined sewer overflow, defined as an event occurring when the combined sewer system is overwhelmed by excess rainwater and discharges or overflows directly to the receiving water.

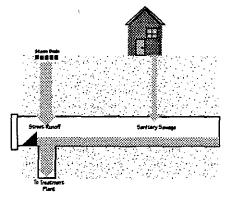
The combined sewer system is that part of Portland's sewer system that collects both sanitary sewage and storm water runoff in a single pipe. The combined sewers serve about 70% of the city's population, mostly in neighborhoods built before 1960. Sewers built since then have separate pipes for sanitary sewage and storm water. Only combined sewers

contribute to combined sewer overflows. Separated sewers convey all sanitary sewage to the wastewater treatment plant.

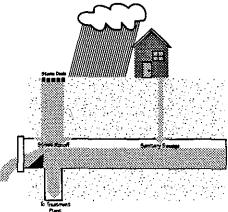
Receiving water is a regulatory term that describes the body of water that receives any type of pollution. Pollution sources include agricultural runoff, urban storm water, wastewater treatment plant effluent, industrial discharges, and combined sewer overflows. Portland's receiving waters include the Willamette and Columbia Slough for CSOs, the Columbia River for treatment plant effluent, and the Willamette, Columbia, slough, and Johnson, Fanno and Balch Creeks for storm water.



Before the 1950s, Portland's sewer system discharged street runoff and sanitary sewage directly into the river.



Since the 1950s, the combined sewer system has diverted street runoff and sanitary sewage to the treatment plant.



During periods of heavy rainfall, some of the combined sewage overflows into the river.

Why does Portland have a combined sewer system?

The combined sewer system dates back to the city's origins, when wooden pipes were built to quickly whisk sewage, rainwater, and the abundant horse manure out of sight, out of mind, and directly into the Willamette River. As the city grew, the wooden pipes were replaced by brick or concrete sewers, and the volume of sewage pouring into the river increased, along with a growing amount of industrial waste from canneries, pulp and paper mills, and slaughterhouses.

By the 1930s public outcry to eliminate this water pollution resulted in the formation of the first state sanitary authority in the country, and, shortly after World War II, construction of "interceptor" sewers began. These pipes paralleled the Willamette and slough intercepting the sewage that once poured into the river. The interceptors diverted the combined sewage to the city's wastewater treatment plant in north Portland.

In what was considered "state-of-the-art" technology at the time, city engineers utilized the existing combined system with the new interceptors. The interceptor lines were designed to hold three times the "average dry weather flow," a common engineering term which generally equals the average amount of sanitary sewage only. This capacity is adequate to carry the city's sanitary sewage as well as the storm water runoff for light rain-storms.

The pipes that originally emptied into the river were left in place to prevent heavy rainfall from overloading the system and causing raw sewage to flood basements and streets. If the combined sewer system's capacity is exceeded during intense rainfall, some of the combined sewage overflows directly

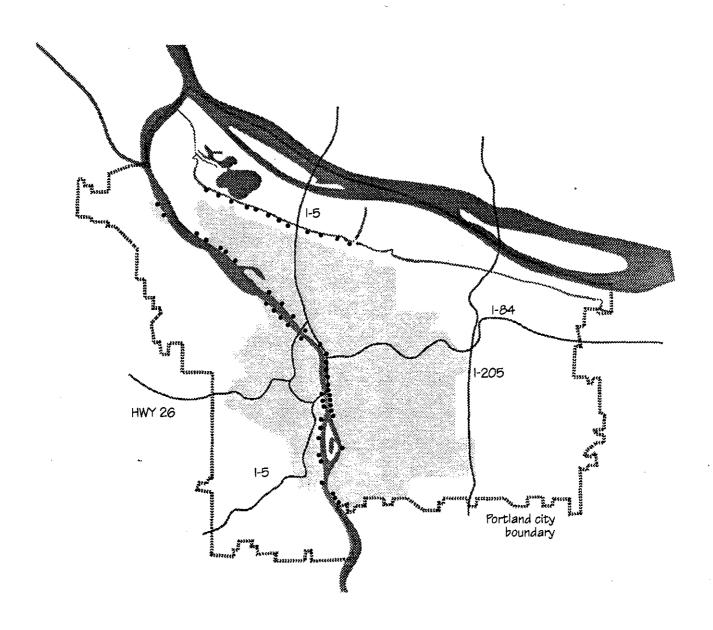
into either the Willamette River or Columbia Slough. These overflows typically contain more than 90% storm water and less than 10% untreated sewage.

Overflows are an integral part of the system. Design engineers assumed that since CSOs would typically occur during high winter river levels when recreational use of the river was low, they would not pose a significant pollution problem. Such combined sewer systems were considered to be the best technology available and are common in most large cities throughout the United States.

As Portland developed, more land was covered with buildings or paved over. The increased amount of impervious surface—area where water isn't able to percolate into the ground—causes a higher volume of rainwater to enter the sewer system and increases the frequency of CSOs. Today more people use the river throughout the year, and water quality is more important year-round.

While the precise affect on water quality from CSOs isn't well understood, we do know that bacteria levels increase near the sewer outfall pipes after an overflow event and floating debris cause aesthetic problems. To reduce those impacts, the discharge permit that regulates Portland's sewer system includes specific measures for the control and treatment of sewage from the 53 combined sewer outfalls discharging to the Willamette River or Columbia Slough. (See the map on the next page.)

Portland's Combined Sewer Outfalls



Combined sewer outfall

Area served by combined sewers

Why are CSOs just now becoming an issue?

Combined sewer overflows were not specifically addressed under the 1972 Clean Water Act, the federal legislation that drives water pollution control efforts. Without specific legislative language, regulatory direction, or federal funding, most cities have focused their efforts on more pressing water quality issues, such as providing secondary sewage treatment and controlling industrial discharges. Only in past few years have Federal and State regulatory agencies begun to provide guidance to municipalities on how to deal with CSOs.

The recent focus on CSOs is the next step in the natural evolution of pollution control. Over the past century we've gone from eliminating the direct dumping of raw sewage to primary treatment to secondary treatment and industrial controls. After CSOs are dealt with, control or treatment of storm water discharges is probably the next water quality issue to be addressed.

Oregon's own history of dealing with water pollution reflects this evolution. In the 1850s there were few people in Portland, the land was rich in natural resources, and most people believed that disposing of waste in the river was an acceptable practice that would do no harm. As the population increased and advancing technology added to the pollutant load, residents became more alarmed at the degradation of the environment.

A 1927 Portland City Club report described the Willamette as "ugly and filthy," and related workers' refusals to work along the river because the odors were so offensive. Sewage treatment was unheard of. The river's shores were home to slaughter houses, food processing plants, pulp and paper mills and other facilities creating tons of organic wastes—and industrial effluent went directly into the water. We simply overwhelmed nature's capacity to purify and protect itself.

After years of debate, including a gubernatorial veto of pollution control laws, Oregon citizens signed an initiative petition to place the *Water Purification and Prevention of Pollution Law* on the 1938 ballot. The law passed by a three to one margin.

By 1947, the first sewage treatment system on the Willamette was operating, and within 10 years, every river community had some type of treatment system, reducing organic wastes from sewage by at least 30 percent. By 1969, these plants had been upgraded and improved. Municipal waste treatment reduced sewage wastes by 85 percent.

With the first major hurdle passed, the state began looking at other pollution sources. A federal study indicated that pulp and paper mills created 70 percent of remaining organic pollution in the Willamette.

Water Pollution Control History

1850s sanitary sewage & rainwater runoff discharged to river 1930s
public
movement to
control water
pollution, state
sanitary
authority
formed

1950s construction of interceptors, primary treatment 1960s construction of separate storm and sanitary sewers in new neighborhoods 1970s
Clean Water Act,
McCall Willamette
River Cleanup,
secondary
treatment, control
of industrial
discharges

1990s CSO controls Stormwater controls

Why now, continued ...

A push from the federal government the Federal Water Quality Act—combined with vigorous local determination speeded Oregon's efforts to clean up its rivers. A 1967 Oregon law prohibited the discharge of wastes to public waters without a pollution control permit. Along with a permit, each recipient would commit to clean up of the waste source. Tax credits helped industries with their clean-up efforts, and state grants matched federal funds for municipal sewage treatment facilities.

The results have been dramatic. For example, an EPA report states that the salmon run at Willamette Falls improved from 79 in 1965 to 22,000 in 1973. Once again, the river became a center for human activity—fishing, swimming, boating, wildlife observation.

The 1972 Clean Water Act states its goal as the restoration of the biological and chemical integrity of the nation's waters, a return to the "fishable, swimmable" rivers, streams and lakes that our predecessors enjoyed. Reducing the pollution caused by CSOs is an incremental step toward that goal, one that was anticipated but has been delayed while other, more serious threats to water quality have been eliminated. Combined sewer overflows—one the last sources of untreated municipal sewage going into our waterways—are now receiving the most attention.

• What is Portland doing?

The City is currently preparing to enter into an enforceable agreement with the Oregon Department of Environmental Quality to dramatically reduce or, in many cases, eliminate the water quality impacts of CSOs in the Willamette River and Columbia Slough. This agreement, called the Stipulation and Final Order or SFO, includes a 20-year schedule with specific dates and CSO reduction targets. While the final details have yet to be worked out, the City is committed to the basic goals of the SFO and intends to implement a program to abate CSO impacts on water quality.

The City has already begun to reduce the volume of CSO discharge. In the past 5 years the City has spent \$32 million on sewer construction to alleviate the capacity problems that cause CSOs. Projects have included increasing the capacity of the interceptor system, partially separating portions of the

combined sewer system, and improving or rebuilding diversion structures to prevent blockages that could also cause overflows. Additional programs to provide pretreatment of industrial wastes further reduce the pollutant load and the impact on receiving waters when overflows do occur.

In the coming 2 years the City will spend \$28 million in additional improvements. The work includes separating troublesome sections of the combined sewer system, upgrading pumping stations and other facilities, building a wetland as a CSO treatment demonstration, and augmenting the flow of the Columbia Slough to improve water quality. Another \$2.3 million will go toward maintenance activities such as catch basin and sump cleaning that reduce the pollutant contribution from storm water runoff. (See the table on the next page.)

Combined Sewer Overflow Abatement Projects

Completed in the past five years

Project Effect

Rivergate Interceptor Add interceptor capacity
SE Relieving Interceptor Add interceptor capacity

Sullivan Pump Station Add capacity
Stormwater Pump Station

Relocation of Compost Bagging
NE 13th Ave - Phase 4
Partial separation
NI Portland Plant Police
Partial separation

N. Portland Blvd. Relief Partial separation
Diversion Operational Study

Diversion Modifications 20 diversion reconst.

Diversion Modifications 50 diversion improved

Miscellaneous Sump Constr. Separation
California Outfall Extension Near shore improvement

Cathedral Park Outfall Ext. Near shore improvement

Projects to being in FY 90/91 or FY 91/92

(Some projects will extend beyond FY 91/92)

Project Effect Total Cost: \$28 million

N. Vancouver Ave. Relief

Lents trunk relief

Wheeler Basin relief (phase 1&2)

NE 13th Ave. relief (5 & 6)

NE Alameda & 35th Pl. relief

NE 62nd & Hancock relief

Central Bus. District storm sewer

Partial separation

Partial separation

Partial separation

Partial separation

Partial separation

Sullivan Pump station Upgrade
Ankeny Pump Station Upgrade
Ramsey Lake Wetlands Demo

Maintenance Activities

Flow Augmentation

Total Cost \$2.3 million

Total Cost: \$32 million

Sewer cleaning Catch Basin cleaning Sump cleaning Street cleaning

Increased frequency of diversion inspection to once per week in 1990/91.

How does Portland compare to other cities with CSOs?

There are more than 1000 cities in the US with combined sewer systems and the accompanying CSO problem. Hampered by an absence of funding and little real knowledge as to the real impacts of CSOs, most are doing little or nothing. Some have begun the long process of reducing the water quality impacts of their overflows.

Under the terms of the draft SFO, CSOs in Portland would be reduced by about 99% at a probable cost in the range of \$500 million to \$1 billion. Overflow events would be limited to one event every 5 years in the winter and only a single overflow every 25 years during the summer months. Violations would be punishable by fines.

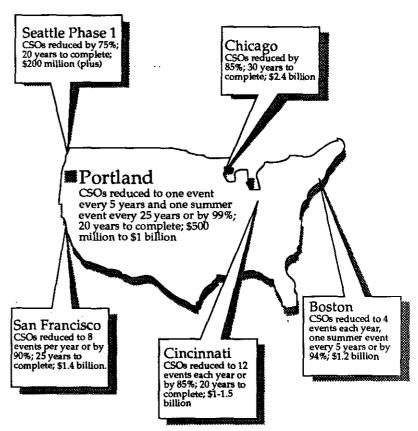
Seattle has recently embarked on a 2phase CSO control program. The first phase will reduce discharges by 75% over

the next 20 years; the second phase will further reduce overflows to a single event each year.

Boston Harbor receives combined sewage from about 66 CSO events each year. With full implementation of the Boston Harbor CSO control plan, that will be reduced to 4 events each year, only one of which may occur every 5 years in the summer. This represents a 93.9% reduction on CSOs at an approximate cost of \$1.2 billion. Portland's reduction under the draft SFO would be 90% greater than Boston's. If Boston were to meet the requirements of Portland's draft SFO, it would cost an additional \$3 billion.

Chicago started planning its CSO remediation efforts in the early 1970s. A system of massive tunnels will store 1.3 billion gallons of overflow sewage during storms and release it afterward for treatment. The project will reduce CSO pollutant loading by 85%, take a total of 30 years to complete, and cost approximately \$2.4 billion.

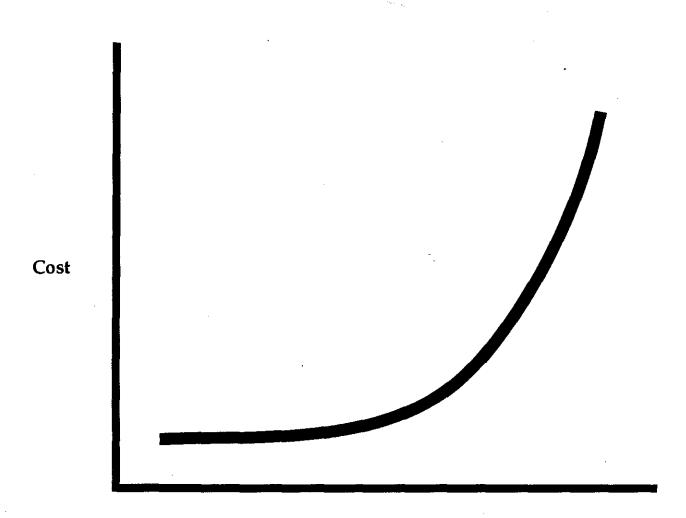
San Francisco's CSO control project to reduce the occurrence of overflows by about 90% is nearly complete. Planning began in the late 1960s, construction started in the early 1970s, and completion is scheduled for 1993. The total capital cost of the project is \$1.4 billion.



•What do we get for our money?

With the information currently available, it's impossible to determine the exact environmental benefits of eliminating CSOs completely. Sewer separation would channel all sanitary sewage to the treatment plant, but still allow polluted storm water runoff to enter the river. Adequate research on the water quality impacts of CSOs hasn't been done, and the extent of the problem seems to vary widely depending on local conditions.

As we make increasingly greater investments in CSO control, the return in environmental benefit becomes less for each additinal dollar spent. At some point a decision must be made as to the best use of the limited funds available.



Environmental Benefit

Attachments

- Oregon Department of Environmental Quality:
 A Chance to Comment On . . .
 City of Portland Stipulation and Final Order
- Draft SFO
- Regulatory Schedule for compliance with National Pollution Discharge Elimination System permit and draft SFO
- Bureau of Environmental Services written comments on the draft SFO

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

City of Portland Stipulation and Final Order

Notice Issued: March 25, 1991

Comments Due: April 19, 1991

What Is Proposed?

The Department of Environmental Quality (DEQ) is seeking public comment on a draft Stipulation and Final Order; a legal document to be signed by both DEQ and the City of Portland.

The purpose of the Order is to lay out the terms of an agreement that the City must follow to address discharges from combined sewers. These discharges may violate water quality standards. The Order requires the City to take steps to correct these violations within specific timelines. The Order also outlines penalties the City faces if it fails to comply.

What Is The Problem?

In Portland, household and industrial sewage mix with rainwater runoff in what is called a combined sewer system. This combined sewer system conveys the sewage to the Columbia Boulevard Wastewater Treatment Plant in North Portland. During rainfall, the combined sewer system's capacity is exceeded and some of the combined sewage overflows directly into either the Willamette River or Columbia Slough. These events are called "combined sewer overflows."

The combined sewer system serves about half of Portland and dates to the city's origins. Portland's first sewers--wooden pipes buried beneath the dirt streets of the city starting about 1860--carried both sanitary wastewater and storm runoff and emptied directly into the river. As the rivers became more polluted, residents demanded that the practice come to an end. Construction of additional sewer lines parallel to the river began in the late 1940s. These pipes "intercept" the sewage that once flowed untreated into the river and convey it to the treatment plant.

In what was considered the best technology of the time, city engineers used the existing combined system. The sewer pipes from the original system that emptied into the river--in Portland, 54 combined sewer outfalls and the overflow lines from the Ankeny and Sullivan pump stations--were left in place as a precaution against the storms that might overload the system.

The combined sewer overflows are causing water quality violations for fecal coliform bacteria in the Columbia Slough and are likely causing similar violations in the Willamette River.

RECEIVED

APR 4 1991



FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portantement Town old long distance charges from other parts of the state, call 1-800-452-4011.

What Is In the Stipulation and Final Order?

The draft Order outlines a time-frame for conducting studies and completing construction of facilities to correct the water quality problems caused by combined sewer overflows. The Order also lists penalties if the schedule is not met. The Order recognizes that until new or modified facilities are constructed and put into full operation, water quality violations will continue during rain storms.

In signing the order the City will agree to correct all of the water quality problems in 20 years, with cleanup of the Columbia Slough to be completed in 10 years. The draft schedule calls for:

- Interim control methods: lower-cost steps that can be taken soon to minimize some discharges.
 - Plan by December 31, 1992.
 - Implemented by October 1, 1994.
- Facilities plan by December 1, 1995.
- Solids and "floatables" removed from discharges to the Columbia Slough by October 1, 1996.
- Eliminate one-third of the discharges, including all from the Columbia Slough.
 - Begin construction of facilities by May 1, 1998
 - Complete construction by December 1, 2001.
- Eliminate another third of the discharges by December 1, 2006.
- Eliminate the remaining third of the discharges that violate water quality standards by December 1, 2011.
- Submit annual progress report to DEQ that includes work completed and work scheduled.
- Penalties
 - \$1,000 for each day of each violation of the Order's compliance schedule.
 - \$2,500 per outfall per day for each outfall that discharges and violates water quality standards beyond the date the outfall was scheduled to have been eliminated.

How To Comment

Comments on the Stipulation and Final Order should be addressed to:

Department of Environmental Quality
Water Quality Division
Attn: Barbara Burton
811 SW Sixth Ave,
Portland, OR 97204.

extended to April 19, 1991. A copy of the draft Stipulation and Final Order is available by calling 229-6504 or by writing to DEQ at the above address.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY, OF THE STATE OF OREGON,) STIPULATION AND FINAL ORDER) No. WQ-NWR-91-75) MULINOMAH COUNTY
Department,	j
v.) }
CITY OF PORTLAND,	
Respondent.	}
tili de la companya	•

- Quality (Department or DEQ) issued National Pollution Discharge
 Elimination System (NPDES) Waste Discharge Permit Number 3881-J
 (Permit) to the City of Portland (Respondent), pursuant to Oregon
 Revised Statutes (ORS) 468.740 and the Federal water Pollution
 Control Act Amendments of 1972, P.L. 92-500. The Permit authorizes
 the Respondent to construct, install, modify or operate waste water
 treatment control and disposal facilities (facilities) and discharge
 adequately treated waste waters into the Columbia River and
 Willamette River, waters of the state, in conformance with the
 requirements, limitations and conditions set forth in the Permit.
 The Permit expires on ________, 1996.
- 2. Respondent's sewage collection system is comprised in part of combined sewers designed to collect both sanitary sewage and storm runoff water. The combined sewer system is designed and intended to collect and transport all sanitary sewage to Respondent's sewage treatment plant during periods of dry weather;

^{1 -} STIPULATION AND FINAL ORDER (WQ-^C__)
^C(DOC NAME)(GSET.3 8/24/90)

however, during some periods of wet weather, the combined sanitary sewage and storm runoff entering the system exceeds the system's capacity to collect and transport sewage to the sewage treatment plant. At such times, the excess combined sanitary sawage and storm runoff are discharged through Combined Sewer Overflows directly to the Willamette River and Columbia Slough, waters of the state, without treatment. Respondent's system includes 54 Combined Sewer Overflows. In addition, Respondent owns and operates sewage pump stations, two of which, the Ankeny Pump Station and the Sullivan Pump Station, may not be capable of pumping all incoming combined sanitary sewage and storm runoff during periods of wet weather. At such times, combined sanitary sewage and storm runoff are discharged from the Ankeny and Sullivan Pump Stations directly to the Willamette River without treatment. The discharges of combined sanitary sewage and storm runoff from the Combined Sewer Overflows and the Ankeny and Sullivan Pump Stations (Discharges) may cause violations of Oregon's water quality standards for Fecal Coliform bacteria and possibly other parameters in the Columbia Slough and the Willamette River.

- 3. Since the adoption of water quality standards for the Willamette Basin (included in Oregon Administrative Rules 340-41-445) by the Environmental Quality Commission in 1976, Respondent has discharged combined sanitary sewage and storm runoff and may have caused violations of water quality standards.
- 4. DEQ and the Respondent recognize that until new or modified facilities are constructed and put into full operation,

Respondent may cause violations of the water quality standards at times.

- 5. Respondent presently is conducting or preparing to conduct studies and facilities planning in order to determine the quantity and quality of combined sanitary sewage and storm runoff discharged from its sewage system, and to determine appropriate methods and time schedules to eliminate violations of water quality standards.
- 6. The Department and Respondent recognize that the Environmental Quality Commission (Commission) has the power to impose a civil penalty and to issue an abatement order for violations of water quality standards. Therefore, pursuant to ORS 183.415(5), the Department and Respondent wish to settle those possible past violations referred to in Paragraph 3 and to limit and resolve the future violations referred to in Paragraph 4 in advance by this Stipulation and Final Order.
- 7. This Stipulation and Final Order is not intended to limit, in any way, the Department's right to proceed against Respondent in any forum for any past or future violations not expressly settled herein.

NOW THEREFORE, it is stipulated and agreed that:

- 8. The Commission hereby issues a final order:
- a. Requiring the Respondent to eliminate all Discharges that violate water quality standards from November 1 through April 30 except during storms greater than or equal to a storm with a five year return frequency and to eliminate all Discharges that violate

^{3 -} STIPULATION AND FINAL ORDER (WQ-^C__)
^C(DOC NAME) (GSET.3 8/24/90)

water quality standards from May 1 through October 31 except during storms greater than or equal to a storm with a twenty-five year raturn frequency, in accordance with the following schedule:

- (1) By no later than December 31, 1992, the Respondent shall submit the results of a study to characterize Combined Sewer Overflows, as described in the Respondent's Permit;
- (2) By no later than December 31, 1992, the
 Respondent shall submit a plan including a schedule for Phase 1 and
 Phase 2 interim control methods to be used to minimize water quality
 violations until such time as final compliance is attained;
 - (3) By no later than October 1, 1994, the Respondent shall implement Phase 1 interim control methods as agreed to by the Respondent and the Department;
 - (4) By no later than December 1, 1994, the Respondent shall submit a draft facilities plan to the Department, as described in Respondent's Permit;
 - (5) By no later than December 1, 1995, the Respondent shall submit to the Department a final approvable facilities plan;
 - (6) By no later than October 1, 1996, the Respondent shall remove all large solids and floatables from discharges to the Columbia Slough;
 - (7) By no later than December 1, 1997, the Respondent shall submit final engineering plans and specifications for construction work required to comply with Section 8(a)(10);

^{4 -} STIPULATION AND FINAL ORDER (WQ-^C__)
^C(DOC NAME) (GSET.3 8/24/90)

- (8) By no later than December 1, 1997, the Respondent shall implement Phase 2 interim control methods as agreed to by the Respondent and the Department;
- (9) By no later than May 1, 1998, the Respondent shall begin construction required to comply with Section 8(a)(10);
- (10) By no later than December 1, 2001, the Respondent shall eliminate discharges that violate water quality standards, subject to the storm return frequencies specified in Paragraph 8a of this Order, at 20 of the CSO discharge points, including all discharges to Columbia Slough, consistent with the facilities plan approved by the Department;
- (11) By no later than December 1, 2001 the
 Respondent shall submit final engineering plans and specifications
 for construction work required to comply with Section 8(a)(13);
- (12) By no later than May 1, 2003 the Respondent shall begin construction required to comply with Section 8(a)(13);
- respondent shall eliminate discharges that violate water quality standards, subject to the storm return frequencies specified in Paragraph 8a of this Order, at 16 of the remaining CSO discharge points, consistent with the facilities plan approved by the Department;
- (14) By no later than December 1, 2006 the Respondent shall submit engineering plans and specifications for construction work required to comply with Section 8(a)(16);

- (15) By no later than May 1, 2008, the Respondent shall begin construction required to comply with Section 8(a)(16);
- (16) By no later than December 1, 2011, the Respondent shall eliminate discharges that violate water quality standards, subject to the storm return frequencies specified in Paragraph 8a of this Order, at all remaining CSO discharge points, consistent with the facilities plan approved by the Department;
- (17) By no later than September 1 of each year that this Order is in effect, the Respondent shall submit to the Department an annual progress report on efforts to minimize and eliminate discharges that violate water quality standards. These annual reports shall include at a minimum work completed in the previous fiscal year and work scheduled to be completed in the current fiscal year.
- b. Requiring Respondent to comply with all the terms, schedules and conditions of the Permit, except those modified by Paragraph 8(a) above, or of any other NPDES waste discharge permit issued to Respondent While this Order is in effect.
- c. Requiring Respondent to demonstrate that each discharge is in compliance with water quality standards, by a means approved by the Department, within twelve months of the scheduled date when compliance is required in this Order. Nothing in this paragraph prevents the Department from enforcing this Order during the twelve month demonstration period.
- d. Requiring Respondent to identify each discharge that is converted to a storm sewer discharge only.

^{6 -} STIPULATION AND FINAL ORDER (WQ-^C__)
^C(DOC NAME) (GSET.3 8/24/90)

- e. Requiring Respondent, in the event that Respondent chooses to retain a Discharge with any connected sanitary wastes, to apply for a modification of Respondent's permit requesting a waste load increase and appropriately sized mixing zone. Nothing in this paragraph shall affect the Department's or the Commission's discretion over granting such a request.
- f. Requiring Respondent, upon receipt of a written notice from the Department for any violations of the Stipulation and Final Order, to pay the following civil panalties:
 - (i) \$1,000 for each day of each violation of each provision of the compliance schedule set forth in Paragraph 8(a).
 - (11) \$2,500 per outfall per day for each CSO outfall for which Respondent fails to demonstrate compliance with water quality standards as specified in 8(c). Discharges that are listed and regulated in Respondent's Permit as may be allowed in 8(e) shall not be subject to stipulated civil penalties under the terms of this Order.
- 9. If any event occurs that is beyond Respondent's reasonable control and that causes or may cause a delay or deviation in performance of the requirements of this Stipulation and Final Order, Respondent shall immediately notify the Department verbally of the cause of delay or deviation and its anticipated duration, the measures that have been or will be taken to prevent or minimize the delay or deviation, and the timetable by which Respondent proposes

^{7 -} STIPULATION AND FINAL ORDER (WQ-^C__) ^C(DOC NAME) (GSET.3 8/24/90)

to carry out such measures. Respondent shall confirm in writing this information within five (5) working days of the onset of the event. It is Respondent's responsibility in the written notification to demonstrate to the Department's satisfaction that the delay or deviation has been or will be caused by circumstances beyond the control and despite due diligence of Respondent. If Respondent so demonstrates, the Department shall extend times of performance of related activities under the Stipulation and Final Order as appropriate. Circumstances or events beyond Respondent's control include, but are not limited to, acts of nature, unforeseen strikes, work stoppages, fires, explosion, riot, sabotage, or war. Increased cost of performance or consultant's failure to provide timely reports shall not be considered circumstances beyond Respondent's control.

- above, which are expressly settled herein without penalty,
 Respondent and the Department hereby waive any and all of their
 rights to any and all notices, hearing, judicial review, and to
 service of a copy of the final order herein. The Department
 reserves the right to enforce this order through appropriate
 administrative and judicial proceedings.
- 11. Regarding the schedule set forth in Paragraph 8(a) above, Respondent acknowledges that Respondent is responsible for complying with that schedule regardless of the availability of any federal or state grant monies.

- 12. The terms of this Stipulation and Final Order may be amended by the mutual agreement of the Department and Respondent.
- 13. Respondent acknowledges that it has actual notice of the contents and requirements of the Stipulation and Final Order and that failure to fulfill any of the requirements hereof would constitute a violation of this Stipulation and Final Order and subject Respondent to payment of civil penalties pursuant to Paragraph 8(e) above.
- 14. This Stipulation and Final Order shall terminate 60 days after Respondent demonstrates full compliance with the requirements of the schedule set forth in Paragraph 8(a) above.
- of either the Willamette River or the Columbia River being designated as Water Quality Limited, the parties agree that Respondent's reductions in discharges pursuant to this agreement will be considered as contributing to Respondent's share of the obligation to achieve water quality standards.

RES	DQ	ND	EΝ	T

Date	(Name)(Title)
	DEPARIMENT OF ENVIRONMENTAL QUALITY
Date	Fred Hansen, Director
	FINAL ORDER
IT IS SO ORDERED:	
COMMISSION	ENVIRONMENTAL QUALITY
Date	Fred Hansen, Director Department of Environmental Quality Pursuant to OAR 340-11-136(1)

Regulatory Schedule

(numbers refer to compliance elements on chart)

Draft NPDES permit compliance items

- Sludge management plan—determines how sewage sludge, a byproduct of the wastewater treatment process, will be disposed of.
- 2-3. Bioassay plan and sampling—provides testing of the impacts of wastewater treatment plant effluent on microorganisms.
- 4-5. CBWTP outfall plan—determines the characteristics of Columbia Boulevard Wastewater Treatment Plant outfall effluent under different dilution conditions and provides data on the outfalls' ability to comply with proposed water quality standards.
- 6. Triangle Lake groundwater monitoring plan—provides a structure to assess the impacts on groundwater from Triangle Lake, the sludge storage lagoon used by the Columbia Boulevard Wastewater Treatment Plant.
- 7. List sewage discharge points—provides a complete listing of all discharge points, including but not limited to CSO outfalls, where raw sewage may enter state waters and the circumstances under which such a discharge may occur.
- 8. Prepare public notification plan—provides a mechanism to alert people using the Willamette River and Columbia Slough to the occurrence of untreated sewage discharges and a system to determine the extent and duration of potentially unhealthful conditions caused by such discharges.
- 9-10. CBWPT compost site wells—determines whether existing groundwater monitoring wells at the Columbia Boulevard Wastewater Treatment Plant's compost storage site are usable and requires new wells if they are not.
- 11. CSO characterization—provides a model to predict the quantity and quality of CSO discharges and analyzes the content of those discharges.
- CSO mixing zone analysis—evaluates the size of mixing zone necessary for CSO discharges to meet water quality standards.
- 13-14. Final and draft CSO facilities plans—provides a plan to abate the water quality impacts of CSO discharges.
- 15-16. Final and draft TMDL compliance plans—provides a plan to comply with Total Maximum Daily Load (waste load allocations) provisions for the Columbia Slough.
- Implement Triangle Lake monitoring plan—implements groundwater monitoring plan described above in #6.

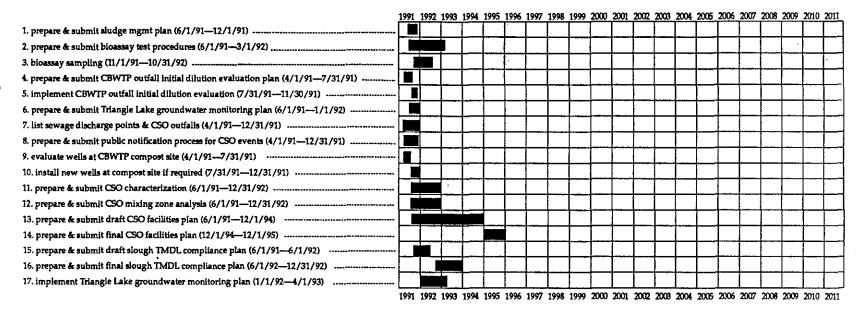
Draft SFO compliance items

- 1. CSO characterization—same as NPDES # 11.
- 2-3, 8. Phase 1 and 2 interim control plans—provides a schedule for and implements interim controls to minimize water quality violations until final compliance is attained.
- 4-5. Draft and final CSO facilities plans—same as NPDES #13-14
- Remove floatables and large solids from slough eliminates such polluitants from CSO discharges to the Columbia Slough.
- 7,9,10. Engineering and construction plans, 20 CSOs—provides final plans to construct CSO control facilities at 20 CSO outfall sites, including the 12 on the Columbia Slough; begins construction; eliminates water quality violations from these outfalls.
- 11,12,13. Engineering and construction plans, 16 CSOs—provides final plans to construct CSO control facilities at an additional 16 CSO outfall sites; begins construction; eliminates water quality violations from these outfalls.
- 14,15,16. Engineering and construction plans, remaining CSOs—provides final plans to construct CSO control facilities at the remaining 16 CSO outfall sites; begins construction; eliminates water quality violations from these outfalls.

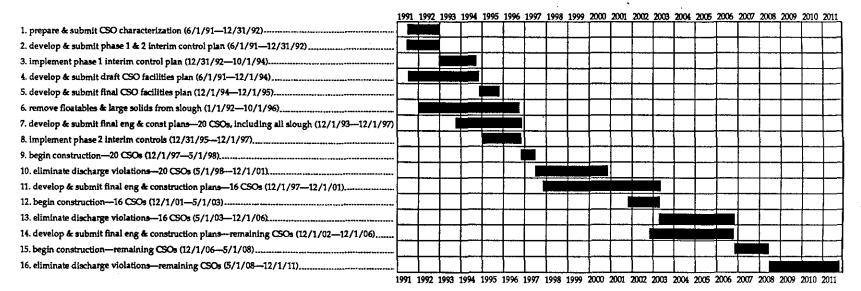
REGULATORY SCHEDULE

for compliance with draft NPDES permit & draft SFO

NPDES



SFO



Note: Compliance element start dates are based on engineer's estimates





April 19, 1991

1120 S.W. 5th Avenue Room 400 Portland, Oregon 97204-1972 (503) 796-7740 FAX (503) 796-6995

Room 400 Ms. Barbara A. Burton
and Oregon Manager, Municipal Wastewater
97204-1972 Oregon Department of Environmental Quality
13) 796-6995 811 SW 6th Avenue
Portland, OR 97204

Subject: Draft NPDES Permit and Stipulation and Final Order

Dear Ms. Burton:

The City of Portland has a strong commitment to improving the water quality of the City's rivers and streams. We recognize that our rivers and streams weave through the fabric of life in the City and constitute one of our most important resources. We also recognize that some of our waterways, in part because of poor water quality, detract from, rather than enhance, the lives of our citizens. We hope and trust that these waterways can be improved to provide multi-use recreational opportunities and improved fish and wildlife habitat, and, as a result, make Portland a more vibrant and liveable city.

In addition to its commitment to water quality, the City has a commitment to its citizens to spend their money efficiently and effectively. We need sufficient flexibility to find and implement solutions to the combined sewer overflow (CSO) problem that will improve water quality without unnecessary or wasteful expenditures.

Controlling pollution from combined sewers is just one facet of improved water quality. The rivers and streams of Portland have other water quality problems that will not be solved by controlling or eliminating combined sewer overflows. The City recognizes this and continues to improve the treatment performance and reliability at our treatment plants, improve Johnson Creek through the combined efforts of the Corps of Engineers, the

Barbara A. Burton, DEQ April 19, 1991 Page 2

Bureau of Environmental Services and concerned citizens, and improve our collection system and pump stations to reduce bypasses and spills. The City is also an active supporter of DEQ's Willamette Basin planning process and the Columbia River Bi-State Study in recognition that water quality problems do not stop at jurisdictional boundaries. The City feels that this comprehensive approach to improving waterways, as embodied in our Clean River Program, is the key to successful and well supported programs.

Please find enclosed the City's specific concerns and comments regarding the draft NPDES permit and the draft Stipulation and Final Order associated with that permit. I have also enclosed the City's response to some of the issues raised at the public meetings DEQ held on March 19 and March 25. The City acknowledges the legitimacy of many of the concerns expressed at those meetings, but feels these concerns should be placed in the context of the complex water quality problems that face the City.

Thank you for your efforts in equitably resolving this complex issue and for your consideration of these comments. CSO abatement will require one of the largest public works projects ever undertaken by local government in the history of Oregon. It is important that all parties recognize the enormity of this project and the importance of careful planning and a cooperative, productive approach to solving this complex problem.

Very truly yours,

Mary T. Nolan

Director

RBE:em Enclosures

burton.rbe

CITY OF PORTLAND'S COMMENTS

REGARDING

DRAFT NPDES PERMIT App. No. 998767

GENERAL COMMENTS

The draft permit received for comment did not include general conditions. It is assumed that the general conditions proposed on January 18, 1991 will become part of the permit and in response to the comments submitted by the City of Portland February 22, 1991, will include Section B.4. <u>Upset</u>, and Section B.5. <u>Treatment of Single Operational Upset</u>. Also, definitions included in the general conditions are assumed to be operative for the proposed permit and following comments. This specifically applies to the definition of Bypass [Section B. 3.a(1)], included in the proposed General Conditions.

A draft of the "NPDES Waste Discharge Permit Evaluation" dated March 28, 1991 was received by the City at the informational meeting held March 19, 1991. If this was intended to satisfy the requirements of a fact sheet (40CFR 123.25(a) 27), 124.7, and 124.56, it seems inadequate, specifically with regard to summarizing the basis for draft permit conditions "including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40CFR 124.9 and 40CFR 124.8 (b)(4).

SCHEDULE A

"Discharge Limitations," Section 1.a.(1) and 1.a.(3): Mass limits should not be included as a discharge limit. We are in agreement that DEQ should move toward water quality based effluent standards and support DEQ in these efforts. If DEQ is going to establish water quality based effluent standards, they should be based on scientifically developed wasteload allocations. Until adequate information is available on which water quality based standards can be developed, limits should include only technology based effluent concentrations. As demonstrated in the proposed Williamette Basin Study and the Columbia Slough Study, the City is willing to work cooperatively in development of information on which to base these standards.

Additionally, if the total maximum daily load (TMDL) is

determined, and appropriate wasteload allocations are imposed, variations should be permitted consistent with the

statistically derived variations as per the technical support document for "Water Quality Based Toxics Control."

"BOD-5," Section 1.a.(1)(a): A technical advisory committee was appointed by DEQ to develop and recommend guidelines by which BOD limits might be expressed as CBOD. This was in response to the fact that many control authorities have concluded that use of CBOD limits offer an improved measure of effluent impact on the receiving streams. The City of Portland concurs with that conclusion, and we encourage DEQ to consider the alternative of CBOD effluent limits, preferably upon complete consideration of the recommendations of the Technical Advisory Committee.

"Removal Efficiency," Section 1.A.(2)(b): The proposed BOD and TSS removal efficiency requirements are apparently based on a review of discharges since 1988 as presented in the evaluation document. This time frame represents relatively dry years. Achieving the proposed required removal efficiencies may be unreasonable in a wet year, particularly with the concurrent mandate in the Stipulation and Final Order to "minimize and eliminate [CSO] discharges that violate water quality standards."

"Stormwater Flows," Section 1.a.(3): As stated above, mass limits are inappropriate, especially for stormwater induced flows in view of the above requirement to minimize CSO impacts. It is recommended the following language be substituted:

"When, because of Storm Water flows, the total flow entering the treatment facility exceeds 100 MGD, the percentage of BOD5 and suspended solids removed by the treatment facility may be less than 85%. During these periods, the treatment facility shall be operated as efficiently as practicable."

"Chlorine and pH parameters," Section 1.a.(2)(a) and (c): Chlorine and pH exceedences would violate this limit only if in excess of the time limit defined in 40CFR 401.17; namely "(1) the total time during which the pH values are outside the required range or pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (2) no individual excursion from the range of pH values shall exceed 60 minutes duration." This definition should be included by reference for clarity.

"Sullivan/Ankeny Discharges," Section 1.d.: The City is already under a compliance agreement to improve these stations and bring them up to the required standard <u>effective</u> <u>January 31, 1993.</u> Consistent with that Agreement,

section 1.d.(1) should be revised to read "After January 31, 1993, Discharges to State waters from Ankeny and Sullivan..."

SCHEDULE B

"Influent - flow meter calibration," Section 1.a.: A definition should be supplied explaining the term "verification" as used or alternatively, provide a citation or reference to a method.

"Quantity Chlorine Used," Section 1.b.: Quantity of chlorine used is not a performance parameter. No justification is given for requiring the quantity of chlorine used. If reporting is required, it should be made clear whether this is chlorine used for effluent disinfection only or total chlorine consumed. Fecal coliform monitoring and limits are sufficient to measure disinfection effectiveness without reference to chlorine usage.

"Toxics Removal," Schedule 1.b.: A reference citation, definition, or protocol to be used for calculating removal rates when the analysis shows non-detect on the discharge is needed.

"Toxics Removal" Note 4: The procedure specified for total plant removal rates calculated from annual averages does not appear valid. Removal rates should be calculated by matching pairs of numbers obtained over the year and subsequently averaged.

"Volatile solids reduction," Section 1.c., Note 7: Calculating a reduction for each digester and each withdrawal line seems unnecessarily detailed. Since these are complete mix systems, calculation should be from beginning to end of process for anaerobic digesters (see EPA "POTW" Sludge Sampling Guidance Document" 8/89). This would also be consistent with proposed 503 Technical Standards where:

% Volatile Solids Reduction = (MI-MG) x 100/MI , where MI=mass of volatile solids prior to digestion MG=mass volatile sludge solids after digestion

"Reporting Procedures," Section 2, para. 2: Monitoring reports should not include the specific location of sludge disposal. As a memorandum item, the current summary indication of quantity and method of use of sludge removed from the treatment facility is informative. However, site locations and related information is part of Sludge Management Plan reporting requirements. Requiring similar information on DMR's is redundant and excessive.

It is assumed that equipment breakdowns related to bypasses only are "applicable." It would be more clear to require: "...a report of equipment breakdowns that resulted in bypasses." That is, bypasses as defined by January 18, 1991, proposed General Conditions.

SCHEDULE C

"Sludge Management Plan," Section 1.: A Sludge Management Plan submitted on March 5, 1987, was approved by the Department on May 18, 1987. Approval for specific land application sites has also been received. Therefore, this compliance requirement has already been satisfied. A provision for DEQ initiating requests for Sludge Management Plan revisions could be part of Schedule D, Section 1.

"Bioassay," Section 2.c.: No explanation or rationale was given for the testing frequency established in Table 1 of the Evaluation. Given the considerable expense of Bioassay. Testing; after an initial testing period, monthly testing should not be required, unless there is an indication of toxic impacts. Timing and frequency of subsequent tests should be related to a profile of conditions and results of testing during the initial assessment period.

"Outfall evaluation," Section 3.: Outfall 002 is only used as a supplemental discharge point under conditions of extreme wet weather, high flows and high river levels. Modeling this outfall under the low-flow conditions proposed provides no useful information. If use of this outfall were to be revised as a result of a CSO or stormwater control strategy in the future, an evaluation of such impacts could be conducted at that time. Therefore, the evaluation of dispersion, mixing and dilution of effluent should be required to be performed only on outfall 001.

Although not defined at this point, the magnitude of this evaluation will require funding, contracting and associated scope definition, competitive selection process and execution after receipt of written approval by the DEQ staff. Therefore, requiring submittal of the evaluation results by November 30, 1991, is not reasonably achievable. These results should be due a minimum of six months after receipt of DEQ plan approval. If it is appropriate to conduct instream studies during the low flow conditions stipulated, this should also be accounted for in the performance schedule.

Section 8.c. References to Section 8.a. and 8.b should be corrected. (The draft erroneously referenced section 7).

CITY OF PORTLAND'S COMMENTS

REGARDING

DRAFT STIPULATION AND FINAL ORDER No. WQ-NWR-91-75

INTRODUCTION

The City of Portland is committed to improving water quality in the Willamette River, Columbia Slough and the other streams that flow through Portland. The City recognizes that combined sewer overflows contribute to water quality problems in the Willamette River and the Columbia Slough and that a CSO control program is necessary to improve water quality.

The Oregon Department of Environmental Quality's draft Stipulation and Final Order would require extremely high levels of combined sewer overflow control and would establish an ambitious schedule for solving Portland's combined sewer problems. Although recognizing the importance of addressing Portland's CSO problem, the City has some concerns regarding the requirements of the draft Stipulation and Final Order. These concerns are detailed below.

PROPOSED IMPLEMENTATION SCHEDULE

The proposed 20 year implementation schedule is very ambitious and would be difficult to achieve under the best conditions. The magnitude and cost of the facilities required to comply with the draft SFO will severely challenge the resources of the community.

The following factors will make achieving the proposed schedule difficult or impossible:

• The technology to achieve the high level of disinfection necessary to meet the SFO requirements is not well developed. Pilot testing of treatment alternatives will be required to demonstrate treatment effectiveness. Proper development and completion of pilot testing programs is a lengthy process. The City will have to move very quickly on development of a pilot testing program to ensure effective input into the implementation of the CSO control plan. Notwithstanding the City's interest in moving quickly, much of the scientific and technical development necessary to

satisfy the proposed implementation schedule simply cannot be hurried.

- The siting of CSO treatment and/or storage facilities will provoke debate regarding appropriate land-use. Land-use disputes are typically lengthy and are often resolved through court action. Such disputes, outside of the direct control of the City, could impact the schedule and extend the time necessary to achieve In addition, because much of the corrective compliance. work is near or in waterways subject to federal permitting, DEQ should consider that the recommended control strategy may be subject to federal Environmental Impact Statement requirements. This permitting process, designed to protect the public interest, is outside of the direct control of the City and would add significantly to the time necessary to achieve compliance.
- The combined sewer overflow control facilities will likely require a great deal of underground construction.
 Such construction is hampered in the Willamette Valley by the wet weather and the valley's soil.
- The City's ability to finance the CSO control program depends upon the development of a comprehensive financing plan that provides the bond holders with the assurance that rate increases will provide the cash flow necessary for the program. Some staging of capital costs is therefore essential to ensure availability of capital.
- The CSO control program will require considerable construction in highly developed urban areas. Compressing the schedule would amplify the disruption to the City; its traffic flow, commercial activities, residential neighborhoods, and recreation areas. A phased construction schedule will benefit the City's high standard for liveability during this massive public works project and minimize adverse side effects on air quality.

RECOMMENDED REOPENING LANGUAGE

The City of Portland recognizes that the Stipulation and Final Order, as drafted, can be amended over the duration of the CSO control program. The City feels that such provision for amendment is essential to allow adjustment of the SFO requirements as warranted by the development of new information. In addition to the existing language, the SFO should include specific dates or milestones that, upon

completion, warrant reevaluation of the requirements and schedule of the SFO. The City recognizes that reevaluation may result in more stringent treatment requirements and/or a more ambitious implementation schedule, if appropriate. The City insists that the public welfare is best served if reevaluation also may result in deletion of some proposed requirements or extensions of time limits for achieving them. The completion of the facilities plan is one milestone that should warrant reevaluation of the SFO requirements in light of what is technically feasible and the analyses of costs versus environmental benefit for various treatment alternatives.

The City therefore recommends adding the following language to paragraph 12:

"In addition, upon submission of the final approvable facilities plan pursuant to paragraph 8.a.(5), above, the Department shall review the timelines contained in paragraph 8.a. and shall revise them, if appropriate, as required by the final facilities plan; the development of new information in the course of complying with the requirements herein shall also trigger review and revision, if appropriate, of the timelines contained in paragraph 8.a."

RECOMMENDED CORRECTIONS AND LANGUAGE MODIFICATIONS

Page 1, paragraph 1 - To properly reflect DEQ's permitting policy, the City recommends that the following language be added to paragraph 1:

"Respondent's prior NPDES permit, issued on September 18, 1984, did not expressly identify the combined sewer overflow discharge points that are part of the sewer system. Prior to the development of the Department's final draft 'Oregon's Strategy for Regulating Combined Sewer Overflows (CSOs)' on February 28, 1991, as a matter of policy the Department did not always list CSO discharge points in an NPDES permit but, in many instances, issued permits for an entire sewer system with full knowledge of the existence of the CSO discharge points. EPA'S Region 10 office approved the issuance of such permits. Respondent's 1984 NPDES permit is a permit for the sewer system, which includes CSO outfalls."

Page 1, paragraph 2 - Sullivan Pump Station only provides lift to the existing east side interceptor system and not combined trunk flows. Overflows at the Sullivan Pump Station result only from equipment malfunction or inadequate pump performance and should be termed by-passes, not planned

combined sewer overflows.

It is unlikely that overflows from Ankeny Pump Station and by-passes from Sullivan Pump Station cause violations of the fecal coliform standard in the Columbia Slough which is six to seven miles downstream. The City recommends that reference to the Columbia Slough with regard to the two pump stations be eliminated.

Page 3, paragraph 6 - The City recommends adding the following language to Paragraph 6:

"This action by the Department constitutes diligent prosecution of all violations that may have occurred prior to the effective date of this Order. In light of changes in United States EPA and Departmental policy governing permitting and evaluation of CSO impacts on water quality, imposition of a civil penalty at this time would not be appropriate."

Page 3, Paragraph 8a - Although the City endorses incorporation of the concept that there are storms that will exceed the capacity of any storm water collection and treatment system, the City does have concerns with the language proposed.

- The more appropriate place for the concept of return frequency may be in the development of water quality criteria and water quality standards that consider subclasses of uses or allow excursions beyond either median or mean values. DEQ should pursue development of water quality criteria that recognize the statistical variability inherent in storm driven water quality problems while protecting beneficial uses.
- The draft SFO would allow exceedances of water quality standards on a long term allowable frequency basis as follows:
 - a. One exceedance in 5 years during the winter season (November 1-April 30)
 - b. One exceedance in 25 years during the summer season (May 1- October 31).

These criteria are extreme by any measure and the City has concerns that meeting these criteria will have a very high cost with little incremental improvement in water quality. Although the absolute impact and costs of meeting these requirements cannot be refined until the development of the facilities plan, some estimate of the impact of these requirements can be made based on

the limited information currently available.

Based on data presented in the Columbia Slough Planning Study, the existing CSO frequency in the Columbia Slough is approximately 20 events per year in the summer period and approximately 50 events per year in the winter. This totals to an overflow frequency of approximately 70 events per year. These estimates will probably not change significantly as a result of the current CSO modeling work. If it is assumed that each overflow resulted in an exceedance of receiving water quality standards, the requirements of the SFO would result in the following reductions in existing overflow frequency:

Summer (one event in 25 years) = 99.8% reduction Winter (one event in 5 years) = 99.6% reduction Overall (six events in 25 years) = 99.7% reduction

These are extreme levels of control and would require the construction of facilities with enormous storage volumes and/or treatment capacities that would be used very infrequently.

Although the City recognizes that what is being done in other parts of the country may not be appropriate for Oregon, it is of some interest to see how the level of control required in the draft SFO compares to other CSO programs that have been initiated.

Boston - The current CSO frequency for Boston Harbor is about 66 events per year. With full implementation of the Boston Harbor CSO control facilities plan, the frequency will be reduced to four events per year, with one or two events every five years occurring in the three month summer season (June, July and August). This represents a 93.9% reduction in overflow frequency. The requirements of the draft SFO would require a further 94% reduction from the reduction required for Boston.

The CSO facilities to be constructed to fully implement the Boston Harbor CSO control plan will provide 342 million gallons of storage at a cost of \$1.2 billion. To reduce the overflows in Boston to 6 events in 25 years, as required by this draft SFO, would have required Boston to construct 1.3 billion gallons of storage, a 280% increase in the scale of the facilities to be constructed. If the more stringent requirements of this draft SFO had been applied to Boston, the project costs would no doubt have increased by several billion dollars.

Cincinnati - The proposed facilities include a system of

distributed concrete storage basins with treatment at existing treatment plants. Overall CSO volume will be reduced by approximately 85% and overflow frequency will be reduced to about 12 events per year. The estimated capital cost of the proposed project ranges from \$1 billion to \$1.5 billion. The total implementation time is estimated to be 20 years.

 Chicago - Total CSO pollutant loadings are to be reduced by approximately 85% with all residual overflows discharged to the Des Plaines River. No overflows will be allowed to spill to Lake Michigan.

Phase I of the CSO control system consists of a deep tunnel storage system with treatment at dry-weather treatment plants. The total capital cost for Phase I is \$2.4 billion. In 1986, Phase I was about half complete. At that time, completion was anticipated in 1996. The project, from planning through to anticipated completion, will require 30 years.

 Milwaukee - Milwaukee is somewhat unique in that the CSO facilities requirements were dictated by the need to eliminate separate sanitary sewer overflows. It was found that the large storage and transport facilities required to control separate sanitary sewer overflows could also be used to control combined sewer overflows.

The resulting frequency of uncontrolled combined sewer overflows is approximately two events per year. The first flush of all combined sewer overflows is to be captured and screened but disinfection of the two remaining overflow events is not required.

Since most of the cost was required to eliminate separate sanitary sewer overflow, the cost is less than that for other cities. The total extra capital cost for CSO control is \$223 million. Facilities planning began in the mid 1970's and the system should be fully operational by 1995, approximately 20 years later.

• San Francisco - The City and County of San Francisco are nearing the end of their CSO control project. Preproject combined sewer overflow frequency was approximately 80 events per year. The allowable overflow frequency now varies from one to ten per year depending upon the receiving water. The average overflow frequency required after completion of the project is approximately eight events per year. Therefore an overall 90% reduction in CSO frequency will be achieved.

The project includes storage and transport facilities with treatment at dry-weather and CSO treatment plants. The total capital cost of the project is \$1.4 billion. Planning began in the late 1960's, construction began in the early 1970's, and the total system should be complete by 1993; approximately 25 years overall.

The requirements of this draft SFO appear to be significantly more restrictive than all other CSO design criteria adopted in cities having extensive combined sewer systems.

The implications of adopting the storm frequency requirements in the draft SFO are as follows:

- Separation of storm sewers and sanitary sewers is likely to be the only technology currently available which will allow the City of Portland to <u>reliably</u> meet the requirements.
- Separation of sewers will have a high cost (estimated at \$1.2 billion) and will likely result in little improvement in water quality since stormwater alone has been shown to have a high pollutant load.

To avoid the construction of facilities which will have great cost to the citizens and businesses of Portland yet will not achieve the intended water quality benefits, the City recommends that DEQ establish the concept of a design storm for summer and winter conditions without setting specific frequencies at this time. The return frequency of the design storm should be based upon an analysis of the costs and the environmental benefits of control alternatives and should therefore be established subsequent to development of the CSO facilities plan. Determining the design storm without understanding either the environmental benefit to be gained or the cost to be incurred does not seem to be good policy or good practice.

Paragraphs 8a, 8a(10), 8a(13), 8a(16) - DEQ should recognize that not all water quality problems in the Willamette River and the Columbia Slough result from combined sewer overflows. The City has neither the authority nor the resources to regulate non-point sources or point sources outside its service area. The language should reflect this and require the City only to address water quality problems attributable to combined sewer overflows.

Page 6, Paragraph 8c - Although the City agrees that there must be an appropriate mechanism for the City to demonstrate compliance with the requirements of the SFO, it will be difficult to demonstrate compliance within twelve months for

events which will statistically occur only once every twenty-five years.

Page 7, Paragraph 8f - With the ambitious schedule and the enormous complexity of the work outlined in the draft SFO, there is some risk that the City will fail to meet some deadlines. The stipulated penalties in the draft SFO appear extreme. With approximately 50 overflow events per year, missing a requirement such as 8a(10) by one wet weather season will result in fines of approximately \$2.5 million for each water quality parameter out of compliance. A fine of \$2.5 million is equivalent to the debt service necessary to finance \$25 million in capital improvements and could therefore inhibit the City's ability to implement the remaining program in a responsive manner.

The City recommends lower penalties and substitution of \$500 under Paragraph 8f(i) and \$1,000 per outfall per day under Paragraph 8f(ii).

SUMMARY

The proposed implementation schedule would be difficult to meet even if all necessary technology already existed (which it does not). The City's ability to meet the schedule could be impacted by a number of forces that are beyond the City's direct control. Any attempts to shorten the schedule will increase the potential for program failure, increase the direct cost of the CSO abatement facilities, increase the disruption to the lives and livelihoods of the citizens of Portland, and increase the burden on the City's ratepayers.

The City submits that the goals of reducing overflows that do not meet water quality standards to six events in 25 years (one in summer and five in winter) is extreme and is not consistent with requirements imposed on other municipalities in the United States. This requirement may greatly increase the costs of the CSO control program without corresponding improvement in water quality.

Although the City endorses incorporation of the concept that there are storms that will exceed the capacity of any storm water collection and treatment system, the City recommends that DEQ only establish the concept of a design storm for summer and winter conditions without establishing specific design storm return frequencies at this time. The return frequency of the design storm should be based upon an analysis of the costs and the environmental benefits of control alternatives and should therefore be established subsequent to development of the CSO facilities plan currently underway.

The City recognizes the difficult task the Department has in establishing an equitable Stipulation and Final Order that will protect our streams' beneficial uses and be supported by Portland's citizens. The City hopes that these comments will be helpful.

RESPONSE TO COMMENTS

AT

PUBLIC MEETINGS

Introduction

At the public meeting regarding the NPDES permit and the Stipulation and Final Order, held on Monday, March 25, 1991 and at the informational meeting on Tuesday, March 19, 1991, a number of comments and criticisms were raised regarding the City's efforts to address water quality problems. The City acknowledges the legitimacy of many of the concerns expressed at those meetings, but these concerns should be placed in context with the water quality problems that face the City. The majority of the citizens' concerns are summarized in the following questions:

Why isn't the City doing anything but studying the problem?

To improve water quality, it is important to understand what activities are impacting water quality, anticipate the effectiveness of control strategies prior to design and construction, and evaluate both the constructability and technical feasibility of proposed treatment alternatives.

Unlike wastewater treatment plant design where technology and process design developed for one treatment plant can be successfully applied to nearly all treatment plants, a successful combined sewer overflow abatement program must be tailored to very site specific conditions. The CSO control program must consider a multitude of variables including the rainfall characteristics and patterns, local geography, the collection system configuration, and the receiving water characteristics. Adequate study is necessary to develop a CSO control program that will be effective in improving water quality and not be wasteful of ratepayer's money.

The City recognizes that the need to study a problem should not be an excuse not to solve the problem. The City is moving ahead with improvements and modifications that can be made ahead of the study effort and will result in improved water quality. These projects, totalling \$62 million, are enumerated in Table 1. The City will continue to implement improvements and projects as soon as they are determined to be necessary and consistent with the long term goal of cost effective improvement of water quality.

Why can't the City move faster to solve the CSO problem?

The schedule presented in the draft Stipulation and Final Order is very ambitious, considering the level of treatment required and the complexity of the problem that must be solved. When the proposed schedule is compared against the time required by other cities to satisfy less stringent requirements, it is difficult to see how this schedule - let along a more ambitious one - could be realistically met. Please refer to the discussion of the schedule in the comments addressed to the Stipulation and Final Order.

Why has the City tried to hide the CSO problem?

The City has made considerable effort to increase the public's awareness about combined sewers. This effort includes mailers in 100,000 sewer bills, presentations to civic and business groups, public involvement in the Columbia Slough study, and public hearings regarding key elements of the Bureau of Environmental Services' programs including: the CSO Management Plan contract, budget proposals for FY 91-92, and the presentation of the Clean River Program to City Council.

The City continues to educate the public about combined sewers, their impact on water quality, and the complexities and costs of resolving the problem.

Why isn't the City acting to immediately increase treatment capacity and/or build additional plants?

A facility plan for the Columbia Boulevard Wastewater Treatment Plant was completed in August, 1987. Copies of the final plan were submitted to the Department of Environmental Quality and are available from the Bureau of Environmental Services. This plan detailed staged expansions of the treatment plant and have been incorporated in the 5-year CIP approved by the City Council and in the 20-year long-range capital plan. The first major expansion will add 12.5 MGD secondary treatment capacity to the system.

The City also prepared a facilities plan for the Tryon Creek Plant in January of 1990. It develops the necessary expansions to accommodate both population growth and more stringent treatment requirements.

These planned expansions are in addition to significant facilities modifications to maintain and improve existing treatment capacities. These improvement projects are

Combined Sewer Overflow Abatement Projects

Completed in the past five years

Project
Rivergate Interceptor
SE Relieving Interceptor
Sullivan Pump Station
Stormwater Pump Station
Relocation of Compost Bagging
NE 13th Ave - Phase 4
N. Portland Blvd. Relief
Diversion Operational Study
Diversion Modifications
Diversion Modifications
Miscellaneous Sump Constr.

California Outfall Extension

Cathedral Park Outfall Ext.

Effect Cost \$32 million

Add interceptor capacity
Add interceptor capacity
Add capacity

Partial separation Partial separation

20 diversion reconst.
50 diversion improved
Separation

Near shore improvement Near shore improvement

Projects to being in FY 90/91 or FY 91/92

(Some projects will extend beyond FY 91/92)

Project Effect

Cost \$28 million

N. Vancouver Ave. Relief
Lents trunk relief
Wheeler Basin relief (phase 1&2)
NE 13th Ave. relief (5 & 6)
NE Alameda & 35th Pl. relief
NE 62nd & Hancock relief
Central Bus. District storm sewer
Sullivan Pump station Upgrade

Ankeny Pump Station Upgrade Ramsey Lake Wetlands Demo Partial separation Partial separation Partial separation Partial separation Partial separation Partial separation Partial separation

Maintenance Activities

Flow Augmentation

Cost \$2.3 million

Sewer cleaning Catch Basin cleaning Sump cleaning Street cleaning

Increased frequency of diversion inspection to once per week in 1990/91.

regularly incorporated in the 5-year CIP plan, updated, and submitted annually to the City Council. Recent improvement projects include:

- Aeration system reliability and efficiency improvements to the Columbia secondary process
- Chlorination system rehabilitation and upgrade
- Improvements to solids handling processes.

RBE:em

April 19, 1991

b:burtatch.rbe

4/25/91 CSO Strategies - EQC 1. Combined sewer systems - How they work. a. Dry WX deposition
b. Wet WX resuspension 5, over \$100 c. Water quality impacts

d. Relative sources - deposits v. DWF v. Runoff
90-95%. 2-5% 1-8%

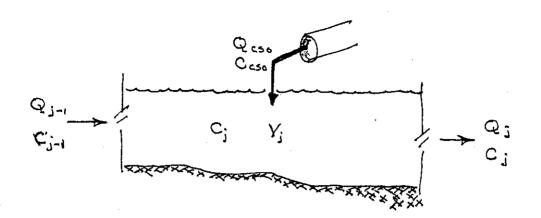
2. Water quality standards - How they work. a. Probabilistic basis: C/og < 200, C/o < 400 org/100 ml b. Log Ameraga v. Arithmetic Average c. Water quality example - hypothetical model 3. Control Strategies. a. Volume controls Wet WX focus b. Quality controls Dry WX focus C. Combinations Loadings focus 4. Cost perspectives. a. Absolute cost basis: \$50,000/acre -----b. Relative costs of alternatives C. Marginal cost/benefit distributions 5. Conclusions/ Recommendations/ Observations. a. Loadings (Log Mean) should be criteria b. Analysis of problem and alternative solutions should be probabilistic based - NOT "chesign storm c. Universe of analysis and alternatives should be much broader than is usual 1) STP implications 2) Urban air quality 3) Costs of disruption (externalities) d. Economic s, environmental risks considerations 1) economic risk u. cost of risk miningation

2) environmente l benefit v. cost al benefit assurance 3) much more sophisticated analysis planning called for than usually applied e. Schedules - "immediate" v. longer term e.g., variable control regulators on overflows

low relative cost, rapid implementation, reduce over flow frequency / topdings by 50%

Table A

```
0.5 /day
                                            C = Coliforms/100ml
        Q_j/V_j =
                         1 /day
                                      C'(j-1) = C(j-1)*Qj/Vj
          alfa =
                       1.5 /day
         beta = 0.517913
                                      C'(cso) = C(cso)*Qcso/Vj
             Day
                            C'(j-1)
                                      C'(cso)
                                                    C(t)
                      C(0)
                                                            C(ave)
                                                                      Log(C)
               1
                                                                      2.1249
                   133.33
                                 200
                                                  133.33
                                                            133.33
               2
                    133.33
                                 200
                                                  133.33
                                                            133.33
                                                                      2.1249
SAMPLE
               3
                                                  133.33
                                                                      2,1249
                    133.33
                                 200
                                                            133.33
               4
                    133,33
                                 200
                                        100000 51924.66 32272.45
                                                                      4.5088
               5 51924,66
                                 200
                                                11689.54 26956.74
                                                                      4.4307
                                                           6118.45
                                                                      3.7866
               6 11689.54
                                 200
                                                 2711.87
                   2711.87
                                                           1468,79
               7
                                 200
                                                  708.68
                                                                      3.1670
               8
                    708.68
                                 200
                                                  261.71
                                                            431.31
                                                                      2.6348
SAMPLE
               9
                    261.71
                                                  161.98
                                                            199.82
                                                                      2,3006
                                 200
              10
                    161.98
                                 200
                                        100000 51931.05 32287.29
                                                                      4,5090
                                                11690.97 26960.05
              11 51931.05
                                                                      4.4307
                                 200
              12 11690.97
                                 200
                                                 2712.19
                                                           6119.18
                                                                      3.7867
                   2712.19
                                                  708.75
                                                           1468.96
                                                                      3,1670
              13
                                 200
                    708.75
              14
                                 200
                                                  261.73
                                                            431.35
                                                                      2.6348
SAMPLE
              15
                    261.73
                                                  161.98
                                                            199.83
                                                                      2.3007
                                 200
                    161.98
                                 200
                                        100000 51931.05 32287.29
                                                                      4.5090
              16
              17 51931.05
                                 200
                                                11690.97 26960.06
                                                                      4,4307
              18 11690.97
                                 200
                                                 2712.19
                                                           6119,18
                                                                      3.7867
              19
                   2712.19
                                 200
                                                  708.75
                                                           1468.96
                                                                      3.1670
              20
                    708.75
                                                  261.73
                                                                      2.6348
                                 200
                                                            431,35
SAMPLE
              21
                    261.73
                                 200
                                                  161.98
                                                            199.83
                                                                      2,3007
                    161.98
                                        100000 51931.05 32287.29
                                                                      4.5090
              22
                                 200
              23 51931.05
                                                11690.97 26960.06
                                                                      4.4307
                                 200
                                                                      3.7867
              24
                 11690.97
                                 200
                                                 2712.19
                                                           6119.18
                                                                      3.1670
              25
                   2712.19
                                                  708.75
                                                           1468.96
                                 200
              26.
                    708.75
                                 200
                                                  261.73
                                                            431.35
                                                                      2.6348
              27
                    261.73
                                                  161.98
                                                            199,83
                                                                      2,3007
SAMPLE
                                 200
                                        100000 51931.05 32287.29
              28
                    161.98
                                 200
                                                                      4.5090
              29 51931.05
                                                11690.97 26960.06
                                                                      4,4307
                                 200
              30 11690.97
                                 200
                                                 2712.19
                                                           6119.18
                                                                      3.7867
                                                                      3.4139
               "Apparent" C(ave) =
                                        184,29
                                                  Actual C(ave) =
                                                                     2593.51
```



Let:
$$\alpha \equiv \left(\frac{Q_i}{V_i} + k\right)$$

$$\beta \equiv \left(\frac{1 - e}{\alpha \Delta t}\right)$$

$$C'_{j-1} \equiv \frac{Q_{j-1}C_{j-1}}{V_j}$$

$$C'_{eso} \equiv \frac{Q_{eso}Q_{eso}}{V_i}$$

Then:
$$C_{j,\Delta t} = C_{j,0}e^{-\alpha \Delta t} + (C'_{j-1} + C'_{cso}) / 3 \Delta t$$
 $E_{q,(1)}$

$$\stackrel{?}{\in} C_{j,\Delta t} = C_{j,0} / 3 + (C'_{j-1} + C'_{cso}) (\frac{1-/3}{\alpha}) E_{q,(2)}$$

If:
$$Qi = 1 day^{-1}$$
, $k = 0.5 day^{-1}$, $\Delta t = 1 day$

Then:
$$C_{j,\Delta t} = 0.22 C_{j,o} + 0.52 (c'_{j-1} + c'_{cso})$$
 $E_{q.}(1a)$ $E_{q.}(1a)$

Taple :

```
0.5 /day
                                    C = Coliforms/100ml
QJ/VJ =
                1 /day
                             C'(j-1) = C(j-1)*Qi/Vi
alfa =
              1.5 /day
beta = 0.517913
                            C/(cso) \approx C(cso) *Qcso/Vj
                   C'(j-1) C'(cso)
                                           C(t)
            C(0)
                                                   C(ave)
    Day
                                                              Log(C)
           :03,33
                                         133.33
                                                    133,33
                        200
                                                              2,1249
           133,33
                        200
                                         133,33
                                                   133.33
                                                             2.1249
      3
           133,33
                                         133,33
                                                    133.33
                                                              2.1249
                         200
                                          133.33
      4
           133,33
                         200
                                                    133,33
                                                              2,1249
      5
           133,33
                                         133.33
                                                    133.33
                                                              2,1249
                        200
                                                              2.1249
           133:30
                        200
                                          133,33
                                                    133,33
      6
      7
                                          133133
           133.33
                         200
                                                    133,33
                                                              2.1249
      8
           133,33
                                          DE.SEL
                                                    133,33
                                                              2,1249
                        200
      9
           133,33
                       200
                                         133,33
                                                    133,33
                                                              2,1249
     10
           133,53
                        200
                                          133.33
                                                    133,33
                                                              2.1249
                                                  6550,55
     : :
           133.33
                                 19967
                                       10474.51
                        500
                                                              3.8163
         10474.51
                        200
                                        2440.76
                                                   5489,16
                                                              3.7395
     . ...
          2440.76
                        200
                                         548.19
                                                   1028.38
                                                              3,1233
          648.19
                                         248.21
                        200
                                                    399.98
     10
                                                              2.6020
     15
           248,21
                        200
                                          158.97
                                                    192.83
                                                              2,2852
                                          139.05
     16
           158.97
                        200
                                                   146.51
                                                              2,1662
     17
           139.05
                        200
                                         134.61
                                                    136,30
                                                              2,1345
                                         133.62
     18
           134.61
                         200
                                                    133.99
                                                              2.1271
     19
           133.62
                                         133,40
                                                   133.48
                        200
                                                              2,1254
                                                              2,1250
     20
           133.40
                        200
                                         133.35
                                                    133.37
     21
           133.35
                        200
                                         133.34
                                                    133.34
                                                              2,1250
           133.34
                                                              2.1249
     22
                        200
                                         133.33
                                                    133,33
           133,33
     23
                                         133.33
                                                   133,33
                        200
                                                              2,1249
           133.33
     24
                        200
                                         133.33
                                                    133.33
                                                              2.1249
           133.33
     15
                        200
                                         133.33
                                                    133.33
                                                              2,1249
     26
           133,33
                        200
                                         133.33
                                                    133,33
                                                              2.1249
     27
           133,33
                        200
                                         133,33
                                                   133,33
                                                              2,1249
     28
           133,33
                                         133.33
                        200
                                                    133.33
                                                              2.1249
     29
                                         133,33
           133,33
                        200
                                                    133,33
                                                              2.1249
     30
           133.33
                         200
                                          133.33
                                                    133,33
                                                              2,1249
```

2,2914

1,95,63 C(ave) =

Table 2

```
0.5 /day
                                    C = Coliforms/100ml
    K 122
QJ/VJ =
                1 /day
 aifa =
              1.5 /day
                             c'(5-1) = c(5-1)*qj/Vj
 peta = 0.517913
                             C'(cso) = C(cso)*Qcso/Vj
                              0'(cso)
             C(0)
                    01(5-1)
                                                    C(ave)
    Day
                                            C(t)
                                                              Log(C)
           133,33
                                                              2.6559
                         200
                                   994
                                          648.14
                                                   452.80
      2
           648,14
                         200
                                          248,20
                                                    399,96
                                                              2,6020
      3
           248,20
                         200
                                          158.96
                                                    192,83
                                                              2.2852
      4
           158.96
                                          139.05
                         200
                                                    146.61
                                                              2.1662
      5
           139.05
                                          134.61
                                                    136.30
                                                              2,1345
                         200
           134.61
                         200
                                          133.62
                                                    133,99
                                                              2.1271
      Ó
      7
           133,62
                         200
                                          133,40
                                                    133.48
                                                              2.1254
      3
           133.40
                                          133.35
                                                    133,37
                                                              2.1250
                         200
      - 9
           130.35
                         200
                                          133,34
                                                    133,34
                                                              2,1250
           133.34
                                                    133,33
     10
                         200
                                          133.33
                                                              2,1249
     11
           133,33
                        200
                                   994
                                          648,14
                                                   452.80
                                                              2,6559
     12
           548,14
                         200
                                          248,20
                                                    399,96
                                                              2.6020
     13
           248,20
                                          158,96
                         200
                                                    192,83
                                                              2,2852
     14
           158.96
                                          139.05
                                                              2,1662
                         200
                                                    146.61
           139.05
     15
                         200
                                          134.61
                                                    136.30
                                                              2,1345
     16
           134.61
                         200
                                          133,62
                                                    133.99
                                                              2.1271
     17
           133.62
                         200
                                          133,40
                                                    133,48
                                                              2,1254
     18
           133,40
                         200
                                          133,35
                                                    133.37
                                                              2.1250
     19
           133,35
                                          133,34
                                                    133.34
                                                              2.1250
                         200
                                                              2.1249
           133,34
                         200
                                          133,33
                                                    133.33
     20
                                                   452.80
     21
           133,33
                        200
                                   994
                                         648.14
                                                              2.6559
           648.14
                                          248.20
                                                    399,96
     22
                         200
                                                              2.6020
           248,20
                        200
                                          158,96
                                                    192,83
     23
                                                              2.2852
           158.96
                                          139,05
     24
                        200
                                                    146.61
                                                              2.1662
     25
           139.05
                                          134,61
                        200
                                                    136,30
                                                              2..1345
     26
           134.61
                        200
                                          133.62
                                                    133.99
                                                              2,1271
     27
           133,62
                         200
                                          133,40
                                                    133.48
                                                              2.1254
           133,40
                                          133.35
     28
                         200
                                                    133,37
                                                              2.1250
     29
           133.35
                         200
                                          133,34
                                                    133,34
                                                              2.1250
           133.34
                                          133,33
     30
                         200
                                                    133.33
                                                              2.1249
                                                              2,2471
                                                 C(ave) =
                                                              176.65
```

Table 3

						•
k =		/day	C = Coliforms/100ml			
Qj/Vj =	آ سلد سن پر	/day `	01/ 5 / 3	~ / *		
alfa =		/day		= C(j-1)*Qj/Vj = C(cso)*Qcso/Vj		
Deta =	0.517913		Uncso; =	U(cso)*Q	CSO/VJ	
Day	c(o)	C'(j-1)	C'(cso)	C(t)	C(ave)	Log(C)
1	133,33	200	•	133,33	133,33	2,1249
2	133,33	200		133.33	133.33	2.1249
3	133.33	200		133.33	133,33	2.1249
4	133.33	200		133.33	133.33	2.1249
5	133,33	200		133.33	133.33	2,1249
6	133.33	200		133,33	133.33	2.1249
ブ	133,33	200		133,33	133.33	2.1249
8	133.33	200		133.33	133.33	2.1249
. 9	133.33	200		133,33	133,33	2.1249
10	133.33	200		133.33	133.33	2.1249
1 1 1 1	133.33	200	829	562.68	399.77	2.6018
12	562.68	200	829	658.48	622.13	2,7939
ìЗ	658,48	200	829	679.86	671,75	2.8272
14	679.86	200		255.28	416.39	2.6195
15	255.28	200		160.54	196.49	2.2933
16	160,54	200		139.40	147.43	2.1686
17	139,40	200		134.69	136.48	2.1351
18	134.69	200		133.64	134.03	2.1272
19	133.64	200		133740	133,49	2.1254
20	133140	200	•	133,35	133.37	2.1251
21	133.35	200		133.34	133.34	2.1250
22	133.34	200		133.33	133.34	2.1249
23	133.33	200		133.33	133.33	2.1249
24	133.33	200		133.33	133.33	2.1249
25	133.33	200		133.33	133,33	2.1249
26	133.33	200		133.33	133,33	2.1249
27	133,33	500		133.33	133.33	2.1249
28	133.33	200		133.33	133.33	2.1249
29	133.33	200		133.33	133.33	2.1249
30	133.33	200		133.33	133.33	2.1249
						2.2105
					C(ave) =	162.38

Table 4

```
0.5 /day
                                    C = Coliforms/100ml
Qj/Vj =
                 1 /day
 alfa =
               1.5 /day
                             C'(j-1) = C(j-1)*Qj/Vj
 beta = 0.517913
                             C^*(cso) = C(cso)*Qcso/Vj
                    C'(j-1)
                              C'(cso)
                                           C(t)
             C(0)
                                                    C(ave)
                                                              Log(C)
    Day
       1
           133,33
                         200
                                          133.33
                                                    133,33
                                                              2,1249
       2
           133.33
                                          133.33
                         200
                                                    133.33
                                                              2.1249
       3
           133,33
                         200
                                          133,33
                                                    133,33
                                                              2,1249
       4
           133,33
                         200
                                          133.33
                                                    133,33
                                                              2.1249
       5
                         200
                                          133,33
                                                    133.33
                                                              2.1249
           133.33
                                                              2.1249
       6
           133,33
                         200
                                          133,33
                                                    133,33
       7
           133,33
                         200
                                          133,33
                                                    133.33
                                                              2,1249
      8
           133,33
                                          133,33
                                                    133.33
                                                              2,1249
                         200
      9
                                                              2,1249
           133733
                                          133,33
                                                    133,33
                         200
     10
           133.33
                                          133,33
                                                    133.33
                                                              2.1249
                         200
     11
           133.33
                         200
                                  2416
                                         1384.61
                                                   909.81
                                                              2,9590
     12
          1384.61
                         200
                                  1208
                                         1038.17
                                                   1169.63
                                                              3.0680
     10
          1038,17
                                   604
                                          648.05
                                                    796,08
                                                              2,9010
                         200
                                                    399.91
                                          248,18
     1.4
           648,05
                         200
                                                              2,6020
                                                    192.81
     15
           248,18
                         200
                                          158.96
                                                              2,2851
     16
           158.96
                         200
                                          139,05
                                                    146.61
                                                              2,1662
     17
           139.05
                                          134.61
                                                    136.29
                                                              2,1345
                         200
     18
           134.61
                         200
                                          133.62
                                                    133.99
                                                              2:1271
     19
           133.62
                                          133.40
                                                    133,48
                                                              2.1254
                         200
     20
           133.40
                         200
                                          133.35
                                                    133.37
                                                              2.1250
     21
           133,35
                         200
                                          133,34
                                                    133,34
                                                              2,1250
     22
           133.34
                         200
                                          133.33
                                                    133.33
                                                              2.1249
     23
           133,33
                                          133.33
                                                    133,33
                                                              2,1249
                         200
     24
           133,33
                                          133,33
                                                    133.33
                                                              2,1249
                         200
     25
           133.33
                         200
                                          133.33
                                                    133,33
                                                              2,1249
                                          133.33
                                                    133.33
     26
           133.33
                         200
                                                              2.1249
     27
           133,33
                         200
                                          133.33
                                                    133.33
                                                              2.1249
     28
                                          133.33
                                                    133,33
                                                              2.1249
           133.33
                         200
     29
           133.33
                                          133.33
                                                    133,33
                                                              2,1249
                         200
                                                              2.1249
     30
           133.33
                         200
                                          133,33
                                                    133,33
                                                              2,2331
                                                              171.03
                   AveCoso =
                                  1208
                                                  C(ave) =
```

Table 5

```
0.5 /day
                                     C = Coliforms/100ml
Qj/Vj =
                 î /day
                              C'(j-1) = C(j-1)*Qj/Vj
 alfa =
               1.5 /day
beta = 0.517913
                              C'(cso) = C(cso)*Qcso/Vj
                     C'(J-1)
                               C'(cso)
             C(0)
                                             C(t)
    Day
                                                     C(ave)
                                                               Log(C)
       1
           133.33
                         200
                                    100
                                          185.12
                                                     165,47
                                                               2.2187
       Z
           185,12
                         200
                                           196.68
                                                     192.30
                                    100
                                                               2.2840
       3
           196:68
                         200
                                    100
                                          199,26
                                                     198,28
                                                               2.2973
           199.26
                         200
                                    100
                                           199.83
                                                     199,62
                                                               2,3002
       3
                                           199,96
           199.83
                         200
                                    100
                                                     199.91
                                                               2,3008
                                                               2.3010
       6
           199.96
                         200
                                    100
                                           199.99
                                                     199.98
       7
           199.99
                                          2007.00
                                                     200,00
                         200
                                    100
                                                               2,3010
       $
           200.00
                                          200.00
                                                     200.00
                         200
                                    100
                                                               2,3010
      9
                                                     200.00
           200,00
                                           200.00
                                                               2,3010
                         200
                                    100
     10
           200.00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2,3010
     11
           200.00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2,3010
     12
           200.00
                                           200.00
                                                     200.00
                                                               2.3010
                         200
                                    100
     13
           200.00
                                           200,00
                                                     200.00
                         200
                                    100
                                                               2,3010
     14
           200.00
                         200
                                   100
                                          200.00
                                                     200.00
                                                               2,3010
     15
           200.00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2,3010
     16
           200.00
                         200
                                    100
                                           200.00
                                                     200.00
                                                               2.3010
     17
           200.00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2.3010
     18
           200.00
                         200
                                    100
                                          1200.00
                                                     200.00
                                                               2.3010
     19
           200.00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2.3010
     20
           200.00
                         200
                                           200.00
                                                     200.00
                                                               2.3010
                                    100
     21
           200.00
                         200
                                   100
                                          200,00
                                                     200.00
                                                               2.3010
     22
           200.00
                                          200.00
                                                     200.00
                         200
                                    100
                                                               2.3010
     23
           200.00
                                          200.00
                                                     200.00
                                                               2.3010
                         200
                                    100
     24
           200.00
                         200
                                    100
                                          200.00
                                                     200,00
                                                               2,3010
     25
           200,00
                         200
                                   100
                                          200.00
                                                     200.00
                                                               2,3010
     26
           200.00
                         200
                                    100
                                           200,00
                                                     200.00
                                                               2.3010
     27
           200,00
                                   100
                                          200,00
                                                     200.00
                                                               2.3010
                         200
     28
           200.00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2.3010
     29
           200,00
                         200
                                    100
                                          200.00
                                                     200.00
                                                               2.3010
     30
           200,00
                         200
                                    100
                                           200,00
                                                     200.00
                                                               2.3010
                                                               2.2976
```

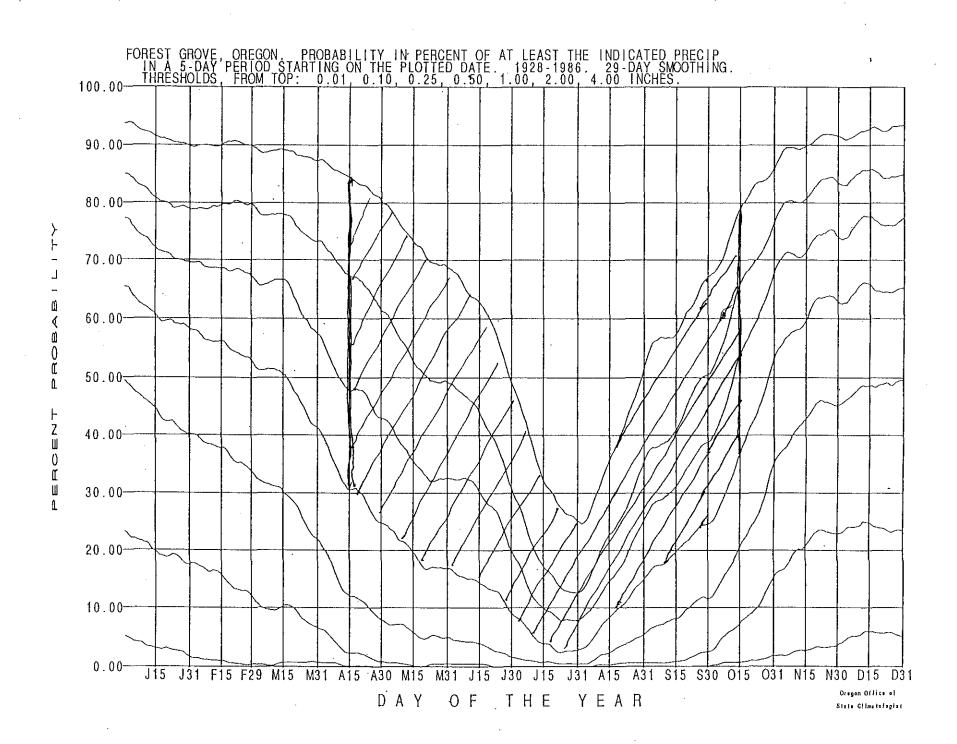
C(ave) = 198.41

Table 6

```
C = Coliforms/100ml
    k ==
              0.5 /day
Qj/Vj =
                 1 /day
 alfa =
               1.5 /day
                             C'(j-1) = C(j-1)*Qj/Vj
 beta = 0.517913
                             C'(cso) = C(cso)*Qcso/Vj
    Day
             C(0)
                    C'(j-1)
                              C'(cso)
                                            C(t)
                                                    C(ave)
                                                               Log(C)
      1
           133,33
                                                               2.1249
                         200
                                          133.33
                                                    133.33
      2
           133.33
                         200
                                                               2.1249
                                          133.33
                                                    133.33
      3
           133.33
                         200
                                                               2,1249
                                          133.33
                                                    133,33
      4
           133.33
                         200
                                   500
                                          392.29
                                                    294.03
                                                               2.4684
      5
           392.29
                         200
                                          191.11
                                                    267.45
                                                              2.4272
      6
           191,11
                         200
                                          146.23
                                                    163.26
                                                               2.2129
      7
           146.23
                         200
                                          136.21
                                                    140.01
                                                               2,1462
      8
           136,21
                         200
                                   500
                                          392.93
                                                    295.52
                                                               2.4706
      9
           392.93
                         200
                                          191.26
                                                    267.78
                                                               2.4278
     10
           191,26
                                          146.26
                         200
                                                    163.33
                                                               2.2131
     11
           146.26
                         200
                                          136,22
                                                    140.03
                                                               2.1462
                                          392.93
     12
           136.22
                         200
                                   500
                                                    295.52
                                                               2.4706
     13
           392,93
                                                               2,4278
                         200
                                          191.26
                                                    267.78
     14
           191.26
                         200
                                          146.26
                                                    163.33
                                                               2.2131
     15
           146.26
                         200
                                          136.22
                                                    140.03
                                                               2,1462
                                                               2.4706
     16
           136.22
                                   500
                                          392.93
                         200
                                                    295.52
     17
           392.93
                                          191.26
                                                    267.78
                                                               2.4278
                         200
     18
           191.26
                         200
                                          146.26
                                                    163.33
                                                               2.2131
           146.26
     19
                         200
                                          136.22
                                                    140.03
                                                               2,1462
     20
                                   500
           136.22
                         200
                                          392.93
                                                    295.52
                                                               2.4706
     21
           392.93
                         200
                                          191.26
                                                    267.78
                                                               2.4278
     22
           191.26
                         200
                                          146.26
                                                               2.2131
                                                    163.33
     23
           146,26
                         200
                                          136.22
                                                    140.03
                                                               2.1462
     24
           136,22
                                   500
                                          392.93
                                                               2.4706
                         200
                                                    295,52
           392,93
     25
                         200
                                          191.26
                                                    267.78
                                                               2.4278
     26
           191.26
                         200
                                          146.26
                                                    163.33
                                                               2.2131
     27
           146.26
                                                               2.1462
                         200
                                          136.22
                                                    140.03
     28
           136.22
                         200
                                   500
                                          392.93
                                                    295.52
                                                               2,4706
     29
           392.93
                                                               2.4278
                         200
                                          191.26
                                                    267.78
     30
           191,26
                         200
                                          146.26
                                                    163.33
                                                               2,2131
                                                               2.3010
    Ave[C'(j-1)+C'cso] =
                                267,90
                                                  C(ave) =
                                                               199,97
```

Table 7

```
0.5 /day
                                    C = Coliforms/100ml
    k ==
Qj/Vj =
                 1 /day
                             C'(j-1) = C(j-1)*Qj/Vj
 alfa =
               1.5 /day
 beta = 0.517913
                             C'(cso) = C(cso)*Qcso/Vj
                    C'(j-1)
                              C'(cso)
                                                    C(ave)
    Day
             C(0)
                                            C(t)
                                                               Log(C)
           133.33
                         200
                                          133.33
                                                    133.33
                                                               2.1249
      . 1
      2
           133.33
                         200
                                          133,33
                                                    133.33
                                                               2.1249
      3
                                                    133.33
           133.33
                         200
                                          133.33
                                                               2,1249
       4
           133.33
                         200
                                   500
                                          392.29
                                                    294.03
                                                               2.4684
      5
           392.29
                         200
                                          191.11
                                                    267.45
                                                               2.4272
      6
           191.11
                         200
                                          146.23
                                                    163,26
                                                               2,2129
      7
           146.23
                         200
                                          136.21
                                                    140.01
                                                               2.1462
      8
           136.21
                         200
                                          133.98
                                                    134.82
                                                               2.1298
      9
                                                               2.1260
           133,98
                         200
                                          133.48
                                                    133.67
     10
           133.48
                                          133.37
                                                    133.41
                                                               2.1252
                         200
     11
           133.37
                         200
                                          133.34
                                                    133.35
                                                               2,1250
     12
           133,34
                         200
                                  3900
                                         2153.20
                                                   1386.76
                                                               3.1420
                                                   1179.45
     13
          2153.20
                         200
                                          584.03
                                                               3,0717
                                          233.90
                                                    366.75
                                                               2.5644
     14
           584.03
                         200
     15
           233.90
                         200
                                          155.77
                                                    185,42
                                                               2.2681
     16
           155.77
                         200
                                          138.34
                                                    144.95
                                                               2.1612
     17
                                          134.45
                                                    135.93
           138.34
                         200
                                                               2.1333
     18
           134,45
                                          133.58
                                                    133.91
                                                               2.1268
                         200
     19
           133.58
                         200
                                          133.39
                                                    133.46
                                                               2.1254
     20
           133.39
                         200
                                   500
                                          392.30
                                                    294.06
                                                               2.4684
     21
           392.30
                         200
                                          191.12
                                                    267.46
                                                               2.4273
     22
           191.12
                         200
                                          146,23
                                                    163,26
                                                               2.2129
                                          136.21
           146.23
                                                    140.01
                                                               2.1462
     23
                         200
           136.21
                                          133.98
                                                    134.82
                                                               2,1298
     24
                         200
     25
           133.98
                         200
                                          133.48
                                                    133.67
                                                               2.1260
     26
           133.48
                         200
                                          133.37
                                                    133,41
                                                               2.1252
     27
                                                    133.35
                                                               2.1250
           133.37
                         200
                                          133.34
     28
                         200
                                   990
                                          646.07
                                                    451.51
                                                               2.6547
           133.34
     29
           646.07
                         200
                                          247.74
                                                    398.89
                                                               2.6008
     30
           247.74
                         200
                                          158.86
                                                    192.59
                                                               2.2846
                                                               2.3010
    Ave[C'(j-1)+C'cso] =
                                                  C(ave) =
                                255,18
                                                               199,97
```



ce wa

PERKINS COIE

A Law Partnership Including Professional Corporations
U.S. Bancorp Tower, Suite 2500 • 111 Southwest Fifth Avenue • Portland, Oregon 97204
Telephone: (503) 295-4400

Via Hand Delivery

April 19, 1991

Fred Hansen, Director
Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

OFFICE OF THE DIRECTOR

Re:

The Draft NPDES Discharge Permit for the City of

Portland

Dear Mr. Hansen:

We are writing on behalf of Northwest Environmental Advocates to comment on the City of Portland's draft NPDES discharge permit. Our primary concern is with those aspects of the permit relating to the combined sewer overflows ("CSOS") and the pump stations. Our client is submitting additional comments under separate cover.

We believe the approaches the Department is taking to the CSOs and the pump stations are inconsistent not only with the applicable laws, but also with sound public policy. Most significantly, the draft permit appears to sanction discharges that will violate water quality standards. Additionally, it fails to specify the technology-based requirements that these discharges are to be subjected to upon permit issuance. We will elaborate on these points and others below.

A. Comments Relating to the CSOs

In our view, the permit, in its current form, cannot sanction the discharges from the CSOs because its conditions do not provide for compliance with the Clean Water Act ("CWA").

OAR 340-35-045(8) requires that any NPDES permits issued by DEQ must comply with the applicable federal requirements. Similarly, 40 C.F.R. § 122.4(a) precludes the issuance of any permit when its conditions do not provide for full compliance with the relevant regulatory provisions. The proposed permit fails to provide for compliance with either the water quality-based requirements promulgated pursuant to Section 302 of the CWA, or the technology-based treatment requirements promulgated pursuant to Section 301(b) of the Act.

Regarding the water quality-based requirements, 40 C.F.R. § 122.4(d) specifically precludes the issuance of any permit

where its conditions cannot ensure compliance with water quality standards. 40 C.F.R. § 122.44 elaborates on this point by requiring that each NPDES permit include "any requirements . . . necessary to . . . [a]chieve water quality standards . . ., including State narrative criteria for water quality." 40 C.F.R. § 122.44(d). Subsection (d)(i) makes clear that water quality-based limitations are required for all pollutants which the permitting authority determines "will cause, have the reasonable potential to cause, or contribute" to water quality standard violations. 40 C.F.R. § 122.44(d).

The Department itself has determined that the Columbia Slough is in violation of the relevant water quality standard for bacteria. The City's own study acknowledges that this state of noncompliance is largely a result of the CSO effluent being discharged into the Slough. Given this situation, 40 C.F.R. § 122.44(d)(iii) requires the Department to establish effluent limits for the relevant pollutants. The mere statement that no discharges are allowed which violate water quality standards is insufficient. The regulations contemplate <u>numeric</u> limitations.

Additionally, the Department has not performed the required analysis - under 40 C.F.R. § 122.44(d)(ii) - to determine whether the CSO discharges have the reasonable potential to cause or contribute to other water quality standard violations. At a minimum, it would seem that this analysis would be required for fecal coliform and other bacteria in the Willamette River, and for potential violations of OAR 340-41-445(2)(k) and (l) (dealing with objectionable discoloration, oily sleek, floating solids, and "aesthetic conditions offensive to the human senses of sight, taste, smell, or touch") in both the Willamette and the Slough. Without performing this analysis, the Department cannot ensure compliance with water quality standards, as is required under 40 C.F.R. § 122.4(d).

The inadequacy of the general bar on noncomplying discharges is exacerbated by Note 1 at the end of Schedule A, which could be read as incorporating the Stipulation and Final Order into the permit by reference and, more significantly, as sanctioning any noncompliance with water quality standards pending the compliance deadlines established therein. potential is underscored both by the proposed compliance schedule in Paragraph 6 of Schedule C, and the proposed memorandum of agreement referenced in Paragraph 8 of Schedule C. The net effect of these provisions and the referenced documents appears to be an attempt by the Department to permit water quality standard violations for the period of time covered by the compliance schedules. This is plainly contrary to federal law, specifically 40 C.F.R. §§ 122.4(d) and 122.44(d). At a minimum, the Department is creating confusion by attempting to integrate enforcement actions with the permitting process.

The illegality of permitting discharges that violate water quality standards is in no way altered by the referencing of compliance schedules in the permit. 40 C.F.R. § 122.47(a)(1) specifically prohibits the inclusion in permits of compliance schedules extending beyond statutory compliance deadlines. The inappropriateness of including such compliance schedules in permits has been recognized by EPA's chief judicial officer. See In the Matter of: Star-Kist Caribe, Inc., NPDES Appeal No. 88-5, 1989 NPDES LEXIS 10 (March 8, 1989). For the CSOs in this case, the statutory deadline for compliance with water quality standards was July 1, 1977. 33 U.S.C. § 1311(b)(1).

The draft permit similarly fails to meet the technology-based requirements of the CWA. 40 C.F.R. §§ 122.44(a) and 125.3(a) require that the permit contain both BCT and BAT requirements. 40 C.F.R. § 122.45 makes clear that technology-based requirements are required for every discharge point. Where the Administrator has not promulgated specific technology-based limitations under Section 304(b) of the CWA, the permitting authority is required to exercise its "best professional judgment" in establishing these limitations on a case-by-case basis. See 40 C.F.R. §§ 125.3(a)(2)(ii)(B) and (iii)(B), 122.3(c), and 122.3(d).

The proposed permit contains no true technology-based limitations for the CSOs. Paragraphs 1(b)(1) and 1(c)(1) in Schedule A require only that the discharges from the CSOs be "minimized as much as practicable at all times." The superficiality of these conditions is made clear in Paragraph 6 of Schedule C, which contemplates the development of a facility plan, one purpose of which will be to evaluate and determine the minimum technology-based limitations. This planning process is not to be completed until December of 1995. As discussed above, the relevant regulations require the Department to exercise its best professional judgment regarding the technology-based limitations prior to the issuance of the permit. This process cannot be delayed and assigned to a facility planning process. See also 33 U.S.C. § 1311(2) and 40 C.F.R. §§ 125.3(a)(2)(ii) and (iii) (establishing a deadline of March 31, 1989 for compliance with both BCT and BAT requirements).

It is worth noting that EPA's Control Strategy contemplates the establishment of BCT and BAT in the actual permit. See 54 FR at 37372. While EPA acknowledges that compliance schedules may sometimes be required to implement these requirements, it makes clear that these compliance schedules are to be contained in separate enforcement orders that do not alter the basic illegality of any interim noncompliance. Id. More significantly, even under EPA's approach, the determination of what constitutes BCT and BAT for a particular facility must be made during the permit issuance process. Thus, the proposed permit flies in the face of both 40 C.F.R. § 125.3 and EPA's

Control Strategy. More significantly, it allows the City to further delay any substantive action for four more years, to the detriment of the relevant waterbodies and their users. There are substantive measures that can be identified immediately and which should be specified in the permit.

We are concerned also that the Department appears to be using the mixing zone concept as an alternative to meeting BCT/BAT or as a relief valve for sanctioning non-compliance with water quality standards. The use of a mixing zone is inappropriate where exposure to the pollutants may occur in that very zone. See EPA's Draft Revised Technical Support Document for Water Quality-Based Toxics Control (April 1990). absence of controls designed to preclude contact in the mixing zones, the only defensible approach is to plug those CSOs that discharge to environmentally sensitive areas (e.g., where fishing occurs) and then to relax the water-quality standards for those reaches where remaining CSO discharge points exist. Of course, any relaxation of the water quality standards would require effectuation of the processes established at 40 C.F.R. § 131.10(g), including the performance of a use attainability analysis.

Finally, in its rush to permit the CSOs, the Department is also violating regulations relating to the amount of information that must be available for consideration in the permit issuance process. The CSOs presumably qualify as "noncontinuous discharges" under 40 C.F.R. § 122.45(e). According to EPA's regulations, non-continuous discharges are to be "particularly described and limited" according to such criteria as rate of discharge and limitations of specified pollutants by mass, concentrations or other appropriate measures. Id. This information also is necessary to meet OAR 340-45-035(4), which requires that each proposed permit be accompanied by a fact sheet indicating the type and quantity of pollutants to be discharged. If DEQ does not currently have this information, the proper response is to "promptly request the needed information from the applicant." OAR 34-45-030(4). The application is not to be considered complete for processing until the requested information is submitted. Id.

B. Comments Relating to the Bypasses

The permit sanctions bypasses from the Ankeny and Sullivan pump stations under certain situations without any showing that the requirements of 40 C.F.R. § 122.41(m)(4) will be met for each bypass event. That section prohibits bypasses unless:

 They are unavoidable to prevent loss of life, personal injury, or severe property damage;

- 2. There were no feasible alternatives, such as the use of auxiliary treatment facilities, retention of the untreated wastes, or better maintenance procedures; and
- 3. Notice is submitted either beforehand (for anticipated bypasses) or within 24 hours (for those which are unanticipated).

By contrast, the permit requires only that the inflows at a given pump station exceed the maximum capacity of that station to pump sewage to the treatment works. Neither the permit nor the evaluation report indicates that any showing has been made regarding either the damage that would occur in the absence of bypasses or the infeasibility of reducing the number of bypass events through maintenance or other activities. In any event, the regulations contemplate that these demonstrations are to be made on an incident-by-incident basis.

In the absence of a showing meeting the requirements of 40 C.F.R. § 122.41(m)(4), we agree with the Department's view, expressed in the evaluation report, that the pump stations should be treated as CSOs. Thus, the comments that we made above with regard to the CSOs should apply in this context as well.

We also note that the permit deals with only two of the 34 pumping stations that are equipped with bypasses capable of discharging raw sewage. Paragraph 7 of Schedule C requires the submission of a report listing all points where raw sewage may be discharged from CSOs or bypasses directly to state waters. This information was required to be in the permit application. See 40 C.F.R. § 122.21(f)(1). Again, under OAR 340-45-030(4), DEQ's proper response in this situation is to "promptly request the needed information from the applicant." The application is not to be considered complete for processing until the requested information is submitted. Id.

Finally, we note that the permit appears to require notice of bypasses only in the monthly DMRs, rather than within 24 hours, as is specifically required by 122.41(1)(6)(ii)(A).

Thank you for the opportunity to comment on this draft permit. Please feel free to contact us with any questions or concerns.

Very truly yours,

Patrick A. Parenteau Craig N. Johnston



DEPARTMENT OF IUSTICE

PORTLAND OFFICE 1515 SW 5th Avenue Suite 410 Portland, Oregon 97201 Telephone: (503) 229-5725 FAX: (503) 229-5120

MEMORANDUM

DATE:

April 22, 1991

TO:

Fred Hansen

Director

Department of Environmental Quality

FROM:

Larry Edelman

Assistant Attorney General

SUBJECT: City of Portland Sewage Treatment Plant Permit and

Combined Sewer Overflow Permit

You have asked for a summary of the legal issues involved in DEQ's proposed NPDES permit for the City of Portland sewage treatment plant and combined sewer overflow system. DEQ has prepared a draft NPDES permit, a draft stipulated consent order and a draft memorandum of agreement to be entered into with the City of Portland. DEQ's draft permit and stipulated order are designed to be consistent with EPA's national combined sewer overflow control strategy and the State of Oregon's strategy for regulating combined sewer overflows.

EPA's national combined sewer overflow strategy requires that all combined sewer overflows be identified and categorized according to their status of compliance with 1) technology-based requirements and 2) water quality-based The national strategy has three primary requirements. objectives: 1) to ensure that if combined sewer overflow discharges occur, they are only as a result of wet weather; 2) to bring all wet weather combined sewer overflow discharge points into compliance with the technology-based requirements of the federal Clean Water Act and all applicable state water quality standards, and 3) to minimize water quality, aquatic biota, and human health impacts from wet weather overflows. Combined sewer overflows are defined as flows from a combined sewer that are in excess of the interceptor or regulator capacity and that are discharged into a receiving water without going to a publicly owned treatment works first.

Fred Hansen April 22, 1991 Page Two

The EPA 'national strategy expressly states that combined sewer overflows or CSOs are point sources under the Clean Water Act independent of the sewage treatment facility and the strategy also states that both technology-based and water quality-based requirements of the Clean Water Act apply to CSOs. The strategy emphasizes that CSOs which are discharging without an NPDES permit are unlawful and must be permitted or eliminated.

The EPA national strategy expressly states also that technology-based permit limits for CSOs should be established to cover best practicable control technology (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT). Since EPA has not established specific effluent guidelines for these criteria, however, the national strategy indicates that the permit writer is to use best professional judgment (BPJ) when permitting CSOs.

The Clean Water Act of 1977 mandates compliance with BPT on or before July 1, 1977, it mandates compliance with all applicable state water quality standards that were then in effect by July 1, 1977, and it mandates compliance with BAT and BCT by March 31, 1989. Obviously, each of these statutory dates in the Clean Water Act have already passed, therefore literal compliance with those statutory deadlines is not currently feasible where construction activities or other longer term activities by the sewage treatment plant and combined sewer overflow agency are necessary to actually achieve compliance. The EPA CSO strategy defines minimum technology-based limitations for BCT and BAT established on a BPJ basis essentially to include: 1) proper operation and regular maintenance programs for the sewer system and combined sewer overflow discharge points; 2) maximum use of the collection system for storage; 3) review and modification of pre-treatment programs to assure CSO impacts are minimized; 4) maximization of flow to the plant for treatment; 5) prohibition of dry weather overflows, and 6) control of solid and floatable materials in CSO discharges.

Oregon's strategy for regulating combined sewer overflows adopts each of these elements.

Fred Hansen April 22, 1991 Page Three

The difficulty with the draft permit, however, is that rather than establish actual BPJ criteria in the permit itself, it sets out a compliance schedule or appears to set out a compliance schedule for the achievement and the identification of those control measures that will constitute BCT/BAT BPJ. Legally speaking, a permit is not a proper mechanism for extending a statutory deadline in the Clean Water Act. This should be done by an enforcement action or consent order. In fact, the permit would not be upheld if it was actually attempting to extend a statutory compliance date.

In paragraphs 6-9 of Schedule A of the draft DEQ permit, the permit states that, notwithstanding the effluent limitations established in the permit, there is to be no violation by the CSO's of water quality standards in the mixing It is unclear whether a mixing zone for bacteria can be established properly in the permit because of the possibility of human exposure. It is also unclear what, if any, effluent limitations are actually established in these permits as applicable to the CSOs. The permits really only list the language from both the national EPA strategy and the Oregon strategy and don't have any specifics. The specifics are to be filled in pursuant to plans to be submitted by the City. environmentalists are arguing that a permit cannot properly establish a compliance schedule for meeting the statutory deadlines, both with respect to water quality standards and with respect to BPJ, and that such a schedule must in fact be done through a enforcement action or, in other words, through the stipulated compliance order.

It is my view that with respect to attaining water quality standards, the environmentalist's position is legally correct. I am not entirely sure that they are correct with respect to BPJ, since there is an argument to be made that where BPJ is used, it is discretionary with the permit writer, and the permit writer may include a schedule for compliance similar to what we did in the pulp mill permits for the achievement of BPJ. That position is not, however, entirely free from doubt as it has not been litigated to the best of my knowledge.

I would recommend, in any case, that we don't issue a permit for the combined sewer overflows which contains either ambiguous requirements or a compliance schedule that runs substantially beyond the 1989 statutory date for attainment

Fred Hansen April 22, 1991 Page Four

under the Clean Water Act of BCT/BAT, even though we are doing so using best professional judgment. I would recommend that we instead, include the long term compliance schedule only in the stipulated consent order. The permit, therefore, should simply have a requirement that specific BPJ interim measure be attained and that applicable water quality standards be met. The specific interim technology-based controls should be identified and included in the permit prior to issuance, not after permit issuance.

dld 6797H

PERKINS COIE

A LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

U.S. Bancorp Tower, Suite 2500 • 111 Southwest Fifth Avenue • Portland, Oregon 97204 Telephone: (503) 295-4400

April 18, 1991

Mr. William P. Hutchison, Jr. Chairman, Environmental Quality Commission Tooze, Marshall, Shenker, Holloway & Duden 333 S.W. Taylor Street Portland, OR 97204

Re: Northwest Environmental Advocates, et al. v. City of Portland - U.S. District Court - No. 91-339-PA

Dear Bill:

We are enclosing for your information a copy of the complaint filed on April 16, 1991, in the above-referenced matter. It is our continued hope that we will have an ongoing dialogue with you on these matters.

Please feel free to give me a call if you have any questions or concerns.

Very truly yours,

Patrick A. Parenteau

PAP:cab

Enc.

cc: Mr. William W. Wessinger

Mr. Henry C. Lorenzen

Mr. Emery Castle

Ms. Carol A. Whipple

(All with enclosure)

Paul T. Fortino, OSB No. 83201
Patrick A. Parenteau, OSB No. 90152
Mary C. Wood, OSB No. 90163
PERKINS COIE
Suite 2500
U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, OR 97204
Telephone: 503-295-4400

Of Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF OREGON

NORTHWEST ENVIRONMENTAL ADVOCATES, an Oregon nonprofit corporation, and NINA BELL, individually,

Plaintiffs,

v.

CITY OF PORTLAND,

[15334-0001/PA910790.124]

Defendant.

NO.CV- 91- 339-PA

COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

(Environmental)

Plaintiffs allege as follows:

I. PRELIMINARY STATEMENT

1. This action seeks to end the illegal discharge of millions of gallons of raw sewage and other wastes to the Willamette River and the Columbia Slough from at least 54 separate, unpermitted point sources owned and operated by the City of Portland as part of its outmoded combined sewer overflow (CSO) system. These discharges constitute serious, long-standing, ongoing violations of federal law that have damaged water quality, impaired beneficial uses and exposed the public 1- COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

to unnecessary and unacceptable health risks associated with water contact recreation and other activities. Despite repeated warnings from regulatory agencies and constant entreaties from the public, the City has yet to take decisive action to correct the problem. Hence, plaintiffs turn to the court for the relief provided by Congress in the Clean Water Act.

2. This action arises under and alleges violations of the Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. §§ 1251-1387.

II. JURISDICTION AND VENUE

- 3. This court has jurisdiction under 28 U.S.C. § 1331 and 33 U.S.C. § 1365. Relief is requested pursuant to 28 U.S.C. §§ 2201 and 2202 and 33 U.S.C. §§ 1319 and 1365.
- 4. Because this claim arises in, and the defendant is located in, the District of Oregon, venue is proper in this court under 28 U.S.C. § 1391(b).

III. PARTIES

5. Northwest Environmental Advocates (NWEA) is an Oregon nonprofit corporation with its principal place of business at 406 Governor Building, 408 S.W. Second Avenue, Portland, Oregon, 97204. NWEA was organized in 1969 under the name of Coalition for Safe Power for the purpose of protecting human health and the environment through public education and legal advocacy. NWEA and its members have standing to bring this suit. NWEA's members are residents of Oregon and Washington who are concerned about pollution in the Northwest's environment. See Exhibits A through E attached (affidavits of NWEA members). NWEA members live and work in the Willamette River Basin and recreate along

2- COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF 115334-0001/PA910790.1241

the Willamette River and the Columbia Slough ("Waterways"). See Exhibit A, ¶ 2; Exhibit B, ¶¶ 2, 3; Exhibit C, ¶¶ 2, 3; Exhibit D, ¶ 2; Exhibit E, ¶ 2. Their uses of the Waterways include fishing, swimming, canoeing, power-boating, bird watching from the shore and hiking and biking along the shore. See Exhibit A, \P 6; Exhibit B, \P 5; Exhibit C, \P 4; Exhibit D, \P 3; Exhibit E, Their use and enjoyment of these water bodies have been, and continue to be, adversely affected by the defendant's discharges into the Waterways in violation of the Clean Water Act. See Exhibit A, ¶ 11; Exhibit B, ¶¶ 4, 8; Exhibit C, ¶¶ 5, 6; Exhibit D, ¶¶ 4, 6; Exhibit E, ¶¶ 6, 7. The injury to plaintiffs caused by the City's unpermitted discharges falls within the zone of interest sought to be protected by the Clean Water Act, which has as its express purpose to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). NWEA and its members have participated, and continue to participate, on citizen advisory committees and technical committees concerned with the water quality of the Waterways. See Exhibit B, ¶¶ 10, 11; Exhibit C, ¶ 7; Exhibit D, ¶ 6; Exhibit E, ¶ 3. NWEA and its members also have participated in hearings held by state and local agencies on the issue of water quality in the Waterways. See Exhibit A, ¶ 4. A favorable judgment by this Court would provide redress for the injuries NWEA and its members suffer as a result of the defendant's illegal discharges. An injunction against further illegal discharges would improve water quality which, in turn, would enhance the recreational and esthetic opportunities on and near the Waterways. Monetary penalties

³⁻ COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF [15334-0001/PA910790.124]

would have a deterrent effect which would help ensure compliance with the Act in the future.

6. The City of Portland is a municipal corporation. It owns and operates a combined sewage storm water system which carries sewage and storm water to a treatment plant. As operator of the system, the City of Portland is responsible for the discharges that are the subject of this complaint.

IV. STATEMENT OF ALLEGATIONS

- 7. The Clean Water Act, 33 U.S.C. §§ 1251-1387, was enacted in 1972 "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Section 301 of the Act prohibits the discharge of any pollutant from a point source into navigable waters unless a permit has been obtained pursuant to § 402, which establishes the National Pollutant Discharge Elimination System (NPDES).
- 8. The Administrator of the Environmental Protection
 Agency (EPA) may issue NPDES permits, but a state may establish
 and administer its own permit program if the program conforms to
 federal guidelines and is approved by the Administrator. 33
 U.S.C. § 1342(b). Oregon has established a federally approved
 state NPDES program administered by the State of Oregon's
 Department of Environmental Quality (DEQ). Or. Rev. Stat.
 § 468.730; Or. Admin. R. 340-45-005 through 340-45-075.
- 9. The Columbia Slough and the Willamette River are both "navigable waters" requiring an NPDES permit for any discharge of a pollutant from a point source into these waters. 33 U.S.C. § 1362(7).

- 10. The term "pollutant" includes sewage, garbage, sewage sludge, solid waste and municipal waste. 33 U.S.C. § 1362(6).
- 11. The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduits " 33 U.S.C. § 1362(14).
- 12. The City operates a combined sewer system which is composed of pipes that transport both storm water and raw sewage. Historically, the effluent (a combination of storm water and sewage) was discharged directly into the Willamette River and the Columbia Slough through a number of outfalls. 1947, the City built a new interceptor system which was designed to carry the effluent to a treatment plant (presently called the Columbia Boulevard Waste Water Treatment Plant) where it was to be treated before being discharged into waterways. During rain storms and occasionally during dry weather, the capacity of the interceptor system is exceeded. In order to prevent rupture of the system in these instances, the excess flows are released through outfalls directly into the Willamette River and the Columbia Slough, with no prior treatment. These untreated discharges of raw sewage and storm water effluent are known as combined sewer overflows (CSO's). These CSO outfalls are up to nine feet wide. It is estimated that 913 million gallons --2800 acre feet -- of combined sewer overflow enters the lower Columbia Slough during an average year. This volume includes approximately 1.1 million pounds of total suspended solids which enter the lower Columbia Slough through CSO's during an average

year. (Columbia Slough Planning Study Background Report, pp. 3-7.)

- 13. On information and belief, there are at least 12 CSO's which discharge into the Columbia Slough and at least 42 CSO's which discharge into the Willamette River.
- 14. On information and belief, these discharges carry domestic sewage, storm water, industrial waste, sewage sludge and garbage (items discarded on city streets which enter storm water drains) into the Waterways.
- 15. On information and belief, there are approximately 800 CSO discharge events into the Columbia Slough each year alone and potentially 3,000 CSO discharge events into the Willamette River per year.
- 16. On information and belief, CSO events have been occurring on a continual basis for at least 35 years.
- 17. The City of Portland's Columbia Boulevard Waste Water Treatment Plant operates under a § 402 permit, but the permit covers only the two outfalls from the plant; it does not cover the 54 (or more) CSO's located throughout the system which regularly discharge effluent into the Willamette River and Columbia Slough.
- 18. Each discharge event is an unpermitted discharge into navigable waters from a point source and is therefore a separate violation of the Clean Water Act. 33 U.S.C. § 1311.
- 19. Pursuant to § 303(a) of the Clean Water Act, states are to develop water quality standards, which become enforceable as a matter of federal law upon EPA approval. 33 U.S.C. § 1313. Oregon's water quality standards for the Willamette River Basin, 6- COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

[15334-0001/PA910790.124]

which includes the Columbia Slough, are found at OAR 340-41-442 et seq. The relevant standards have been approved by EPA.

- 20. On information and belief, DEQ has determined that the Columbia Slough is in violation of the relevant water quality standard for bacteria. At this time, DEQ is developing what is referred to as a "total maximum daily load" (or TMDL) under § 303(d) of the Clean Water Act to address this state of noncompliance. The City's own study acknowledges that this state of noncompliance is largely a result of the CSO effluent being discharged into the Slough. Each CSO discharge that contributes to a water quality standard violation constitutes a separate violation of the Clean Water Act.
- 21. On information and belief, the CSO discharges contribute to other water quality standard violations in both the Slough and the Willamette. Here also, each CSO discharge that contributes to a water quality standard violation constitutes a separate violation of the Clean Water Act.
- 22. On information and belief, effluent from CSO events contain pathogens and other materials that may pose grave dangers to human health upon contact and, additionally, harm aquatic life in the Waterways.
- 23. The violations resulting from the CSO discharges are likely to continue. They result from a system which is overloaded and which does not have the capacity to carry the amount of sewage and storm water entering it to the treatment plant. The full abatement of CSO discharges will require considerable time and expense, and may involve a structural overhaul of the collection and treatment system. Plaintiffs

thus have every reason to believe that noncompliance will be ongoing.

- 24. As owner/operator of the System, the City of Portland is subject to both federal and state enforcement action for failure to comply with the Clean Water Act. 33 U.S.C. § 1319, 1342(b).
- 25. In the absence of "diligen[t] prosecution" of a civil or criminal action brought by the EPA or the state agency, private citizens may commence civil actions in federal district court against any person alleged to be in violation of an "effluent standard or limitation." 33 U.S.C. § 1365(a)(b).
- 26. In the context of citizen suits, "effluent standard or limitation" means an unlawful act under § 1311(a). 33 U.S.C. § 1365(f). The City's CSO discharges constitute unlawful acts under § 1311(a) which prohibits the discharge of any pollutant from a point source into navigable waters without a permit, 33 U.S.C. § 1342(a), and prohibits the discharge of pollutants which contribute to the violation of water quality standards established under § 1312.
- 27. The Clean Water Act provides that any person in violation of § 1311 or § 1312 shall be subject to a civil penalty not to exceed \$10,000 per day of violation for violations occurring prior to February 4, 1987, and \$25,000 per day of violation for violations occurring on or after February 4, 1987. 33 U.S.C. § 1319(d).
- 28. Neither the United States government nor the State of Oregon has brought an enforcement action against the City of

Portland for the violations that are the subject of this complaint.

- 29. Section 1365(b)(1)(A) of the Clean Water Act provides that a citizen suit may not be brought against any person alleged to be in violation of an effluent standard or limitation prior to 60 days after the plaintiff has given notice of the alleged violation to the EPA Administrator, to the state in which the alleged violation is occurring, and to the alleged violator. EPA has promulgated regulations requiring that equivalent notice be served on the EPA Regional Administrator for the region in which the relevant regulations are alleged to have occurred. 40 C.F.R. § 135.20.
- 30. On February 1, 1991, plaintiffs gave written notice to the City of Portland, the EPA Administrator, the State of Oregon, and the EPA Regional Administrator for Region 10, which is the region within which the violations are alleged to have occurred, that the plaintiffs intended to file a citizen suit in federal district court for the District of Oregon under the Clean Water Act, for the City's violations of effluent standards and limitations resulting from improper discharges of pollutants from at least 54 separate point sources in the system. See Exhibit F.
- 31. This citizen suit is being filed more than 60 days after the notice described in paragraph 30 above was given to the City, the EPA Administrator, the relevant Regional Administrator, and the State of Oregon.

V. CAUSES OF ACTION

UNPERMITTED DISCHARGE OF POLLUTANTS

Plaintiff, for its FIRST CAUSE OF ACTION alleges:

- 32. Plaintiffs reallege and incorporate herein by reference paragraphs 1-31 above.
- 33. The defendant, City of Portland, is in violation of the Clean Water Act, 33 U.S.C. §§ 1251-1387, in that it has in the past and continues to discharge pollutants into navigable waters without an NPDES permit (from at least 54 separate point sources).

FEDERALLY APPROVED WATER QUALITY STANDARDS

Plaintiff, for its SECOND CAUSE OF ACTION alleges:

- 34. Plaintiffs reallege and incorporate herein by reference paragraphs 1-31.
- 35. The defendant, City of Portland, is in violation of § 301(a) of the federal Clean Water Act, in that the discharge of pollutants into navigable waters through 54 (or more) point sources have caused and are causing violations of federally approved water quality standards in both the Willamette River and the Columbia Slough.

WHEREFORE, plaintiffs pray as follows:

- 1. That the Court determine and declare that the City of Portland is in violation of the Clean Water Act;
- 2. That the Court issue an injunction which sets a date for full compliance with the Clean Water Act and establishes a comprehensive schedule with milestones adequate to ensure that the ultimate goal is met;

- 3. That the Court assess civil penalties as prescribed under the Act;
- 4. That the Court award plaintiffs their costs and disbursements and attorneys' fees incurred herein; and
- 5. For any further and additional relief that the Court deems appropriate.

DATED this 16th day of April, 1991.

PERKINS COIE

Ву:

Paul T. Fortino

Of Attorneys for Plaintiffs

OSB No. 83201

Paul T. Fortino, OSB No. 83201
Patrick A. Parenteau, OSB No. 90152
Mary C. Wood, OSB No. 90163
PERKINS COIE
Suite 2500
U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, OR 97204
Telephone: 503-295-4400

Of Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF OREGON

NORTHWEST ENVIRONMENTAL ADVOCATES, an Oregon nonprofit corporation, and NINA BELL, individually,

NO.

AFFIDAVIT OF NINA BELL

Plaintiffs,

v.

CITY OF PORTLAND,

Defendant.

STATE OF OREGON))ss. County of Multnomah)

- I, NINA BELL, being first duly sworn, depose and say:
- 1. I am the Executive Director of Northwest
 Environmental Advocates ("NWEA"). I am also an individual
 plaintiff in this action and make this affidavit in support of
 the complaint. I have personal knowledge of the facts stated
 in this affidavit.

1 - AFFII	DAVIT OF	MINA	BELL
COMPLAINT,	EXHIBIT	<u>A</u>	
	PAGE	(-

PA910930.042

- 2. I reside at 3113 N.E. Skidmore, Portland, Oregon 97211. NWEA's office is located at 408 S.W. Second Avenue, Portland, Oregon, 97204. I have worked with NWEA since 1977 and have been its Executive Director since 1985.
- 3. NWEA's attention to water quality issues on the Columbia River dates back to 1969 when the group was actively involved with issues of thermal, chemical and low-level radioactive discharges from the Trojan Nuclear Plant. During May, 1989, an NWEA employee, Chuck Bell, who in 1988 had written a report for NWEA on the water quality of the Columbia River, urged me to involve NWEA in what he considered a scandal: the regular discharge of raw sewage into the Columbia Slough by the City of Portland.
- 4. In late 1989, I was contacted by Mikey Jones, who sought NWEA's help in his long-term attempts to rectify the water quality problems in the Columbia Slough attributable to the discharges of untreated sewage from the City of Portland's Combined Sewer Overflows (CSOs). Mikey gave me a file of much of his correspondence with various government agencies, most notably the Oregon Department of Environmental Quality (DEQ) and the U.S. Environmental Protection Agency (EPA). Over the course of several meetings, Mikey explained the history of the problem, his efforts in promoting cleanup of the Columbia Slough, and why he felt that the current discharges were illegal. It was also brought to my attention that CSOs were located on the Willamette River, and that the Willamette River

likewise suffered from illegal discharges of sewage and other pollutants by the City of Portland. Over the course of the last year, NWEA, through its directors and members, has participated in agency hearings and meetings on the CSO discharges into the waterways.

- 5. In April 1990, I took an Earth Day boat tour of the Willamette from downtown Portland to its confluence with the Columbia, accompanied by a group of legislators and staff from state and local government agencies. Staff from the City of Portland pointed out some of the CSO locations on the banks of the Willamette which discharged directly into the Willamette River.
- In July of 1990, I took a canoe trip with four other 6. NWEA members from the uppermost point of the Lower Columbia Slough to the mouth of the Slough at its confluence with the Willamette River. I saw all 13 CSOs on the Slough, (numbered 54 to 65 on map attached). I was most struck by the huge N.E. 13th Street CSO Outfall, No. 65, into which we brought our canoe. In and around the CSO, the water was covered with a filthy film which I photographed. I was surprised to see the film, because I believed at the time that the CSOs only discharged during periods of rain. That was at the very start of our day-long trip, and all of us tried not to touch the water or drip the water into the canoe or on each other for the duration of that trip. We located each CSO from the descriptions on a map provided to us by the City of Portland

Bureau of Environmental Services and photographed most of them. We saw effluent coming out of at least one CSO.

- asked some people what they were going to do with the fish.

 Members of the Oregon Bass and Panfishers' Club said they were going to throw the fish back after catching them. We did not ask the Hispanic and Asian people who were fishing, because we simply assumed that they were fishing for food. At Kelley Point Park, where the banks of the Slough are sandy, we saw families with small children swimming, playing in the sand, and fishing. I would have enjoyed the trip immensely were it not for the scummy quality of the water as a result of the CSOs. We viewed incredible bird life: great blue herons, kingfishers, goldfinches and hawks by the dozens.
- 8. In August 1990, I accompanied DEQ staff on a sampling trip on the Willamette. We launched the boat at the Cathedral Park boat ramp (in the vicinity of CSO Nos. 50 and 52 on the attached map) and took sediment samples and set traps for leaches near river mile 6.75 on the Willamette downstream of the McCormick and Baxter wood treating plant (in the vicinity of CSO Nos. 48 and 49 on the attached map). We then did the same in the North Portland Harbor at a site downstream of the 002 outfall of the Columbia Boulevard Sewage Treatment Plant (around river mile 105 on the Columbia). On this trip, as well as other trips, I could not completely

4 - AFFIDAVIT OF NINA BELL COMPLAINT, EXHIBIT A avoid contact with the water. However, I was very careful not to put my hands to my mouth after assisting with this task.

- 9. Since these trips, I have talked with people who have been canoeing on the Columbia Slough during wet weather months who encounter filthy and smelly water and numerous dead rats. I also have talked with a DEQ employee who is knowledgeable about the Portland sewer system who saw CSO No. 8 discharge on September 8, 1989, which was a dry, hot day.
- 10. Often when I am going home over the Steel Bridge I see people fishing on the Willamette directly downstream of CSO No. 40. I also see people water-skiing in the Willamette in downtown Portland (in the vicinity of CSO Nos. 35, 36, 37 and 38) all year round, including days when rainfall has caused CSO discharges.
- 11. I would use the Slough more often if the water were not utterly disgusting. Canoe trips would be fabulous in cleaner water. I would like to buy a canoe and use the Slough more frequently, but I am afraid to take my small boy there because of the potential health hazard resulting from contact with the sewage in the water. We used to visit Willamette Park, but I would not want to go there now that I know that CSO Nos. 1, 2 and 3 are located at and near that park. Similarly, I have gone to Kelley Point Park for work and pleasure, but I would not want to let my child go near the water because of the sewage. My feeling about the Willamette

River has changed now. Every time I cross it and see the innumerable CSOs, I feel depressed.

- 12. NWEA is actively involved in water quality issues in the Columbia Slough and the Willamette River. We respond to numerous inquiries from people calling our office asking if it is safe to swim in the Willamette, at Kelley Point Park and on Sauvie Island. NWEA has purchased a 26-foot boat, called the RiverWatch, which we are refurbishing. NWEA members and volunteers, on at least five occasions, have taken the boat on the Willamette from Oregon City to the Columbia River. They have also taken the boat up the Columbia Slough to the St. John's Landfill. In May 1991, NWEA will officially launch its Columbia/Willamette RiverWatch Program. Members of the public and elected representatives will be taken on boat trips free of charge in the Portland Harbor area and the Columbia Slough.
- 13. Over the course of 1990, the NWEA Board of Directors and I discussed the CSO discharges into the Slough and the Willamette. We also contacted other North and Northeast Portland citizens, local environmentalists and environmental attorneys. I then sought legal representation to pursue what I and the NWEA Board believed was the appropriate course

6 - AFFIDAVIT OF NINA BELL

PAGE 6

PA910930.042

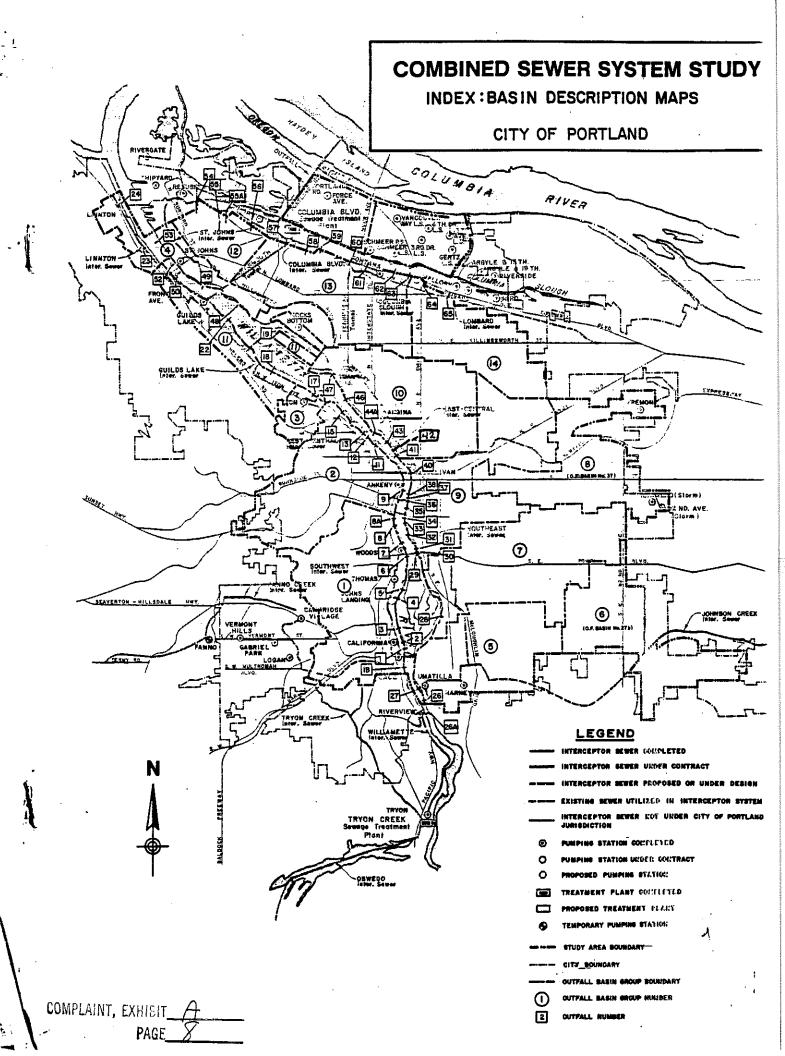
of action.

Nina Bell

SUBSCRIBED AND SWORN to before me this 15th day of April, 1990.

Notary Public for Oregon

My Commission Expires: 10/600



Paul T. Fortino, OSB No. 83201 Patrick A. Parenteau, OSB No. 90152 Mary C. Wood, OSB No. 90163 PERKINS COIE Suite 2500 U.S. Bancorp Tower 111 S.W. Fifth Avenue Portland, OR 97204 Telephone: 503-295-4400

Of Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

NO.

AFFIDAVIT OF MARK PRATT

NORTHWEST ENVIRONMENTAL ADVOCATES, an Oregon nonprofit corporation, and NINA BELL, individually,

Plaintiffs,

v.

CITY OF PORTLAND,

Defendant.

STATE OF OREGON

)ss. County of Multnomah)

- I, MARK PRATT, being first duly sworn, depose and say:
- I am a member of the Northwest Environmental Advocates ("NWEA"). I make this affidavit in support of the complaint in this action and have personal knowledge of the facts stated in this affidavit.

1- AFFIDAVIT OF MARK PRATT

[15334-0001/PA910950.087] COMPLAINT, EXHIBIT PAGE

- 2. By way of background, my occupation is a cobbler. Since 1986, I have resided at 822 N. River Street, Portland, Oregon, 97227.
- 3. I live 20 yards from the banks of the Willamette River, approximately one-quarter mile north of the Broadway Bridge. I have a view of the Willamette River ("River") from my home. I live within 30 yards of one of the combined sewer overflow (CSO) outfalls which discharges into the River. (Outfall No. 43, on the map attached.) I also have a full view of Outfall No. 11 (see map attached) located across the River from my residence.
- 4. I regularly observe sewage discharging into the Willamette River from Outfall Nos. 43 and 11. I also, on regular occasion, smell a sewage odor from where I live. The odor emanating from the outfall smells like urine. The odor is strong, obvious and disgusting. The site and smell of sewage negatively impacts the enjoyment of my home.
- on the River two to four times a week in the summer and one to two times a week in the winter, on average. I use the canoe not only for recreational purposes, but also as a mode of transportation for the purpose of investigating and monitoring the conditions of the River. My canoe trips span from Molalla State Park (above Oregon City) to Sauvie Island, between Outfall No. 26A and No. 24, as reflected on attached map. Additionally, I bicycle along the Willamette River on a path 2- AFFIDAVIT OF MARK PRATT

[15334-0001/PA COMPLAINT,	B	
	PAGE	ے

which runs parallel to the river five yards from the shore of the east side between the Morrison and Hawthorne Bridges (between Outfall No. 35 and No. 38). I also photograph the River from my canoe, primarily to record the pollution and sometimes just for scenic reasons, on a stretch of river which includes the city center (between Outfall No. 26A and No. 24). I also engage in bird watching from the shore of the River.

- 6. During my excursions on the River, I see others canoeing on the River, water skiing on the River, and biking along the banks. All of these activities take place above, through and below the city along the Willamette River between and beyond Outfall No. 26A and No. 24.
- 7. I have observed our city bird, the Great Blue Heron, feeding from CSO's between the Hawthorne and Burnside Bridges on the east side of the River. I found a dead Blue Heron on these same banks, near Outfall No. 36.
- 8. My use and enjoyment of the River is significantly hampered the sight and smell of sewage. I do not swim or fish in the River because of the sewage and other debris that flows out of the Outfalls into the water. If such discharges did not occur, I would swim and fish in the River, and my overall recreational and esthetic enjoyment of the River would be greatly enhanced.
- 9. I have been concerned about the CSO discharges into the River and the resulting degradation of water quality for a number of years. Consequently, I have taken actions to 3- AFFIDAVIT OF MARK PRATT



address the problem. For two years, I have taken investigatory excursions in my canoe to trace the source of the pollution in the River. On frequent occasions, I have paddled directly up to outfalls (specify which ones on map) and have seen the sewage and other matter that is discharged from them into the River. Further, in the immediate vicinity of the CSO's, I have collected debris transported presumably from city streets and the city sewer system, through outfalls and into the River. Such debris is typically found about one yard down river from the outfall on the banks and includes hypodermic needles, thousands of cigarette butts, condoms, tampon applicators, all kinds of plastics, toilet paper, etc. I have photographed several of the outfalls along the River, areas around the outfalls, the River itself, and have kept a log of my investigatory excursions.

- 10. As a result of my concern for the River, I organized river cleanups in which other concerned citizens have participated. Between 1990 and 1991, I organized trips (once per week on average) during the spring, summer and fall for the purpose of picking up debris along the riverbank and in the River itself. Ordinarily, on these trips we can fill our 16-foot boat so full of garbage in 30-45 minutes that there is almost no room for us to sit on the return trip.
- 11. In June, 1990, I began an organization called Repair Northwest, whose purpose it was to spur public awareness, education, and participation in River cleanup activities.

 4- AFFIDAVIT OF MARK PRATT

COMPLAINT, EXHIBIT PAGE

Some of the activities sponsored by Repair Northwest include once a week debris cleanups (involving five people on average); a citizens' river cleanup day to clean up the Swan Island section of the Willamette River; studying and investigating the River and developing a file of documentation; handing out fact sheets to boaters explaining pollution problems on the Willamette River; assisting the City of Portland with its Clean River Program; meeting with the Oregon Department of Fish and Wildlife to discuss pollution problems on the Willamette River; handing out trash bags to boaters as part of an overall cleanup effort on the Willamette River; and taking news reporters and camera crews on pollution tours of the River. In the fall of 1990, I joined NWEA to extend my involvement in these water quality issues through an additional forum.

12. The outcome of this lawsuit will thus directly affect me, as I plan to continue using the Willamette River for recreational purposes.

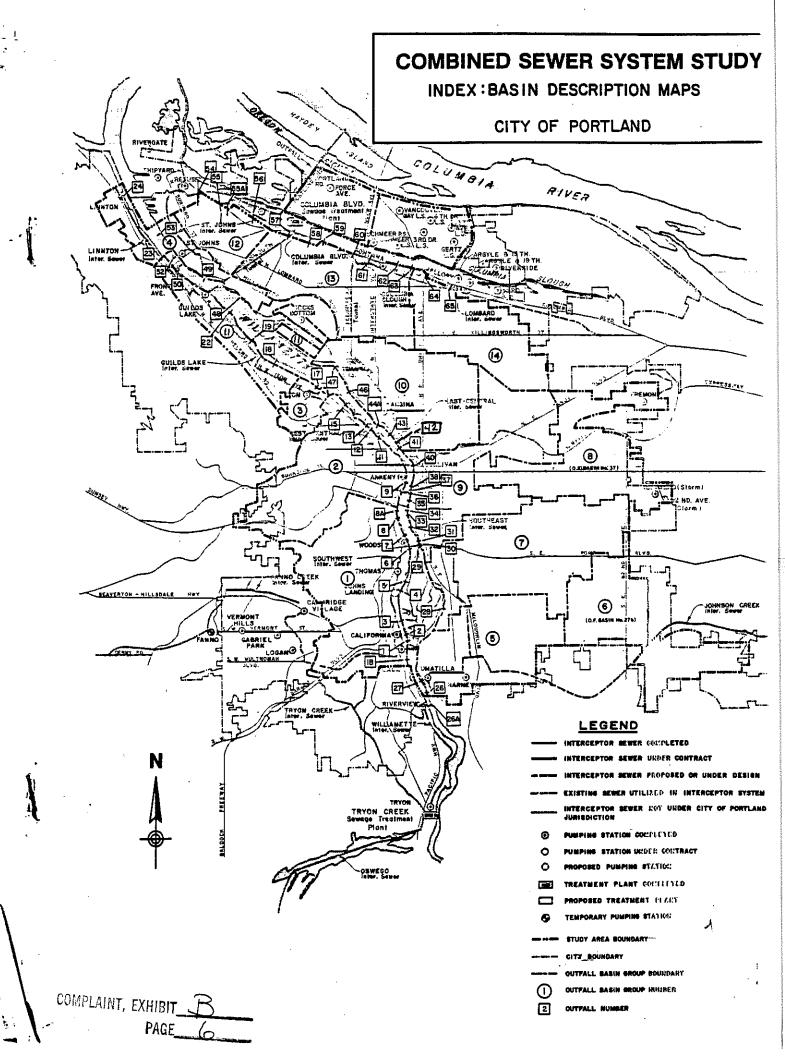
Mark Pratt

SUBSCRIBED AND SWORN to before me this 11th day of April, 1991.

Notary Public for Oregon My Commission Expires: 4/07/92

5- AFFIDAVIT OF MARK PRATT

[15334-0001/PA910950.087]
CUMPLAINT, EARLOH
PAGE 5



Paul T. Fortino, OSB No. 83201 Patrick A. Parenteau, OSB No. 90152 Mary C. Wood, OSB No. 90163 PERKINS COIE Suite 2500 U.S. Bancorp Tower 111 S.W. Fifth Avenue Portland, OR 97204 Telephone: 503-295-4400

Of Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF OREGON

NO.

AFFIDAVIT OF CHRIS TOTH

NORTHWEST ENVIRONMENTAL ADVOCATES, an Oregon nonprofit corporation, and NINA BELL, individually,

Plaintiffs,

ν.

CITY OF PORTLAND,

Defendant.

STATE OF OREGON)ss. County of Multnomah)

I, CHRIS TOTH, being duly sworn, depose and say:

I am a member of Northwest Environmental Advocates ("NWEA"). I make this affidavit in support of the complaint in this action, and I have personal knowledge of the facts stated in this affidavit.

FIDAVIT OF CHRIS TOTH

[15334-0001/PA910950.055] COMPLAINT, EXHIBIT (PAGE_

1	תדקקג	አ ፕፖፓጥ	$\Delta \mathbf{r}$	CHDIC	Π

- 2. By way of background, I work as a cobbler and also as a freelance proofreader and editor for publications. I reside at 822 North River Street, Portland, Oregon, 97227.
- 3. I have a full view of the Willamette River (River) from my residence which is located just 20 yards from the east bank of the River. I have a full view of a combined sewer overflow (CSO) outfall indicated as Outfall No. 11 on the attached map, which is located just 120 yards from my residence. When I look out my window toward the River, I often see sewage flowing directly into the River.
- 4. I canoe along the Willamette River (between Swan Island and the Hawthorne Bridge) approximately twice per week. My canoe trips take me between Outfall No. 46 and No. 34, as reflected on the attached map. I explore the banks from my canoe. I often disembark and examine the River's edge. I also enjoy bird watching along my canoe route and from my home.
- 5. My uses of the River, however, are severely hampered due to the obvious presence of sewage in the water. On frequent occasions while canoeing, I see raw sewage being discharged from the outfalls near my home (CSO No. 43 and No. 11). On those occasions, the River itself smells like sewage. The sewage is often a foamy brown mixture that spews from the outfalls and flows in a "stream" down river where it gradually dissipates. I have canoed in the midst of such streams as far as one-half mile. In these flows, I have seen cigarette butts 2- AFFIDAVIT OF CHRIS TOTH

COMPLAINT, EXHIBIT C

(by the hundreds), condoms, tampon applicators, and dead rats floating. I have witnessed such a display of sewage as recently as March 24, 1991, just after a heavy period of rain. The odor smells of fecal material and is disgusting. Near the mouth of these outfalls, I often see a concentration of condoms, needles, tampons, toilet paper, and cigarette butts tangled in the briers and washed onto the beach. One such example is a site just five to ten yards down river from Outfall No. 42. Here, condoms are left dangling from the vines at the River's edge, as are tampons and toilet paper. I also have seen bloated, dead rats floating in the water on separate occasions near Outfall No. 41, 30 yards from Outfall No. 43, and three yards from Outfall No. 36.

detracts from my canoeing, biking and bird watching. I feel that it should be my right to use the River for recreational purposes. I should be able to take my lunch in my canoe and spend the afternoon writing along the banks of the Willamette River with wildlife for company. (I have a degree in creative writing and English literature from Ohio University.) My excursions are ruined, due to the stench and filth in the River. I cannot have lunch along the banks of the River, because they are revolting in their sight and smell. I cannot go to the River and remain calm enough to write. I am disgusted and infuriated by what is being dumped into the River. Moreover, when I take a canoe trip, I consider myself 3- AFFIDAVIT OF CHRIS TOTH

CUMPLAINT, EXHIBIT C

at risk and take great care not to come in physical contact with the river water. Were it not for the presence of sewage, I would water ski and swim in the Willamette River. (At present, I swim three to five times per week indoors, but would prefer to swim outdoors.)

- 7. Out of concern for the water quality of the Willamette River, I joined REPAIR Northwest, a group dedicated to improving water quality in local rivers through public awareness, public involvement, and education. As a part of this group, I have participated in cleanup efforts along the Willamette River, held, on average, once per week. In participating in this group, my goal is to help enhance recreational activities and wildlife habitat along the River, now threatened due to the River's sewage contamination. My involvement with NWEA is similarly motivated by this goal.
- 8. The outcome of this lawsuit will directly affect my use and enjoyment of the Willamette River.

DATED this ___/_ day of April, 1991.

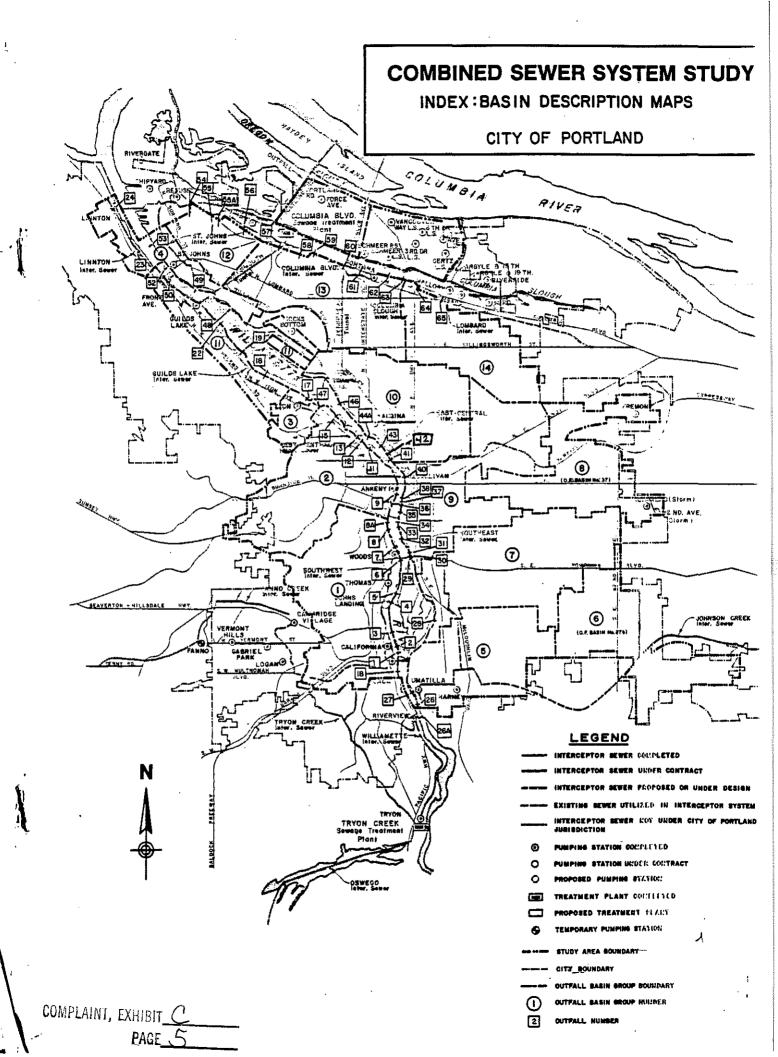
Chris Toth

SUBSCRIBED AND SWORN to before me this 11th day of April, 1991.

Notary Public for Oregon/ My Commission Expires: 4-27-92

4- AFFIDAVIT OF CHRIS TOTH

COMPLAINT, EXHIBIT PAGE 4



Paul T. Fortino, OSB No. 83201
Patrick A. Parenteau, OSB No. 90152
Mary C. Wood, OSB No. 90163
PERKINS COIE
Suite 2500
U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, OR 97204
Telephone: 503-295-4400

Of Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

NORTHWEST ENVIRONMENTAL ADVOCATES, an Oregon nonprofit corporation, and NINA BELL, individually,

NO.

AFFIDAVIT OF DAVID FINDLAY

Plaintiffs,

v.

CITY OF PORTLAND,

Defendant.

STATE OF OREGON))ss. County of Multnomah)

- I, DAVID FINDLAY, being first duly sworn, depose and say:
- I am a member of Northwest Environmental Advocates ("NWEA"). I have personal knowledge of the facts stated in this affidavit.
- By way of background, I am a full-time student. I reside at 1430 S.E. Clinton Street, Portland, Oregon, 97202.
 I have been a resident of Portland for 25 years.
- 1- AFFIDAVIT OF DAVID FINDLAY [15334-0001/PA910570.066]

COMPLAINT,	EXHIBIT_	D
	PAGE	

- з. I frequently use the Willamette River for recreational purposes. I fish on the Willamette River for spring Chinook near the Sellwood Bridge near combined sewer overflow (CSO) outfall marked No. 27 on the attached map. Additionally, I own a canoe and power boat, both of which I take on the Willamette River. In the summer I canoe the Willamette on average two times per week between the Fremont Bridge and the Broadway Bridge (between Outfall No. 40 and No. 44). I also take my canoe on the Columbia Slough at least once each winter in the vicinity of Kelley Point Park. I take my power boat on the Willamette River an average of once a week in the summer. On occasion, I boat between Molalla and a point above Oregon City (between Outfall No. 26A and No. 24). Additionally, approximately eight times per year, I bike along the east side of the Willamette River between the Hawthorne Bridge and the Steel Bridge (between Outfalls No. 34 and No. 38) on a bike path which is located approximately five yards from the river.
- 4. On several of my canoe trips along the Willamette River, I have approached Outfall No. 43 and have smelled the discharge into the river. On these occasions, the outfall was submerged under water, but the odor of the sewage was strong. I also have observed several bloated, dead rats along the banks of the Willamette in the vicinity of the Fremont and

²⁻ AFFIDAVIT OF DAVID FINDLAY
[15334-0001/PA910570.066]

Broadway Bridges, just yards down river from Outfall Nos. 43, 41 and 11.

- I have observed a marked difference in the nature of 5. debris floating in the Willamette River and scattered on its banks in the vicinity of Oregon City as compared with the stretch of river between the Sellwood Bridge to the Fremont Bridge, where many of the CSO's are located. Near Oregon City, the debris appears to be a result of recreational activities. For example, it consists largely of Styrofoam containers, beer cans and bottles, and discarded fishermen's equipment (i.e., hooks and lines). The water in the river near Oregon City also appears relatively clean, and it is free of condoms, drug needles, and tampon applicators. By contrast, in the area of Portland, near Outfall No. 40 and No. 44, the debris includes large numbers of condoms, used hypodermic needles, tampons, and cigarette butts by the The difference in the nature of debris between the thousands. upper Willamette (near Oregon City) and the lower Willamette (near Portland) is striking.
- 6. The severe condition of the water quality in the Willamette and Columbia Slough near Portland has concerned me for a long period of time. Consequently, I joined a group, REPAIR Northwest, whose purpose it is to improve the water quality of nearby rivers by encouraging public awareness, participation in cleanups, and education. I joined REPAIR

3- AFFIDAVIT OF DAVID FINDLAY [15334-0001/PA910570.066]

COMPLAINT, EXHIBIT PAGE 3

Northwest in 1990 and have participated in several of their river cleanups since that time. My membership and involvement in NWEA is likewise attributable to my concern for the Willamette River and the Columbia Slough.

7. The outcome of this lawsuit will directly affect my use and enjoyment of the Willamette River and the Columbia Slough. If water quality in those rivers is improved as a result of eliminating discharges from CSO's, I would swim in the river and, additionally, my canoeing on the river and viewing of the surrounding areas would be greatly enhanced. Moreover, I would consume the fish I caught in these areas, whereas presently, I do not consume them for fear of contamination resulting from the presence of sewage in the river.

DATED this //th day of April, 1991.

David Findlay

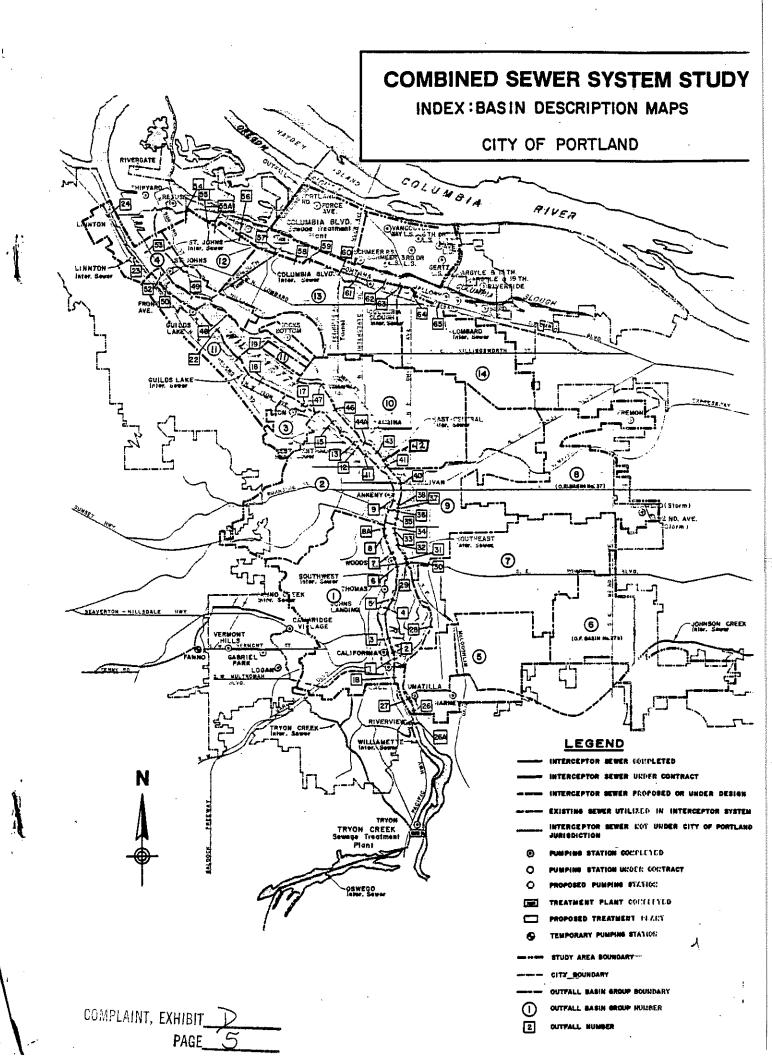
SUBSCRIBED AND SWORN to before me this 11th day of April, 1991.

Notary Public for Oregon

My Commission Expires: 4-27-92

4- AFFIDAVIT OF DAVID FINDLAY [15334-0001/PA910570.066]

COMPLAINT, EXHIBIT PAGE 4



Paul T. Fortino, OSB No. 83201
Patrick A. Parenteau, OSB No. 90152
Mary C. Wood, OSB No. 90163
PERKINS COIE
Suite 2500
U.S. Bancorp Tower
111 S.W. Fifth Avenue
Portland, OR 97204
Telephone: 503-295-4400

Of Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

NORTHWEST ENVIRONMENTAL ADVOCATES, an Oregon nonprofit corporation, and NINA BELL, individually,

NO.

AFFIDAVIT OF MIKEY JONES

Plaintiffs,

v.

CITY OF PORTLAND,

Defendant.

STATE OF OREGON))ss. County of Multnomah)

- I, MIKEY JONES, being first duly sworn, depose and say:
- 1. I am a member of the Northwest Environmental Advocates ("NWEA"). I make this affidavit in support of the complaint. I have personal knowledge of the facts stated in this affidavit.

1- AFFIDAVIT OF MIKEY JONES [15334-0001/PA910570.014]

COMPLAINT,	EXHIBIT_	E
	PAGE	1

- 2. By way of background, my occupation is making wine. I reside at 17751 Amity Vineyards Road, Amity, Oregon, 97101.
- 3. I have been actively involved in groups that have monitored the condition of the Columbia Slough and have advocated improvement of water quality. My involvement with these issues includes being a representative on the North Portland Citizen's Council from 1986 to 1989; membership in the City of Portland Columbia Slough Leadership Group; and participation in the Smith and Bybee Lakes Management Committee.
- 4. I have used and enjoyed the Columbia Slough over the past 13 years. My activities include canoeing on the Slough and walking along its banks. I visit the Slough 12 times per year, on average. My canoe trips generally take me on the section of the Slough between the confluence of the Willamette River and the Columbia Slough and the Peninsula Channel, which is between Outfall #54 and #65 as reflected on the attached map. When I take walks along the banks of the Slough, I generally walk in the vicinity of Smith and Bybee Lakes and Penn 1 Drainage District between Outfall #55A and #60 as reflected on the attached map.
- 5. On my visits to the Slough over the past 13 years,
 I have observed Vietnamese fisherman fishing out of the
 Slough (near the confluence of the North Slough and the
- 2- AFFIDAVIT OF MIKEY JONES [15334-0001/PA910570.014]

COMPLAINT, EXHIBIT <u>E</u>

PAGE 2

Columbia Slough) in the vicinity of Outfall #54 as reflected on the attached map. They eat all types of fish including carp and crayfish and freshwater clams.

- On several visits to the Slough over the past 13 years, I have observed sewage flowing directly into the water from an Outfall located at 13th Street (#65 on the attached It is a huge outfall pouring a river of sewage; it has the character of excrement. When this outfall is flowing, it adds so much water and sewage to the Slough that it submerges the other nearby outfalls. Additionally, I used to ride the "Empire Builder" train past the Slough daily on my way to work from 1987 to 1989 when I was employed by Amtrak as a Conductor. On both dry days and wet days, I observed raw sewage flowing into the Slough from outfalls in the sewer works not listed on the attached map. In the summer, many outfalls between Denver Avenue and the Landfill (Outfalls # 56, 57, 58, 59, 60) will have a steady stream of filth. When I worked as a yard master for Union Pacific, I would eat lunch atop Outfall #56, until one summer day I realized it was a sewer when I observed "floaters" in it.
- 7. The sewage in the Slough has significantly impaired and detracted from my use and enjoyment of this area. I am offended by the appearance and odor of the water. Although I am sickened by some of the sights, I am amazed I still find the Slough beautiful. I do not canoe for fun, because I am

3- AFFIDAVIT OF MIKEY JONES [15334-0001/PA910570.014]

COMPLAINT, EXHIBIT E PAGE 3

afraid the water will make me sick. Additionally, I worry about those who eat the fish. If it were clean, I would fish and swim in it. I also believe that if the City of Portland were not ashamed of the Slough, it would allow the use of the Park Bureau property in the Kenton neighborhood where my house is, along the proposed 40-mile loop.

8. The outcome of this lawsuit will thus directly affect my use and enjoyment of the Slough.

SUBSCRIBED AND SWORN to before me this $\frac{4}{2}$

___ day of

March, 1991.

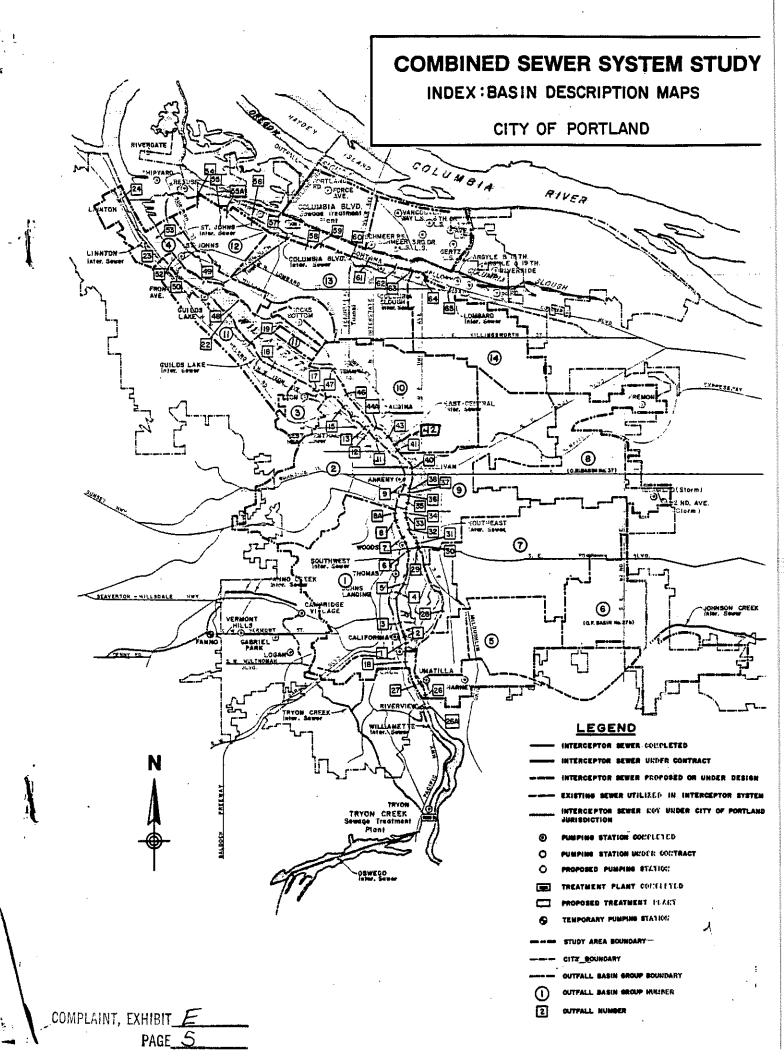
Notary Public for Oregon

My Commission Expires:

4- AFFIDAVIT OF MIKEY JONES

[15334-0001/PA910570.014] COMPLAINT, EXHIBIT

PAGE 4



PERKINS COIE

A Law Partnership Including Professional Corporations
U.S. Bancorp Tower, Suite 2500 • 111 Southwest Fifth Avenue • Portland, Oregon 97204
Telephone: (503) 295-4400

February 1, 1991

Via Certified Mail

Ms. Mary Nolan Director of Environmental Services City of Portland 1120 S.W. Fifth Avenue Portland, OR 97204

Re: Notice of Intent to File Suit Under Section 505 of the Clean Water Act

Dear Ms. Nolan:

This letter is to inform you that Northwest Environmental Advocates and other named plaintiffs (collectively "NWEA") are intending to file suit against the City of Portland (the City) to enforce the requirements of Section 301(a) of the Clean Water Act, 33 U.S.C. 1311(a), with regard to the unpermitted discharges of pollutants from the City's combined sewer system. This action will be filed pursuant to Section 505(a)(1) of the Act. This letter constitutes the 60-day notice required by Section 505(b) of the Act.

NWEA is aware of at least 12 combined sewer overflow points ("CSOs") that discharge into the Columbia Slough, and at least 43 CSOs that discharge into the Willamette River. NWEA also is aware that the City's consultants have estimated that there are almost 800 CSO discharge events into the Slough each year. Although the City does not appear to have generated any similar analysis with regard to the number of such events in the Willamette, reasonable extrapolation would appear to indicate that there might be as many as 3,000 CSO discharge events into that river annually.

Each CSO event represents a violation of the Clean Water Act. Section 301(a) of the Act prohibits point source discharges of pollutants into the navigable waters of the United States, except as permitted under the terms and conditions of an NPDES permit issued pursuant to Section 402 of the Act. Each CSO discharge event constitutes a "point source" discharge under the Act. None of the CSOs, and therefore none of the resulting discharges, are permitted pursuant to Section 402.

1

n=	
COMPLAINT, EXHIBIT F	Telex: 32-0319 Perkins Sea • Facsimile (503) 295-6793
	Anchorage * Bellevue * Los Angeles * Seattle * Washington, D.C.

Additionally, NWEA has reason to believe that the CSO events may cause water quality standard violations in both the Slough and the Willamette. The City's own consultants have determined that the CSOs give rise to very high fecal coliform levels in the lower slough. The same presumably is true for the Willamette. Additionally, the CSOs may be a significant source of toxins for both the Slough and the Willamette River.

Each violation of a water quality standard constitutes an additional violation of the Clean Water Act. More significantly, NWEA is very concerned about the impacts of these water quality standard violations. As you know, both the Slough and the Willamette River are used extensively for contact recreation such Additionally, at least the Willamette as fishing and boating. also is used for swimming. While much of this activity is limited to the drier periods of the year, this is not exclusively so; it cannot be said that no boating or fishing occurs in these waterbodies during the wet-weather months. Moreover, the storm events which give rise to CSO events are not limited to the winter months. By way of example, NWEA is very concerned about the first major storm that occurs either late each summer or early each fall, during what might otherwise be considered a "dry" time of year. It is our understanding that this storm might yield particularly high levels of pollutants, due to the "first flush" effect.

NWEA is aware that the City is implementing a Clean Rivers Program and that one component of this program is devoted to addressing water quality issues for the Columbia Slough. NWEA also is aware that the water quality issues in the Slough extend beyond the CSOs, and that any approach to the CSO problem must also consider such issues as the control of stormwater runoff, the removal of cesspools in the mid-county area, and the closure of the St. Johns Landfill. NWEA realizes that the Clean Rivers Program is addressing or will address these issues.

NWEA applauds the City for the steps that it has taken. However, NWEA is concerned that the CSO problem will not be resolved satisfactorily, or in an appropriately expeditious timeframe, in the absence of a judicially-sanctioned compliance schedule. The City, for example, has been aware of the water quality impacts that the CSOs have on the Slough since at least the 1950's. As early as 1974, DEQ recommended that the City should eliminate the discharge of untreated sewage into the Slough by 1985. Instead, the City has continued to study the problem and has yet to take any substantive measures to reduce the impacts that these CSOs are having on the Slough.

More significantly, the City's efforts seem to be focused on the Slough to the exclusion of any analysis relating to the problems that CSOs are causing in the Willamette River, let alone



any efforts to redress those problems. NWEA considers the issues relating to the impacts that these CSOs are having on the Willamette to be at least as significant as those relating to the Slough. While the Willamette may flush itself more readily, it is also more heavily utilized for certain forms of contact recreation, such as swimming. Thus, the public exposure scenarios for the Willamette may be more significant than those posed by the Slough.

We will be seeking through this lawsuit to implement the requirements of the Clean Water Act. As you may know, the Act requires that any CSO discharges be pursuant to a permit including both technology-based and water-quality-based requirements. From a technology-based standpoint, CSO systems are to incorporate principles of both best conventional pollutant control technology ("BCT") and best available technology economically achievable ("BAT"). Additionally, current water quality standards must be complied with at all times. water quality standards can be modified only through an administrative process established at 40 C.F.R. Part 131. Specifically, States may remove designated uses, or downgrade existing uses to seasonal uses, only after going through a public hearing process which establishes (1) that the designated use is not an existing use, and (2) that attaining the designated use is not feasible for one of a limited set of reasons. 40 C.F.R. § 131.10.

NWEA understands that the City will not be able to achieve compliance with water quality standards overnight. NWEA further understands that it may take some time to understand fully what BCT and BAT require under the facts of this case. At the same time, however, NWEA believes that there are some steps that can be taken immediately to reduce the impacts that the CSOs are having on the relevant waterbodies. These might include, for example, increasing the frequency with which the catch basins are cleaned, flushing sewage deposits from the sewers during low flow periods, screening the sewer outfalls, and taking steps to maximize in-sewer storage. Some of these steps are components of all four of the City's alternative CSO plans for the Columbia Slough embodied in its September, 1989, report. Others are clearly contemplated under EPA's list of minimum requirements. NWEA sees no reason not to implement these steps right away.

While we are prepared to litigate these matters, NWEA is hopeful that this lawsuit can be resolved through negotiation, with the settlement then being embodied in a consent decree. We will strive to bring a constructive presence to the issues at hand and are willing to work with the City in establishing a reasonable but expeditious schedule. Our view is that the schedule should contain a date certain for full compliance, milestones to measure progress, and sanctions for deadlines missed.

Although compliance is the main object of this action, compensation for damage already done and deterrence of future violations are also important objectives. NWEA is very concerned about the long-standing nature of these violations, the injury to beneficial uses that has occurred, and the City's failure to take any meaningful action to correct the problems or mitigate the Even under the best of circumstances, it will take years to achieve full compliance, and perhaps even longer to fully restore beneficial uses. Meanwhile, the Slough and the Willamette will continue to receive untreated sewage and other pollutants (e.g., refuse) from the CSOs. The serious nature of these ongoing violations warrant penalties as prescribed by the Clean Water Act. The Act provides for penalties of up to \$25,000 per day for each violation occurring after February 5, 1987 (\$10,000 per day prior to that date). Should this matter proceed to trial, the judge will fix the amount of any penalty, payable to the United States Treasury. However, NWEA would prefer to negotiate a comprehensive settlement that would include the creation of a special fund to carry out projects beneficial to the Slough and the Willamette, in addition to those needed to achieve compliance. Courts have recognized such "credit projects" as appropriate alternatives to penalty assessments in citizen suits.

Please feel free to contact me directly should you wish to discuss these matters prior to the filing of our complaint.

Very truly yours,

Patrick A. Parenteau

cc: William K. Reilly, Administrator
U.S. Environmental Protection Agency
Dana Rasmussen, Regional Administrator
U.S. Environmental Protection Agency
Fred Hansen, Director
Oregon Department of Environmental Quality
Betty Roberts, Governor
State of Oregon
J.E. Bud Clark, Mayor
City of Portland
Earl Blumenauer, Commissioner of Public Works
City of Portland

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I caused to be served the foregoing COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF on the following parties on the 16th day of April, 1991, by mailing to them, via certified mail, return receipt requested, true copies thereof, contained in sealed envelopes with postage prepaid, addressed to said individuals at their last known addresses, to wit:

Mary Nolan
Director of Environmental Services
City of Portland
1220 S.W. Fifth Avenue
Portland, OR 97204

Fred Hansen, Director Oregon Department of Environmental Quality 811 S.W. Sixth Ave. Portland, OR 97204

Earl Blumenauer, Commissioner Commissioner's Office City of Portland 1220 S.W. Fifth Avenue Portland, OR 97204

William K. Reilly, Administrator U.S. Environmental Protection Agency 401 M Street, S.W. Washington, D.C. 20460

Dana Rasmussen, Regional Administrator Region 10 U.S. Environmental Protection Agency Office of Regional Counsel 1200 Sixth Avenue (SO-125) Seattle, WA 98101

Betty Roberts, Governor State of Oregon State Capital Building Salem, OR 97310 J.E. Bud Clark, Mayor City of Portland 1220 S.W. Fifth Avenue Portland, OR 97204

DATED this $\frac{16\%}{}$ day of April, 1991.

PERKINS COIE

ву:

Paul T. Fortino

Of Attorneys for Plaintiffs

OSB No. 83201

NORTHWEST ENVIRONMENTAL ADVOCATES



Memorandum

Date: April 25, 1991

To: Environmental Quality Commissioners

From: Nina Bell, Executive Director

OFFICE OF THE DIRECTOR

Gtore of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Re: Work Session agenda item Triennial Review

It is with a certain degree of regret and reluctance that I provide members of the Commission with the attached memoranda. I do not suggest that you attempt to read and understand the full scope of these documents today. However, I think it is imperative that the Commission not act on any of the subject matters discussed in these memoranda until it has had a chance to fully comprehend their import.

In my view, these memoranda show that the Department is being "blackmailed" by the Association of Oregon Industries (AOI). AOI has said, in essence, that if DEQ does or does not do certain specific things that the Association requests, AOI will support DEQ's budget request 91-93 in the current legislative session. While I think that AOI's actions reflect most poorly on AOI, my concern is with the response of DEQ and the Commission.

The Clean Water Act¹ specifically <u>requires</u> DEQ to conduct its "Triennial Review" of water quality standards in a <u>public</u> forum. Regardless of how innocuous AOI's requests may seem on their substantive merit, and I do not believe that they are, it is wholly inappropriate for the Department to make decisions regarding the triennial review in some "backroom deal." The decision to go forward or not on the water quality standards should be made following DEQ staff's full written evaluation of comments received in the public process.

DEQ Director Fred Hansen will hasten to point out that, from a substantive perspective, DEQ is not acting in any way or asking the Commission to act in any way that compromises either the Department's or the Commission's ability to protect the environment. I would say that, under the circumstances,

^{1.} Section 303(c)(1) reads as follows:
The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with October 18, 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. * * *

each member of the Commission should go behind the statements of DEQ management and carefully make a finding on each item prior to taking any action.

I am sorry that I cannot be present at your work session but due to obligations of the Lower Columbia River Bi-State Water Quality Program I am in meetings all day.

P.O. Sox 12519 1149 Court St. N.E., Salem OR 97309-0519

> Telephone: Salem S03/588-0050 Portland 503/227-5634 Oregon 200/452-7862 FAX 503/588-0052

> > Portland Office 503/227-3730

OFFICERS

Chairman of the Board RIPLEY W. GAGE Gage Industrics

First Vice-Chairman KON SCHIFF Fay Less Drug Stoms NW

President RICHARD M. BUTRICK

Treasurer CECIL W. DRINKWARD Hoffman Construction

> CHARLES H. FROST Tektronix

Immodiate Past Chairman DONALD J. COOK Pendiaton Grain Growers

EXECUTIVE COMMITTEE

RECHANGE OF A PRINCE OF A PRINCE OF A PRINCE OF A PRINCE OF A PORCE OF A PRINCE OF A PRINC

DAVID E. BECKER Becker Company *JERRY FISHER Hewlett-Packam

*THOMAS FREEDMAN Les Schwab Tire Centers JOHN HAMPTON

Williamina Lumber
JOSCH HTTSON

Security Pacific Bank of Oregon

NULLIMAL JUNE
Portland General Flector

DOUGLAS McKEE Pay Less Drug Stores NW

MORTON MICHELSON Cascade Stock Rolling Mills

R. GENE MORRIS
Oak Street Tank & Steet
*BRUCE O'NEIL

Westcom Productions
TOM PRITERSON

Xonix Technologies
RIC: IARD RUDISILE
Buise Cascade

RONALD G. SCHMIDT Pihas, Schmidt, Westerdahl

BARBARA SUE SEAL Barbara Sue Seal Properios JOHN J. SUPPLE

JOHN J. SUPPLE Asiona Warchousing *STEPHEN M. TELFER Legacy Health System *District Vice Chairmen

MAJOR DIVISIONS

OREGON RETAIL COUNCIL OREGON FOREST INDUSTRIES COUNCIL

MAJOR AHHLIATED
ASSOCIATIONS

ionthwest Christmas Tree Assn.
Oregon Association of Realtons
Oregon Chamber Executives
Oregon Land Tibe Assn.
Oregon Restaurant Assn.
Oregon Small Woodlands Assn.
Oregon Soft Drink Assn.

operation Advertising Rederation

والمرابع والمراجع وتعارو فالاستان والمحروب

E mail

ASSOCIATE OREGON

INDUSTRIES

Mr. Fred Hansen
Director
Department of Environmental Quality
811 S. W. Sixth Avenue
Portland, Oregon 97204-1390

SUBJECT:

DEQ'S 1991-93 BUDGET

Dear Fred:

April 16, 1991

On behalf of Associated Oregon Industries' (AOI) Hazardous Materials Committee, I want to take this opportunity to thank the Department for working with AOI with the Department's concerns regarding DEQ's 1991-93 budget. We appreciate the time pertaining to effort and responses we have received from the Department in addressing our inquiries, as the committee has tried to more fully understand the proposed budget and the purposes of the various decision packages.

Based upon our several discussions, it is our understanding that the Department anticipates receiving a written response from AOI relating to its 1991-93 budget package. We want you to know that, after lengthy discussion, AOI will generally support the agency's proposed 1991-93 budget. In fact, from an overall standpoint, AOI is positioned to support approximately 96% of the agency's overall decision packages. However, there is approximately 4% of the proposed decision packages which AOI cannot support. In positioning AOI to generally support the DEQ's budget, AOI would impress upon the Department that AOI's support is for the Department programs themselves and not an endorsement of the actual dollars. Because of the limited time which we have had to review the budget package, we must trust that the decision package dollars will accurately reflect the true cost of the programs. Nevertheless, we are alarmed at the continued escalation in program budgets and costs which we have seen over the past several legislative sessions. Therefore, AOI would propose that during the forthcoming biennium the Department and industry sit down to carefully review the costs of the various programs and see what can be done to use those monies in the most cost-effective manner.

In lending its support to the DEQ 1991-93 budget, it should be understood that AOI's support is conditional upon resolution of certain overriding concerns which transcend individual program boundaries, as well as the specific concerns within given programs. These overriding concerns include:

GET COSTO

AOI desires that DEQ attempt, if possible, to maintain a neutral position on the pollution control tax credit program.

DEQ to make inspections of previously uninspected hazardous waste generators an agency priority and that the DEQ to make a diligent effort to get all hazardous waste inspection reports to the generators in a timely manner. In many instances, generators are now waiting as much as a year from the time of inspection to receive inspection reports from the agency.

> DEQ to make the speedy processing of permits an agency priority, dedicating as many FTE's as necessary for prompt processing. Furthermore, that the DEQ require staff reports on the status permit issuance at each monthly EQC meeting. The DEQ should either accept or deny essentially complete permit applications within 45 days of submittal. which have explicit

The state environmental programs should, as a general rule, be no more stringent than corresponding federal programs, absent a compelling need for more stringent state rules. Existing state rules which are more stringent should be reviewed and then either modified or repealed, absent a compelling need for their continued existence.

Some of these state regulations of concern include, but are not limited to:

Ino Fed standard WATER QUALITY RULES Fish tissue standard (a) (b) Dissolve Oxygen (DO) (c) Fecal standard Wetlands HAZARDOUS WASTE (a) Aquatics toxicity rule: (b) 3% and 10% solvent rule-(c) PCBs as hazardous waste Change DEQ's quarterly hazardous waste reporting to annual hazardous waste reporting. HAZARDOUS SUBSTANCES

Letter to Fred Hansen
April 16, 1991

3

ECD cleanup levels should be federal health based cleanup standards rather than based on background.

Set forth below is ACI's position on each of the major program areas:

A. AIR PROGRAM

AOI proposes to support approximately 93% of the proposed air program decision packages, provided agreement can be reached on the following issues:

- DEQ agrees to conform the industrial clean air program to the federal requirements. AOI generally opposes state regulations which are more stringent than the federal regulations.
- AOI will support House Bill 2175 consistent with the minimum federal requirements under CAA for industry. However, to the extent that HB 2175 provides additional income to the air program (e.g., the \$2,429,000 decision package), the budget should be proportionately reduced.
- Since DEQ is no longer funding the noise program, the ORS's for noise pollution should be repealed. Furthermore, the DEQ's new enforcement proposal for noise, which would increase noise related civil penalties from \$500 a day to \$10,000 a day, should be deleted.

AOI opposes the proposed indoor air program. AOI believes that indoor air concerns are adequately addressed and regulated by both OR-OSHA and the Oregon State Health Division programs and does not believe a third agency needs to be involved in this matter.

AOI opposes the new asbestos program, as contained in SB 185. AOI supports the movement of the existing federal and state asbestos program to OR-OSHA while keeping the NESHAPS notification program (air toxics) within the department.

B. HAZARDOUS AND SOLID WASTE PROGRAM

AOI supports approximately 86% of DEQ's proposed decision packages on hazardous and solid waste. However, it is unable to support approximately 14% of those decision packages. AOI's support for the

Letter to Fred Hansen April 16, 1991

4

hazardous and solid waste programs is conditioned upon the following:

- AOI supports the solid waste program increases as set forth in Senate Agriculture & Natural Resources Committee version of SB 66 B-Engrossed, limited to DEQ's additional responsibilities under the Opportunity to Recycle Act consistent with DEQ's legislative testimony on SB 66.
- AOI opposes the added solid waste certification program as proposed. However, AOI would support a solid waste certification program based upon a self-policing certification statement from the shipper of the solid waste stating that they have local rules and regulations for waste minimization consistent with those of the State of Oregon. Such a certification program should be self-policing and compliance could be verified by intermittent random checks of solid waste shipments delivered to solid waste disposal facilities in Oregon.
- AOI supports the proposed incremental additions to the Hazardous Waste Disposal Fee at Arlington pursuant to the conditions set forth below. This includes immediate \$4/ton disposal fee, with an additional \$1.50/ton increase on January 1, 1992, July 1, 1992, January 1, 1993 and July 1, 1993. AOI opposes further increases in the Hazardous Waste Disposal Fee. AOI's support for the increase in the Hazardous Waste Disposal Fee is expressly conditioned upon the following:
 - 1. The fee increase will be used to make up current budgetary shortfalls in the hazardous waste program.
 - 2. DEQ will prioritize hazardous waste generator inspections to include those facilities which have not previously been inspected by the department.
 - 3. AOI supports use of the fund to pay for two additional FTEs at the Arlington facility.
 - 4. AOI supports technical assistance and hazardous waste minimization programs for SQGs and CEGs. However, AOI opposes use of the Hazardous Waste Disposal Fee to fund Toxic Use Reduction. AOI believes the Toxic Use Reduction program is most appropriately funded through the Fire Marshal's fee and solid waste tipping fees. It is not

Letter to Fred Hansen April 16, 1991

5

necessary to provide three independent funding sources for that program.

C. ENVIRONMENTAL CLEANUP

AOI is prepared to support 100% of the Environmental Cleanup Program decision packages. This support is conditioned on DEQ's willingness to commit that the Hazardous Substances Cleanup Program will expend not less than 80% of the program budget on specific site-related activities; and not to utilize these funds for the ongoing drafting and enactment of state rules and regulations which are more stringent than corresponding federal regulations. Furthermore, that the Hazardous Substance Cleanup Program will utilize the federal health-based standards in establishing cleanup levels and not adopt clean-up standards which are more stringent than the federal standards.

D. WATER QUALITY PROGRAM

AOI is prepared to support approximately 97% of the proposed water quality program decision packages consistent with the following:

AOI supports the EPA delegated programs (e.g., water quality standards, TMDLs, 401 certification programs.) provided those programs are funded by the general fund; all state standards are consistent with corresponding federal regulations; and the NPDES permit fees are based upon effluent flows to the receiving streams and not upon the classification of the NPDES permit holders (e.g., municipal or industrial).

AOI opposes the proposed oil spill planning proposals, SB 242, inasmuch as the proposal creates a duplication of efforts between agencies (e.g., DEQ and Coast Guard). AOI believes the Coast Guard is adequately addressing those concerns at the present time.

AOI is currently unable to support the Cross Media Risk Reduction proposal because it is unclear as to who will be paying the fees related to the \$88,000 decision package and it is unclear as to the actual intent of the program. Furthermore, what are the benefits to Oregon industry for supporting such a proposal?

AOI appreciates the opportunity to respond to the agency regarding its 1991-93 budgetary decision packages. As the Department is aware, AOI's position with the 1991-93 budgetary decision package is consistent with the support which the Department has received over the past bienniums from AOI. We believe that AOI's ability to

Inderin

Baseram

A TONGO

P.07

Letter to Fred Hansen April 16, 1991

continue to support the Department's budget and decision packages is based in large part upon the ongoing communication between the Department and AOI. We encourage the Department to continue its efforts to maintain those lines of communication with Industry and to work with AOI to resolve those issues which preclude AOI from giving its full support to the Department in these budgetary matters.

If the Department has further question regarding AOI's position, please do not hesitate to contact us so that we may continue our ongoing dialogue.

1) 1/1/1/1/

Sincerely

James M. Whitty Legislative Counsel

JMW:jkh

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE:

April 17, 1991

TO:

Fred Hansen

FROM:

John Loewy

SUBJECT: Response to AOI

WATER QUALITY DIVISION DEPT. OF ENVIRONMENTAL QUALITY

What follows are the responses, in the same order as in the AOI letter, based on input from the Division Administrators.

GENERAL

1. Tax Credits Nez

I believe you indicated a willingness not only to be neutral but to serve as a messenger to the Governor regarding the industry's position.

we will inspect previously uninspected generators and respond in a timely manner. We are already negotiating this commitment with EPA in the State/EPA agreement.

Speedy Permits

DEQ agrees that dealing with permit backlogs and improving the permitting process is a high priority. We have, in fact, begun a process to deal with the issue for the Department as a whole, and individual programs have developed strategies for reducing their backlogs in e.g. NPDES and SW (perhaps give them a copy of memo we just sent to all managers re: permitting, which shows our commitment). We do not necessarily agree that the only way to solve this problem is to add FTE; we believe the process can be streamlined. If, however, our evaluation of the process shows that we simply must have more people to do permits, we are prepared to address that issue and hope that AOI will support us. We intend to seek input from AOI and others as we evaluate the permitting process. With regard to the reports on permit status which are currently provided to the EQC, we will make those available to the interested public, as we have in the past. Finally, our goal is to renew all permits before they expire, and to respond to complete applications for major modifications and new permits within 90 days (assuming the public review process can be

doy/.

completed during that timeframe). We believe, however, that we must eliminate the backlogs and streamline our processes before we can attain those goals, and are committed to this activity as a priority in the '91-93 biennium.

Ine Department agrees to propose a rule change to the which would limit state environmental programs genera to no more stringent than corresponding federal programs absent a specific finding by the EQC that the more stringent state rule is justified by special circumstances.

However, the Department should point out that federal regulations are often performance based, with the expectation that states will develop more explicit language in their rules. Determining are "more stringent" will The Department agrees to propose a rule change to the EQC which would limit state environmental programs generally to no more stringent than corresponding federal programs,

language in their rules. Determining whether state rules

committee to review our existing rules for the same criteria, and have that committee recommend rules for modification to more closely conform to federal standards.

Water Quality Rules

Water Quality standards are not developed by EPA on a national basis. Each state must develop and adopt its own. Often they provide guidance, sometimes with specific numbers, sometimes not. Therefore, it will not be clear cut when DEQ is equal to or more stringent than EPA in WO because of the structure of the Clean Water Act.

The specific standards which are currently being reviewed by DEQ for our triennial standards review which are expressed as areas of concern by AOI: D

a) Fish Tissue Standard...we will delay taking to the EQC and have a technical advisory committee review. We have concerns, however, about the fish tissue information we have available now; what we should say about it to the public if asked; and the public perception damage which can occur if we don't have some internal guidance or strategy about fish tissue information. We would like to prepare either a fact

Commendation.

- sheet or strategy document on fish tissue information. Would AOI object to that concept?

 b) Dissolved Oxygen (DO)...we will form a tect advisory committee and recommend that modified how but during the new review. This would allow about specifics on helpful in discount to the province of the province b) Dissolved Oxygen (DO)...we will form a technical advisory committee and recommend that this not be modified now but during the next triennial standards review. This would allow us to have more information about specifics on the Willamette and which would be
 - advisory committee and recommend to the EQC that this not be reviewed now, but during the (next) triennial standards review when our program direction is better defined and EPA's position is clearer.
 - d) Fecal Standard: We don't understand what AOI's concern is and have some human health concern with not moving forward on this standard. Clarification on what AOI issues are here would help us in making a response to the request. We aren't trying to say yes or no, just asking for further information on the oproblem.

<u>Hazardous Waste Rules</u>

- a) Aquatic toxicity rule: this rule affects the woodtreaters and the agricultural community. woodtreater waste fails aquatic toxicity, they are subject to Part B RCRA permitting as a TSD. If in the ag business they must get a WQ permit. of the new EPA rules for wood treaters, we believe our regulation merits reevaluation and are willing to do so through our normal advisory committee process.
- b) 3% and 10% solvent rule: we agree that this rule needs to be either revised or deleted to be consistent with the feds, and we will proceed to do white so through our normal rulemaking process, including advisory committee input. and sex whitemer out.
 - c) PCBs as hazardous waste: quite frankly, we are surprised that this is perceived to be a big deal, as we only adopted federal rules by reference; we don't do anything in this program, and PCBs are not listed as a (HW)in Oregon. We have recently received a grant from EPA to evaluate what kind of a PCB program, if any, DEQ ought to have. We would very much welcome AOI's participation in our program evaluation for EPA.

waste of a strange of a strange

were into.

More i

Change quarterly HW reporting to annual: we are in the process of doing so and are delighted to have AOI's support.

<u>Hazardous Substances</u>

The Department commits to revisiting the issue of background with the Environmental Cleanup Advisory Committee (ECAC), and taking ECAC recommended changes to the cleanup standards to the EQC for action during. No commisment on white take to the '91-93 biennium.

AIR PROGRAM

EQC, or il to take onlying.

No Regulations Which Are More Stringent Than Federal 1152 140 - 40 161, 142 40 /1-N-25 0~ Regulations

40 vz 100 Tona 15 this only a Frdyral Clean We support taking rule to EQC. However, odors and nuisance conditions should be kept, even though they are not federally mandated.

Reduce Permitting Budget So That Industry Is Not Double-2. Hit By Fee Increases And HB 2175 Emission Fees

-not on others. Yes. We have already planned that the regular permit fee Yell will be dropped on those sources once they begin paying the federally-mandated fee in HB 2175.

Noise 3.

on both statutes privally - Whily statement. No. We do not believe it is responsible to completely

delete all noise pollution statutes. and no do poulty but k tole

Although we would be willing to defer funding for this program during this biennium, and would be willing to discuss with OR-OSHA and Health Division how these concerns can best be addressed, we are not willing indoor air from all functions. Although we would be willing to defer funding for this concerns can best be addressed, we are not willing to drop identified indoor air as one of the greatest health risks of all environmental problems.

> 5. Drop SB 185, And Move Existing Federal And State Asbestos Programs To OR-OSHA

We believe SB 185 should be decided by the Legislature on its merits. The Department opposes transfer of the asbestos program / because the program is environmentally

the the

> oriented and not related solely to worker safety. OR-OSHA currently coordinate well on this program.

HAZARDOUS AND SOLID WASTE PROGRAM

1. SB 66

AOI's statement of support includes for statewide solid waste planning (\$1.1 million in budget). With regard to AOI's desire to remain new the \$600,000 for HHW and \$600,000 to Metro for an information clearinghouse, while we recognize that are not really AOI issues, it is important to note these are critical pieces to the City of Portland and Metro, as programs for the metropolitan Portland and Metro, as programs for the metropolitan Portland and Metro, as programs for the metropolitan Portland and Metro, as programs is if asked, we hope they will support so the whole bill doesn't go down in flames, that they will at least say that these are issues, although we would arms. We assume that AOI's statement of support includes support budget). With regard to AOI's desire to remain neutral on information clearinghouse, while we recognize that these are not really AOI issues, it is important to note that these are critical pieces to the City of Portland and Metro, as programs for the metropolitan Portland area. AOI may be able to remain silent unless asked directly support so the whole bill doesn't go down in flames, or that they will at least say that these are not their issues, although we would argue that HHW is an AOI issue.

we cannot agree with AOI on this. There is legislative history on the statute (ORS 459.055 and 459.305) that goes back several sessions. Many people other than DEQ care about this issue, e.g. Shirley Gold. The Senate Ag. Committee has thoroughly discussed and already passed SB 475, which strengthens the above statutes. DEQ's Solid Waste Advisory Committee is on record as stating that:

"Out-of-state generators shall act to reduce and records the waste at least as well as Oregonia."

The Department of the state of the decords and the waste at least as well as Oregonia. Waste Advisory Committee is on record as stating that:

"Out-of-state generators shall act to reduce and recycle
the waste at least as well as Oregonians are required to
do." The Department never has been given the resources to
do these certifications, and if our budget request is

en record as stating that:

"Out-of-state generators shall act to reduce and recycle
the waste at least as well as Oregonians are required to
do the beautiful do the second of the s do these certifications, and if our budget request is every represent the work at the liminated it will be extremely difficult to do the work solver and a timely manner with existing staff. Only \$.05 of the solver and to pay for this action. given the resources to given the resources to given the resources to given the resources to given the request is self-with a timely manner with existing staff. Only \$.05 of the \$2.25/ton surcharge on out-of-state waste would be needed to pay for this activity. our budget request is

will be extremely difficult to do the work

for a timely manner with existing staff. Only \$.05 of the

\$2.25/ton surcharge on out-of-state waste would be needed

to pay for this activity.

What are the conditions of the con

Hazardous Waste Disposal Fee Increase

We agree with the schedule for phasing in the fee and with the four uses proposed by AOI. We also agree not to request further increases in the fee in our 1993-1995 budget request. (Fred - I wasn't sure if changes in federal law game discussed with the schedule for phasing in the fee and with the budget request. (Fred - I wasn't sure if you wanted the | alende S blus representative of the property of the service of th / specifically. Your call.) covery that 27 TH1 17 Mg onucled -all bets off - no control ove Gov., but not

mour request.

ENVIRONMENTAL CLEANUP

80 Percent - Site Related Activities

The Department is already meeting this condition, and commits to continuing to meet this goal.

WATER QUALITY

1. EPA Delegated Programs

Our understanding of the discussion is that AOI supports DEQ performing 401 certifications and doing TMDL work...they aren't comfortable with SB 330 as it stands and would like to have these two activities supported by General Fund dollars...the decision package (101) contains .416 FTE for TMDLs on fees and \$100,000...also contains \$120,000 fund shift from general to other funds for 401 certification...the rest of the package deals with permitting activities and it is our understanding that AOI is not objecting to those particular portions of the decision package...

We would be happy to use General Fund dollars Response: for TMDL work...our Governor's recommended budget, however, doesn't have excess...can we suggest an alternative for internal shift of something else onto fees that AOI might be more comfortable with and shift general funds from those activities onto TMDL work...for example...if SB 330 allowed us to have a fee on plan reviews for industrial and municipal permits (new ovanyth applications and major modifications), we could substitute - yeis those fees for the plan review function and shift \$100,000 into TMDL work. We would be happy to continue to discuss need mony with AOI any other solution, such as a ceiling on fees 441) is # 5610 under SB 330 which would resolve this issue. The 401 certification fee is to allow timely review of 401 Again, we would be willing to certification applications. seek a solution to find General Fund dollars or to · somewhere continue discussions about what could be modified in SB . 50 330 to make it palatable to AOI.

The second portion of AOI's discussion on fees relates to equity in charging NPDES permit holders. AOI suggests that permit fees should be based upon effluent flows to receiving streams rather than classification of permit holder. DEQ would propose that we establish a permanent WQ advisory committee. The committee would have as one of its tasks, a look during the legislative interim, at Water program permit fees, as well as other funding mechanisms

condress to yours

tongure services

Tongs 23. -...

Tongs 23. -...

Tongs 23. 23. 20.

Memo to: Fred Hansen April 17, 1991

Page 7

to come up with a recommendation prior to the budget being developed for 1993-95 to provide equity in charging permit holders.

Oil Spill, SB 242 2.

the ointrically those and review of and is not opposed to DEQ planning requirements. DEQ package related to SB 242

1/10 of an FTE to deal with review of Coast and actual vessel inspection. The egislation, however, authorizes DEQ to perform this function. DEQ doesn't hold strong feelings on the matter, but would prefer to have the legislature decide the issue on its merits. We understand that AOI would not support the entire decision package.

Cross-Media Risk Reduction

DEQ provided clarification at the meeting decision package...Do they need more decision not to support hold respond. Oil Spill Planning: AOI opposes some portions of the oil

med to know

need to know

Threat vetalished y pre

with

and

Threat vetalished y pre

with

Threat vetalished y pre

w

AOI/HSW Issues

An overall comment: are we committed to doing all of this even if our fees are not approved by the legislature?

We will inspect previously uninspected generators and respond in a timely manner. We are already negotiating this commitment with EPA in the state/EPA agreement.

I volunteered to prepare the Department's response on permits (not limited to HSW).

DEQ agrees that dealing with permit backlogs and improving the permitting process is a high priority. We have, in fact, begun a process to deal with the issue for the Department as a whole, and individual programs have developed strategies for reducing the backlogs in e.g. NPDES and SW (perhaps give them a copy of memo we just sent to all managers re permitting, which shows our commitment). We do not necessarily agree that the only way to solve this problem is to add FTE; we believe the process can be streamlined. If, however, our evaluation of the process shows that we simply must have more people to do permits, we are prepared to address that issue and hope that AOI will support us. We intend to seek input from AOI and others as we evaluate the permitting process. With regard to the reports on permit status which are currently provided to the EQC, we will make those available to the interested public, as we have in the past. Finally, our goal is to renew all permits before they expire, and to respond to complete applications for major modifications and new permits within 90 days (assuming the public review process can be completed during that timeframe). We believe, however, that we must eliminate the backlogs and streamline our processes before we can attain those goals, and are committed to this activity as a priority in the 91-93 biennium.

Specific HSW issues:

More stringent rules:

- 1) aquatic toxcity rule: this rule affects the woodtreaters and the agricultural community. If a woodtreater waste fails aquatic toxicity, they are subject to Part B RCRA permitting as a TSD. If in the ag business they must get a WQ permit. In light of the new EPA rules for wood treaters, we believe our regulation merits reevaluation and are willing to do so through our normal advisory committee process.
- 2) 3% and 10% solvent rule: we agree that this rule needs to be either revised or deleted to be consistent with the feds, and we will proceed to do so through our normal rulemaking process, including advisory committee input.
- 3) PCBs as hazardous waste: quite frankly, we are surprised that this is perceived to be a big deal, as we only adopted federal rules by reference; we don't do anything in this program, and

PCBs are not listed as a HW in Oregon. We have recently received a grant from EPA to evaluate what kind of a PCB program, if any, DEQ ought to have. We would very much welcome AOI's participation in our program evaluation for EPA.

4) Change quarterly HW reporting to annual: we are in the process of doing so and are delighted to have AOI's support.

Solid waste/SB 66:

We assume that AOI's statement of support includes support for statewide solid waste planning (\$1.1 million in budget). With regard to AOI's desire to remain neutral on the \$600,000 for HHW and \$600,000 to Metro for an information clearinghouse, while we recognize that these are not really AOI issues, it is important to note that these are critical pieces to the City of Portland and Metro, as programs for the metropolitan Portland area. AOI may be able to remain silent unless asked directly what their position is; if asked, we hope they will support so the whole bill doesn't go down in flames, or that they will at least say that these are not their issues, although we would argue that HHW is an AOI issue.

Cetification of out-of-state waste reduction programs: We cannot agree with AOI on this. There is legislative history on the statute (ORS 459.055 and 459.305) that goes back several sessions. Many people other than DEQ care about this issue, e.g. Shirley Gold. The Senate Ag. Committee has thoroughly discussed and already passed SB 475, which strengthens the above statutes. DEQ's Solid Waste Advisory Committee is on record as stating that: "Out-of-state generators shall act to reduce and recycle the waste at least as well as Oregonians are required to do." The Department never has been given the resources to do these certifications, and if our budget request is eliminated it will be extremely difficult to do the work in a timely manner with existing staff. Only \$.05 of the \$2.25/ton surcharge on out-of-state waste would be needed to pay for this activity.

\$10/ton hazardous waste disposal fee:

We agree with the schedule for phasing in the fee and with the four uses proposed by AOI. We also agree not to request further increases in the fee in our 1993-1995 budget request. (Fred - I wasn't sure if you wanted the changes in Federal law caveat in here or not. I've discussed with Zweig but not with Whitty or Diane specifically. Your call.)

RESPONSE TO POINT #4: THAT STATE PROGRAMS SHOULD BE NO MORE STRINGENT THAN CORRESPONDING FEDERAL PROGRAMS, ABSENT A "COMPLELLING" NEED.

The Department agrees to propose a rule change to the EQC which would limit state environmental programs generally to no more stringent than corresponding federal programs, absent a specific finding by the EQC that the more stringent state rule is justified by special circumstances.

However, the Department should point out that federal regulations are often performance based, with the expectation that states will develop more explicit language in their rules. Determining whether state rules are "more stringent" will not always be an easy task.

The Department also agrees to appoint an advisory committee to review our existing rules for the same criteria, and have that committee recommend rules for modification to more closely conform to federal standards.

Specifically, AOI has identified several rules it would like reviewed.

Water Quality Rules: Fish Tissue, Dissolved Oxygen, Fecal standard, Wetlands.

DEQ response: All of these proposed Water Quality rules will be reviewed by a technical committee before being adopted.

Hazardous Waste Rules: Aquatics toxicity, 3%-10% solvents, PCB's, Hazardous Waste reporting requirements.

DEQ response:

- 1) aquatic toxcity rule: In light of the new EPA rules for wood treaters, we believe our regulation merits re-evaluation and are willing to do so through our normal advisory committee process.
- 2) 3% and 10% solvent rule: we agree that this rule needs to be either revised or deleted to be consistent with the feds, and we will proceed to do so through our normal rulemaking process, including advisory committee input.
- 3) PCBs as hazardous waste: quite frankly, we are surprised that this is perceived to be a big deal, as we only adopted federal rules by reference; we don't do anything in this program, and PCBs are not listed as a HW in

Oregon. We have recently received a grant from EPA to evaluate what kind of a PCB program, if any, DEQ ought to have. We would very much welcome AOI's participation in our program evaluation for EPA.

4) Change quarterly HW reporting to annual: we are in the process of doing so and are delighted to have AOI's support.

Environmental Cleanup Rules: cleanup levels; mcl's versus background.

DEQ response:

The Department agrees to reopen the question of cleanup standards, including the option of using health-based cleanup standards rather than background as the cleanup goal. DEQ will involve industry, and others, in review of the cleanup standards.

RESPONSE TO SPECIFIC POINTS MADE ON THE AIR PROGRAM:

1. NO REGULATIONS WHICH ARE MORE STRINGENT THAN FEDERAL REGULATIONS.

DEQ response: We support taking rule to EQC. However, odors and nuisance conditions should be kept, even though they are not federally mandated.

2. REDUCE PERMITTING BUDGET SO THAT INDUSTRY IS NOT DOUBLE-HIT BY FEE INCREASES AND HB 2175 EMISSION FEES.

DEQ response: Yes. We have already planned that the regular permit fee will be dropped on those sources once they begin paying the federally-mandated fee in HB 2175.

3. REPEAL NOISE POLLUTION STATUTE, AND DELETE NOISE FROM THE ENFORCEMENT BILL BEING PROPOSED.

DEQ response: No. We do not believe it is responsible to completely delete all noise pollution statutes.

4. DROP THE INDOOR AIR PROGRAM AND STAFFING PROPOSED IN DECISION PACKAGES.

DEQ response: Although we would be willing to defer funding for this program during this biennium, and would be willing to discuss with OR-OSHA and Health Division

how these concerns can best be addressed, we are not willing to drop indoor air from all further consideration. EPA has identified indoor air as one of the greatest health risks of all environmental problems.

5. DROP SB 185, AND MOVE EXISTING FEDERAL AND STATE ASBESTOS PROGRAMS TO OR-OSHA.

DEQ response:

We believe SB 185 should be decided by the Legislature on its merits. The Department opposes transfer of the asbestos program, because the program is environmentally oriented and not related solely to worker safety. DEQ and OR-OSHA currently coordinate well on this program.

From: Fred Hansen: OD: DEQ

To: Stephanie Hallock: HSW: DEQ cc: division administrators: deq

Subj: AOI

In-Reply-To: Message from Stephanie Hallock: HSW: DEQ of 4-17-91

Your question gives me a chance to say something which in the speed of things I didn't say and which answers your question. I believe that what we propose to do and what each of you give me is what we feel the merits of the specific situation merit. Consequently, it is not a "compromise" which we give up something for something else in return. Rather, it is what we think is a reasonable action, based on merit. example, Stephanie, in your case you suggested deleting or revising the 3 and 10 rule. I think this is a reasonable issue to have the advisory committee look at-not as a compromise but on the merits. recall, we adopted the 3 and 10 rule as a way to pick up mixed solvents which might not be captured otherwise. Now that the Feds have adopted TCLP we effectively get the same result without two hoops for people to jump through or for our inspectors to know and understand. Whether this is sufficient or if a loophole is not captured by TCLP and which the 3 and 10 rule would catch is something that an advisory committee ought to review. We make no commitment about whether we will agree with a CAC recommendation or what we will do with it. And that is appropriate becausewe haven't seen the recommendation yet.

In a similar vein, I know when Lydia recommended putting the DO standard revision through a technical advisory committee that she had essentially come to that conclusion even before the issue was even raised by AOI. know in this one it was real important to Lydia that since the proposed changes we were making it would have had the effect of relaxing the standard (actually more closely tracking actual DO levels so that we were not unecessarily high) we still maintained a higher level of environmental protection during the review process. I might add, from my standpoint, almost without regard to the issue of stringency, when we are proposing a change which we think relaxes the standard and many permit holders are coming to us with the exact opposite view, something When there is this much of a fundamental differnce it says we are not communicating well at a technical level, and I believe a technical review group is the place to resolve it. The policy issue of how stringent is of course our call, but it should be argued on the policy issues, not on whether 2+2=4 or 5.

I believe that this is how each of you approached what you sent me and what I relayed to AOI. I have to be in Salem this afternoon so I will not be able to brief you on what I said. I modified some of your recommnedations to not go as far, for example MJD said we would ask ECAC to revisit "how clean is clean" and we would take that to the EQC. I am happy to ask ECAC to revisit (as we should be willing to do with any of our major policies) but I am unwilling to commit to take anything forward until we have seen the recommendation and agree with it or propose any appropriate modifications.

I will brief you on Monday at budget dry run.

Thanks for the very quick turnaround on all this stuff. It is essential to have as much lined up before we hit W & M as possible. he is

----- Replied Message Body ---------

Date: 4-17-91 7:26am

From: Stephanie Hallock: HSW: DEQ

To: fred hansen:od, division administrators:deq

Subj: AOI

Sorry I had to leave before the discussion ended. Did you talk about an "all bets are off" piece of this if we don't get our fees, regardless of AOI support? Or, do we have to fulfill these commitments to AOI regardless of whether or not the legislature approves the fees?

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 17, 1991

TO:

John Loewy

FROM:

Lydia

SUBJECT: AOI comments

page 2, comments on state regulations: Water Quality standards are not developed by EPA on a national basis. Each state must develop and adopt its own. Often they provide guidance, sometimes with specific numbers, sometimes not. Therefore, it will not be clear cut when DEQ is equal to or more stringent than EPA in WQ because of the structure of the Clean Water Act.

The specific standards which are currently being reviewed by DEQ for our triennial standards review which are expressed as areas of concern by AOI:

Fish Tissue Standard...we will delay taking to the EQC and have a technical advisory committee review. We have concerns, however, about the fish tissue information we have available now; what we should say about it to the public if asked; and the public perception damage which can occur if we don't have some internal guidance or strategy about fish tissue information. We would like to prepare either a fact sheet or strategy document on fish tissue information. Would AOI object to that concept?

Dissolved Oxygen (DO)...we will form a technical advisory committee and recommend that this not be modified now, but during the next triennial standards review. This would allow us to have more information about specifics on the Willamette and which would be helpful in discussing any proposed standard.

Wetlands....we will recommend for a technical advisory committee and recommend to the EQC that this not be reviewed now, but during the next triennial standards review when our program direction is better defined and EPA's position is clearer.

Fecal Standard: We don't understand what AOI's concern is and have some human health concern with not moving forward on this standard. Clarification on what AOI issues are here would help us in making a response to the request. We aren't trying to say yes or no, just asking for further information on the problem.

Memo to: John Loewy April 17, 1991 Page 2

page 5, Water Quality Program decision packages:

Our understanding of the discussion is that AOI supports DEQ performing 401 certifications and doing TMDL work...they aren't comfortable with SB 330 as it stands and would like to have these two activities supported by General fund dollars...the decision package (101) contains .416 fte for tmdl's on fees and \$100,000....also contains \$120,000 fund shift from general to other funds for 401 certification...the rest of the package deals with permitting activities and it is our understanding that AOI is not objecting to those particular portions of the decision package....

response: We would be happy to use general fund dollars for TMDL work....our governor's recommended budget, however, doesn't have excess.....can we suggest an alternative for internal shift of something else onto fees that AOI might be more comfortable with and shift general funds from those activities onto TMDL work....for example....if SB 330 allowed us to have a fee on plan reviews for industrial and municipal permits (new applications and major modifications), we could substitute those fees for the plan review function and shift \$100,000 into TMDL work. We would be happy to continue to discuss with AOI any other solution, such as a ceiling on fees under SB 330 which would resolve this issue. certification fee is to allow timely review of 401 certification applications. Again, we would be willing to seek a solution to find general fund dollars or to continue discussions about what could be modified in SB 330 to make it palatable to AOI.

The second portion of AOI's discussion on fees, relates to equity in charging NPDES permit holders. AOI suggests that permit fees should be based upon effluent flows to receiving streams rather than classification of permit holder. DEQ would propose that we establish a permanent WQ advisory committee. The committee would have as one of its tasks, a look during the legislative interim, at Water program permit fees, as well as other funding mechanisms to come up with a recommendation prior to the budget being developed for 1993-95 to provide equity in charging permit holders.

Oil Spill Planning: AOI opposes some portions of the oil spill planning proposed under SB 242....specifically those activities dealing with vessel inspection and review of the US Coast Guard program. AOI is not opposed to DEQ plan review and contingency planning requirements. DEQ has in its decision package related

Memo to: John Loewy April 17, 1991 Page 3

to SB 242 approximately 1/10 of an FTE to deal with review of Coast Guard activities and actual vessel inspection. The legislation, however, authorizes DEQ to perform this function. DEQ doesn't hold strong feelings on the matter, but would prefer to have the legislature decide the issue on its merits. We understand that AOI would not support the entire decision package. (DEQ worked closely with Senate subcommittee on this, and would find it somewhat awkward to backtrack completely at this time. John...let me know if we need to express that).

Cross Media Risk Reduction: DEQ provided clarification at the meeting with AOI on this decision package...Do they need more, or does their decision not to support hold...we need to know in order to respond.

Date: 4-19-91 11:09am

From: Stephanie Hallock: HSW: DEQ

To: Fred Hansen: OD: DEQ

cc: division administrators:deq

Subj: AOI

In-Reply-To: Message from Fred Hansen: OD: DEQ of 4-19-91

Fred - I agree that what we proposed was on the merits. Just want to be sure that everyone has the same understanding as we go through the legislative process. Thanks.

----- Replied Message Body -----

Date: 4-19-91 8:04am From: Fred Hansen:OD:DEQ

To: Stephanie Hallock: HSW: DEQ cc: division administrators: deq

Subj: AOI

In-Reply-To: Message from Stephanie Hallock: HSW: DEQ of 4-17-91

Your question gives me a chance to say something which in the speed of things I didn't say and which answers your question. I believe that what we propose to do and what each of you give me is what we feel the merits of the specific situation merit. Consequently, it is not a "compromise" which we give up something for something else in return. Rather, it is what we think is a reasonable action, based on merit. example, Stephanie, in your case you suggested deleting or revising the 3 and 10 rule. I think this is a reasonable issue to have the advisory committee look at-not as a compromise but on the merits. As recall, we adopted the 3 and 10 rule as a way to pick up mixed solvents which might not be captured otherwise. Now that the Feds have adopted TCLP we effectively get the same result without two hoops for people to jump through or for our inspectors to know and understand. Whether this is sufficient or if a loophole is not captured by TCLP and which the 3 and 10 rule would catch is something that an advisory committee ought to review. We make no commitment about whether we will agree with a CAC recommendation or what we will do with it. And that is appropriate becausewe haven't seen the recommendation yet.

In a similar vein, I know when Lydia recommended putting the DO standard revision through a technical advisory committee that she had essentially come to that conclusion even before the issue was even raised by AOI. I know in this one it was real important to Lydia that since the proposed changes we were making it would have had the effect of relaxing the standard (actually more closely tracking actual DO levels so that we were not unecessarily high) we still maintained a higher level of environmental protection during the review process. I might add, from my standpoint, almost without regard to the issue of stringency, when we are proposing a change which we think relaxes the standard and many permit holders are coming to us with the exact opposite view, something is wrong. When there is this much of a fundamental differnce it says we are not communicating well at a technical level, and I believe a technical review group is the place to resolve it. The policy issue of how stringent is of course our call, but it should be argued on the

policy issues, not on whether 2+2=4 or 5.

I believe that this is how each of you approached what you sent me and what I relayed to AOI. I have to be in Salem this afternoon so I will not be able to brief you on what I said. I modified some of your recommnedations to not go as far, for example MJD said we would ask ECAC to revisit "how clean is clean" and we would take that to the EQC. I am happy to ask ECAC to revisit (as we should be willing to do with any of our major policies) but I am unwilling to commit to take anything forward until we have seen the recommendation and agree with it or propose any appropriate modifications.

I will brief you on Monday at budget dry run.

Thanks for the very quick turnaround on all this stuff. It is essential to have as much lined up before we hit W & M as possible. he is

----- Replied Message Body ------

Date: 4-17-91 7:26am

From: Stephanie Hallock: HSW: DEQ

To: fred hansen:od, division administrators:deq

Subj: AOI

Sorry I had to leave before the discussion ended. Did you talk about an "all bets are off" piece of this if we don't get our fees, regardless of AOI support? Or, do we have to fulfill these commitments to AOI regardless of whether or not the legislature approves the fees?

Date: 4-17-91 8:04am

From: Michael Downs: ECD: DEQ

To: John Loewy: OD

cc: Division Administrators:DEQ

Subj: Response to AOI letter

With respect to the comment on page 3 that "ECD cleanup levels should be federal health based cleanup standards rather than based on background.", the proposed response is:

The Department commits to revisiting the issue of background with the Environmental Cleanup Advisory Committee (ECAC), and taking ECAC recommended changes to the cleanup standards to the EQC for action during the 1991-93 biennium.

With respect to the comment on page 5 that "This support is conditioned on DEQ's willingness to commit that the Hazardous Substances Cleanup Program will not expend less than 80% of the program budget on specific site-related activities;", the proposed response is:

The Department is already meeting this condition, and commits to continuing to meet this goal.

With respect to the remainder of the comments concerning Environmental Cleanup on page 5, they are already addressed by earlier commitments to be made by the Department in response to the comments on page 2.

Let me know if you need further information John.



April 20, 1991

Oregon Trout

Speaking out for Oregon's fish

P.O. Box 19540 • Portland, Oregon 97219 • (503) 244-2292

Environmental Quality Commission Department of Environmental Quality 811 S. W. 6th Av. Portland, OR 97204

Subject: Agenda Item F

EQC Meeting April 25, 1991

Dear Commissioners:

Oregon Trout is pleased to see that the department has now drafted rules for the implementation of its instream water right authority. Oregon Trout supports the department's request to hold public hearings to solicit comment on the draft rules.

After a cursory review of the proposed rules, it looks like alternative #3 would be the best avenue for the department to take. Oregon Trout looks forward to participating during the public comment period of this process.

Oregon Trout understands the reasons for the delay in getting draft rules written, and we are hopeful that the department will be able to respond in a more timely manner once the rules have been adopted. Its imperative that the department apply for instream water rights on all water quality limited streams at the earliest opportunity.

Sincerely,

Jim Myron

Regional Director

cc: Bakke

WaterWatch

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY APR 23 1951

OFFICE OF THE DIRECTOR



STOEL RIVES BOLEY JONES & GREY

ATTORNEYS AT LAW
SUITE 2300
STANDARD INSURANCE CENTER
900 SW FIFTH AVENUE
PORTLAND, OREGON 97204-1268

Telephone (503) 224-3380 Telecopier (503) 220-2480 Cable Lawport Telex 703455 Writer's Direct Dial Number

(503) 294-9181

April 25, 1991



OFFICE OF THE DIRECTOR

BY MESSENGER

Mr. William Hutchinson, Chairman Oregon Environmental Quality Commission 811 SW Sixth Avenue Portland, OR 97204

Re: Proposed Adoption of Amendments to Industrial Volatile Organic Compound ("VOC") Rules

Dear Mr. Hutchinson:

On August 15, 1990 we submitted comments to the rules proposed by DEQ concerning emissions of VOCs on behalf of several industries represented by our firm that emit VOCs as a part of their manufacturing operations. We are now supplementing our earlier comments because the rules DEQ proposes today have undergone significant changes since last summer. In addition, since DEQ first proposed its rules, Congress passed the Clean Air Act Amendments ("CAAA") of 1990. In light of these changes, we ask that you refer a portion of the rules back to DEQ for further consideration of the modifications we offer in these comments.

We ask that you not adopt the portion of the proposed rules which would require the application of reasonably available control technology ("RACT") to sources of air emissions for which EPA has given no guidance. The 1990 CAAA has eliminated the basis for this part of the proposed rules and, as DEQ recognized in its initial proposal, the adoption of these rules will produce little measurable air quality benefit. Alternatively, if you determine that RACT should be imposed on all major sources, we ask that you remand the proposal to DEQ for further clarification as to how RACT will be developed for major sources for which EPA has issued no guidance. As explained in more detail below, this portion of the rules is not required by the 1990 CAAA and no federal sanctions will result if they are delayed or not issued at all.

SRBp9220 62232/32 72940/38

I. RACT Is Not Required for Non-CTG Sources.

DEQ originally proposed amendments to its VOC rules in August 1990. According to the summary accompanying the proposal, DEQ sought to align the Oregon rules with EPA guidance interpreting the 1977 Clean Air Act amendments ("1977 Act"). In the same summary, however, DEQ noted that "[the proposal] is expected to achieve only a small reduction in VOC emissions." June 29, 1990 Proposal at 5.

Under the 1977 Act, state implementation plans ("SIPs") for nonattainment areas such as the Portland area had to require reasonable further progress toward attainment by requiring sources to apply reasonably available control technology ("RACT"). To assist states in evaluating RACT, EPA published a number of control technique guidelines ("CTGs"). CTGs describe specific types of control technology that can be used to meet RACT, and they formed the basis for the Oregon RACT rules approved by EPA and now codified as OAR 340, Division 22.

Prior to the 1990 CAAA, areas were classified as either attainment or nonattainment; the Act made no provision for recognizing degrees of attainment. Because many nonattainment areas failed to meet the Act's goal of achieving attainment by 1987, EPA issued a series of "SIP calls" in 1988. SIP calls prompted states like Oregon to revise their SIPs to provide additional measures to achieve attainment. Included in measures suggested by EPA was a provision that states require RACT for all sources emitting over 100 tons per year of VOC even if no CTG had been issued. Consistent with this suggestion, DEQ last summer proposed the rules now under consideration.

Since last summer, Congress passed the CAAA. The CAAA more accurately recognizes that some ozone nonattainment areas such as Portland are very close to attainment while others such as the Los Angeles Basin will require years of drastic curtailments to meet ozone standards. Accordingly, Congress created five classes of nonattainment areas ranging from "marginal" to "extreme." DEQ recently proposed that Portland be classified as marginal, and we have every reason to believe that EPA will accept this proposal.

The five classes of nonattainment areas require increased control measures with severity. Under the 1990 CAAA, some measures previously suggested for all nonattainment areas, such as imposing RACT on major sources without CTGs, now apply only to the more severe ozone nonattainment areas. The 1990 CAAA only requires marginal areas such as Portland be regulated by RACT rules consistent with existing CTGs; nothing in the 1990 CAAA requires RACT for major sources when EPA has not issued a CTG. In fact, such a requirement would be more stringent than the 1990 CAAA provision for moderate areas which do not require RACT for non-CTG sources until late 1992. For this reason, the RACT portion of the rules DEQ is proposing today go beyond what is required under the new CAAA. In short, the proposal for requiring RACT for non-CTG sources is a relic from the days when the Clean Air Act made no distinctions between degrees of nonattainment.

Although the 1990 CAAA contain no clear requirement in marginal areas that RACT be developed at major non-CTG sources, the CAAA does require other types of controls at many of these sources. Under the air toxics provision many sources that emit more than 10 tons per year of certain listed hazardous air pollutants will be required to install "maximum available control technology" ("MACT"). Many hazardous air pollutants are also VOCs. Thus, the air toxics program likely will help reduce VOC emissions in the Portland area.

More importantly, the air toxics program's MACT requirement may result in control technology on VOC sources that is as strict or even more strict than what would be required under RACT. Because RACT is a less well defined concept (when EPA has not issued a CTG), however, requiring RACT for non-CTG sources now could result in a source having to re-evaluate its technology when MACT is required. A more consistent approach with the overall thrust of the 1990 CAAA would be to require RACT only when EPA has clearly defined it in a CTG and let the air toxics program's MACT provisions control non-CTG VOC emissions.

In preparing these comments, we recognize that DEQ always has the ability to impose restrictions that go beyond those called for by federal law. However, contrary to the statements in the preamble to today's proposal, failure to adopt RACT for non-CTG sources will not result in the loss of any state delegation to enforce this portion of the rules because it is simply not required under federal law. Moreover,

as discussed in more detail below, the RACT rule for non-CTG sources DEQ has proposed is ambiguous and confusing, and would force Oregon industry to bear the burden of developing and applying new technology when DEQ has identified little, if any, commensurate air quality benefit. For these reasons we ask that adoption of the rules requiring RACT for non-CTG sources be delayed for further review. Such a delay will not violate the Clean Air Act and will allow DEQ to adopt rules that better fit the air needs of the Portland area. Accordingly, we suggest the rules be modified as follows:

- "(4) All new and existing sources located inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology ("RACT") for any emissions unit covered by categorical standards set forth in OAR 340-20-106 through OAR 340-22-300. The Department from time to time may supplement these categorical standards."
 - "(5) [Delete]."
 - "(6) [Delete]."

II. The Proposed Rules Should be Revised Before Adoption.

If the Commission desires to require RACT for non-CTG sources even though not required by the 1990 CAAA, the proposed rules as recently modified by DEQ should be revised for clarity and ease of implementation. The following paragraphs detail specific areas where we have identified potential problems and conclude with proposed language for your consideration:

A. The Rules Fail to Provide a Cutoff Point For Small Emission Units.

As we commented last summer, the proposal has the potential to unfairly penalize sources that operate a variety of processes. Some sources in Oregon's high technology and other industries operate a multitude of small VOC emission units at a single facility that emit a total of more than 100 tons of VOC per year. Under a literal interpretation of the proposal's requirement that 100 tons per year be from

"aggregated emission units," a source would be required to develop RACT for each category of minuscule emissions unit (for instance bottles of typewriter correction fluid). A better approach would be to require RACT only for emissions units emitting more than a de minimis threshold, such as ten tons per year, of VOCs (which would be consistent with the air toxics program).

Also, some such sources may have a few emissions units subject to a CTG combined with many small emission units with no CTG. By subjecting the entire source, rather than just the relevant emission unit, to RACT, the rule requires a RACT analysis for minuscule emissions units. This problem could be corrected by clarifying that RACT only applies to emissions units subject to a CTG and emissions units larger than some de minimis threshold. Furthermore, EPA guidance clearly indicates that a 100 TPY non-CTG source does not take into account regulated CTG sources. EPA, "Issues Relating to VOC Regulation Cutpoints, Deficiency, and Deviations" at 2-3 (1988). Thus, the rules should make clear that RACT for non-CTG source only is triggered if aggregate emissions from sources for which a categorical RACT standard exists exceeds 100 TPY.

B. The Provision For Eliminating RACT are Inconsistent With the Remainder of the Rules.

Under the proposal, once a source became subject to RACT, it would be virtually impossible to eliminate the RACT requirement even if production were reduced drastically. A source becomes subject to RACT when its "potential emissions before add on equipment" for all emissions units aggregate to greater than 100 tons per year of VOC. To remove the RACT requirement, a source must show that emissions fall "below the level that initially triggers RACT." Because RACT would be triggered by potential emissions, this showing would be virtually impossible to make unless a source completely dismantled a portion of its manufacturing operations. A better rule would be to allow a source to remove the RACT requirement by adding pollution control equipment, changing its production process, or adding a permit provision limiting allowable VOC emissions.

C. The Rules Fail to Provide Adequate Notice as to When RACT Will Be Required For Sources Without a CTG.

The proposal's requirement that sources submit a RACT analysis "within 3 months of notification by the Department of the applicability of this rule" leaves sources open to uneven enforcement of the rule. Presumably, a source would not need to apply RACT on emissions units without CTGs before DEQ gives some sort of notice. Yet, the proposal gives no indication as to when notice would be given. Because no notification process is described, sources will have difficulty determining what triggers the RACT requirement. For example, would a notice in the Oregon Administrative Bulletin that these rules have been adopted constitute notice under these rules? Without a better indication of when RACT is required, sources are left confused as to their current compliance status.

D. EPA Approval Adds an Unnecessary Layer of Enforcement Oversight.

Since the 1990 CAAA does not require that DEQ impose RACT for non-CTG sources, any RACT provision for non-CTG sources goes beyond a federally-mandated requirement. Without a federal requirement, there is no reason for EPA approval of source specific RACT. To the extent allowed by the 1990 CAAA, DEQ should retain its autonomy from EPA so that it can exercise its discretion in response to local air quality needs.

EPA approval of SIP amendments is a complicated process that can take several years. It is an inappropriate mechanism for dealing with the details of an individual source permit. Additionally, once such permit provisions are incorporated into the SIP, they become virtually impossible to modify. Lastly, inclusion of the individual RACT requirements into the SIP will give EPA authority to enforce the individual permits. Because one reason for proposing these rules in the first place was the perceived need to avoid added federal control of the Oregon air program, we see no need for EPA approvals. Thus, the provisions in the proposal for EPA approval should be eliminated.

E. Daily Monitoring of Small Surface Coating Operations Will Not Translate Into Air Quality Benefits.

The proposal incorrectly assumes that the federal and state standard for ozone (0.12 ppm over a one hour averaging

period) justifies a requirement that small surface coating operations demonstrate daily compliance. Low level ozone formation results from a complex photochemical reaction between sunlight and certain organic chemicals (including VOC). There is little reason to believe that short term emissions that may occur in one part of the Portland airshed would have any immediate effect on ozone levels in another part. Instead, ozone violations are far more likely to occur due to aggregate emissions from many sources over a period of time. Thus, since daily recordkeeping of emissions is extremely difficult for small surface coaters, the lack of a corresponding immediate air quality benefit makes this rule meaningless. A meaningless rule which is costly to small businesses should not be adopted.

F. Suggested Modifications.

To better align the proposed rules with these comments, we suggest the following modifications to 340-22-104(4)-(6):

- "(4) All new and existing sources subject to categorical RACT requirements set forth in OAR 340-22-300 or described in subsection (5) that are located inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology (RACT) unless otherwise specifically exempted in these rules. Compliance with the conditions set forth in OAR 340-22-106 through 340-22-300 shall be presumed to satisfy the RACT requirement.
- "(5) Sources with emission units for which no RACT categorical requirements exist and which have potential emissions before add-on equipment of over 100 tons per year ("TPY") (exclusing emissions units already subject to a RACT categorical standard) of VOC from aggregated emission units shall have RACT developed on a case-by-case basis by the Department for each

¹ New material is underlined, deleted material is bracketed.

emissions unit with the potential to emit more than 10 TPY of VOC. Once a source becomes subject to RACT requirements under these rules, it shall continue to [be subject to] apply RACT to each emission unit with the potential to emit more than 10 tons per year of VOC unless the total allowable VOC emissions falls below 100 tons per year. [If emissions fall below the level that initially triggered RACT, the source may request RACT not be applied, providing the source can demonstrate to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity].

"(6) Within 3 months of a request from [notification] the Department for a RACT <u>analysis</u> [by the Department of the applicability of this rule], the source shall submit to the Department a complete analysis of RACT for each category of emission unit at the source with the potential to emit more than 10 tpy of VOC, taking into account technical and economic feasibility of available control technology and the emission reductions each technology would provide. This analysis does not need to include any emission units subject to a specific RACT requirement under these rules. These RACT requirements approved by the Department shall be incorporated into the source's Air Containment Discharge Permit, and shall be effective not more than one year after the date the Department approves the proposed RACT [not become effective until approved by EPA as a source specific SIP revision. The source shall have one year from the date of notification by the Department of EPA approval to comply with the applicable RACT requirements]."

III. Summary.

In summary, we recognize the need to bring certain provisions of the SIP in line with what Congress has required

STOEL RIVES BOLEY JONES & CREY

Environmental Quality Commission April 25, 1991 Page 9

under the 1990 CAAA. We see no justification, however, for imposing RACT on non-CTG sources, especially when many of these sources will soon be subject to MACT. Thus, our preferred alternative would be to have the Commission eliminate the provisions for non-CTG RACT as discussed in Section I of our comments.

If the Commission determines that RACT for non-CTG sources may be warranted, we urge the Commission to remand the portion of the rules to DEQ for further consideration as discussed in Section II of these comments. As we have discussed, we can find nothing in the 1990 CAAA to indicate federal sanctions would result from such a remand and further clarification is needed before these rules can be properly implemented.

Thank you for the opportunity to submit these comments.

Very truly yours,

Stephen R. Brown

cc: Mr. Fred Hansen

Mr. Steve Greenwood

Mr. John Kowalczyk

Ms. Wendy Sims

Mr. Brian Finneran



April 25, 1991

Neil Mullane Department of Environmental Quality 811 S.W. 6th Avenue Portland, OR 97204

Re: Rules for Establishment of Instream Water Rights for Pollution Abatement, EQC Agenda Item F

Dear Mr. Mullane:

WaterWatch is a nonprofit environmental organization dedicated to promoting water policies for Oregon that provide the quality and quantity of water needed to support fish, wildlife, ecological values, public health and a sound economy. We support the DEQ's decision to move forward on rules for instream water rights for pollution abatement under the 1987 Instream Water Rights Act. It is important for DEQ to finally begin to protect the assimilative capacities of the State's rivers by linking water quality and water quantity through the establishment of instream water rights.

We offer two comments regarding the scope of the proposed rules. First, the rules should reflect the ultimate goal of applying for instream water rights on <u>all</u> waters of the state needing protection. DEQ should not rely solely on other agencies and the public to request rights for the "other waters" of the state. Second, the goal of the Clean Water Act is to eliminate discharges of pollutants into public waterways. However, until that goal is reached, DEQ must face the reality that it is the agency that is authorizing the discharge of millions of gallons of polluted effluent every year. DEQ's rules should reflect both the goal <u>but also</u> the reality. Instream rights should be requested to protect uses at existing discharge levels. Once target loadings are achieved, the instream water right can be adjusted accordingly.

We look forward to participating in the public comment period on these rules.

Sincerely

Mich Russell

Karen Russell

Executive Assistant

c. Fred Hansen, Director Bill Huchison, Chair EQC Karl Anuta, NEDC Jim Myron, OT April 24, 1991 4-1242-RGB-265

William W. Wessinger 1133 West Burnside Street Portland, Oregon 97209

Dear Mr. Wessinger,

our products.

air quality regulation on Aerospace Component Coating Operations (OAR 340-22-175). Under the proposed regulation, aerospace facilities whose annual volatile organic compound (VOC) emissions from surface coatings are between ten and forty tons will no longer be exempt from the regulation. The Boeing Commercial Airplane facility

located in Gresham, Oregon emits approximately 39 tons per year and will, therefore, be required to meet specified coating limitations for the first time.

The Department of Environmental Quality is proposing a new

Nearly one hundred different surface coatings and thinners are used at the Boeing facility during a production year. Many of these coatings do not meet the low VOC content limits proposed by the rule requirements. A couple of low VOC candidates are currently undergoing manufacturing feasibility studies. If implementation is required prior to study completion as the rule proposes, problems may

arise which could jeopardize the performance and safety of

On the other hand, the proposed rule allows for exceptions and/or alternatives to meeting the coating requirements; they must be approved through an EPA-approved source-specific SIP revision. Such a revision could take a year or more for DEQ and EPA approvals and would leave the facility in question as to compliance in the interim. In either case, whether through low VOC coatings or a SIP revision, more time is needed to phase-in the coating requirements including the determination of effective equivalent emission reduction or control methods for other coatings which have no low VOC alternatives.

Time is also critical for the implementation of the recordkeeping requirement included in the proposed regulation. The establishment of a daily recordkeeping program at a facility previously required to submit only annual reports will necessitate adequate time and resources to develop a tracking system and to train employees. Based on the experience of other aerospace facilities where similar requirements exist, the program implementation could take over a full year. No phase-in period is allowed by the proposed rule.

BUEING

4-1242-RGB-265 Mr. Wessinger Page 2

In light of these problems, The Boeing Company recommends two changes to the proposed VOC rule. First, the coating limitations and recordkeeping requirements should not take effect immediately upon promulgation of the rule, but should be implemented through compliance schedules incorporated into individual permits. This would allow reasonable time for sources such as Boeing to submit evidence supporting alternative emission limits and equivalent means of VOC removal for specific coatings that present the kind of technical, economic and environmental problems previously discussed. This would not create a substantial administrative burden on the Department because there are only twenty-five existing sources, and permits must be written for each in any event. approach is also consistent with the 1990 Clean Air Act Amendments, in which Congress adopted operating permits as the preferred mechanism, as opposed to SIP's, for implementing emission limits and related requirements. This change could be accomplished by amending OAR 340-22-104(4) as follows:

Unless otherwise exempted in these rules, and subject to the exceptions and alternative emission controls provided for herein, all new and existing sources inside the designated nonattainment areas identified in subsection (2) of this section shall apply Reasonably Available Control Technology (RACT) in accordance with compliance schedules established in Air Containment Discharge Permits issued to such sources.

Second, the language requiring that each alternative emission limit and equivalent means of VOC removal cannot take effect unless and until approved by EPA as a source specific SIP revision should be stricken from the rule. That may well be EPA's position but there is no reason for the State of Oregon to codify it as part of its implementations plan. The state should not cede its authority to decide, as a matter of state law, whether to approve an alternative emission limit of equivalent VOC control. Once DEQ has made such a determination, sources should not be held hostage to a lengthy and unpredictable federal review process. We understand there are risks involved in relying upon DEQ's decision without an EPA sign-off, but those risks are preferable to the situation created under the proposed rules in which sources are technically in noncompliance during the period it takes EPA to decide whether to agree with DEQ. The EPA approval language appears throughout the proposed rule [eg. 340-22-175(c) and 10(c)] and should be removed entirely.

The Boeing Company would like to work with the Oregon Environmental Quality Commission in developing effective

e de la como de la com

4-1242-RGB-265 Mr. Wessinger Page 3

regulations to improve air quality in the Portland area. We believe that significant emission reductions can be achieved provided that sufficient time exists to implement efficient and practical technology. Should you wish to discuss this issue further, we will be present at the next EQC meeting. We look forward to sharing with you our mutual concerns on the environment.

Very truly yours,

CORPORATE SAFETY, HEALTH, AND ENVIRONMENTAL AFFAIRS

BOEING

D. J. Smukowski

Manager

Phone: (206) 393-4780 M/S 7E-EH

Environmental Operations

cc: Fred Hansen, Department of Environmental Quality



OREGON METALLURGICAL CORPORATION

April 25, 1991

Environmental Quality Commission 811 SW Sixth Avenue Portland, OR 97204

Dear Members of the Commission:

We are here today representing Oregon Metallurgical Corporation (Oremet). Oremet respectfully requests that you grant the permit today. However, Oremet has concerns about some of the conditions of the permit.

Oremet is in the process of expanding its furnace capacity from eight furnaces to twelve furnaces. This is a substantial increase in production capacity which has required a large capital expenditure. To meet its environmental obligations, Oremet initiated the permit renewal/modification process on June 15, 1988, with a letter to the Salem office of DEQ asking for discussion regarding the Total Dissolve Solids (TDS). Our permit was granted when we had four furnaces operating (six installed). We have applied for permission to expand to twelve furnaces. We agreed to meet our existing permit limits for all permit parameters except TDS. Since that date, Oremet has worked closely with DEQ staff and believe we have provided all the information that was requested as quickly as possible.

When we reviewed the staff report which has been presented to you, we found suggested conditions which have never been discussed with Oremet: (1) proposed changes in the mixing zone and (2) that the TDS limit would expire at the end of the permit period. Specifically, we believe that, prior to any amendment in the mixing zone definition, there should be scientific study. Oremet pledges to work with DEQ staff to obtain scientific data for an appropriate period of time during the five-year interim period. As a result of that scientific data, there would be a factual basis which would allow a proper definition of the mixing zone. No information has been gathered over the past two years which specifically addresses the concerns raised by the modifications to the mixing zone definition.

The first modification is that Oremet would not discharge into Oak Creek when the flow in Oak Creek is equal to or less than ten cubic feet per second. During the summer season, the

normal flow in Oak Creek diminishes. The primary flow in Oak Creek comes from the discharge from Oremet. This has been the situation for approximately twenty years. Before terminating the existing water flow in Oak Creek, Oremet believes a scientific study should be taken to determine the effect upon the plants and wildlife if Oak Creek is changed from a continuous flow to a seasonal flow creek. In addition, the impact upon other users of Oak Creek must be determined.

The second proposed modification is "When the flow rate in Oak Creek is greater than ten cubic feet per second: the mixing zone shall extend 150 (sic) below the discharge." That definition does not take into consideration the fact that Oremet's discharge flows through a wetlands before directly entering into the waters of the creek. As a result, Oremet's effluent enters Oak Creek at several points along a distance of approximately one-eighth of a mile. Because the point of origin has not been specifically identified, Oremet believes that scientific study will be able to indicate an appropriate area in Oak Creek. That mixing zone area would be better tied to a fixed structure such as a roadway crossing or bridge crossing than to a specific numerical distance in order to provide clarity for all concerned.

The third area of concern is the staff recommendation that "...the present request for TDS discharge load increase will be limited to a consideration of a five-year interim period only." Oremet needs to have some certainty as to what will be the TDS level it must meet in five years. In order to have appropriate planning and capital improvements, industry needs to be able to know what target it must meet.

Oremet wants to make clear that it is not requesting that there be a lessening of the environmental standards. What Oremet is requesting is that the five-year interim period be used for scientific study and discussion so that a redefinition of the mixing zone will be based upon sound scientific information. The remainder of this letter is intended to provide you with more information which has been prepared by our consultant CH2M-Hill and more information of the adverse impacts the proposed changes would make on Oak Creek.

A brief summary of the consultant's work is included in the staff report starting at page B9. Some of the highlights include:

- 1) No acute toxicity (LC50 >100%) measured in wastewater collected post-wetland. The data includes five different species, two lab's results and a one-year time period.
- 2) Generally no chronic toxicity in wastewater collected post-wetland. In five of six tests there was no chronic toxicity measured. In one test there was minimal chronic toxicity.
- 3) An increased number of fish in Oak Creek downstream from Oremet's discharge.
- 4) A shift in the insect community in Oak Creek downstream from Oremet's discharge which is not likely an adverse effect of Oremet's wastewater but more likely a different invertebrate community.
- 5) No difference in fish or invertebrate communities was observed in the Calapooia River above and below Oak Creek's entrance.

The discussion for many months centered around the relationship between TDS and results from the bioassays. It has been conclusively demonstrated and all parties agreed that there is no direct relationship between any toxicity and TDS in Oremet's effluent. The TDS levels in our proposed permit will not be toxic.

The new proposed recommendation to now allow Oremet to discharge when flow in Oak Creek is ten cubic feet per second or less has not been mutually or directly discussed during the previous two and one-half years of meetings that Oremet has had with DEQ.

What appears to be missing in the present staff recommendation is the impact to Oak Creek when there is no flow during the dry summer months. What existing studies have shown, by looking upstream from Oremet's discharge, is that Oak Creek becomes a stagnant nonflowing series of small puddles which will not support the indigenous fish population that currently exists in the stream throughout the seasonal changes that occur during the year.

Oremet's effluent maintains this fish population and other wildlife as well as the other beneficial uses that exists only because of Oremet's discharge during the dry months of the year.

A large part of the existing habitat and wildlife would be lost without Oremet's discharge. Frogs, fish, ducks, beaver, and nutria all survive and thrive directly in Oremet's wetland before discharge into Oak Creek. This wetland would also be lost without Oremet's discharge. Another consideration is the loss of other beneficial uses that occur downstream from Oremet.

The new definition of a mixing zone for our discharge should not be included as a condition of this permit or in any settlement of lawsuits. "No discharge" is not a proper definition of a mixing zone as required by OAR 340-41-205. Removing Oremet's wastewater from Oak Creek will cause damage. We need to proceed with the permit without an incorrect, binding decision on the future mixing zone definition.

Oremet is the only NPDES permittee to our knowledge that has a permit limit on TDS in the State of Oregon. If Oremet's experience is applied statewide, DEQ will have to revisit all permit holders that discharge into small seasonal streams on the subject of whether or not TDS limitations are appropriate and, if so, how the "water quality guidelines" will impact the current definition of "mixing zones." There will be substantial impact in requiring all permit holders to stop discharging when the stream flow will not dilute the effluent TDS to levels that are "suggested," and when such levels are set essentially at background.

In Oremet's case there has been demonstrated with fish bioassays that there would be very little, if any, benefit to Oak Creek if water quality guidelines become limitations. Considerable money has been spent to date to accommodate the proposed draft permit limitations and minimize the impact to Oak Creek. A very much larger amount of money would have to be spent to meet the proposed elimination of Oremet's discharge to Oak Creek when stream flow becomes ten cubic feet per second or less. The need for this limitation has not been supported by the scientific data that has been gathered during the last two and one-half years.

Oremet has worked hard, with the Department's staff, to come up with a responsible permit modification that allows for production increase while ensuring environmental protection. We will stay within our existing permit limitations for all nationally regulated parameters. We will do better than BAT for our industry. We believe a scientific study should be made to develop facts. Conditions should be established as a result of facts. We believe industry needs finality so that it can meet environmental standards.

We respectfully request the issuance of Oremet's permit be granted today. We respectfully request the contested conditions be modified so that decisions can be made on a sound factual basis. If we are granted the permit as requested, we strongly believe we will complete our economic development in an environmentally responsible manner.

Respectfully submitted,

Gerald D. Cork, P.E.

Director of Engineering

Greg Hoffman Environmental Engineer

Agenda	Item	
--------	------	--

Request to Present Information

David Paul, Paula Meske
Name (Please Print Clearly)
10015 SW Terwilliger Blud. Portland, OR
Address
Northwest env'l Defense Conter
Affiliation

CHAIRPERSON HUTCHISON

Agenda	Item	
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		

Oregon Environmental Quality Commission

Request to Present Information
BIH- IN TRYING TO MERT REQUIREMENT OF 5/15/9/ dato - YOU ARE OF MAY
5/15/91 date - you ARR or may
Name (Please Print Clearly) BB SUBJECT TO A LAWSUIT
FOR FRILURA TO PROVIDE AN OPPORTUNITY
Address ROD PUBLIC HEARING ON A SUBSTANTIUNE
Affiliation CHANER-LIKE THE UNE BEING PROPOSED.
AN apportantly for Public Tun Donace
Please limit comments to five minutes.
HRIBRING SHOULD BK
PROUDED.

Agenda	Item	H	

Request to Present Information

Donn	Print Clearly)	lea 1				
Name (Please	Print Clearly)					
5200	NE Ele	m Gours	a PLWIN	Hillshow	OL.	97104
Address)))	\
Affiliation	Corpora	120				
Affiliation						

Agenda	Item	<u>+</u>
--------	------	----------

Request to Present Information

Steve Brown - Stoel Pives Boley Jones & Grey
Address Name (Please Print Clearly) Address
Address
Affiliation
- Comments on VOC rules.
Please limit comments to five minutes

		<i>f</i>
	_	
Agenda	ltem	Acres 100 miles
Agenda	TICITI	/ /

Request to Present Information

$\mathcal{O}_{\mathcal{O}}(\mathcal{D}_{\mathcal{O}})$	
PAT PARENTEAU	
Name (Please Print Clearly)	
PORTLAND, DREGON Address	
Address	
PERKINS-COIE, REPRESTING BOEING	
Affiliation	

		1
Agenda	Item	
5		

Request to Present Information

GERALD D. CORK, P.E.	DIRECTOR OF	= ENGINEERING
Name (Please Print Clearly)		
530 W. 345# Av., ALBI	4NY, DR 973	32/
Address		
DREGON METALLURGICAL	CORP.	
Affiliation	***	

Agenda	Item	_
9		

Request to Present Information

Name (Please Print Clearly)	Ovink		
Name (Please Print Clearly)		O(1)	
P.O. Box 428		llis or	97330
Address		ſ.	
Environment	l consul	tant to	OREMET
Affiliation			