

**5/23/1975**

**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS**



**State of Oregon  
Department of  
Environmental  
Quality**

This file is digitized in **black and white** 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.

A G E N D A

Oregon Environmental Quality Commission

May 23, 1975

City Council Chambers, City Hall, 555 Liberty Street S.E., Salem, Oregon

9:00 a.m.

- A. Minutes of April 25, 1975 EQC Meeting
- B. April 1975 Program Activity Report Ron Myles
- C. Tax Credit Applications Ron Myles
- D. PUBLIC HEARING to consider adoption of order prohibiting construction of subsurface sewage disposal systems in certain (moratorium) areas Jack Osborne
- E. Comments by JACKSON COUNTY officials regarding subsurface sewage disposal prior approvals
- F. Consideration of ADOPTION of proposed revisions to Oregon Administrative Rules pertaining to subsurface sewage disposal Jack Osborne
- G. Boise Cascade, Salem - Air Quality Control Program - Status Report Russ Fetrow
- H. VARIANCE REQUESTS
1. Reichhold Chemical Company, St. Helens, Oregon - One-year variance to conduct pilot testing on methods to control particulate emissions from prill tower Tom Bispham
2. Oregon Portland Cement Co., Lime, Oregon Extension of compliance schedule Fritz Skirvin
3. Union Oil Company Extension of Variance to Sulfur Content of Fuel Regulation John Kowalczyk
4. SWF Plywood Company, Fir-Ply Division, White City - request for one year extension of compliance schedule Al Burkart
5. Continental Forest Products Company, dba Little River Box Company, Glide, Douglas County, Oregon - extension schedule to achieve compliance of hog fuel boiler Al Burkart
- I. Authorizations for PUBLIC HEARINGS
1. Pertaining to proposed adoption of Federal New Source Performance Standards (NSPS) John Kowalczyk
2. Pertaining to proposed adoption of National Emission Standards for Hazardous Air Contaminants (NESHAP) Ray Johnson
- J. Field Burning - Status Report Dick Vogt

The Commission will breakfast and lunch at Stuart Anderson's Black Angus, 200 Commercial Street South, Salem. Breakfast will be at 7:30 a.m.

Press

~~Farm Moore~~

Dean Smith  
Wayne Thompson

Peter

MINUTES OF THE SIXTY-EIGHTH MEETING  
OF THE  
ENVIRONMENTAL QUALITY COMMISSION

April 25, 1975

Pursuant to the required notice and publication, the sixty-eighth meeting of the Oregon Environmental Quality Commission was called to order at 10:00 a.m. on Friday, April 25, 1975. The meeting was convened in Conference Room A, Human Resources Building, 850 S.W. 35th, Corvallis, Oregon.

Commissioners present included: Mr. B.A. McPhillips, Chairman; Dr. Morris Crothers; Dr. Grace S. Phinney; (Mrs.) Jacklyn L. Hallock; and Mr. Ronald M. Somers.

Department staff members present included Mr. Kessler R. Cannon, Director; Mr. Ronald L. Myles, Deputy Director; Mr. Harold M. Patterson (Air Quality); and Mr. Harold L. Sawyer (Water Quality). Several additional staff members were present.

MINUTES OF THE MARCH 28, 1975 COMMISSION MEETING

Chairman McPhillips reported a suggestion that the minutes be amended to more accurately reflect testimony given by Mr. John Vlastelicia during the March 28 meeting. It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the proposed minutes be amended as suggested (the suggestion having been set forth in writing before each Commissioner).

It was MOVED by Commissioner Somers and seconded by Commissioner Crothers that ".5%," appearing on page six of the proposed minutes be changed to ".3%,". The motion was carried. The Commission then adopted the minutes as amended.

MARCH 1975 PROGRAM ACTIVITY REPORT

Mr. Ronald Myles, on behalf of the Department, presented the Program Activity Report.

Commissioner Somers, addressing himself to Attachment Five of the report, dealing with the month of March 1975, inquired as to the specific problems behind those permit applications dating back to 1974 whose resolution was not expected until June of 1975. Mr. Harold Patterson explained that the remaining work was subject to a "catch-up" operation and that many of the permits proposed had been sent to regional offices with an invitation for their comment. Mr. Patterson noted that the permits and the comments thereon were now being received by the Air Quality Division and he expected to be able to act on a great number of permits shortly. Mr. Patterson assured Commissioner Somers that the permits were requested in all cases for existing sources now operating

on temporary permits. Commissioner Somers pointed out that his understanding in that case was that the Department was not holding up any industrial operation due to its time schedule for processing the permit workload. In response to inquiry from Commissioner Somers, Mr. Patterson stated that there were no major permit applications recently received other than that of Alumax.

Commissioner Phinney inquired of Mr. Patterson concerning the conditional approval granted Georgia Pacific at Toledo to burn tires in its hog fuel burner. Mr. Patterson explained that this was a novel, experimental permit which would allow supervised addition of rubber to the hog fuel and require periodic submission of data from the applicant to enable the Department to evaluate the process. Commissioners Somers and McPhillips, along with Mr. Cannon, recalled that Oregon-Washington Plywood had tried a similar process and failed due to the incapacity of older boilers to accept the heat. Mr. Patterson pointed out that Georgia Pacific had done some minimal experimental work in this area previous to the present proposal.

Commissioner Somers was told that the April Program Activity Report would reflect Alumax's withdrawal of its permit application for the Warrenton site (formerly desired for the location of an aluminum plant). Commissioner Crothers wished to point out that he viewed the program activity report as the most complete ever given to the Commission and as one which reflects both the vast workload of the Department and the successful Departmental effort to catch up. It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Commission approve staff action on plans and permits for the month of March 1975.

Commissioner Somers concurred with Commissioner Crother's commendation to the staff on this month's program activity report. (See attachment for program activity report specifics).

#### TAX CREDIT APPLICATIONS

It was MOVED by Commissioner Somers, seconded by Commissioner Phinney, and carried that the Commission approve seven tax credit applications as recommended by the Director and set forth in distributions to the Commission. The applications were numbered as follows: T-618, T-625, T-630, T-631, T-632, T-633 and T-634.

#### PUBLIC FORUM

Mr. Joseph Casey and Mr. Richard Hamilton addressed the Commission on the subject of non-waterborne waste disposal facilities. Mr. Casey informed the Commission that he and Mr. Hamilton were unaffiliated researchers who had co-authored a book dealing with the subject. Mr. Casey questioned the assumption that sound sanitation requires the flush toilet. He asserted that, in some cases, the reverse is true; that sound policy requires that water not be used.

Mr. Casey decried the practice whereby the useful aspects of fecal matter were ignored in a system which dilutes fecal matter ninety-eight times with water, carries it through miles of sewer lines, and disposes of it with expensive, energy consuming treatment plants. He pointed out that conventional fertilizers replace only three of sixteen necessary soil nutrients. Properly treated human waste would replace all sixteen of these nutrients - nutrients which he declared to be essential for agriculture. It was Mr. Casey's contention that the decline and fall of the Roman Empire (notwithstanding the view of Edward Gibbon) might be laid at the door of sophisticated but wasteful sewerage construction. Mr. Casey attributed the successful yield per acre on Chinese farm lands to efficient management of human waste, a management which included its return to the soil. Mr. Casey cited the motto of Sir Edwin Chadwick, a great nineteenth century English sanitarian, "the rainfall to the river, the sewage to the soil."

Mr. Casey stated that it was difficult to calculate the energy loss resulting from present use of the flush toilet. He went on to state that a primary loss of energy was involved in the simple flushing away of materials which should be returned to the soil. He stated that, per million population, more than ten million four hundred thousand pounds per year of nitrogen was lost. Annual potassium and phosphorous losses per million population were said to be in the millions of pounds also. Mr. Hamilton then addressed the Commission, describing what he thought was a desirable alternative to the flush toilet. Mr. Hamilton informed the Commission that approximately ten thousand gallons of water per year were flushed down the average flush toilet by the average person. This water, he noted, had been through a purification plant and was destined for a treatment plant, both of which operations were costly. He stated that western civilization's elimination of waterborne diseases, such as typhoid, had been accomplished at a hidden expense which should now be recognized.

The Commission's attention was called to the Clivis Multrum (inclined compost) organic waste treatment system, a system which did not involve the use of water. The system was reported to have been in use for some thirteen years in Sweden and to have received the endorsement of several health organizations, including the World Health Organization. The Clivis Multrum was said to solve the problem of waste disposal by rendering it a fine, odorless humus which was suitable for use as a fertilizer.

Mr. Hamilton cited the regulation of grey water (household effluents other than those of the flush toilet) to be the central problem involved in approval of the Clivis system. The Clivis system would not handle grey water, and other means of disposal were needed for this aspect of the problem. Mr. Hamilton reported that he and Mr. Casey had retained a consulting sanitary engineer to work up a proposal for regulation of grey water to be placed before the Commission. Also, he stated, the state of Maine had been consulted for information regarding their regulation of grey water and their use of the Clivis system. Mr. Hamilton predicted that use of the Clivis system would have a thirty to forty percent reduction in the size of septic tanks and drainage fields needed to handle grey water.

Also, he opined, many areas not now approved for septic tank installation might become acceptable for installation of a system to deal only with grey water effluents, effluents which were said to pose different and lesser problems than the conventional septic tank system is designed to meet.

In response to questioning by Commissioner Somers, Mr. Hamilton pointed out that he was not a dealer for the Clivis system but knew the Oregon dealer. To Mr. Hamilton's knowledge, there was one system which had been delivered in Oregon but was not yet installed.

Commissioner Somers asked what was necessary to start the system up. Mr. Hamilton explained that the system was what might be called an inclined compost, consisting of a fiberglass container whose bottom was overlaid with ten to twelve centimeters of peat moss, two to three centimeters of soil, and two centimeters of leaves. The container is separated into compartments, one compartment for human waste, and a second compartment for papers, wrappers, and other appropriate items of trash. Aerobic digestion was said to be the result of the interaction of bacteria in the waste, trash, and soil. The end product, the humus, was said to be virtually odorless and safe from health hazard.

Commissioner Somers was told that the market price of the Clivis system was approximately thirteen hundred dollars at present, as sold by manufacturers in Maine.

Chairman McPhillips was told that the system was small enough to be installed in existing homes with some excavation in appropriate cases. It was conceded that a second story dwelling would pose problems.

Mr. Hamilton lamented poor land use planning which resulted from the need for septic tank approval. The present circumstances, he opined, led to the consistent building of houses on arable land. In the absence of the "septic tank impediment," people would be free to build houses in hilly areas, leaving the useful farmland agricultural purposes.

Commissioner Somers was informed that this system's odor was controlled by convection through a ventilating system which led to a twenty-foot stack. The draft is initiated by heat generated in the decomposing waste and circulated through a vent system which would not involve waste of heat in the dwelling.

Commissioner Phinney was told that the digestion process was rapid enough to abate any problem of compaction in the system. The humus accumulation was said to equal approximately one bucket per person per year. The tank was said to need emptying on an annual basis beginning two to four years after installation.

Mr. Hamilton was unable to inform Commissioner Somers if the system had been tried in boat houses.

Mr. Cannon noted that Maine legislation approving the system had been recent and that staff was in correspondence with officials in Maine to investigate the benefits of the system.

Commissioner Somers suggested that Mr. Casey and Mr. Hamilton contact different members of the Department's staff toward the end of conducting a public hearing on the issue of Departmental approval of the Clivis Multrum system under its rules.

Mr. Hamilton commended government in Oregon for its responsiveness to matters such as the one in discussion.

Commissioner Somers warned of the severe consequences involving home owners whose lots were not approved for conventional disposal facilities when experimental measures failed, noting that the Department then had no choice but to close down faulty disposal systems. He noted that the Water Quality Division spent ninety-five to one hundred million dollars yearly in correcting failing systems.

The Commission thanked Mr. Hamilton and Mr. Casey for what was termed a very interesting and refreshing dissertation.

Mr. Orrin Halsten of the Bridgeton-Philoma Citizens Association addressed the Commission with his objection to the assessment on his property proposed as a result of the Gertz-Schmeer sewer system. Mr. Halsten reported that his land, valued at sixty-five thousand dollars, was the subject of a proposed fifty thousand dollar assessment. He added that the land had been "zoned down" making it useless for subdivision.

Commissioner Somers was told by Mr. Harold Sawyer of the Department's Water Quality Division that the prioritizing system for sewage works construction needs (Agenda Item E) would call for seventy-five percent federal funding of projects ordered after forced annexation; such as was the Gertz-Schmeer project. Mr. Sawyer noted, however, that a seventy-five percent EPA grant applied to the pump station and interceptor portions of the Gertz-Schmeer project still left extremely high property assessments in the offing for residents of the affected area.

Mr. Henry Buehner, attorney for the Bridgeton-Philoma Citizens Association, testified against the Gertz-Schmeer project, condemning it as an overly expensive, inefficient design, which, in Mr. Buehner's view, would work an undue and unnecessary hardship on the affected residents. He stated that the Bridgeton-Philoma Citizens Association consisted of approximately two hundred residents, approximately fifty percent of those residing in the area. He stated that a suit seeking injunction against the project was filed in federal court. A gentlemen's agreement was reported in existence whereby the project would not go forward for some thirty days. Mr. Buehner, after meeting with EPA officials and examining the file on the Gertz-Schmeer project, concluded that the proposed



prioritizing of sewage construction grants would be a start in the right direction. What was needed, he contended, was a thorough revision of the statutory and regulatory guidelines in the area of forced annexation and sewage construction. In the unique situation of the affected flood plain, Mr. Buehner opined, traditional planning methods had proved inadequate. A gravity flow system, in a down zoned area such as the present one, Mr. Buehner objected, works an intolerable economic hardship on the residents due to the sparcity of land use. Colonel Ostelmeyer, head of the Peninsula Drainage District #2, was reported in agreement with Mr. Buehner. The plan, Mr. Buehner stated, did not make provision for hookup to the houseboats along the river. There was reportedly no provision for connections running over the dike to existing laterals.

In response to Commissioner Somer's inquiry, Mr. Buehner stated that some of the residences involved had been located in the Gertz-Schmeer area for as long as fifty years. Mr. Buehner stated that, while the Department did not draw project plans, the plans were approved by the Department as drawn. Mr. Buehner said the affected area was east of I-5, between I-5 and the airport. Mr. Buehner stated that the present plan involved installation of materials some twenty-two feet under the ground on the flood plain, a project which, it was feared, would involve an OSHA problem. He argued that an alternate plan was needed.

Mr. Sawyer confirmed Mr. Buehner's understanding with regard to Department approval, reporting that it was the duty of the Department to review the plans as drawn by the city of Portland. In its review, the Department was to grant approval if it found that the proposal would, in fact, solve a health problem designated by the Board of Health. Commissioner Somers and Mr. Sawyer noted that no other plan was proposed, and that the Commission's inquiry was limited to the question of whether the system would solve the health problem. Whether the plan was the best of all those possible was not seen as a Commission issue.

Commissioner Crothers asked Mr. Buehner if he had any suggestions for alternative solutions. Mr. Buehner responded that the Seattle office of the EPA had promised to present alternative plans for consideration. Mr. Buehner called the Commission's attention to the need for condemnation of some of the homes in the area as a consideration to be included in proper overall planning.

In response to Chairman McPhillips' inquiry, Mr. Buehner stated that he had not discussed his dissatisfaction with officials of the city of Portland, noting that he and Councilwoman McCreedy of the city of Portland were not on speaking terms.

Mr. Buehner contended that, from his study of the problem, eighty to ninety percent of the health hazard could be alleviated without installing a sewer. He noted that facilities such as the Delta Park Raceway involved use of thousands of non-residents who would not have to bear a proportionate share of the cost. This installation was cited as a facility which should be required to solve its own problem with an individual package plant.

Commissioner Somers warned that, if the Commission should act to halt the project, whatever plan was eventually implemented would bear a price tag swollen by interim inflation.

Mr. Buehner reported his survey had indicated, in at least fifty percent of the assessments involved, proposed assessments exceeding the value of the property assessed. He stated this to be the result of the election to install a highly expensive gravity flow sewer system on property zoned for sparse usage.

Commissioner Somers stated that an unacceptable alternative would be to rezone the property, permitting additional subdivision (encouraged by the availability of a sewer) and the erection of more houses beneath frequent low altitude aircraft flights.

Mr. Sawyer reported to the Commission that the Gertz-Schmeer project had been in its initial stages for several years while zoning and planning problems were resolved. Hearings had been conducted with regard to environmental assessment in connection with the application for an EPA grant, it was reported. At this point, Mr. Sawyer stated, the project had reached a construction stage, and the Department's work in connection with the project's planning had been essentially completed.

Mr. Sawyer and Commissioner Somers concurred that current legislation did not afford the Commission the power to use additional state funds to further assist property owners in the Gertz-Schmeer area. Commissioner Somers stated he would write a letter in support of any pending legislation which would be compatible with his desire to seek additional funding conditioned on repayment by the property owner where subdivision occurs in the future. This might be done through covenants running with the land, he speculated. Relief should be limited to those property owners whose injudicious election to build residences on unsuitable land had occurred ten to fifteen years ago. In more recent years, he stated, zoning and land use expertise had become widespread and sophisticated enough to put people on warning that they should not build dwellings on property such as that in the Gertz-Schmeer area.

Mr. Max Runyon, a resident of the Gertz-Schmeer area, reported to the Commission that he had been in communication with legislators over two bills. One, a deferred payment plan, was introduced by Senator Otto, he stated. Under this alternative, it was explained, the assessment would be deferred during the tenure of the current owner. Beneficiaries of this deferment would be those enjoying annual income less than a maximum which had not yet been decided. Under this plan, Mr. Runyon noted, the retired property owners (reported to be considerable in number) would not be able to afford the interest on the deferred payment in many cases. Their estates would thus be consumed.

Mr. Runyon stated the problem had involved a misrepresentation by the Port of Portland wherein the latter had promised three hundred and eighty-four thousand dollars to assist in the project, projecting an average assessment of twelve to eighteen hundred dollars per owner. The three hundred and eighty-four thousand dollars was forthcoming, he reported; but the projection of the average assessment had been totally inadequate. The money had been conditioned for use only in areas zoned farm or forest, and for owners whose assessment was in excess of the one hundred and twenty percent Bancroft Bonding Act limitation. In the interim, Mr. Runyon reported, the city of Portland had been busy increasing valuations of the affected property, rendering infrequent the case whereby the assessment exceeded Bancroft bonding limitations, even though the assessments proved to be well in excess of the predicted amounts. Mr. Runyon decried the increased land valuation as a mystery in light of the moratorium on building which was imposed four and a half years ago during annexation. The City of Portland had not, Mr. Runyon noted, adhered to its time schedule for imposing assessments.

Commissioner Somers urged the residents to file a hasty appeal, should they find their assessments unsuitable, reminding them that May 1 was the deadline for filing.

Mr. Runyon then called to the Commission's attention a newspaper article wherein Mr. Crutcher, City Manager of Sweet Home, reported the Foster-Midway Project as having been financed totally with federal funds, twenty-five percent from HUD and seventy-five percent from EPA. Mr. Runyon asked why such an option had not been available for the Gertz-Schmeer project. Mr. Sawyer noted that the Foster-Midway Project had not proceeded as far as the Gertz-Schmeer Project, and stated that he did not think the EPA grant had been approved. Beyond this, no one present was able to confirm or deny the newspaper report's accuracy.

Commissioner Crothers, noting that the subject matter would be dealt with when the Commission reached Agenda Item E, urged that the presentation proceed in a more orderly fashion. He stated that the meat of the problem was simply the installation of a sewer serving large sized lots. In such a case, he noted, the footage of sewer per assessed owner was great, resulting in a large assessment. In this case, the moratorium on further building left the owners unavailed of the traditional option of subdivision. Sewers on a flood plain, however, Commissioner Crothers noted, posed no particular problem. He mentioned that the entire city of New Orleans was below a flood plain and served by sewers.

Mr. Runyon stated he had read the staff report for Agenda Item E and still retained concern that, even with seventy-five percent federal funding, some property owners still faced exorbitant assessments. He conceded that the answer would have to come from the Legislature and stated his willingness to work with Mr. Cannon in support of any proposal the Department might endorse. He noted, however, that he was employed full time and did not have time to lobby excessively for the needed legislation. He argued that the

Department of Environmental Quality, having approved the City's plan, should accept some responsibility for the problem. In answer to inquiry by Dr. Crothers, Mr. Runyon cited ORS 222.850 as authority requiring that annexation be followed by a solution to the health hazard. Mr. Runyon argued that the plan did not solve the health hazard, left out several businesses, left out several homes, and provided no connectors going to the houseboats. The Department's certification of this faulty plan, in Mr. Runyon's view, was inappropriate. The houseboat residents, Mr. Runyon stated, were unable to get a commitment in writing from the city of Portland allowing them to hook on to the sewer after its construction. This was happening despite the clear inclusion of the houseboats in the definition of the health hazard, Mr. Runyon contended.

In response to Commissioner Somers, Mr. Runyon reported that the houseboats were approximately twelve hundred yards away from the trunk line and requiring of private easements to connect to the trunk line. He said the airport would not be hooked on to the sewer and was now disposing its waste through the Inverness Treatment Plant on 122nd Street, an installation operated by Multnomah County. He cited four houses, two businesses, and the City's Delta Park as examples of areas within the defined health hazard which would not receive hookup. Because of the assessments, Mr. Runyon reported, School District #1 was threatening to withdraw their school from the assessed area, the district having been assessed some ninety-thousand dollars. Tri-Met was also attempting to withdraw bus service, he added.

Mrs. Mildred Jones, a resident of the affected area, addressed the Commission. She stated that she had lived in the area for thirty-four years, was in fear of low flying aircraft in the area, and in need of a solution to this problem as well as the problem of expensive sewer service. She commended Mr. Runyon, reporting him to be working to relieve the problems in the area despite his full time employment at night. She argued that the entire sewer project and annexation had been unconstitutional.

Commissioner Somers requested that a spokesman for the Bridgeton-Philoma Citizens Association state for the Commission exactly what the Association would have the Commission do toward remedying the problem. Mr. Runyon replied that the first request would be for the Commission to do an Environmental Impact Statement and include a "no build" recommendation. Included in the "no build" part he said, would be an economic impact statement. Mr. Runyon said the Citizens Association felt that ten percent of property valuation would be an equitable amount to pay.

In response to Commissioner Crothers' inquiry, Mr. Runyon and Mr. Cannon noted the city of Portland had down zoned the area and the zoning was for the purpose of avoiding further construction in an area of low altitude aircraft travel.

Commissioner Somers speculated that, should the Commission bring the project to a halt, federal officials might view this action with disappointment and would hesitate to fund similar future projects. Mr. Cannon pointed out that hardship funds in the presently proposed budget, if approved by the Legislature, could afford the Department an opportunity to assist the Citizens Association. Mr. Sawyer and Commissioner Somers concurred that, even without EPA funds, the City would have authority to go forward with the project. Mr. Sawyer stated he was not sure what would be the effect if the Department withdrew its approval. Commissioner Crothers noted that the hardship funding presently under legislative review could reduce the maximum payment for any property owner to about twelve to thirteen hundred dollars. He noted that, since the project was stopped for one month, it might be best to await the legislative action.

Mr. Buehner, noting that the EPA had advised him and his group to appear before the Commission, suggested that the Commission adopt a resolution viewing the project with alarm. This action, he contended, might bring the problem into focus in the Legislature and other governmental circles. In particular, he opined, the EPA would take deep interest since they were the "bankers" of this project. He reported that, at this point, the EPA was greatly concerned with the failure to plan hookups for the boathouses.

Commissioner Hallock asked if the Citizens' Association backed the proposed prioritizing system, Agenda Item E, and received an affirmative answer.

Commissioner Somers again expressed apprehension that any precipitous action by the Commission might jeopardize the ninety-three million dollars in federally funded sewer projects now proposed. Mr. Sawyer stated his unwillingness to second guess EPA as to their reaction, but added that he did not foresee serious problems. Mr. Buehner pointed out that the Code of Federal Regulations contained emergency provisions which were intended to apply to situations such as the present.

Upon inquiry by Commissioner Phinney, Mr. Sawyer expressed surprise on learning that the City did not plan to hook up houseboats. Commissioner Phinney pointed out that, if the problem were one of health hazard solution rather than funding, the Commission might have the jurisdiction to interfere. Commissioner Somers expressed disappointment on hearing that the boundaries of the health hazard area might have been drawn inappropriately so as to leave some residents out.

Commissioner Crothers stated his view that the Commission should not take action at this time, but should await further information about the problem. Commissioner Somers, however, contending that it was appropriate to make a motion during the Public Forum portion of the agenda, MOVED that the Commission go on record as viewing with alarm the Gertz-Schmeer project #WPC-ORE326 and WSFOR-10-16-1000 and recommended that the Department once again review the plan. The motion was seconded by Commissioner Hallock and carried.

At Commissioner McPhillips' request, Mr. Cannon explained that any Environmental Impact Statement would have to come from the federal agency involved in the project, in this case the EPA. He further pointed out that such an Impact Statement would have to cover the economic aspects of the project and would have to evaluate the "no build" alternative.

PROPOSED CRITERIA FOR PRIORITIZING SEWAGE WORKS CONSTRUCTION NEEDS FOR CONSTRUCTION GRANT PURPOSES FOR FY76

Mr. Harold Sawyer presented the staff report, pointing out that the federal requirements for criteria for prioritizing needs had been served by the Department, but that changes in federal rules and their interpretation had rendered a revision in priority criteria necessary in order to get grant projects moving. Mr. Sawyer explained that the proposal involved quantification of competing projects by assigning a relative point spread as follows within five categories: The first category was that of project need. Mandatory annexation problems under ORS 222 and drill hole elimination problems under OAR Chapter 340 Section 44-005 would occupy the highest priority in this first category. Next, in their respective orders, would come streams protected by water quality standards, projects needed to end violation, specifically directed minimum treatment requirements, and abatement of non-point source problems. The second category would be that of regulatory emphasis. It would assign, on a descending scale, points for projects required by order or regulation of the Environmental Quality Commission, Departmental permit, letter directives, preliminary planning approval, project authorization, or other positive written response. The third category would be stream segment ranking as had been conducted already by the Department. A fourth category would be project type, stressing sewage treatment plants, plant outfall projects incorporating both treatment works and interceptors, and such public sewer system rehabilitation as would have economic benefit to the community. Secondary emphasis would be given interceptor sewers, major pumping stations, and pressure mains. The fifth category would be step status, emphasizing the stage in which the project stands.

Mr. Sawyer noted that the considerations involved in assigning high priority to mandatory annexation and drill hole elimination projects were their vast complexity and heavy expense. Mr. Sawyer conceded that the stream segment ranking was an area that lacked precise definition, and one wherein the Department had proceeded somewhat subjectively. He noted, with regard to the step status, that unfortunate current federal emphasis was on solution of existing problems (to the exclusion of preventive measures for foreseeable problems). Under present federal law, he said it was extremely hard to obtain funding for preventive projects. He added that planning had gotten far ahead of construction, creating a need to proceed with constructing those projects already planned.

Commissioner Phinney asked what weight would be given downstream uses in the proposed prioritizing criteria. Mr. Sawyer replied that emphasis on downstream uses was incorporated into the beneficial uses

aspect of water quality standard adoption. Water quality standards, where not being attained, weighed heavily in the project need category, he said. For example, he noted, use of downstream waters for domestic water supply would place the waters on a relatively high level of priority. Mr. Sawyer was unable to speculate on the number of jobs which would result from seventy-seven and a half million dollars in federal grant monies. He noted however, that this year's monies would approximately double the amount spent previously, having a vast effect on planning, design, engineering, and construction industry.

Commissioner Somers expressed apprehension that the stream segment ranking might be misinterpreted by land use planners and others. He opined that the Commission might well adopt the proposal with the caveat that stream segment ranking was for purposes of construction grant monies only. Mr. Sawyer explained that, technically, the ranking was required to serve other aspects of PL 92-500 and the regulations implementing that act. He stated that a caveat limiting the ranking to those purposes only would give less difficulty.

Commissioner Crothers MOVED that the Commission authorize a public hearing on the proposed prioritizing criteria. His motion was seconded by Commissioner Phinney and carried.

Commissioner Hallock questioned whether the motion might be out of order in that the proposal was for adoption by the Commission without hearing. She questioned whether going to hearing involved halting projects. Mr. Sawyer explained that a hearing would not halt projects; that an eventual hearing on the prioritized projects would be necessary; but that he did not feel a hearing would be appropriate on the proposed system for prioritizing. Mr. Cannon concurred in Mr. Sawyer's explanation. Mr. Sawyer reported that staff had considered adoption of the system for prioritizing as a temporary rule; but had decided it was best to proceed with the actual ranking and conduct a hearing which would both consider the list and inherently deal with the system of ranking also.

Commissioner Somers MOVED that the Commission amend its motion to state that the Commission approves the system for prioritizing as proposed and approves it for future public hearing. Commissioner Crothers concurred, stating this to be aligned with the intent of his motion. The motion was seconded by Commissioner Hallock and carried.

AGENDA ITEMS F-I, VARIANCE REQUESTS AND INTENT TO HOLD A PUBLIC HEARING ON NOISE CONTROL CIVIL PENALTIES

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock and carried that the Commission adopt the Director's recommendation with regard to agenda items F through I. Adopted were the following recommendations:

- 1) That a two-year variance of Oregon Administrative Rules, Chapter 340, Section 23-010(1)(a) be granted to Cascade Locks Lumber for the period May 1, 1975 through April 30, 1977 under conditions as set forth in the staff report.
- 2) That Air Contaminant Discharge Permit #12-0001 be renewed and a seven-month variance, June 1, 1975 to December 31, 1975 from OAR Chapter 340, Sections 21-020 and 21-015 (1), be granted to Edward Hines Lumber Company at Bates (present permit to expire December 31, 1975).
- 3) That the Commission authorize a public hearing before a hearings officer for the proposed rule amendments dealing with subsurface sewage regulations.
- 4) That a public hearing on the noise control civil penalties schedule be conducted in July or August of 1975.

PROPOSED TRANSIT SERVICE MODIFICATIONS TO WASHINGTON SQUARE SHOPPING CENTER

Mr. Carl Simons of the Air Quality Division presented the staff report to the Commission. As was set forth in the staff report, the operation of the "London Bus" system, a condition to the five thousand parking spaces at Washington Square approved by the Commission, had been unsuccessful. It was the staff's opinion that Washington Square should be allowed to terminate its London Bus service, conditioned on its agreement to join with Tri-Met in a new transit improvement program toward the ends of 1) increased transit ridership to and from Washington Square, 2) reduced need for parking, 3) relief from seasonal parking problems, and 4) reduced traffic congestion and air pollution on adjacent arterials. It was the Director's recommendation that the Commission require and approve the proposed transit incentive program with the following conditions: 1) That Washington Square be allowed to terminate its "London Bus system" on or after May 15, 1975. 2) That all conditions relating to quarterly reports, reduction of parking spaces, development of long term land use and transit plans, and reduction of temporary parking during peak seasonal periods remain in effect. 3) That any substantial change in the proposed transit improvement program require approval of the Department.

Washington Square representatives present did not wish to be heard. It was MOVED by Commissioner Somers, seconded by Commissioner Hallock and carried that the Director's recommendation be approved.

PETITION FOR A DECLARATORY RULING - PORTLAND CHAIN MANUFACTURING CO.,  
A DIVISION OF WEBSTER INDUSTRIES, INC.

Mr. Peter McSwain, on behalf of the Department, presented the Director's recommendation that the Commission respectfully decline to grant Petitioner's request for a declaratory ruling. In response to inquiry by Commissioner Somers, Mr. McSwain explained that staff was not opposed to the granting of a variance and/or exception. It was the format of a petition for a declaratory ruling to which the staff was reported in disagreement with the Petitioner. It was staff's position that Departmental rules governing hearings for declaratory rulings contained only oral arguments, indicating that a declaratory ruling granted through this channel would be limited to an assumed fact situation. In the instant case, it was argued, Petitioner was able to provide actual data gathered at the site and allow



staff to review this data in an informal setting, as in the case with all variances requests before the Commission. Mr. McSwain added his opinion that the granting of a variance was usually a non-coercive matter and, therefore, a declaratory order per se.

Mr. Tom Guilbert, counsel for Petitioner, addressed the Commission, concurring with Mr. McSwain that the present request of the Commission was to set a hearing and not to rule on a variance request. Mr. Guilbert asked the Commission, should it not grant the requested hearing, to construe the petition as one for a variance and/or an exception as well as a petition for a declaratory ruling. He explained to the Commission that Petitioner's request for a declaratory ruling was based in part on what he saw to be some confusion in the Department's rules. This confusion, he feared, would result in rules governing variance hearings before the Department being invoked; whereas authorization for a variance such as that requested was vested in the Commission under the noise rules. He added that, since the walls of the homes on the proposed noise sensitive property were not yet built, the facts upon which a variance might be granted had not yet come into play. Part of Petitioner's request was aimed at obtaining a ruling as to whether or not the rules could be invoked prior to the construction for the noise sensitive property. Mr. Guilbert asked that Petitioner be informed as soon as possible whether or not he could have an exception or a variance since he would, in the absence of exception or variance, be required to search for a new site.

Commissioner Somers inquired if, after the construction of the noise sensitive property, Petitioner would, in fact, be in violation when operating his two three hundred and fifty ton presses. Mr. Guilbert replied that this was a very serious possibility; that some measurements had been taken; and that the Department's Mr. John Hector had informed Petitioner that the most limiting of the noise regulations applicable to Petitioner's operation might be those governing impulse sounds. Mr. Guilbert added that his petition did not contain specific measurement with regard to the source for the reason that measurement of impulse noise was beyond the capability of his consultant, and within the capabilities of the Department. He noted that he did not wish the data to become a matter of public record, usable against the petitioner in any future nuisance action. Mr. Guilbert stated that measurements had been taken and that he would be willing to provide the data from these measurements to the staff upon their request. He stated his belief that, with regard to those regulations not dealing with impulse sound, his client's source was very close to the limitations prescribed by the rule. Mr. Guilbert stated that his client sought an interpretation of the rules as applied to his source to see which of the three dimensions of noise regulation would apply: dBA measurement, one third octave band measurement, and impulse sound measurement.

Commissioner Somers inquired whether Petitioner would be satisfied if the Commission authorized a hearing to determine whether or not the Department should grant an exception to the Petitioner. Mr. Guilbert replied that such a hearing would be satisfactory. It was MOVED by Commissioner Somers

seconded by Commissioner Hallock, and carried that the Commission decline to grant Petitioner a declaratory ruling and that the Commission instruct the Department to conduct a hearing to determine if (based on information supplied by the Petitioner and interested parties) Petitioner should be authorized an exception based on OAR Chapter 340, Section 35-035(6). Discussion on the intent of the motion revealed that the hearing was to be before a hearing officer.

#### DISCUSSION OF FIELD BURNING LEGISLATION

Mr. Dick Vogt, of the Department's Air Quality Division, noted that the Commission had been provided with a staff report dealing with all of the legislative hearings attended by staff members.

Commissioner Somers, noting that the Commission was in agreement that its duty was to implement whatever legislation might be passed, inquired of Mr. Vogt whether federal restrictions would make it necessary, if field burning were extended in the Willamette Valley for two years, to impose restrictions in some other area or category of emission in order to make up the loss. Mr. Vogt opined that this would be necessary. It was noted that the forest products industry and other industry in the valley would be affected. It was Commissioner Somers' understanding that a situation might arise whereby the Environmental Protection Agency could step in and prevent the issuance of any further permits in the area. Mr. Cannon concurred, explaining that the 1971 Implementation Plan was understood by the EPA to be the State's plan to meet the national standards. Alteration of the Plan, Mr. Cannon believed, would require remedial action by either the State or the Federal Government to restore any loss to air quality resulting from relaxed field burning standards.

Commissioner Crothers contended that the process of federal intervention was a slow one, not to be regarded as an emergency situation. He cited, as an example, the delay with regard to control of taxi cab emissions in New York City, a delay which he predicted would continue for several years.

Commissioner Somers concurred; but added that it was the responsibility of the State to comply with federal standards where possible.

Commissioner McPhillips pointed out that legislation permitting extended field burning could, in effect, be repealed by federal intervention and federal prohibitions of field burning. Commissioner Somers stated that he doubted if the EPA would act in direct contravention of State legislative provisions.

Commissioner Phinney stated there had been a misunderstanding as to staff's position in the legislative hearings. She asked Mr. Vogt if staff had actually endorsed any of the legislative proposals under

consideration and she received a negative answer. Commissioner Phinney said it was important to note that staff had merely offered the Legislature technical advice, and had not taken a position on any of the current bills. Commissioner Somers said that the staff had been involuntarily involved in a political football game, a circumstance which was not entirely fair to them. He added that the Department's role was to carry out legislation, not to create it. Mr. Cannon noted that staff could not appear before the Legislature as individuals, but would always wear the "hat" of the Department. Nevertheless, he said, he did not understand staff to have taken a position on any legislation. He stated the Department to be willing to carry out whatever might be the legislative mandate. He added, however, that considerations with regard to federal primary and secondary standards had been the subject of caution to the Legislature. This caution, he stated, had included the advice that any relaxation in field burning regulations be accompanied by increased restriction on some other category of emission.

Commissioner McPhillips voiced his skepticism that any improvement in the Willamette Valley airshed could occur as long as field burning continued on the scale it is presently conducted.

Commissioner Somers asked why burning of stubble from cereal grain fields was continuing. Chairman McPhillips opined that many of the farmers took advantage of the permission to burn grass stubble in order to burn cereal grain stubble. Commissioner Crothers conjectured that many misused the requirement that they file an affidavit of intent to replant with grass or crimson clover.

Commissioner Somers warned that he would be opposed to embarking on a program of supervising field burning with insufficient funds, a situation which he felt would lead to budgetary problems similar to those experienced with regard to subsurface sewage permit administration. Mr. Cannon assured the Commission that the Department would be very leery of embarking upon such a program under those conditions. Commissioner Hallock noted that one current proposal would have adequate funding built into it. Chairman McPhillips asked if its implementation would require the borrowing of funds from another program. Mr. Vogt questioned whether there would be enough funds to conduct the entire permit issuing proposal under discussion.

Commissioner Somers expressed the view that any extension of field burning ought to be accompanied by provision of a Class A misdemeanor for improper field burning, and that the State Police ought to be directed to enforce the prohibitions. He questioned the sagacity of hiring for two month periods thirty-five state employees to drive about inspecting field burning. He noted that another two hundred people were being added to the State Police Department, a department which already had mobile units circulating in the area. Mr. Cannon stated that there was a problem involved with actually following the permittee to the field to determine, with expert knowledge, if the burning was within the limitations of the permit with regard to seed of an appropriate nature. Chairman McPhillips added

that, with the workload the State Police face, they would not find time to enforce such a law unless specifically directed to do so. Commissioner Somers opined that, once legislation was enacted, it would be within the prerogative of the Governor's Office to invoke vigorous police enforcement.

Commissioner Crothers noted that, despite its intentions to the contrary, the Commission was tending to take a position on the issues.

Commissioners Somers and Phinney decried the tendency of the Legislature to interpret each comment by staff in hearings to be the position of the Commission and/or the Department. This they felt put staff in an unfair position and was an erroneous weighing of testimony.

There being no further discussion, the meeting was adjourned.

MINUTES OF THE SIXTY-EIGHTH MEETING

of EQC

April 25, 1975

APPENDIX A

Water Quality Control - Water Quality Division (26)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-5-75	Tillamook	Cloverdale S.D. - 410 PE STP & Coll. System incl. effluent filtration & disinfection	Prov. Approval
3-6-75	Tillamook	Bay City - Rev. change order B-8 proj.	Approved
3-6-75	Jackson	Medford - Blackstone Sub. Sewers	Prov. Approval
3-7-75	Grant	Prairie City - S. Side Intercptr. Sew.	Prov. Approval
3-7-75	Marion	Marion Co. - Labish Village Sewerage System	Prov. Approval
3-7-75	Clatsop	Warrenton - C.O. #3 E. Warrenton Int.	Approved
3-7-75	Coos	North Bend - Holy Redeemer Subdv. Sew.	Prov. Approval
3-10-75	Coos	Eastside - C.O. #3 & 4 Pump St. Cnst.	Approved
3-10-75	Tillamook	NTCSA - C.O.A-2 Sch. II&C.O. B-9 Sch.IV	Approved
3-11-75	Umatilla	Hermiston - Underwood Addn. Sewers (revised plans)	Prov. Approval
3-14-75	Multnomah	Mult. Co. - Inverness Int. Units 6B & 6C	Prov. Approval
3-18-75	Clackamas	Milwaukie - C.O. #5, Milwaukie Int. Sewer Sch. I	Approved
3-18-75	Yamhill	Lafayette - C.O. #1, STP project	Approved
3-20-75	Coos	Eastside - C.O. #5, Pump STP Const. STP 8.78 AC Lagoon	Approved
3-21-75	Jefferson	Culver - Sewers & STP	Prov. Approval
3-24-75	Jackson	BCVSA - C.O. #1 S. Medford trunk	Approved
3-27-75	Washington	USA (Aloha) - 5 Equipment Bid Pkgs. for the Phase III Aloha STP interm improvements	Prov. Approval
3-27-75	Clackamas	Clackamas S.D. #1 - Phase IV Intcptrs.	Prov. Approval
3-27-75	Clackamas	Lake Oswego - "G" Ave. Sewer Ext.	Prov. Approval
3-28-75	Lincoln	Newport - Embarcadero Sewers	Prov. Approval
3-28-75	Union	LaGrande - Reynolds Safety Rest Area Sewer	Prov. Approval
3-31-75	Harney	Hines - Chlorination & P.S. Modifications.	Prov. Approval
3-31-75	Douglas	North Umpqua S.D. - Main A & Lateral A-8.5 sewer extensions	
3-31-75	Marion	Salem (Willow Lake) - Rev. Sludge Hauling Vehicle Contract documents	Prov. Approval

Water Quality Control - Water Quality Division - Industrial Projects (2)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-10-75	Clatsop	Union Oil, Astoria Terminal	Approved
3-13-75	Douglas	I. P. Gardiner, Veneer Dryer Water Recycler	Approved

Water Quality Control - Northwest Region (18)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-4-75	Tillamook	Garibaldi - Polly Ann Park - San. Sew.	Approved
3-4-75	Clackamas	Oregon City- Library Rd. San Sewer	Approved
3-5-75	Marion	Keizer-Sanitary Dist. (Willow) West of Mistletoe - Loop San. Sewer	Approved
3-5-75	Washington	Somerset West (USA) - Rock Creek No. 10 San. Sewer	Approved
3-7-75	Marion	Mt. Angel-Cherry St. San. Sewer	Approved
3-7-75	Washington	Forest Grove - 4th Ave. - L.I.D. No. 4 San. Sewer	Approved
3-7-75	Washington	Metzger (USA) - Argent Subdv. San. Sew.	Approved
3-11-75	Yamhill	Dayton-Palmer Addn. San. Sew. Addn. No. 1	Approved
3-11-75	Marion	Salem (Wallace) Hope Ave. - San. Sewer	Approved
3-12-75	Clackamas	Oregon City-Rev. Library Rd. San. Sew.	Approved
3-14-75	Multnomah	Wood Village-West Coast San. Sewers Schedule 2	Approved
3-17-75	Yamhill	Dundee-Locust & 8th St. San. Sewer	Approved
3-18-75	Marion	East Salem-Sewage & Drainage Dist. No. 1 (Willow) - Village East San. Sew. System	Approved
3-18-75	Washington	Aloha (USA)- Tom Moyer Enterprises San. Sewer System	Approved
3-18-75	Marion	Salem (Willow)-Hickory St. Between Indus- trial Way & Val Park Rd.- San. Sewer System	Approved
3-19-75	Clackamas	Gladstone-Bill Morrow Dvlpmt. - San. Sew.	Approved
3-24-75	Marion	Salem (Willow)- Columbia Mill Work San. Sewer - Near Anunsen St.	Approved
3-27-75	Clackamas	Lake Oswego-CID 165, G Ave. - San. Sew. Extension	Approved

Water Quality Control - Northwest Region - Industrial Projects (3)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-75	Multnomah	Portland-Pennwalt Corp. - Outfall & Diffuser System Plans.	Approved
3-12-75	Multnomah	Portland-Halton Tractor Corp. - Oil Water Separator Facilities	Approved
3-17-75	Clatsop	Astoria - Union Oil - Separator Fac.	Approved

Air Quality Control - Air Quality Division (7)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-6-75	Coos	Coos Bay - Georgia Pacific Corp. Proposal to run hardboard fume incinerator at 1000 F.	Conditionally approved subject to satisfactory inspection
3-10-75	Lincoln	Toledo - Georgia Pacific Corp. Proposal to burn tires in hog fuel boiler	Approved Conditionally
3-10-75	Klamath	Klamath Falls - Weyerhaeuser Co. Air/Air condenser for veneer dryer emission control	Approved
3-10-75	Coos	North Bend - Weyerhaeuser Co. Air/Air condenser for veneer dryer emission control	Approved
3-24-75	Douglas	Dillard-Round Prairie Lumber Co. New hogged fuel boiler	Approved
3-31-75	Union	LaGrande - Boise Cascade Corp. New baghouse for cyclones 16 & 17	Approved
3-31-75	Union	LaGrande - Boise Cascade Corp. New baghouse for cyclone 23	Approved

Air Quality Control - Air Quality Division - Industrial Sources (36)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-3-75	Douglas	Drain - Smith River Lumber (10-0028) Sawmill	Permit Issued
3-3-75	Douglas	Riddle - Mining Minerals Mfg. Co. (10-0066) Rockcrusher	"
3-3-75	Hood River	Cascade Locks - Gorge Lumber Co. (21-0011) Sawmill	"
3-3-75	Lincoln	Toledo - Publishers Forest Prod. Co. (21-0011) Sawmill	"
3-3-75	Jackson	White City - Olson Lawyer Timber Co. (15-0058) Charcoal Manufacturing	Permit Modified
3-3-75	Douglas	Drain - Woolley Enterprises, Inc. (10-0054) Plywood Manufacturing	"
3-25-75	Coos	Coquille - Coos Co. Highway Dept. (06-0002) Asphalt Plant	Permit Issued
3-25-75	Jackson	White City - Cascade Wood Products (15-0005) Millwork	"
3-25-75	Jackson	Central Point - Double Dee Lumber Co. (15-0010) Sawmill	"
3-25-75	Jackson	Ashland - Bellview Moulding Mill (15-0070) Millwork	"
3-25-75	Klamath	Klamath Falls - Jeld-Wen, Inc. (18-0006) Sawmill, Millwork	"
3-25-75	Klamath	Klamath Falls - Klamath Rock Products (18-0012) Asphalt Plant	"
3-25-75	Lake	Lakeview - Louisiana Pacific Corp. (19-0002) Sawmill	"

Air Quality Control - Air Quality Division - Industrial Sources (cont.)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-25-75	Lincoln	Toledo - Guy Roberts Lumber Co. (21-0013) Sawmill	Permit Issued
3-25-75	Lincoln	Newport - Paul Barber Hardwoods Co. (21-0020) Sawmill	"
3-25-75	Lincoln	Yachats - Dahl Lumber Company (21-0021) Sawmill	"
3- 5-	Umatilla	Pendleton - Hermiston Asphalt Products (30-0003) Asphalt Plant	"
3-25-75	Umatilla	Hermiston - E.S. Schnell & Co., Inc. (30-0071) Asphalt Plant	"
3-25-75	Wallowa	Joseph - Boise Cascade Corp. (32-0001) Sawmill	"
3-26-75	Coos	Bandon - Rogge Lumber Sales, Inc. (06-0019) Sawmill	"
3-26-75	Coos	Bandon - Rogge Lumber Sales, Inc. (06-0057) Sawmill	"
3-26-75	Curry	Sixes - Rogge Lumber Sales, In. (08-0016) Sawmill	"
3-26-75	Hood River	Cascade Locks - Cascade Locks Lumber Co. (14-0005) Sawmill	"
3-26-75	Jackson	Central Point - Chaney Forest Products (15-0007) Sawmill	"
3-26-75	Jackson	Central Point - The Mt. Pitt Co. (15-0023) Sawmill	"
3-26-75	Jackson	Medford - Medford Moulding Co. (15-0037) Millwork	"
3-26-75	Jackson	Central Point - Steve Wilson Co. (15-0044) Sawmill	"
3-26-75	Jackson	White City - Oregon Cutstock & Moulding (15-0047) Millwork	"
3-26-75	Jackson	White City, Alder Mfg., Inc. (15-0060) Sawmill	"
3-26-75	Josephine	Grants Pass - Spaulding & Son, Inc. (17-0013) Sawmill	"
3-26-75	Malheur	Ontario - Monroc Inc. (23-0021) Rock Crusher	"
3-26-75	Wallowa	Wallowa - Rogge Mills, Inc. (32-0011) Sawmill	"
3-31-75	Douglas	Roseburg - Roseburg Lumber Co. (10-0063) Particleboard Mfg.	Permit Modified
3-31-75	Lincoln	Toledo - Georgia Pacific Corp. (21-0005) Kraft pulp and paper	"

Air Quality Control - Northwest Region (4)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-13-75	Multnomah	Portland - Simpson Timber/Chemical Division-Forced Evap. System	Approved
3-27-75	Clackamas	Clackamas-Hall Process Co. - Pipe coating & wrapping	Approved
3-27-75	Clackamas	Near Brightwood-Estacada Rock Prod. Control of truck loadout area	Approved
3-27-75	Clackamas	Near Molalla-Estacada Rock Products Control of truck loadout area	Approved



Land Quality - Solid Waste Management Division (2)

<u>Date</u>	<u>Location</u>	<u>Project</u>	<u>Action</u>
3-6-75	Yamhill	Whiteson Sanitary Landfill Interim Leachate Collection System	Approved
3-6-75	Yamhill	Delphian Foundation - Solid Waste Program	Approved
3-3-75	Multnomah	Macadam Processing Center, new facility (Tires)	Permit Issued
3-5-75	Douglas	Tiller Transfer St. new facility	Permit Issued
3-14-75	Lane	Marcola Transfer St. new facility	Permit Issued
3-14-75	Linn	Sweet Home Transfer St. new Facility	Permit Issued
3-26-75	Columbia	Clatskanie Landfill existing site	Permit Issued
3-31-75	Lake	Adel Land fill existing site	Permit Amended



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item B, May 23, 1975, EQC Meeting  
April, 1975 Program Activity Report

### Discussion

Attached is the April, 1975 Program Activity Report (as presented in a simplified format).

### Recommendation

It is the Director's recommendation that the Commission give confirming approval to the Department's plan/permit action for April, 1975.

KESSLER R. CANNON  
Director

RLM:vt  
5/13/75  
Attached



Contains  
Recycled  
Materials

Plan and Permit Actions

April, 1975

Water Quality Program:

Page Number

79 - - -	Plan Actions Completed	1
29 - - -	Plan Actions Pending	5
12 - - -	Permit Actions Completed	8
297 - - -	Permit Actions Pending	9

Air Quality Program:

15 - - -	Plan Actions Completed	10
31 - - -	Plan Actions Pending	12
47 - - -	Permit Actions Completed	16
582 - - -	Permit Actions Pending	20

Land Quality Program:

4 - - -	Plan Actions Completed	24
7 - - -	Plan Actions Pending	25
14 - - -	Permit Actions Completed	26
146 - - -	Permit Actions Pending	28

Plan Actions Completed (79)

Water Quality Program

April, 1975

Municipal Sewerage Projects (71)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Klamath	Klamath Falls - County Facilities Sewer	3/31/75	Prov. Approval
Washington	USA - (Beaverton)-Broadway P.S. Bypass Sewer	4/1/75	Prov. Approval
Curry	Brookings - Harbor Int. Sewer	4/1/75	Prov. Approval
Washington	Oak Lodge S.D.-#2 System, Sewer Lateral 2A10-2	4/1/75	Prov. Approval
Marion	Salem-(Willow Lake)-Cross St. Area, S.E. Sewer Replacement	4/4/75	Prov. Approval
Clackamas	Sandy - City Park Sewer and Pump Station	4/4/75	Prov. Approval
Lincoln	Lincoln Co.-Beverly Beach State Park STP	4/4/75	Prov. Approval
Washington	USA-Durham STP C.O. #2,3,4, & 5	4/7/75	Approved
Sherman	Rufus-C.O. #3 STP Project	4/7/75	Approved
Washington	USA (Forest Grove) Trinity Subdivision Sewers	4/7/75	Prov. Approval
Marion	Salem-(Willow Lake) Iron Wood Estates Sewers	4/8/85	Prov. Approval
Washington	USA (Forest Grove)-C.O. #1 Corn. F.G. Intertie	4/8/75	Approved
Jackson	BCVSA-T & M Subdivision (White City) Sewers	4/8/75	Prov. Approval
Marion	Woodburn-West Hayes St. Sewer Lateral	4/8/75	Prov. Approval
Lane	Springfield - N. Olympic St. Sewer	4/8/75	Prov. Approval
Multnomah	Gresham - Binford Farms Subdn. Sewers	4/10/75	Prov. Approval
Klamath	Klamath Falls-American Subdn. Sewers	4/10/75	Prov. Approval

Plan Action Completed - Municipal (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Status</u>
Umatilla	Hermiston - Chateaubri Trailer Park Sewers	4/10/75	Prov. Approval
Multnomah	Portland - C.O.#1 Outfall Sewer	4/10/75	Approved
Washington	Aloha - STP Modifications - 3 Addenda	4/10/75	Approved
Lincoln	Newport-Edinview District Sewers	11/75	Prov. Approval
Lane	Oakridge - High Leah L.I.D. Sewers	4/14/75	Prov. Approval
Hood River	Hood River - Port Area Sewers	4/14/75	Prov. Approval
Douglas	Reedsport - Lower Umpqua Hosp. Sewer	4/15/75	Prov. Approval
Marion	Salem - (Willow Lake) - Fairway Ave. Apts., Phase 1 Sewers	4/15/75	Prov. Approval
Multnomah	Portland - (Columbia Blvd.) N. E. First Ave.	4/16/75	Prov. Approval
Multnomah	Portland - (USA-Fanno) S.W. 48th Place Sewer	4/16/75	Prov. Approval
Clackamas	Clackamas Co. S. D. #1 - S.E. 77th Ct. Sewer Ext.	4/16/75	Prov. Approval
Marion	East Salem S & D Dist. #1 Tierra Court Sewer	4/18/75	Prov. Approval
Linn	Albany - Adair Park Subdn Sewers	4/18/75	Prov. Approval
Benton	Corvallis - Edwin Addn Sewers	4/21/75	Prov. Approval
Coos	Eastside - C.O. #6 Force Main and Pump Station	4/21/75	Approved
Coos	Coos Bay - C.O. #3 Coos Bay Pump Station	4/22/75	Approved
Jefferson	Metolius - C.O. #1 STP Contract	4/22/75	Approved
Clatsop	Warrenton - C.O. #4 East Warrenton Int.	4/22/75	Approved
Curry	Gold Beach - C.O. #4 STP Contract	4/22/75	Approved

## Plan Action Completed - Municipal (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Status</u>
Lincoln	Newport - Addendum #1 - Edenvew Sewer	4/22/75	Approved
Multnomah	Portland (Tryon) - S.W. Trail Court Sewer	4/23/75	Prov. Approval
Klamath	Chiloquin - Re-evaluation of Hood Way Sewer	4/23/75	Prov. Approval
Marion	East Salem S. & D. #1 Hayesville Estates No. 2 Sewer	4/24/75	Prov. Approval
Umatilla	Milton-Freewater - Orchard Subdn. Sewers	4/24/75	Prov. Approval
Sherman	Rufus - C.O. #4 & 5 - STP Contract	4/28/75	Approved
Marion	Salem (Willow Lake) - Commercial St. Sewer (South of Barnes)	4/28/75	Prov. Approval
Lane	Junction City - Middle School Sewer Extension	4/28/75	Prov. Approval
Marion	Keizer S.D. - McNary Apts. Sewer	4/28/75	Prov. Approval
Washington	Hillsboro - Beaumead Subdn. - Phase II Sewers	4/28/75	Prov. Approval
Linn	Albany - White Truck Sales Sewer Extension	4/29/75	Prov. Approval
Marion	Salem (Willow Lake) - Sewer Replacement in Alley off Commercial 13th St. Sewer	4/29/75	Prov. Approval
Washington	USA(Sunset) - Valley Hills Subdn Sewers	4/29/75	Prov. Approval
Washington	USA (Beaverton) - New Horizons III Subdn Sewers	4/29/75	Prov. Approval
Marion	Salem (Willow Lake) - C.O. #1 STP Project	4/30/75	Approved
Douglas	Roseburg - Selmer Hutchins Prop. Sewer	4/30/75	Prov. Approval
Clackamas	Clackamas Co. S.D. #1-Milwaukie K-Mart & Clack. Ford Bldg. Sewers	4/30/75	Prov. Approval
Yamhill	McMinnville - H.W. Cozine San. Sewer	4/30/75	Prov. Approval
Multnomah	Portland - Addenda No. 1 & 2 Gertz-Schmeer Sewers	4/30/75	Approved

Plan Action Completed  
Industrial Waste Sources (8)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Status</u>
Polk	Dallas - Dallas Coop Whse. Scrubber Pond	4/2/75	Approved
Marion	Stayton - Stayton Canning Co. Odor Control Pond	4/2/75	Approved
Polk	Independence - Bakers Custom Meat Service Lagoon	4/3/75	Approved
Lane	Cottage Grove - Weyerhaeuser Cooling Tower	4/9/75	Approved
Clatsop	Astoria - N.W. Fur Breeders Coop. - Waste Water Screen	4/10/75	Approved
Lane	Florence - Sea Lion Caves Sanitary Wastes	4/18/75	Approved
Clackamas	Damascus - Damascus Sand and Gravel Water Recirculation	4/21/75	Approved
Multnomah	Portland - Albers Milling Waste Water Holding Tank	4/30/75	Approved

Plan Actions Pending (29)

Water Quality Program

April, 1975

Municipal Sewerage Projects (14)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Baker	Huntington - Disinfection Facilities	1/16/75	Revision required by letter (Dated Jan. 27, 1975)
Curry	Harbor S.D. - Holly Lane Sewer	2/4/75	Held pending construction of Harbor S.D. System Response (Dated Feb. 19, 1975)
Douglas	Spendthrift Mobile Park STP	2/14/75	Revision required and information requested by letter (April 18, 1975)
Clackamas	Sandy - Preliminary Plans for Sludge Equipment	2/14/75	Review to be completed upon submission of final plans
Lane	Veneta - Sewage Lagoon expansion	3/24/75	Additional information requested by letter (April 8, 1975)
Jefferson	Metolius - Lift Station Construction Drawings	3/31/75	Revision required and information requested by letter (April 29, 1975)
Douglas	Riddle - Waste Water Treatment Plant	4/1/75	Revision required and information requested by letter (April 30, 1975)
Linn	Albany - East Central Sanitary Sewer System	4/16/75	Under review (Review completion projected April 2, 1975)
Washington	USA-Metzger-Clover Heights Subdivision Sewers	4/18/75	Under review (Review completion projected April 2, 1975)
Lincoln	Starfish Cove Motel STP	4/25/75	Under review (Review completion projected April 16, 1975)



<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Umatilla	Hermiston - Pumping Station No. 7	4/25/75	Under review (Review completion projected April 9, 1975)
Douglas	Roseburg - Umpqua West Subdivision sewers	4/25/75	Under review (Review completion projected April 9, 1975)
Deschutes	Bend - Preliminary Specifications for Vacuum Sewer System Equipment for R & D Project	4/25/75	Under review (Review completion projected April 15, 1975)
Malheur	Ontario - Tuttle Subdivision Sewers	4/30/75	Under review (Review completion projected April 9, 1975)

Industrial Waste Sources (15)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Lincoln	Newport - Oregon Aqua Foods Increase Capacity	2/3/75	Additional information necessary
Lincoln	Newport - Adams Packing Waste Water Facilities	2/26/75	Approval - early May
Lincoln	Newport - New England Fish Co. Waste Water Facility	3/17/75	Approval - early May
Clackamas	Tualatin - K Lines Truck Washing Waste Waters	3/17/75	Additional information necessary
Lincoln	Newport - Peterson Seafoods Waste Water Facility	3/17/75	Approval denied - early May
Clackamas	Lake Oswego - Oregon Portland Cement Waste Water Treatment	4/3/75	Approval in early May
Lincoln	Newport - Bumble Bee Seafoods Waste Water Facility	4/7/75	Approval in early May
Multnomah	Portland - Port of Portland Steam Cleaning	4/9/75	Plans returned
Jackson	White City - SWF (FirFly) Glue Recirculation	4/17/75	Approval in early May
Clatsop	Wauna - Crown Zellerbach Secondary Treatment	4/22/75	Additional information necessary
Washington	Aloha - Intel IV Neutralization	4/24/75	Additional information necessary

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Klamath	Klamath Falls - Weyerhaeuser Bark and Debris Control Klamath River	4/24/75	Review underway
Washington	Hillsboro - Permapost Waste Water Evap.	4/24/75	Plans returned
Wasco	The Dalles - Martin Marietta Phase I Scrubber Water Recirculation	4/25/75	Approval - early May
Multnomah	Portland - Oregon Steel-River- gate Waste Water Recirculation	4/29/75	Review Underway

Permit Actions Completed (12)

Water Quality Program

April, 1975

Municipal Sources (4 NPDES; 4 State\*)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Lane	Westfir - Edward Hines Lbr. Co. (Westfir Hemlock Addition)	4/26/75	NPDES Issued
Linn	City of Halsey	4/26/75	NPDES Issued
Linn	City of Lebanon	4/26/75	NPDES Issued
Clackamas	Clackamas - *Riverview Mobile Home Park	4/26/75	State Permit Issued
Douglas	Winston - *Bremner Hills Cooperative	4/26/75	State Permit Issued
Jefferson	*City of Madras	4/26/75	State Permit Issued
Lane	Eugene - *Lynnbrook, Inc.	4/26/75	State Permit Issued
Sherman	City of Moro	4/26/75	NPDES Issued

Industrial Sources (3 NPDES; 1 State\*)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Lincoln	Newport - Petersons Seafoods, Inc.	4/26/75	NPDES Issued
Lane	Eugene - Simpson Extruded	4/26/75	NPDES Issued
Multnomah	Portland - Chevron Asphalt Co.	4/26/75	NPDES Issued
Clackamas	Canby - *Union Mills	4/26/75	State Permit Issued

Permit Actions Pending (297)

Water Quality Program

April, 1975

Municipal and Industrial Sources (263 NPDES; 34 State)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Various	24 State Permits	Various	Various	Not Drafted <u>1/</u>
Various	10 NPDES Appl.	April	Various	Not Drafted <u>2/</u>
Various	10 State Permits	Various	Various	Pencil Drafts
Various	20 NPDES Permits	Various	Various	Pencil Drafts <u>3/</u>
Various	132 NPDES Permits	Various	Various	Applicant Review <u>3/</u>
Various	73 NPDES Permits	Various	Various	Public Notice <u>3/</u>
Various	28 NPDES Permits	Various	Various	EPA Final Review <u>3/</u>

1/ Most of these applications are for gold dredging. An evaluation is being made as to whether or not a permit is necessary. No projects are being delayed.

2/ These are recent applications which will be processed within the statutory deadline.

3/ All NPDES permits, except for new applicants, should be issued by June 30, 1975. Most applicants are existing sources which are currently regulated by a state permit. The NPDES permit when issued will replace the state permit.

Plan Actions Completed (15)

Air Quality Program

April, 1975

Direct Stationary Sources (14)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Coos	Coos Bay - Georgia Pacific - Sawdust truck dump facility.	4/9/75	Approved
Multnomah	Portland - Portland Willamette - Baghouse for brass melting furnace.	4/11/75	Approved
Clatsop	Wauna - Crown Zellerbach - Control of TRS emissions from pulp washer.	4/16/75	Approved
Multnomah	Portland - Pacific Carbide & Alloy-Ducting carbide crusher cyclone exhaust to New baghouse	4/16/75	Approved
Multnomah	Portland - Trumbull Asphalt- New burner package for #2 boiler.	4/16/75	Approved
Multnomah	Portland - W. R. Grace Co. - Baghouse for control of vermiculite dust.	4/21/75	Approved
Clackamas	Milwaukie - Milwaukie Plywood - Enlargement of sawdust storage bin.	4/21/75	Approved
Clackamas	Colton - Colton School District - New paint spray booth.	4/25/75	Approved
Marion	Salem - Boise Cascade - New New digester to convert wood chips into pulp.	4/30/75	Approved
Clackamas	Milwaukie - Red, White and Blue Thrift Store - New fumigation chamber.	4/30/75	Approved
Clatsop	Wauna - Crown Zellerbach - Venting foam tank emissions to a new gas incinerator.	4/30/75	Approved

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Clatsop	Wauna - Crown Zellerbach - Venting emissions from the digester feeder to a new gas incinerator	4/30/75	Approved
Clatsop	Wauna - Crown Zellerbach - New noncondensable gas incinerator	4/30/75	Approved
Douglas	Dillard - Roseburg Lumber Co. - New sawdust truck dump facility.	4/30/75	Approved

Indirect Sources (1)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland - Pacific Northwest Bell - 302 space parking structure.	4/23/75	Approved plans for ventilation system.

Plan Action Pending (31)

Air Quality Program

April, 1975

Direct Stationary Sources (31)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Clatsop	Astoria - Layton Funeral Home - New cremation incinerator <u>1/</u>	2/28/74	Awaiting emission data from similar unit. Expect data by end of May and action by June 15, 1975.
Douglas	Roseburg - Raintree Wood Products - New cyclone to control dry sawdust from several saws <u>1/</u>	4/9/74	Awaiting information to determine if type of material should be collected by baghouse. Expect completion by July 1, 1975.
Multnomah	Portland - Port of Portland Bulk commodity rail receiving and ship loading facility. <u>1/</u>	6/12/74	Awaiting information on controls. Info. will be received when Port approves project funding which is expected by June 1, 1975.
Marion	Salem - Boise Cascade - New countercurrent pulp washers. <u>1/</u>	7/7/74	B-C investigating available control methods as requested. Expect info by June 15, 1975 and action by June 30, 1975.
Multnomah	Portland - Zidell Explorations, Inc. - New secondary aluminum smelter. <u>1/</u>	11/12/74	Review completed. Approval letter will be sent by 5/9/75.
Multnomah	Portland - Kaiser Permanente Medical Center. New controlled atmosphere incinerator. <u>2/</u>	11/22/74	Review completed. Approval letter will be sent by 5/8/75.
Multnomah	Portland - Boeing of Portland - Scrubber to control salt fumes. <u>1/</u>	11/26/74	Reviewing 4/8/75 request to renovate existing scrubber. Expect action by June 15, 1975.

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Washington	Durham - U.S.A. - New sludge incinerator. <u>2/</u>	12/31/74	Awaiting additional info on process & air pollution control equipment. USA has been notified on 4/8/75 that Dept. is still awaiting info. Expect response by May 5, 1975.
Klamath	Bly - Weyerhaeuser Co. - New boiler with two (2) multiclones for control. <u>1/</u>	1/6/75	Reviewing adequacy of information submitted on 4/21/75. Expect action by June 15, 1975.
Clackamas	Clackamas - Caffal Brothers Construction - Portable rock crusher. <u>2/</u>	1/20/75	Review completed. Approval letter will be sent by 5/9/75.
Columbia	Clatskanie - Kaufmann Chemical Corp. - Bulk sulphur rail receiving and ship loading facility. <u>2/</u>	2/25/75	Additional info requested 4/22/75. Action expected within 15 days after receipt of info.
Multnomah	Portland - Albers Milling New oil-gas boiler. <u>1/</u>	3/3/75	Review completed. Approval letter will be sent by 5/16/75.
Multnomah	Troutdale - Reynolds Metals Co. - New particulate and fluoride baghouse collection system for all aluminum reduction pot lines. <u>1/</u>	3/10/75	Additional info requested 4/4/75. Action expected within 30 days after receipt of info.
Clackamas	Milwaukie - Milwaukie Plywood - Scrubber control of veneer driers. <u>1/</u>	4/10/75	Reviewing info submitted. Expect action by 5/10/75.
Clackamas	Lake Oswego - Oregon Portland Cement - New baghouse for #2 cement packing scale. <u>1/</u>	4/11/75	Reviewing info submitted. Expect to request additional info by 5/9/75.
Clackamas	Molalla - Molalla Sand and Gravel Co. - Water spray dust control on rock crusher. <u>1/</u>	4/14/75	Reviewing submitted info. Expect to complete by 5/19/75.
Union	Elgin - Boise Cascade - New veneer drier. <u>1/</u>	4/16/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/15/75.



<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Union	Elgin - Boise Cascade - New cyclone for conveying green wood chips. <u>1/</u>	4/16/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/15/75.
Grant	John Day - Edward Hines Co. - New hog fuel boiler controlled by wet scrubber. <u>1/</u>	4/18/75	Requested plans and add info on 4/10/75. Action expected within 30 days of receipt of info.
Coos	North Bend - Weyerhaeuser - Spray chamber control of veneer drier emissions. <u>1/</u>	4/21/75	Reviewing submitted info. Expect requesting add info by 5/15/75.
Union	La Grande - Boise Cascade - New cyclone for conveying wood chips and sawdust. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to complete by 5/30/75.
Lane	Springfield - Weyerhaeuser - New condensate stripper. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/20/75.
Lane	Springfield - Weyerhaeuser - New counter current pulp drum washer. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/20/75.
Lane	Springfield - Weyerhaeuser - Control odorous emissions from the causticizing equip. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/20/75.
Lane	Springfield - Weyerhaeuser - New digester to convert wood chips into pulp. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/20/75.
Lane	Springfield - Weyerhaeuser - New concentrator evaporator. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/20/75.

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Lane	Springfield - Weyerhaeuser - New sawdust conveying and screening system. <u>1/</u>	4/21/75	Reviewing submitted info. Expect to determine whether add info will be needed by 5/20/75.
Multnomah	Portland - Troxel Panel Products, Inc. - Two new paint spray booths. <u>1/</u>	4/27/75	Reviewing submitted info. Expect com- pletion by 5/12/75.
Jackson	White City - SWF Plywood - New cyclone for new truck chip bin. <u>1/</u>	4/24/75	Reviewing submitted info. Expect com- pletion by 5/30/75.
Jackson	White City - SWF Plywood - New baghouse for control of sanderdust. <u>1/</u>	4/24/75	Reviewing submitted info. Expect com- pletion by 5/30/75.
Multnomah	Portland - Bank Check Supply - New lead remelt furnace. <u>1/</u>	4/30/75	Reviewing submitted info. Expect com- pletion by 5/30/75.

Footnotes:

1/ These plan reviews are for modification or additions to existing facilities. Pending action by the Department is not materially affecting production or operation of the facility.

2/ These plan reviews are for new facilities. Production or operation of facility is dependent on Department action.

Permit Actions Completed (47)

Air Quality Program

April, 1975

Direct Stationary Sources (40)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Clatsop	Warrenton - AMAX Aluminum New Aluminum Reduction Plant	4/18/75	Application Withdrawn
Columbia	Rainier - Cascade Energy, Inc. New Oil Refinery		Issued
Jackson	Medford - Eugene Burrill Lumber (14-0011) Sawmill	4/4/75	Permit Issued
Josephine	Grants Pass, Fourply (17-0002) Plywood Plant	4/4/75	Permit Modified and Issued
Hood River	Hood River, Hanel Lumber Co. (14-0006) Sawmill	4/24/75	Permit Modified and Issued
Klamath	Klamath Falls, Jeld-Wen (18-0006) Sawmill	4/2/75	Permit Modified and Issued
Klamath	Klamath Falls, Jeld-Wen (18-0059) Hardboard Plant	4/2/75	Permit Modified and Issued
Union	Elgin - Boise Cascade (31-0006) Plywood Plant	4/24/75	Permit Modified and Issued.
Portable	Portland - Babler Bros., Inc. - (37-0020) Asphalt Plant	4/17/75	Permit Issued
Multnomah	Portland - Kerr Grain Corp. (26-2003) Grain Elevator	4/16/75	Permit Issued
Tillamook	Tillamook - Publishers Paper Co. (29-0007) Sawmill	4/16/75	Permit Issued
Clackamas	Milwaukie - Milwaukie Plywood Corp. (03-1874) Plywood Mfg.	4/16/75	Permit Issued
Multnomah	Portland - Portland Bolt and Mfg. Co. (26-1884) Galvanizing	4/16/75	Permit Issued
Columbia	Rainier - Cascade Energy Inc. (05-2561) Petroleum Refinery	4/16/75	Permit Issued

## Direct Stationary Sources (continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Washington	Forest Grove - Forest Fiber Products Co. (34-2143) Hardboard Mfg.	4/15/75	Permit Modified
Multnomah	Portland - Barker Mfg. Co.- (26-1878) Furniture Mfg.	4/16/75	Permit Modified
Clackamas	Lake Oswego - Lakeshore Concrete Co. (03-1924) Readimix Concrete	4/16/75	Permit Issued
Multnomah	Portland - Cobb Lumber Co., Inc. (26-2539) Sawmill	4/29/75	Permit Issued
Washington	Sherwood - Southwest Readymix Co. (34-2583) Ready-mix concrete	4/29/75	Permit Issued
Multnomah	Portland - Sterling Furniture Mfg., Inc. (26-2547) Furniture manufacturing.	4/29/75	Permit Issued
Clackamas	Portland - Alpine Veneers, Inc. (03-2065) Plywood Mfg.	4/29/75	Permit Issued
Multnomah	Portland - Supreme Perlite Co. (26-2390) Perlite expanding kiln	4/29/75	Permit Issued
Washington	Cornelius - C. C. Ruth Co. (34-2037) Animal Feeds	4/29/75	Permit Issued
Washington	Beaverton - Tualatin Valley Paving, Inc. (34-2581) Asphaltic Paving	4/29/75	Permit Issued
Tillamook	Tillamook - Trask River Gravel (29-0041) Rock Crusher	4/29/75	Permit Issued
Tillamook	Nehalem - Miami Shingle & Shake Co. (29-0017) Shake Mill	4/29/75	Permit Issued
Tillamook	Cloverdale - Kimber Log and Lumber Co. (29-0048) Sawmill	4/29/75	Permit Issued
Tillamook	Tillamook - Tillamook County Road Dept. (29-0051) Rock Crusher	4/29/75	Permit Issued
Clatsop	Astoria - Bumble Bee Seafoods (04-0036) Boiler	4/29/75	Permit Issued
Clatsop	Astoria - Bayview Transit Mix Inc. (04-0046) Ready Mix Concrete	4/29/75	Permit Issued

Direct Stationary Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Clatsop	Gearhart - Bayview Transit Mix, Inc. (04-0045) Ready Mix Concrete	4/29/75	Permit Issued
Multnomah	Portland - ABC Foundry, Inc. (26-1848) Brass Foundry	4/29/75	Permit Issued
Clackamas	Molalla - Avison Lumber Co. (03-1772) Sawmill	4/29/75	Permit Issued
Multnomah	Portland - Great Northern Products, Inc. (26-2538) Sawmill	4/29/75	Permit Issued
Multnomah	Portland - Service Bronze and Brass (26-1855) Brass Foundry	4/29/75	Permit Issued
Multnomah	Portland - Galvanizers Co. (26-1885) Galvanizing	4/29/75	Permit Issued
Multnomah	Portland - Consolidated Metco, Inc. (26-1890) Aluminum Foundry	4/29/75	Permit Issued
Washington	Banks - Banks Lumber Co. (34-2565) Sawmill	4/29/75	Permit Issued
Multnomah	Portland - Colonial Mortuary Inc. (26-2803) Crematory	4/29/75	Permit Issued
Columbia	Mist - Olympic Forest Products Co. (05-1771) Sawmill	4/29/75	Permit Issued

Indirect Sources (7)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Multnomah	Rockwood Area - Sommerwood 588 space residential development.	4/21/75	Permit Issued
Washington	Beaverton - Hyland Hills 471 space shopping center	4/21/75	Permit Issued
Washington	Beaverton - Somerset West 149 space commercial center	4/21/75	Permit Issued
Multnomah	Portland - Tri-Met - 75 space bus parking facility	4/21/75	Permit Issued
Multnomah	Portland - Rivergate Area Columbia Independent Refinery 75 space parking facility	4/21/75	Permit Issued
Multnomah	Gresham - Fred Meyer 675 space shopping center	4/28/75	Permit Issued
Washington	Progress Area - Washington Square - 5000+ space shopping center	4/25/75	Permit amended with EQC approval, new transit conditions.

Permit Actions Pending (582)

Air Quality Program

April, 1975

Direct Stationary Sources (576)

(New Sources - - - - - 17 - - - - See listing below)  
 (Existing Sources - - - - - 353 - - - - See footnote 1/)  
 (Fuel Burning (Boilers) - - - - - 206 - - - - See footnote 2/)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Applcn</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Multnomah	Portland - Union Carbide #1 Furnace Product Change	11/21/73	2/13/75	Issued proposed Permit 2/28/75. Expect Issuing Permit by 5/19/75.
Clatsop	Astoria - Layton Funeral Home - New Cremation Incinerator	2/28/74		(See plan action pending). Permit will be drafted within 15 days of plan approval, expected by 6/30/75.
Multnomah	Portland - Oregon Steel Mills, Rivergate - New pellet metallizing furnace	7/18/74	3/28/75	Expect to issue proposed permit by 5/15/75.
Multnomah	Portland - Resource Recovery Byproducts Paper air classifier	11/1/74	2/25/75	Issued proposed permit 2/25/75. Expect to issue Permit by 5/15/75.
Multnomah	Portland - Pennwalt Corp. - Expansion of chlorine-caustic soda manufacturing.	11/4/74	4/17/75	Expect proposed permit to be issued by 5/16/75.
Multnomah	Portland - Zidell Explorations, Inc. - New secondary aluminum smelter.	11/12/74	4/2/75	Issued proposed permit on 4/2/75. Expect to issue final permit by 5/30/75.
Multnomah	Portland - Kaiser Permanente Medical Center - New controlled atmosphere incinerator.	11/22/74	2/25/75	Issued proposed permit 2/25/75. Expect to issue final permit by 5/15/75.

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Washington	Durham - USA - New Sludge Incinerator, Lime recalciner and steam boilers.	12/21/74		(See plan action pending) Permit will be drafted within 15 days of plan approval. Expected by 6/1/75.
Clackamas	Clackamas - Caffal Bros. Construction Portable rock crusher.	1/20/75	4/2/75	Issued proposed permit 4/2/75. Expect to issue final permit by 5/30/75.
Columbia	Clatskanie - Kaufman Chemical Corp. - Bulk sulfur rail receiving and ship loading facility.	2/25/75		(See plan action pending) Permit will be drafted within 15 days of plan approval. Expected by 6/15/75.
Umatilla	Umatilla - Alumax Pacific Corp. - New aluminum reduction plant.	4/18/75		Request additional information on 4/29/75. Expect to hold public hearing on proposed Department action on permit application within 45-60 days of receipt of information requested.
Portable	Redmond - Watson Asphalt & Paving Co.	3/75		Permit to be issued by 6/30/75
Portable	Salem, State of Oregon - Highway Division	3/75		Permit to be issued by 6/30/75
Portable	Yakima - Superior Asphalt & Concrete Company	3/75		Permit to be issued by 6/30/75
Portable	Allied Paving, Asphalt Plant	4/21/75		Permit to be issued by 6/30/75
Douglas	Roseburg - Dan M. Parker - Rock crusher	4/17/75		Permit to be issued by 6/30/75
Douglas	Roseburg - Umpqua Dairy Products	4/15/75		Permit to be issued by 6/30/75



Footnotes:

- 1/ These permit actions are of existing sources that are operating on automatic extensions of existing permits or on temporary permits. Of this number approximately 1/4 are on Public Notice, 1/2 are ready for final review and 1/4 are being drafted. All permits for existing sources are expected to be issued prior to June 30, 1975.
  
- 2/ All fuel burning (boiler) permits are final type and are being processed for approval. Expected completion date of 6/15/75. These permits are of existing sources and do not hinder their operation. (65 fuel burning permits were issued in April 1975.)

Indirect Sources (6)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Applcn.</u>	<u>Date of Completed Applcn.</u>	<u>Status</u>
Clackamas	Milwaukie Area - Clackamas Town Center 6000+ space shopping center.	7/19/74		Environmental Impact Statement received, no further review by Department neces- sary until land use is approved by local planning commission.
Multnomah	Rockwood Area - Mt. Hood Mall - 6000+ space shopping center.	7/19/74		Additional infor- mation requested, environmental assess- ment. No further review by Department necessary until land use is approved by local planning commission.
Clackamas	Oak Grove Area-Stuart Anderson's Black Angus 115 space parking facility.	4/14/75		Requested addi- tional information 4/30/75 regarding transit incentives.
Jackson	Central Point Area - Jackson County Exhibition Center - 1500+ parking facility for fairgrounds.	4/14/75		Requested environ- mental assessment, carbon monoxide, traffic, noise impact, 4/16/75.
Clackamas	Clackamas - Clackamas Industrial Complex - 68+ space parking facility.	4/21/75		Anticipate request for additional information, 5/7/75.
Clackamas	Milwaukie, Waverly Greens - 145 space parking facility.	4/23/75		Anticipate request for additional information, transit incentive and traffic controls, 5/5/75.

Plan Actions Completed (4)

Land Quality Program

April, 1975

General Refuse (Garbage) Projects (4)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Crook	Ochoco Lumber Co. Existing Landfill	4/7/75	Letter of authorization approval
Klamath	Lake Ewauna Landfill	4/9/75	Review and comment rejected by Klamath Falls City Planning Commission
Washington	Arden Danielson New site	4/17/75	Provisional approval
Douglas	Glide Transfer Station New Transfer Station.	4/21/75	Approval

Plan Actions Pending (7)

Land Quality Program

April, 1975

General Refuse (Garbage) Projects (6)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Deschutes	Southwest Landfill	10/10/74	More data requested
Umatilla	Pendleton Landfill	10/15/74	More data requested
Douglas	Myrtle Creek Transfer Station	1/6/75	More data requested
Baker	Baker Sanitary Landfill	1/31/75	More data requested
Douglas	Reedsport Landfill	2/18/75	More data requested
Douglas	Canyonville Landfill	3/18/75	More data requested

Industrial Solid Wastes Disposal Projects (1)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Linn	Western Kraft Corporation	4/24/75	In Process Action 5/75.

Permit Actions Completed (14)

Land Quality Program

April, 1975

General Refuse (Garbage) Facilities (8)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Crook	Riverside Ranch Transfer Station - New Facility	4/16/75	Permit issued
Deschutes	LaPine Disposal Site Existing Facility	4/2/75	Permit issued
Jackson	Ashland Landfill Existing Facility	4/7/75	Permit issued (Renewal)
Jackson	South Stage Landfill Existing Facility	4/7/75	Permit issued (Renewal)
Jefferson	Culver Landfill Existing Facility Permanently closed.	4/2/75	Permit revoked
Josephine	Kerby Landfill Existing Facility	4/4/75	Permit amended
Lake	Adel Landfill Existing Facility	4/3/75	Permit amended
Washington	Arden Danielson New Facility	4/17/75	Letter authorization issued.

Demolition Solid Waste Disposal Facilities (1)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Washington	Hillsboro Landfill Existing Facility	4/1/75	Permit issued (Renewal)

Land Quality Program - Permit Actions Completed (continued)

Industrial Solid Waste Disposal Facilities (4)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Clatsop	Lewis & Clark Log Sorting Yard - New facility	4/21/75	Permit issued
Crook	Ochoco Lumber Co. Existing Facility	4/7/75	Letter authorization issued.
Douglas	Little River Box Co. Existing Facility	4/7/75	Permit issued
Hood River	U. S. Plywood, Dee Existing Facility	4/24/75	Permit issued

Sludge Disposal Facilities (1)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Linn	Nored Sludge Lagoon Existing Facility	4/11/75	Permit issued (Renewal)

Permit Actions Pending (146)

Land Quality Program

April, 1975

General Refuse (Garbage) Facilities (103)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Curry	Brookings Landfill	5/16/72	6/16/72	Under temp. permit Proposed reg. permit issued 4/16/75.
Curry	Nesika Beach Landfill	5/16/72	6/16/72	" " "
Curry	Port Orford Landfill	6/20/72	6/20/72	" " "
Douglas	Camas Valley Landfill	6/12/72	2/30/75	Under temp. permit. Regional staff to draft regular permit 5/75.
Gilliam	Arlington Landfill	5/15/72	11/14/74	Under temp. permit. Regional staff to coordinate site upgrading. Proposed regular permit expected 5/75.
Umatilla	Pilot Rock Landfill	5/17/72	8/14/74	Under temp. permit. Regional staff to coordinate site closure as soon as possible. Proposed regular permit expected 5/75.
Umatilla	Weston Landfill	5/17/72	8/14/74	Under temp. permit. Regional staff to draft regular permit by 7/75.
Clackamas	Rossmann's Landfill	4/21/75	4/21/75	Renewal. Permit expires 6/31/75. Regional staff draft- ing new permit for issuance 5/75.
Lane	Franklin Landfill	4/2/75	4/2/75	Renewal. Permit expired 3/31/75. Regional staff draft- ing new permit for issuance 5/75.

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Jackson	Prospect	3/7/75	4/21/75	Renewal. Permit expired 4/1/75. Proposed new permit drafted. To be issued 5/75.

93 other sites with temporary permits  
(incomplete applications)

Most awaiting completion of regional solid waste management plans. Regional staff to draft permit by 7/75 if possible.

Demolition Solid Waste Disposal Facilities (2)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Marion	Salem Airport Landfill	6/20/72	8/14/74	Under temp. permit. Regional staff to draft regular permit by 7/75.
Polk	Fowler Demolition	8/8/72	8/14/74	Under temp. permit. Regional staff to draft regular permit by 7/75.

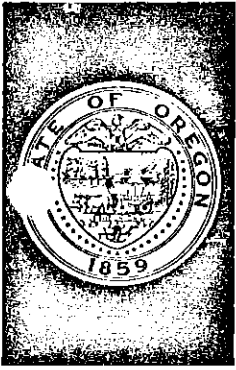
Industrial Solid Waste Disposal Facilities (41)

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Benton	Hobin Lumber Co.	6/21/73	6/29/73	Under temp. permit. exp. 7/1/75. Regional staff to draft regular permit by 6/30/75.
Benton	Paul Barber Hardwood	12/19/73	5/20/74	" " "
Douglas	Reedsport Mill	8/8/73	8/8/73	" " "
Douglas	Superior Lumber	6/20/73	7/12/73	" " "
Josephine	Josephine Co. Industrial Sludge Disposal Site	7/18/73	7/18/73	" " "



<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Josephine	Rough and Ready Lumber	6/25/73	7/13/73	Under temp. permit. exp. 7/1/75. Regional staff to draft regular permit by 6/30/75.
Lane	Georgia-Pacific, Irving Rd. Eugene	6/22/73	6/22/73	" " "
Lane	Georgia-Pacific, Springfield	6/28/73	9/7/73	" " "
Lane	Hines Lumber	6/29/73	5/30/74	" " "
Marion	Green Veneer	6/1/73	7/3/73	" " "
Multnomah	Pacific Carbide	6/25/73	6/25/73	" " "
Columbia	Camp 8 Landfill	4/22/75	4/22/75	Renewal. Permit expires 6/30/75. Regional staff drafting new permit for issuance 5/75.
Douglas	Round Prairie	10/2/74	11/12/74	Proposed new facility will not be used until summer. Regional staff to draft regular permit 5/75.
Benton	Willamette Industries	7/3/73	7/3/73	Letter authorization issued with no exp. date. Regional staff to draft regular letter authorization or permit by 6/30/75.
Coos	Coos Bay Plywood Millington Flats	6/20/73	7/2/73	" " "
Curry	U.S. Plywood, Gold Beach	7/13/73	7/13/73	" " "
Douglas	D & D Lumber	6/29/73	6/29/73	Letter authorization issued with no exp. date. Regional staff to draft regular letter authorization or permit by 6/30/75.
Douglas	U.S. Plywood, Roseburg	7/13/73	7/13/73	" " "

<u>County</u>	<u>City and Source</u>	<u>Date of Initial Appl.</u>	<u>Date of Completed Appl.</u>	<u>Status</u>
Hood River	Champion International	7/13/73	7/13/73	Letter authorization issued with no exp. date. Regional staff to draft regular letter authorization or permit by 6/30/75.
Jackson	Boise Cascade, Medford	7/2/73	7/2/73	" " "
Lincoln	Publishers Paper, Toledo	9/28/73	9/28/73	" " "
Linn	Bauman Lumber	6/19/73	6/19/73	" " "
Linn	Cedar Lumber	7/1/73	7/1/73	" " "
Linn	Dean Morris Lumber	6/28/73	6/28/73	" " "
Linn	Willamette Industries Foster	7/5/73	7/5/73	" " "
Baker	Oregon-Portland Cement Co.	6/19/73	- - -	Existing site, Requested letter authorization. Regional staff to respond by 6/30/75.
Jackson	Jackson Co. Park	1/12/74	- - -	" " "
Coos	Coos Head Timber	6/21/73	6/21/73	Existing site. Regional staff to investigate by 6/30/75.
Coos	International Paper	12/13/74	12/13/74	" " "
Coos	Roseburg Lumber, Coquille	7/18/73	7/18/73	" " "
Coos	Westbrook Pole and Piling	5/7/74	5/7/74	" " "
Coos	Weyerhaeuser, Allegany	6/21/73	4/12/74	" " "
Coos	Weyerhaeuser, Horse Flats	6/21/73	4/12/74	" " "
Douglas	L and H Lumber	6/20/74	6/20/74	" " "
Douglas	Roseburg Lumber Co. 5 mill sites	7/9/73	6/3/74	" " "
Lincoln	Georgia-Pacific, Toledo	7/2/73	3/14/74	(5 applications) " " "
Linn	Willamette Industries Sweet Home	7/5/73	12/28/73	" " "



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

ROBERT W. STRAUB  
GOVERNOR

### MEMORANDUM

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item C, May 23, 1975, EQC Meeting  
Tax Credit Applications

Attached are review reports on 11 Tax Credit Applications. These applications and the recommendations of the Director are summarized on the attached table.

KESSLER R. CANNON

AHE

May 12, 1975

### Attachments

Tax Credit Summary  
Tax Credit Review Reports (11)



Contains  
Recycled  
Materials

TAX CREDIT APPLICATIONS

<u>Applicant</u>	<u>Appl. No.</u>	<u>Facility</u>	<u>Claimed Cost</u>	<u>% Allocable to Pollution Control</u>	<u>Director's Recommendation</u>
Georgia-Pacific Corporation Coos Bay Division	T-636	Multiclone cinder collector	\$70,985.00	80% or more	Issue
Georgia-Pacific Corporation Coos Bay Division	T-638	Baghouse fire suppression system	11,785.81	80% or more	Issue
Georgia-Pacific Corporation	T-639	Baghouse to control emissions of sawdust fines from hard-board plant	36,683.00	80% or more	Issue
Clarence Van Dyke and Charles Hertel - Dairy Farm	T-642	44,000 gallon concrete holding tank for animal waste	3,824.00	80% or more	Issue
Western Pulp Products	T-643	Treatment system providing both primary clarification and secondary aeration	21,585.00	80% or more	Issue
Rich Manufacturing Company of Oregon	T-647	Baghouse to collect dust generated from grinders and wheelabrator shot blast casting cleaning machine	20,997.98	80% or more	Issue
Rich Manufacturing Company of Oregon	T-648	Baghouse, cyclone precleaner, canopy hoods and associated items to collect and control fumes and particulates	141,157.42	80% or more	Issue
Boise Cascade Corporation Paper Division	T-652	Installation of effluent flow measuring equipment	35,809.00	80% or more	Issue
Boise Cascade Corporation Paper Division	T-653	Clay unloading system	35,640.00	80% or more	Issue
Tru-Mix Construction Company	T-654	Baghouse to capture particulate emissions from aggregate dryer	78,244.53	80% or more	Issue
Weyerhaeuser Company Wood Products Manufacturing	T-657	Sand classifier for cinder collectors on hogged fuel boilers	44,178.00	80% or more	Issue

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Georgia-Pacific Corporation  
Coos Bay Division  
PO Box 869  
Coos Bay, Oregon 97420

The applicant operates a lumber mill and plywood plant at Coquille, Coos County, Oregon.

2. Description of Facility

The facility claimed in this application is described as a multiclone cinder collector to collect particulates being emitted from the plant's hogged fuel boiler. The collector consists of the following:

1. Multiclone Dust Collector type 9V10T Size 182.7
2. Five rotary air locks, 8" Prater Model 8C
3. Two sand classifiers, Eriez Magnetics Model 65B-22x30
4. Two link belt screw conveyors
5. Foundation, wiring, piping, etc. miscellaneous

The facility was completed and put into operation in July, 1973.

Certification is claimed under the 1969 Act and the percentage claimed for pollution control is 100%.

Facility cost: \$70,985 (accountant's cost certification was provided).

3. Evaluation of Application

This facility was installed in accordance with Department of Environmental Quality approved plans and specifications. The secondary collectors were installed to enable the boiler to meet the Department's emission concentration regulation. The facility's source test demonstrating compliance has Department approval. The cinder re-injection feature of this facility has the Department's approval as it solves a solid waste problem.

It is concluded that the facility claimed was installed and is operated solely to meet the Department's regulations. Therefore, the whole claimed cost can be allocated to air pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$70,985 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-636.

PBB:mh

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Georgia-Pacific Corporation  
Coos Bay Division  
P. O. Box 869  
Coos Bay, Oregon 97420

The applicant operates a plywood plant in the Bunker Hill area of Coos Bay, Oregon.

2. Description of Facility

The claimed facility is a baghouse fire suppression system consisting of the following:

1. Four Agent Storage Containers (Ferwall #31-192007-203).
2. Two explosion gates (dampers) in duct pipes (Archer #13-673-1).
3. Two electrical panels (Hoffman #A-20P16) with fire alarms.

Upon sensing a fire, the two baghouses are deluged by freon gas. The facility was completed in February 1974 and placed into operation in March, 1974. Since no fires have occurred to date, the system has never been used.

Certification is claimed under the 1969 Act and the percentage claimed for pollution control is 100%.

Facility costs: \$11,785.81 (Accountant's certification was provided.)

3. Evaluation of Application

Use. The claimed facility insures that a fire will not destroy an inordinate amount of the pollution control device. In three cases, Georgia-Pacific has had baghouses with no fire suppression systems incur severe damage from fires. Baghouse replacement time varies from 3 weeks to 6 months, during which time the plant would emit above the standard or simply close the plant with attendant economic impact. Georgia-Pacific and their Insurance Agent consider it good design practice to protect baghouses with a fire suppression system.

Relation to Air Pollution Control

Precedent. In T-495 and T-506, tax credit was granted for a fire suppression system. In both cases, the fire suppression system was not mentioned in the

review report's equipment list nor in the body of the report, even though the value was included in the credit.

Degree of Direct Relation. This fire suppression system does not clean the air; indeed, it releases freon, a mild pollutant, into the outside air. The guidelines of November 1971 for Tax Relief on page 6 state "Construction which is related to the normal repair and maintenance of an existing pollution control facility to keep it operating...is not eligible." These two reasons would be cause for denying the application.

On the contrary, the guidelines also state on the same page "It should be a permanent...facility...to prevent...air pollution." A function of the fire suppression system is to prevent the inordinate down time caused by a fire where the emissions would have only cyclone or no control until the baghouse is repaired. Certainly its use cannot be characterized as a "normal" use; nor can the freon released be considered nearly as severe pollution as the smoke from an uncontrolled fire and 3 weeks or more of sanderdust emissions.

Conclusion. It is concluded that this installation offers the possibility of air pollution prevention. The company may earn a return on this investment in the form of reduced baghouse costs in the event of a fire. Since no fires have occurred in over a year of operation, there has been no return and may never be any return.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$11,785.81 with 80% or more of the costs allocated to pollution control be issued for the facility claimed in Tax Application T-638.

PBB:mh



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Georgia-Pacific Corporation  
Coos Bay Division  
PO Box 869  
Coos Bay, OR 97420

The applicant operates a hardboard plant at Coos Bay, Oregon.

2. Description of Facility

The facility claimed in this application is described as a baghouse controlling emissions of sawdust fines from the hardboard plant and other auxiliary equipment. The equipment is described as:

1. Clarke baghouse, Model #PNA-1035, serving cyclones 14, 34 and 35
2. New relay cyclone gathering exhaust from cyclones 27 and 28 for transfer to the new Carter Day baghouse
3. Fire protection system for the Carter Day baghouse
4. Miscellaneous parts and supplies

The facility was completed and placed into operation about December 1, 1973.

Certification is claimed under the 1969 act as amended in 1973, and the percentage claimed for pollution control is 100%.

Facility cost: \$36,682.98 (Accountant's certification was provided.)

3. Evaluation of Application

The claimed Clarke Baghouse was reviewed and approved by the Department on September 11, 1973. It is contributing significantly to the reduction of wood fines emissions from the hardboard plant.

The claimed cyclone, fire protection system, and miscellaneous equipment convey dust laden air to a Carter-Day baghouse and assure its continuous operation. This baghouse was approved by the Department on March 13, 1973.

The dust collected by these baghouses is worth about \$10 per day. This income is more than offset by the operating costs incurred by the higher horsepower fans required, maintenance, etc.

This facility does operate within the Department's emission regulations and is concluded to be 100% for air pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$36,683 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-639.

PBB:mh

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Clarence VanDyke and Charles Hertel  
Partnership - Dairy Farm  
Route 2, Box 238H  
Forest Grove, Oregon 97116

The applicants own and operate a dairy farm with 40 milking cows, 30 replacement stock and 120 acres of crop land one mile north of Verboort on Evers Road.

2. Description of Claimed Facility

The facility is a 44,000 gallon concrete tank, 8 ft. deep, 30 ft. in diameter to hold one month's animal waste when spreading is not advisable.

The claimed facility was completed and placed in operation in June 1974.

Certification is claimed with 80% or more of the cost allocated to pollution control.

Facility Cost: \$3,824.00 (Invoice for tank construction was attached)

3. Evaluation of the Application

Prior to the installation of the facility, manure was stored in a low area that flooded during winter high water. With the tank, manure is stored without the possibility of being washed into the creek. It is spread on high crop land when weather conditions permit.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate be issued for the claimed facilities in Application T-642, such certificate to bear the actual cost of \$3,824.00 with 80% or more allocable to pollution control.

WDL:ak  
May 1, 1975

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT  
WATER QUALITY DIVISION

---

1. Applicant

Western Pulp Products  
P.O. Box 968  
Corvallis, Oregon 97330

The applicant owns and operates a plant to manufacture vacuum formed nursery containers, flower pots and protective packaging materials from waste paper.

2. Description of Claimed Facility

The new treatment system provides both primary clarification and secondary aeration to reduce suspended solids and BOD in repulping plant waste water to conform to the limits set forth in NPDES Permit No. 1686-J. The new equipment and facilities involved consist of:

- a. Waste Water batch separator.
- b. Fiber collection bins (2).
- c. Collection pump.
- d. Effluent pump, Pacific 1 1/2 hp.
- e. Pipe lines to lagoon, approx. 750 ft. 4" and 1" PVC.
- f. Aerated Lagoon 480,000 gallon, six day detention.
- g. Aerators, two Aqua Jet, 3 hp.
- h. Lagoon discharge settler,
- i. Associated foundations, controls, electrical and miscellaneous piping.
- j. Discharge piping, approximately 400 ft.

The claimed facility was completed and placed into service in December 1974.

Certification is claimed with 100% of the cost allocated to pollution control.

Facility Cost: \$21,585 (accountants certification was attached to the application.)

3. Evaluation of the Application

Installation of the claimed facility was necessary because of the limits required by NPDES Permit Condition. The facility has reduced BOD and suspended solids in the summer months 85 percent or more so that an average of 15 lbs/day BOD and suspended solids are

discharged in summer and 40 lbs/day average BOD lbs/day and 48 lbs/day average suspended solids in the winter months are discharged. The company claims no useable materials are recovered for profit, thus the only benefit derived is pollution control. Monitoring reports show that the facility is performing properly.

4. Director's Recommendation

It is recommended that a Pollution Control Certificate be issued for the claimed facilities in Application T-643, such certificate to bear the actual cost of \$21,585 with 80% or more allocable to pollution control.

WDL:mr

Date April 29, 1975

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Rich Manufacturing Company of Oregon  
866 North Columbia Boulevard  
Portland, OR 97217

The applicant takes scrap iron and steel and melts them down in an induction furnace. The molten metal is poured into sand molds to make gray iron castings. The castings are cleaned by shot blasting and grinding. The sand is re-conditioned and reused.

2. Description of Facility

The claimed facility is a baghouse, associated hooding, ductwork, fan and motor to collect dust generated from two double ended grinders and a wheel-abrator shot blast casting cleaning machine. The baghouse is a Rees Blowpipe Manufacturing Co. Model No. 24, intermittent shaker type. Air Movement is by a 54" diameter, 600 RPM fan powered by a 25 HP motor.

Certification is claimed under the 1969 Act and the percentage claimed for pollution control is 100%.

Facility costs: \$20,997.98 (Accountant's certification was provided.)

3. Evaluation of Application

On June 19, 1974, Rich Mfg. Co. of Oregon submitted Notice of Construction Number 426 for the proposed baghouse to capture dust emissions from said grinders and shot blast machine.

On October 8, 1974, the Department approved the construction.

The baghouse was completed and in full operation on November 4, 1974.

Evaluation of the approved system was made by the Department shortly thereafter. No visible emissions were observed from the baghouse and the Department is satisfied that said operation is operating in compliance with air quality regulations.

The collected baghouse fines are hauled away to an approved landfill.

Conclusions

It is concluded that this installation is for the sole purpose of air pollution prevention. Rich Mfg. Co. adhered to Department Notice of Construction

procedures and said equipment is meeting all air quality emission standards.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$20,997.98 with 80% or more of the costs allocated to pollution control be issued for the facility claimed in Tax Application T-647.

JAP:mh

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Rich Manufacturing Company of Oregon  
866 North Columbia Boulevard  
Portland, Oregon 97217

Rich Manufacturing operation consists of melting down scrap iron and steel in an induction furnace. The molton metal is poured into sand molds to make gray iron castings. The castings are cleaned by shot blasting and grinding. The sand is re-conditioned and re-used.

2. Description of Facility

The claimed facility consists of a baghouse, cyclone precleaner, two large canopy hoods and associated ductwork, fans, motors, cleaning mechanism and screw conveyors to control and collect fumes and particulates released from the gas fired scrap pre-heater and the electric induction furnace. The baghouse is manufactured by Industrial Clean Air, Rees Division, Model #16-800 intermittent shaker type. Air movement is by a 85" diameter fan powered by a 150 HP motor.

Certification is claimed under the 1969 Act and the percentage claimed for pollution control is 100%.

Facility cost: \$141,157.42 (Accountant's certification was provided.)

3. Evaluation of Application

The now dissolved Columbia-Willamette Air Pollution Authority issued Board Order Number 72-15 on October 20, 1972, to Rich Manufacturing Co. requiring control of emissions from the induction furnace and gas-fired pre-heater. Incorporated within the order was a two phase compliance schedule stating time frame for achieving compliance.

On January 30, 1973, CWAPA received notice of construction No. 382 covering the installation of hooding and ducting to capture emissions from the electric induction furnace and the scrap pre-heater.

On March 22, 1973, CWAPA approved NC #382 as submitted.

On October 18, 1973, CWAPA received notice of construction No. 483 covering installation of an ICA-REES Model Number 16-800 baghouse and associated ducting, motors and fans. The Department approved the construction on January 23, 1974.



In March, 1974, the Department made a compliance determination evaluation of said facility. The observations of the pre-heating, melt down, charging, and tapping operations indicate that the new equipment, as installed, is in compliance with the Department's air quality regulations concerning opacity and effective fume capture.

Conclusions

It is concluded that this installation is for the sole purpose of air pollution prevention at the request of Columbia Willamette Air Pollution Authority.

Rich Mfg. Co. adhered to Department Notice of Construction procedures and is operating said facility in compliance.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$141,157.42 with 80% or more of the costs allocated to pollution control be issued for the facility claimed in Tax Application T-648.

JAP:mh

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Boise Cascade Corporation  
Paper Division  
P.O. Box 2089  
Salem, Oregon 97308

The applicant owns and operates a sulfite pulp and paper mill at Salem, Oregon on the Willamette River.

2. Description of Claimed Facility

The claimed facility consists of the installation of effluent flow measuring equipment, installation of floats to assist pumping out the emergency holding pond and rearrangement of aerators in secondary treatment aeration cells with necessary wiring, piping and anchoring materials and work.

The claimed facilities were completed and placed into operation in September 1974. Certification is claimed under the 1969 Act with 100% of the cost allocated to pollution control.

Facility Cost: \$35,809 (Accountant's certification was attached to the Application)

3. Evaluation of the Application

An engineering study conducted for Boise Cascade showed that better treatment could be obtained with a change in configuration of aeration in the secondary treatment cells. The Department of Environmental Quality approved this change and also asked for flow measurement equipment.

The staff considers that the main function of the work described herein is to insure more consistent operation of the treatment facilities - less susceptible to upsets. The application states that BOD's have dropped about 200 pounds per day and flows 1.7 MGD. The application also states that Boise Cascade expects BOD's to drop 1,000 pounds per day in future.

There is no income to be derived from these facilities so that the only benefits are in pollution control.

4. Director's Recommendation

It is recommended that a Pollution Control Facility certificate be issued for the facilities claimed in Application T-652, such certificate to bear the actual cost with 80% or more of the cost of \$35,809 allocable to pollution control.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Boise Cascade Corporation  
Paper Division  
P. O. Box 2089  
Salem, Oregon 97308

The applicant owns and operates a pulp and paper mill at 315 Commercial Street S. E., in downtown Salem, Oregon.

2. Description of Claimed Facility

The facility claimed in this application is described as a clay unloading system consisting of:

1. Radar Pneumatics clay suction system, 20 ton/hour
2. Kleissler Baghouse, No. PT-8-54, at 2450 CFM
3. Support structure and electrical facilities
4. Labor, engineering and miscellaneous

The facility was completed and put into operation in March 1974.

Certification is claimed under the 1969 Act and the percentage claimed for pollution control is 80% plus.

Facility cost: \$35,640 (accountant's cost certification was provided)

3. Evaluation of Application

This facility was installed in accordance with a Department of Environmental Quality approved plan. The facility was constructed by Boise Cascade to replace a belt-type conveying system which was acceptably conveying the clay, but caused fugitive air emissions which fell onto cars, may have drifted into Pringle Creek or Willamette Slough and caused a general nuisance to neighbors.

Since the installation of the claimed facility, fallout has diminished to the point where no complaints have been received since the startup of the claimed facility. The Department's District Manager reports that the area is now clear of fugitive clay dust and that the system is operating within Department regulations.

Boise Cascade has claimed 80% plus allocable to pollution control. The value of the clay recovered by the dust collector (500 lb/week or \$715/year) is offset by the increase in electric power cost to run the pollution control system. There is another savings in housekeeping and cleanup costs which is probably too intangible to be quantified.

It is concluded that not less than 80% of the facility's cost is allocable to pollution control.

T-653  
April 16, 1975  
Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$35,640 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-653.

PBB:cs  
April 17, 1975

Date April 17, 1975

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Tru-Mix Construction Co.  
PO Box 1708  
Medford, OR 97501

The applicant leases and operates an asphalt batch plant north of Medford, Oregon, on Highway 62.

2. Description of Facility

The facility claimed in this application is described as a baghouse used to capture particulate emissions from the asphalt plant's aggregate dryer.

The facility was completed in November, 1974, but was placed into operation in May, 1974.

Certification is claimed under the 1969 Act and the percentage claimed for pollution control is 100%.

Facility cost: \$78,244.53 (Accountant's certification was provided.)

3. Evaluation of Application

The batch plant was formerly located in Central Point, where several housing tracts grew up around it. The plant had cyclone primary controls and spray system secondary controls. When the plant was forced to move to their new location, the management went to a baghouse for secondary control to meet the new emission source standard.

The Department required the plant to prove compliance as a condition of their Air Contaminant Discharge Permit. Compliance was proved by a source test dated July 9, 1974, which was approved by the Department.

The fines collected by the baghouses are returned to the process. Their worth is more than offset by the \$8,200 annual operating expenses of the claimed facility.

Therefore, it is concluded that the baghouse was installed only for control of air pollution.

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the cost of \$78,244.53 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Application T-654.

Date May 5, 1975

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Weyerhaeuser Company  
Wood Products Manufacturing  
Post Office Box 389  
North Bend, Oregon 97459

The applicant operates a sawmill, planing mill, plywood and particleboard plant at North Bend in Coos County, Oregon.

2. Description of Claimed Facility

The facility claimed in this application is described as a sand classifier for the cinder collectors on the plant's three hogged fuel boilers. The sand classifier consists of:

1. six rotary screens
2. sump pump
3. sump, piping, valves, and related equipment
4. labor costs of installation

The facility was placed into operation in July, 1974, and completed in December, 1974.

Certification is claimed under the 1973 Act and the percentage claimed for pollution control is 100%.

Facility cost: \$44,178.00 (Accountant's certification was provided).

3. Evaluation of Application

Six cinder collectors remove sand, cinders (char), and salt from the stack gas of Weyerhaeuser's three hogged fuel boilers at North Bend. Formerly, all was reinjected into the boilers to burn the char. The sand and salt, as it became smaller during handling, would pass through the cinder collectors and be emitted out the stack.

The classifiers claimed in this application separate the sand and salt so that it is not reinjected. Because it lessens air pollution, this project was approved by the Department on July 24, 1973.

The recirculated sand formerly had an abrasive effect on the boiler tubes and cinder collectors. Weyerhaeuser estimates an annual \$500 savings on wear which is more than offset by the annual \$750 cost for operating and maintaining the classifier.

It is concluded that the classifier was built substantially for pollution control and that it contributes to maintaining lowest possible boiler emissions.

T-657

May 5, 1975

Page 2

4. Director's Recommendation

It is recommended that a Pollution Control Facility Certificate bearing the the cost of \$44,178.00 with 80% or more of the cost allocated to pollution control be issued for the facility claimed in Tax Credit Application Number T-657.



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item D, May 23, 1975, EQC Meeting

Public hearing to consider extension of existing moratoriums on subsurface sewage system installations

### Background

There are existing in a number of cities and counties certain defined geographic areas in which the local governing body has declared moratoriums or embargoes on installation of new subsurface sewage disposal systems. The reason for these actions is that health hazards and/or water pollution problems have been created by failing subsurface systems. The installation of new systems would only aggravate the problem. Moratoriums on new installations were instituted to force action toward cleanup of such problems by construction of sewerage systems or other appropriate means.

Effective January 1, 1974, the Oregon Legislature provided that the Environmental Quality Commission and the Department of Environmental Quality should regulate subsurface sewage disposal. ORS 454.605 to 454.745. It was the intent of the Legislature to preempt this field of regulation to the Commission and the Department. Consequently, it is legal counsel's opinion that such moratoriums or embargoes by local governments are no longer effective.

### Conclusion

Many of the moratoriums are necessary to protect public health or prevent water pollution and therefore should be continued.

The following areas now under moratorium have in the past shown a high failure rate on subsurface sewage disposal systems, creating health hazards and/or water pollution.



Contains  
Recycled  
Materials



JACKSON COUNTY:

Three (3) areas - listed as areas A, B, and C, and described on the attached Exhibits # 1 and 2.

JOSEPHINE COUNTY:

The Fruitdale-Harbeck-Redwood sewage disposal emergency area as described on the attached Exhibits # 3 and 4.

DOUGLAS COUNTY:

The Glide-Idlewild Park Area as shown on the attached Exhibits #5, 5A, 6 and 7.

MARION COUNTY:

City of Donald - Entire city as set forth on attached map, Exhibit # 8, and in keeping with the understanding set forth in Exhibit # 9, fourth paragraph.

BENTON COUNTY:

Southwest Corvallis Area as set forth in Exhibit # 10.

The following subdivisions:

- Princeton Heights, North Albany, Exhibit # 11.
- Kingston Heights, North Albany, Exhibit # 12.
- Kingston Heights, 1st Addition, North Albany, Exhibit # 13.
- Strawberry Acres, North Albany, Exhibit # 14.
- Strawberry Acres, 1st Addition, North Albany, Exhibit # 15.
- Country Estates, Lewisburg Area, Exhibit # 16.
- Country Estates, 1st Addition, Lewisburg Area, Exhibit # 17.
- Deerhaven Heights, S. E. of Philomath, Exhibit # 18.

LINN COUNTY:

Midway-Foster Area as set forth in Exhibits # 19, 20 and 21.

COLUMBIA COUNTY:

Scappoose Dike Land septic tank ban area as set forth in Exhibits # 22 and 23.

Conclusion - continued

Failure to act promptly will result in serious prejudice to the public interest for the specific reasons that the public will be without adequate protection from water pollution and health hazards attendant to the construction of subsurface systems in the areas of proposed moratoriums.

Pursuant to ORS 183.335(2) the Commission may adopt a temporary rule to be effective immediately upon filing with the Secretary of State and until 120 days thereafter.

The Commission's rule (if adopted) will have been preceded by the requisite thirty-day notice to all interested parties as required by ORS 454.685 and will constitute an "order" pursuant to that section. While such order will not be directed against named person(s) and generally applies to all persons within the jurisdiction of the State, it is thought that caution would require the Commission to reduce such order/rule to writing and sign the same for filing with the Secretary of State. (See draft prepared for Commission signatures in the the event adoption is the Commission's election in this matter).

During the 120-day life of the temporary rule, the Department could hold public hearings in each of the affected areas to consider whether permanent moratoriums are needed.

Recommendation

It is the Director's recommendation that the Commission act as follows:

- 1) Enter a finding that failure to act promptly will result in serious prejudice to the public interest for the specific reasons that the public will be without adequate protection from water pollution and health hazards attendant to the construction of subsurface systems in the areas of proposed moratoriums.
- 2) Adopt the aforementioned moratoriums as previously invoked by local governing bodies in listed areas, such moratoriums to take effect immediately upon filing with the Secretary of State.
- 3) Sign the enclosed draft order for filing with the Secretary of State.
- 4) Authorize the Department to conduct public hearings in each of the moratorium areas on the question of whether permanent moratoriums are needed.



KESSLER R. CANNON  
Director

TJO:md  
3/27/75

Attachments: Exhibits #1 through #23

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

Re: Moratoriums on the Construc- )  
tion of Subsurface Sewage Systems ) FINDING AND ORDER  
in Certain Designated Areas ) of the Commission

The Commission, having conducted a public hearing in this matter after affording notice to interested persons in the affected area, having considered all testimony presented therein, and having taken the matter under consideration, pursuant to ORS 454.685, enters the following Finding and Order:

The Commission FINDS that construction of subsurface sewage disposal systems should be limited in those areas described in the following Order.

The Commission hereby ORDERS as follows: Effective immediately the construction or installation of subsurface sewage systems of any type is prohibited in those areas described in the attached Exhibits numbered 1 through 23, said Exhibits being incorporated herein and made fully a part hereof. To effectuate said prohibition pursuant to ORS Chapter 183, the Commission hereby adopts the Proposed OAR Chapter 340, Section 71-020(6) attached hereto as Exhibit A. Said Proposed Rule is a temporary rule pursuant to ORS 183.335(2) and is to be promptly filed along with the requisite Findings and Reasons in the Secretary of State's Office.

Respectfully entered by the undersigned Commissioners this \_\_\_\_\_  
day of \_\_\_\_\_, 1975.

\_\_\_\_\_  
B. A. McPhillips, Chairman

\_\_\_\_\_  
Morris K. Crothers

\_\_\_\_\_  
Grace S. Phinney

\_\_\_\_\_  
Ronald M. Somers

\_\_\_\_\_  
Jacklyn L. Hallock

Attachment A

PROPOSED OAR CHAPTER 340, SECTION 71-020(6)

The Director and his authorized representatives shall not approve or issue construction permits for subsurface sewage disposal systems within the boundaries of the following geographic areas of the State of Oregon as described in Exhibits numbered 1 through 23, said Exhibits being being made fully a part hereof.

JACKSON COUNTY

Three areas; see Exhibits numbered 1 and 2.

JOSEPHINE COUNTY

The Fruitdale-Harbeck-Redwood Sewage Disposal Emergency Area; see Exhibits numbered 3 and 4.

DOUGLAS COUNTY

The Glide-Ideyld Park Area; see Exhibits numbered 5, 5A, 6, and 7.

MARION COUNTY

The City of Donald; see Exhibits numbered 8 and 9.

BENTON COUNTY

Southwest Corvallis Area; see Exhibit numbered 10 and 10A.

The following subdivisions:

Princeton Heights, North Albany; see Exhibit numbered 11.

Kingston Heights, North Albany; see Exhibit numbered 12.

Kingston Heights, 1st Addition, North Albany; see Exhibit numbered 13.

Strawberry Acres, North Albany; see Exhibit numbered 14.

Strawberry Acres, 1st Addition, North Albany; see Exhibit numbered 15.

Country Estates, Lewisburg Area; see Exhibit numbered 16.

Country Estates, 1st Addition, Lewisburg Area; see Exhibit numbered 17.

Deerhaven Heights, S. E. of Philomath; see Exhibit numbered 18.

Attachment A

Page two

PROPOSED OAR CHAPTER 340, SECTION 71-020(6) Cont.

LINN COUNTY

The Midway-Foster Area; see Exhibits numbered 19, 20, and 21.

COLUMBIA COUNTY

The Scappoose Dike Land Septic Tank Ban Area; see Exhibits  
numbered 22 and 23.

INSTALLATION OF SEPTIC SYSTEMS IS HEREBY PROHIBITED AS OF MARCH 21, 1973,  
AS DESCRIBED BELOW:

Areas A, B, and C of Phase I are identified as follows:

- Area A. All of Sections 23, 26, 27, 34 and 35 in Township 37 South, Range 2 West of the Willamette Meridian, and
- All those portions of Sections 24, 25, 36 in Township 37 South, Range 2 West of the Willamette Meridian outside the incorporated city limits of Medford, Oregon, and
- All those portions of Section 31 in Township 37 South, Range 1 West of the Willamette Meridian outside the incorporated city limits of Medford, Oregon, and
- All of Sections 1 and 2 in Township 38 South, Range 2 West of the Willamette Meridian, and
- All of Section 6 in Township 38 South, Range 1 West of the Willamette Meridian.
- Area B. The entire area lying between the old Rogue River Highway (99), sometimes referred to as Rogue Valley Blvd., and Interstate Highway Number 5, South of the Central Point city limits and North of the Medford city limits.
- Area C. All of Sections 22, 25, 26, 27, 35 and 36 in Township 36 South, Range 2 West of the Willamette Meridian.
- That portion of Section 34, in Township 36 South, Range 2 West of the Willamette Meridian lying East of Interstate Highway Number 5.
- All of Sections 30 and 31 in Township 36 South, Range 1 West of the Willamette Meridian.
- All those portions of Sections 1 and 2 in Township 37 South, Range 2 West of the Willamette Meridian lying East of Interstate Highway Number 5 and outside the incorporated city limits of Medford, Oregon.
- That portion of Section 6, in Township 37 South, Range 1 West of the Willamette Meridian lying outside the incorporated city limits of Medford, Oregon.

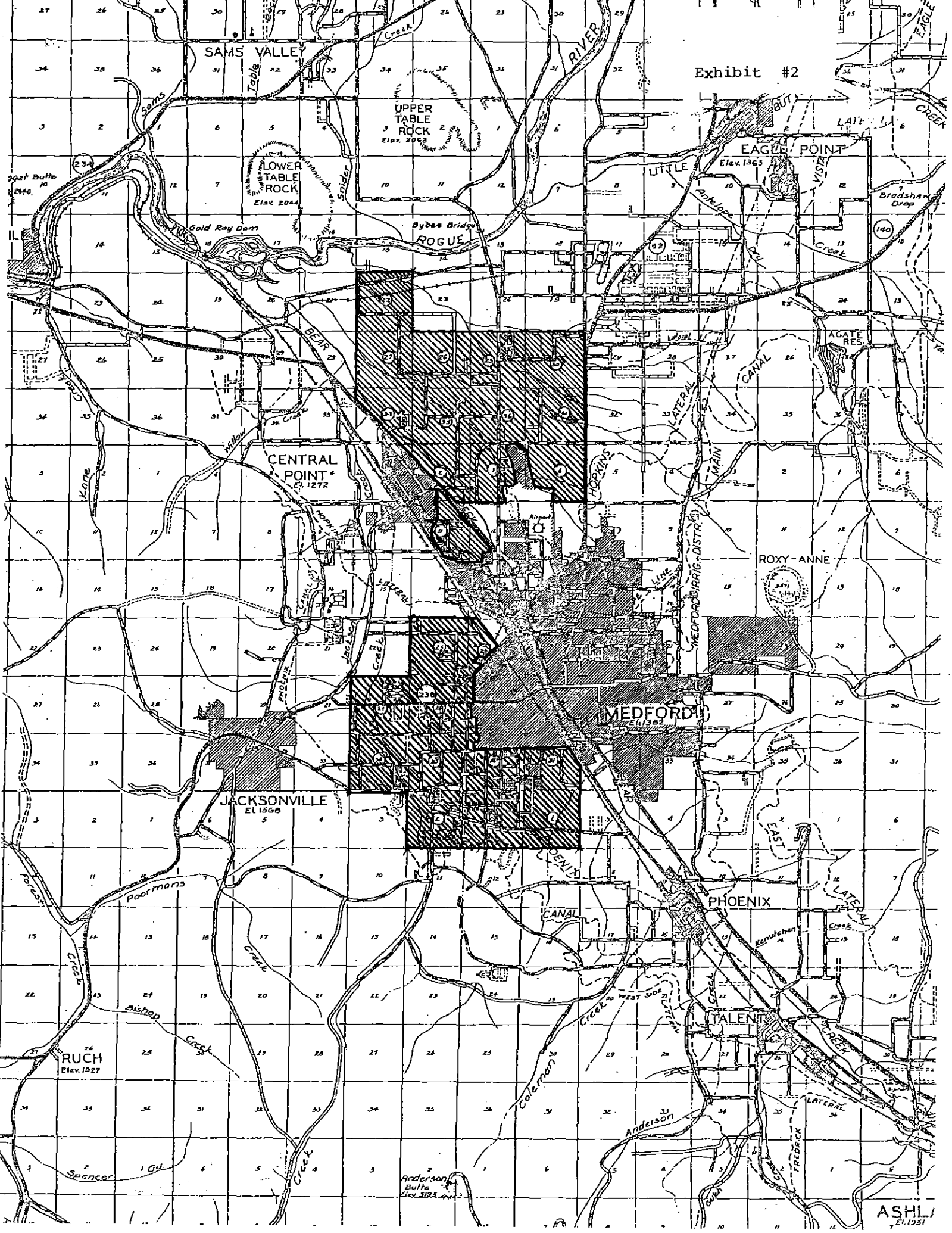


Exhibit #3

Fruitdale-Harbeck-Redwood Sewage Disposal Emergency Area

Description: Boundary:

Beginning at the point on the Rogue River which is due North of the northernmost end of Dowell Road; thence easterly along the Rogue River to the point on the Rogue River due North of the point of the intersection of Fruitdale Drive and Canyon Drive; thence due South to the point of intersection of Fruitdale Drive and Canyon Drive; thence southwesterly along Canyon Drive to the point of its intersection with Highline Canal; thence westerly along Highline Canal to the point of its intersection with Allen Creek; thence northerly along Allen Creek to the point of its intersection with Redwood Highway; thence westerly along Redwood Highway to the point of its intersection with Dowell Road; thence due North to the point of beginning:

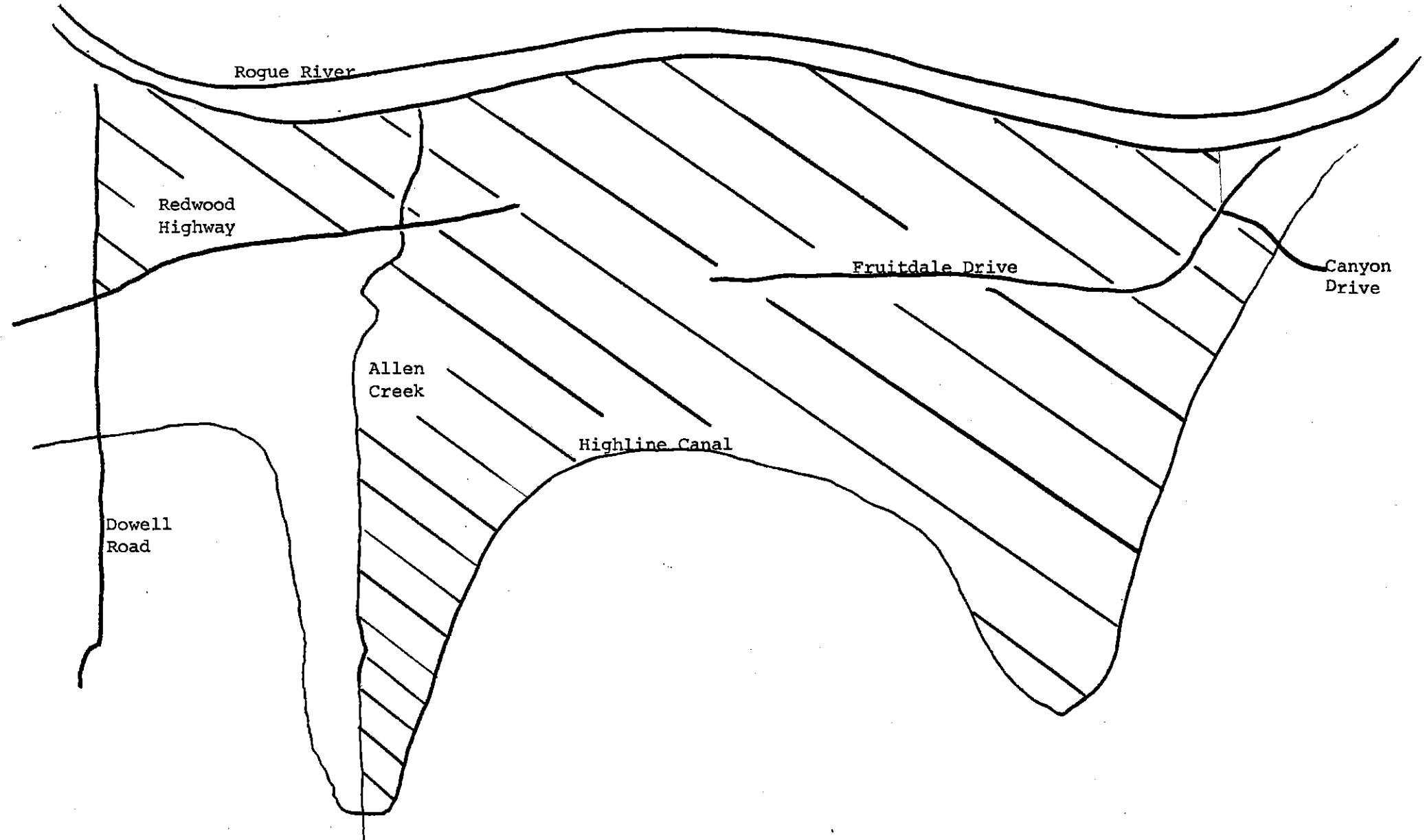
The above described area is located within Township 36 S, Range 5 W and Range 6 W, Willamette Meridian. All topographic features are set forth in the Grants Pass Urban Area Map of the Oregon State Highway Division (December, 1969).



Exhibit #4

See Grants Pass Urban Area Map  
Oregon State Highway Department  
December 1969

Fruitdale-Harbeck-Redwood  
Sewage Disposal Emergency Area  
Located in Township 36 S, Range 5 W  
and Range 6 W, Willamette Meridian



IN THE BOARD OF COUNTY COMMISSIONERS OF DOUGLAS COUNTY, OREGON

In the Matter of the Moratorium on Septic )  
Systems in the Glide Area of Douglas County ) ORDER

It appearing to the Board of County Commissioners that in the interest of public health and safety the Douglas County Health Officer has declared a moratorium on subsurface sewage disposal systems in the Glide area of Douglas County, copy of said declaration being attached hereto; and

It being the opinion of the Board that said declaration should be filed with the County Clerk as public record;

NOW, THEREFORE, IT IS HEREBY ORDERED that the declaration hereinabove described and attached hereto be recorded in the County Court Journal and placed on file in the office of the County Clerk of Douglas County.

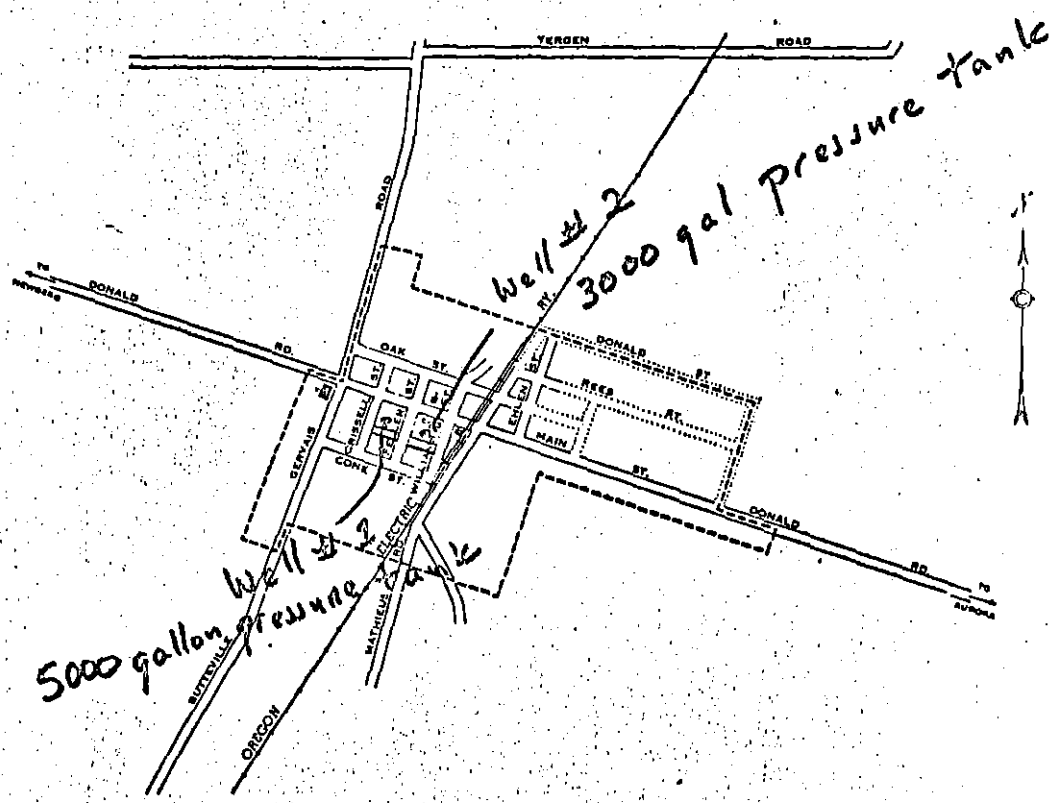
Dated this 5th day of October, 1973.

BOARD OF COUNTY COMMISSIONERS  
OF DOUGLAS COUNTY, OREGON

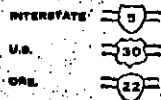
/s/ \_\_\_\_\_  
Al Flegel, Chairman

/s/ \_\_\_\_\_  
Ray E. Doerner, Commissioner

/s/ \_\_\_\_\_  
L. W. Michaels, Commissioner



**SIGNED ROUTES**



**LEGEND**

- Post Office
- Public Bldg.
- School
- R. R. Depot
- Street open for travel.
- Street dedicated but not open.
- City Limits.
- City Hall
- Court House
- Armory
- Library

**DONALD**

MARION COUNTY, OREGON

OFFICE OF THE  
 OREGON STATE HIGHWAY DEPARTMENT  
 TRAFFIC ENGINEERING DIVISION  
 IN COOPERATION WITH THE  
 U.S. DEPARTMENT OF COMMERCE  
 BUREAU OF PUBLIC ROADS

Population 201

Scale 1/4" = 100'

January 1, 1961

Salem District Office  
2595 State Street  
Salem, OR 97301

DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-

ROBERT W. STRAUB

February 14, 1975

Mr. K. Charles Buster  
City Recorder  
P.O. Box 388  
Donald, OR 97020

RE: WQ - City of Donald  
Marion County  
Salem District - NW Region

Dear Mr. Buster:

This will confirm our telephone discussion of February 12, 1975, regarding the Department's involvement with the City of Donald, our findings and proposed approach toward solving the serious problem of improper sewage disposal within the city.

The Department of Environmental Quality first became aware that Donald was experiencing sewage problems in December, 1971 when complaints were publicly made at the city council meeting. Since that meeting the Department, in conjunction with the Marion County Health Department and members of the city council, has verified that a substantial number of older homes discharge their sewage directly into field tiles and storm drains underlying the city.

During our investigations, we have discovered an equally serious problem in the newer developments where people have attempted to install proper septic tank and drainfield systems. For example, a survey was made on the North Marion Junior Estates Subdivision in March, 1974. Our preliminary findings revealed approximately 50% of these new homes had failing systems due to the high ground water and relatively slow-draining soil conditions that are prevalent in the Donald area.

As you know, the City of Donald is an urbanized area with most lot sizes averaging between 5,000 to 10,000 square feet. Based on the adverse seasonal climatic conditions, relatively slow soil drainage, and septic tank failures in the newer developments of Donald, the Marion County Health Department requested the city to impose a moratorium on all new construction. This request was formally implemented during your April, 1974 city council meeting and your decision is supported by this Department.

COPY

Mr. K. Charles Buster  
Page 2  
February 14, 1975

In regard to correcting the problems, the Marion County Health Department and the Department of Environmental Quality have serious reservations about requiring the homes that are presently experiencing sewage failures to attempt repairs to their systems. It is our opinion that this effort would not be successful and more problems would be created than resolved, due to the seasonal high ground water conditions, poorly drained soil conditions, and small lot sizes.

It is our combined opinion that the only permanent solution to the sewage problems in Donald is the installation of a sewage collection and treatment facility. Delays in providing appropriate sewage facilities to alleviate the dangerous health hazard situation in the Donald area can only lead to much higher costs to the residents with the solution remaining unchanged. This Department (and all the other agencies involved) is looking forward to working with you to provide both technical and financial assistance in every way possible.

If there are any other questions regarding the above matters, please feel free to contact this office at 378-8240, Salem.

Cordially,

KESSLER R. CANNON  
Director

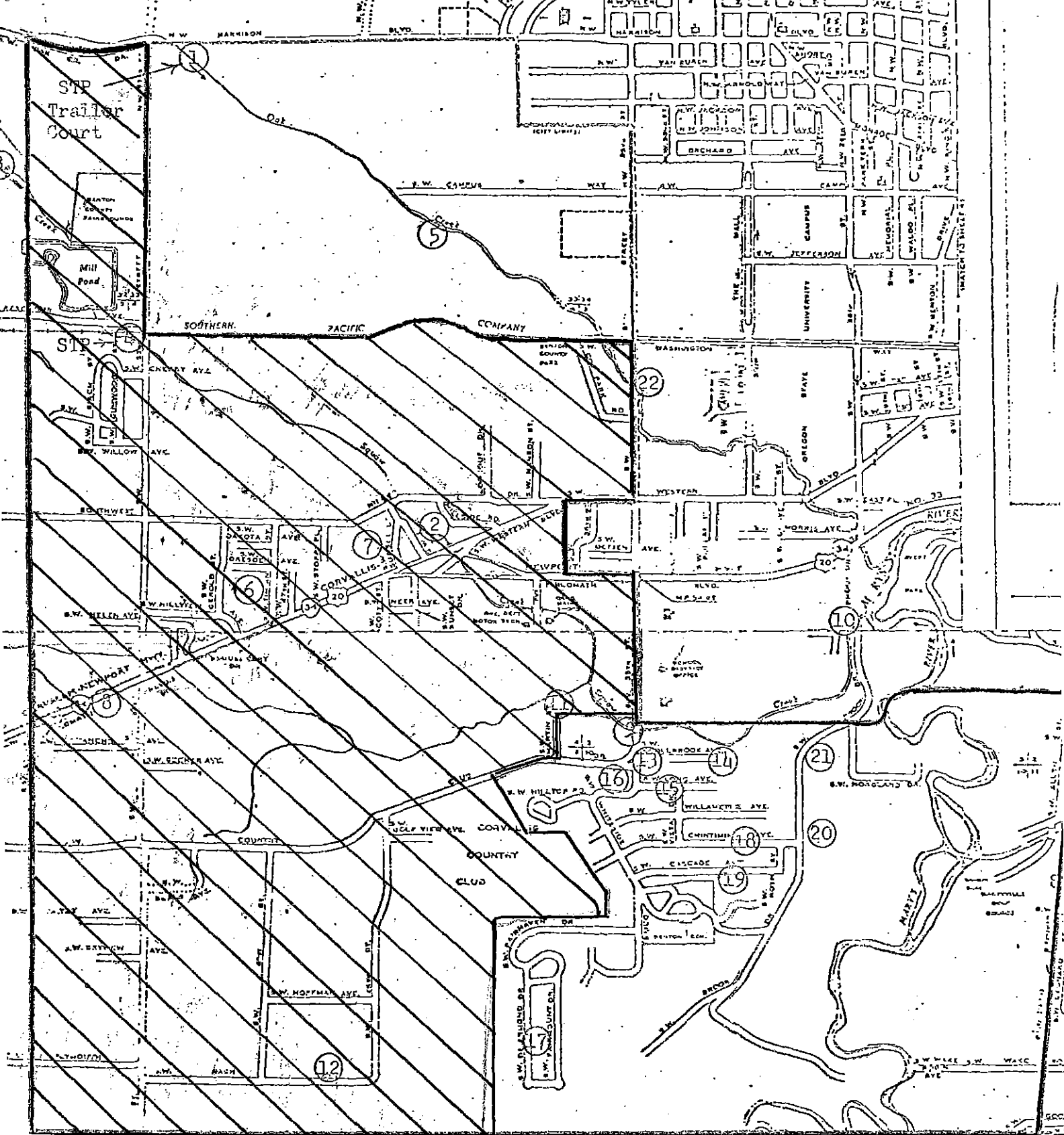
Russell H. Fetrow, Jr., P.E.  
Salem District Manager

RHF/GWM/ks

cc: E.J. Weathersbee, Administrator, NW Region Office  
Laverne Miller, State Division of Health, Portland  
C.S. Sherman, Marion County Health Department  
Bill Daniels, Farmers Home Administration, 1218 SW Washington St.,  
Portland, 97205

**R E C E I V E D**  
MAR 6 1975

Subsurface Sewage Division  
Dept. of Environmental Quality



BACTERIOLOGICAL SAMPLING LOCATIONS

Exhibit #10

STP - Sewage Treatment Plant

*Survey Area*

PRINCETON HEIGHTS SUBDIVISION

SEC. 26, T.10 S., R.4 W., W.M.

BENTON COUNTY, OREGON

SCALE 1" = 100'

KNOW ALL MEN BY THESE PRESENTS:

DEED

THAT WE, BOMARC FARMS, INC. HAVE THIS DAY MADE AND DO HEREBY SUBDIVISION, BENTON COUNTY, OREGON, CONSISTING OF BLOCKS, LOTS, AND THAT THE STREETS AS SHOWN ARE HEREBY CONVEYED, SET APART AND THAT ALL TAXES AGAINST SAID PROPERTY HAVE BEEN PAID, THE UTILITY EASEMENTS AS SHOWN ON THIS PLAT SHALL BE CONSIDERED AS BEING THIS 19<sup>TH</sup> DAY OF OCTOBER A.D. 1960.

*John Prince*  
PRESIDENT

STATE OF OREGON  
COUNTY OF

ON THIS 19<sup>TH</sup> DAY OF OCTOBER A.D. 1960 PERSONALLY APPEARED BEFORE WITHIN NAMED, JOHN PRINCE, SAM FRAGER AND WILLIAM SWIN, TO ME WHO EXECUTED THE FOREGOING DEDICATION AND WHO ACKNOWLEDGED TO ME VOLUNTARILY FOR THE USES AND PURPOSES THEREIN NAMED.

SURVEYORS CERTIFICATE  
STATE OF OREGON  
COUNTY OF BENTON

I, B. OSBURN SHAW, BEING FIRST DULY SWORN SAY LANDS AS REPRESENTED ON THIS PLAT AND THAT I HAVE SET AN IRON PIPE, 2" IN DIAMETER AND 36" LONG. FROM THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER OF SECTION 26, T.10 S., R.4 W., W.M. BENTON COUNTY, OREGON; THENCE N89°47'W, 57.99 FEET; THENCE N88.65 FEET; THENCE SOUTHEASTERLY ALONG A 21.45 FEET; THENCE SOUTHEASTERLY ALONG A 60.00 FEET TO THE POINT OF BEGINNING.

REGISTERED  
OREGON  
LAND SURVEYOR

*B. Osburn Shaw*  
OCTOBER 4 1967  
B. OSBURN SHAW  
431

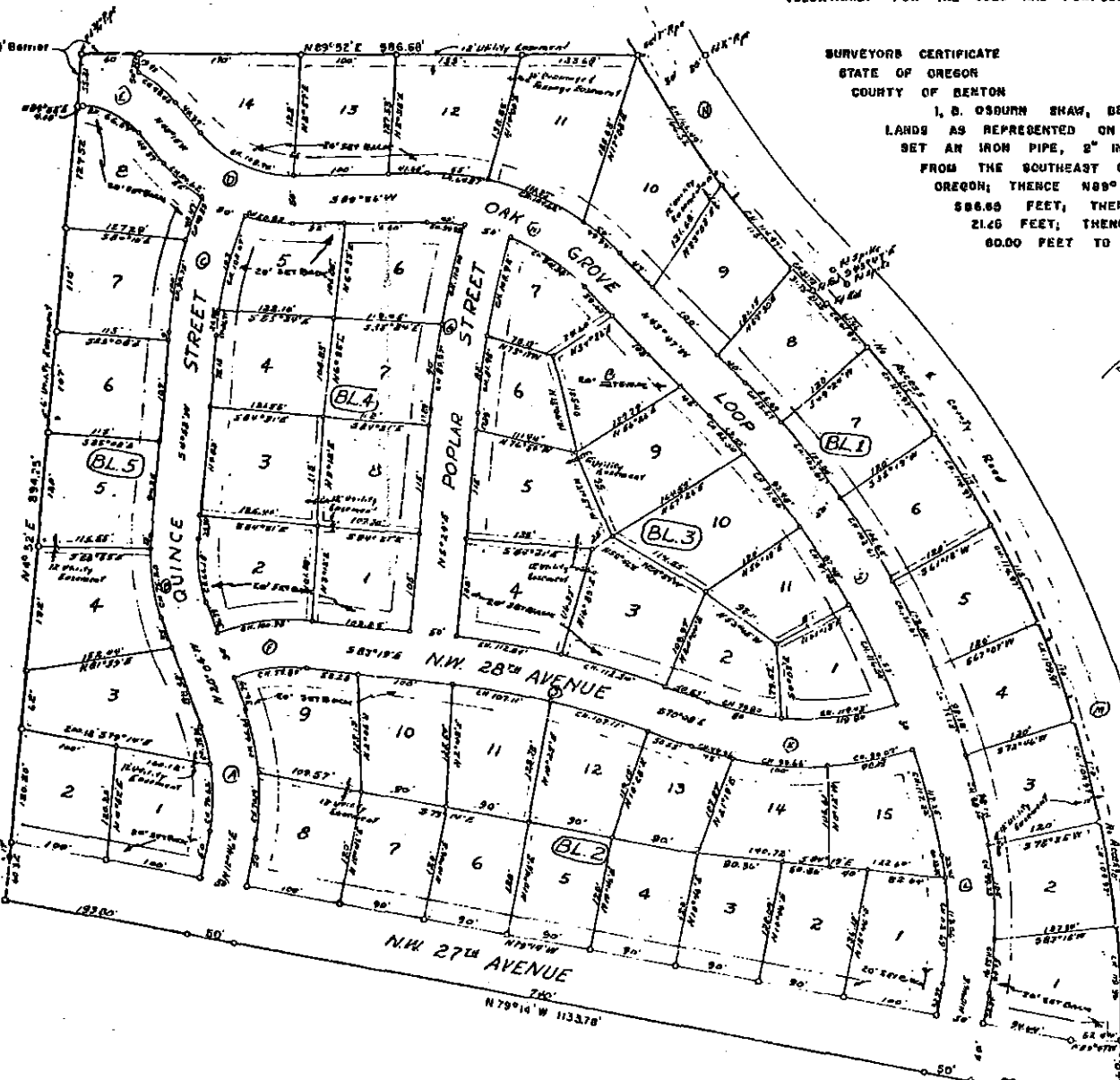
THIS PLAT APPROVED BY COURT OF BENTON COUNTY, ENTERED THIS 13<sup>TH</sup> DAY OF

*John Prince*  
COUNTY JUDGE  
*Walter Jones*  
COUNTY COMMISSIONER  
*Malcolm...*  
COUNTY CLERK

THIS PLAT APPROVED  
March A.D.

*Paul C...*  
COUNTY CLERK  
*Charles...*  
COUNTY CLERK

Curve	Angle
A	30°50'
B	20°46'
C	20°53'
D	50°14'
E	49°55'
F	26°45'



THIS PLAT APPROVED THIS 28 DAY OF February A.D. 1961.

*Ralph J. Lewis*  
CHAIRMAN  
CITY PLANNING COMMISSION  
ALSANY, OREGON



# KINGSTON HEIGHTS SUBDIVISION

SEC. 25, T. 10 S., R. 4 W., W. M.

BENTON COUNTY, OREGON

SCALE 1" = 100'

CURVE	ROAD & CURVE DATA:		DATA:	
	Δ	RAD	L	T
1	49°00'	156.32'	712.4'	133.66'
2	49°01'30"	158.92'	72.47'	135.97'
3	8°30'	174.00'	12.93'	25.81'
4	5°04'30"	107.39'	50.48'	94.24'
5	30°45'	108.00'	28.87'	56.33'
6	44°30'	100.00'	40.91'	77.68'
7	75°43'	180.43'	124.75'	212.09'
8	21°45'	110.35'	21.09'	41.89'
9	9°00'	230.00'	38.49'	76.27'
10	27°30'	143.03'	35.00'	68.64'
11	54°00'	140.00'	71.33'	131.94'
12	45°30'	160.00'	67.09'	127.05'
13	30°00'	100.00'	26.79'	52.36'
14	30°00'	100.00'	26.79'	52.36'

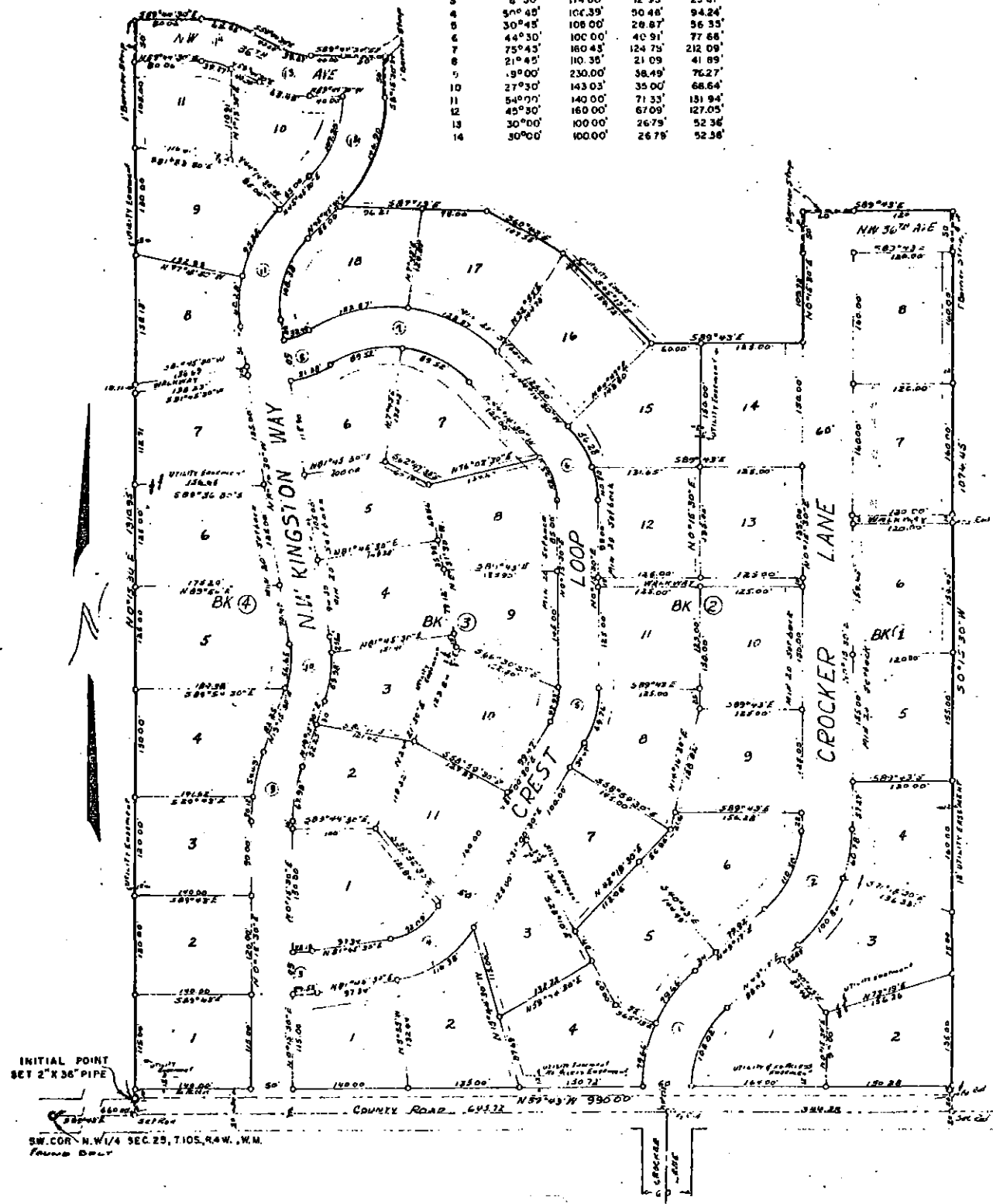


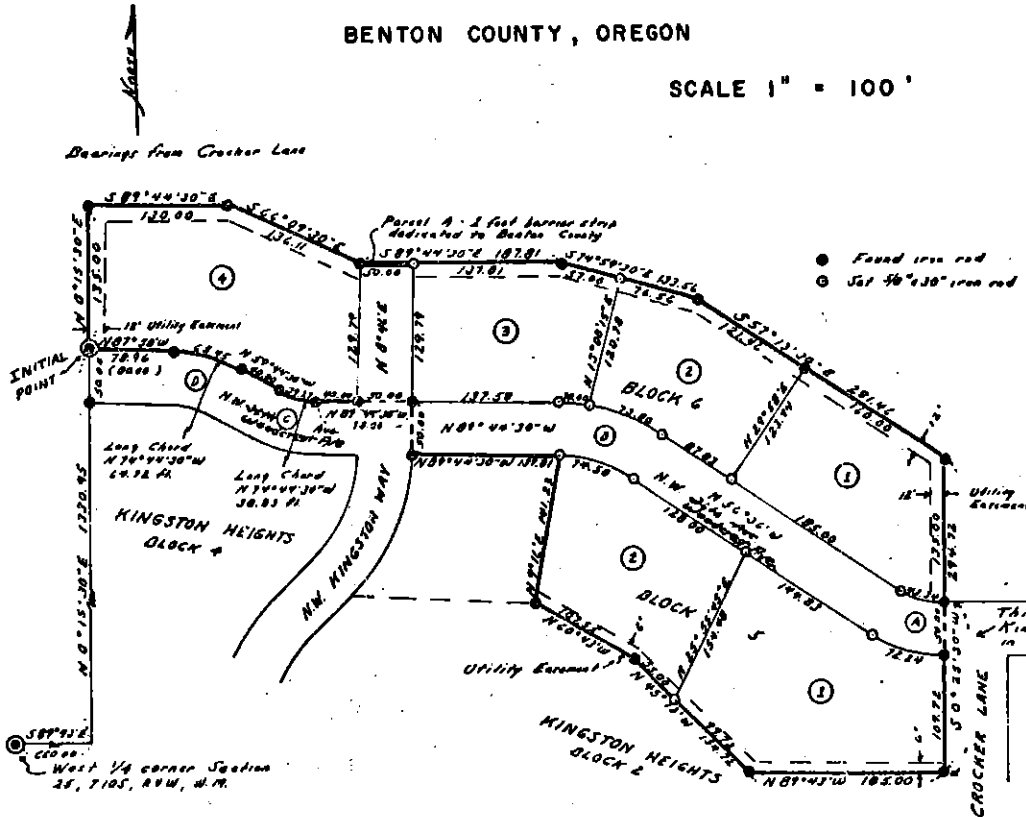
Exhibit #12

1ST ADDITION TO KINGSTON HEIGHTS SUBDIVISION

SECTION 25, T10S, R4W, W.M.

BENTON COUNTY, OREGON

SCALE 1" = 100'



UTILITY EASEMENT

A perpetual easement is reserved for utility installation, maintenance and replacement over and under the ground in the utility strips as shown and marked on this plat. This reservation shall include the right to install and maintain guys and guy anchors along all lot lines where necessary to facilitate standard pole line construction. It shall further include the rights of ingress to and egress from any or all lots in any manner necessary for the purpose of construction, maintenance, or removal of utility equipment, provided that the utility using this easement shall restore the property as near as practicable to its original condition. Maintenance shall include the right to remove trees, limbs of trees, undergrowth or other obstructions that overhang or otherwise endanger utility equipment.

I hereby certify that all taxes on the within described property are paid ~~to~~ this 30th day of June A.D. 1972

John T. Dolan, Benton County Sheriff  
By Janis Middlebury, Deputy

STATE OF OREGON 99  
COUNTY OF BENTON

I hereby certify that the within was received and duly recorded by me in Benton County Records, Book of Plats, Volume \_\_\_\_\_ Page \_\_\_\_\_ on the \_\_\_\_\_ day of \_\_\_\_\_ A.D. 1972

County Recorder

CENTER LINE CURVE DATA

MUS	Δ	TANGENT	LENGTH
.00	33° 07'	29.73	57.80
.15	33° 34' 30"	46.80	69.15
.00	30° 00'	26.78	52.39
.00	30° 00'	26.78	52.39

This plat approved this 27th day of February A.D. 1972

W. H. Williams, Planning Commission, Albany, Oregon  
Richard J. ..., City Engineer, Albany, Oregon

Raymond ...

19846  
STATE OF OREGON }  
County of Benton }  
I hereby certify that the within instrument was received for record and recorded in book \_\_\_\_\_ of Plate 55 of said county on the \_\_\_\_\_ day of \_\_\_\_\_ A.D. 1972  
FRED W. KINGSTON, County Clerk  
John T. Dolan

KNOW ALL MEN  
That we, JAKE PRINCE  
sold out 1ST ADDITION  
size, shape and dimension  
of the public forever  
The utility and drainage  
That all taxes and

STATE OF OREGON  
COUNTY OF BENTON

On this 15th day of June, 1972  
Jake Prince, Willing  
dedication, and wh

STATE OF OREGON  
COUNTY OF BENTON

I, James W. Prince  
as 1ST ADDITION

Beginning at the Initial Point  
and also being 38.85 feet  
Thence N 0° 15' 30" E 187.81 feet  
feet; thence along  
and N 60° 43' W  
Kingston Way; then  
90.00 feet; then  
38.85 feet; then  
curve to the left  
78.96 feet to the

This plat approved  
and entered this

This plat approved  
Charles ...  
Field

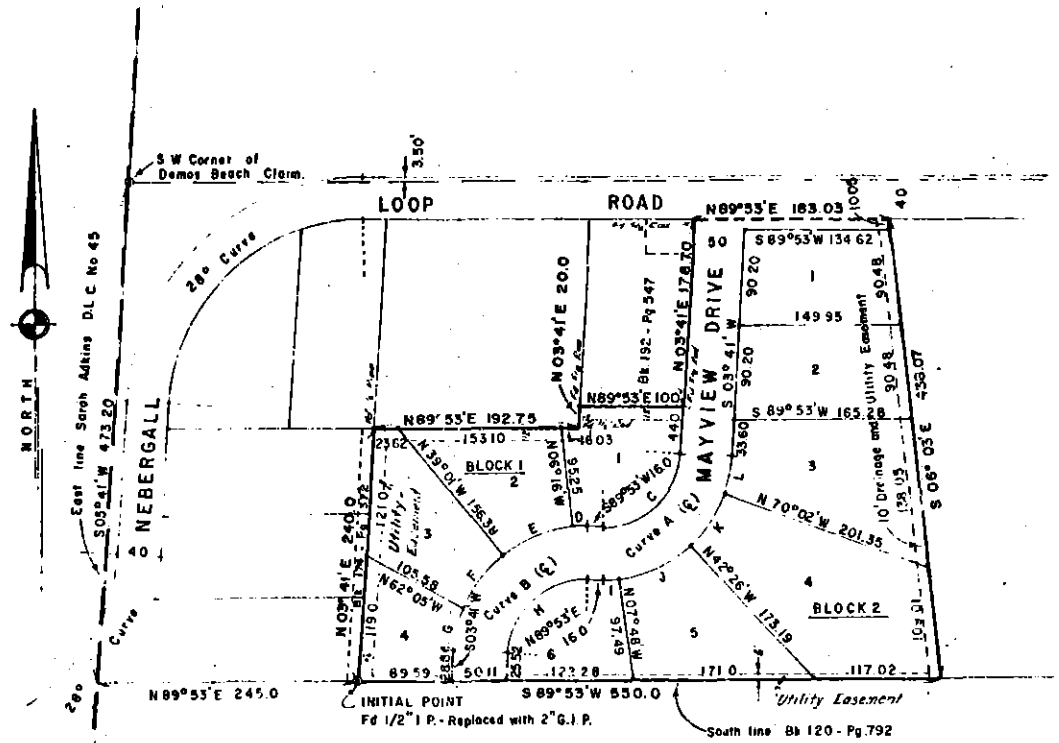
# STRAWBERRY ACRES

Section 31, T10S, R3W, W.M.

Benton County, Oregon

Scale 1" = 100'

November 1964.

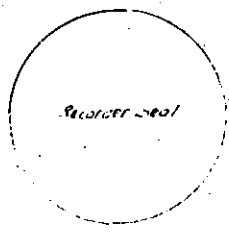


CURVE	RADIUS	Δ	CHORD	ARC
A	100	86° 12'	S 46° 47' W 136.65	150.45
B	100	86° 12'	S 46° 47' W 136.65	150.45
C	75	86° 12'	S 46° 47' W 102.49	112.84
D	125	06° 09'	S 86° 48' 30" W 13.41	13.42
E	125	32° 45'	S 67° 21' 30" W 70.48	71.45
F	125	28° 12'	S 36° 53' W 60.91	61.52
G	125	19° 06'	S 13° 14' W 41.48	41.67
H	75	06° 12'	N 46° 47' E 102.49	112.84
I	125	07° 41'	N 86° 02' 30" E 16.75	16.76
J	125	34° 38'	N 64° 53' E 74.41	75.56
K	125	27° 56'	N 33° 46' E 59.63	60.21
L	125	16° 17'	N 11° 49' 30" E 35.41	35.53

STATE OF OREGON  
 County of Benton  
 I, *[Signature]*, County Clerk, do hereby certify that the within and foregoing was recorded for the year  
 1965 OCT 23 PM 10 07

6 *[Signature]*  
 10 *[Signature]*  
 BENTON COUNTY CLERK  
*[Signature]*

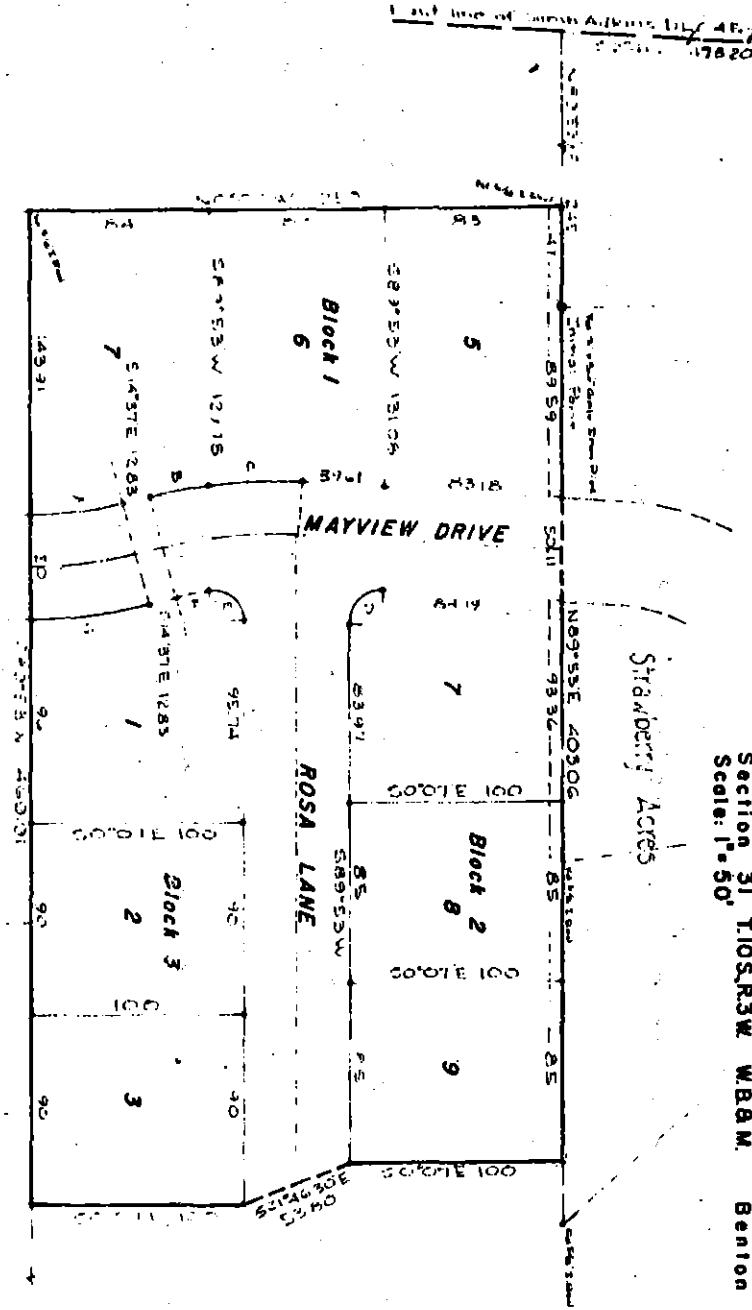
that the within was received and duly recorded by me  
 Miss Bessie M. Platts, Notary Public, on  
 1965, at \_\_\_\_\_ o'clock \_\_\_\_\_



Southwest corner  
of Section 31, T10S, R3W  
W.B.A.M.

# FIRST ADDITION TO STRAWBERRY ACRES

Section 31 T10S, R3W W.B.A.M. Benion County, Oregon  
Scale: 1" = 50'  
February 17, 1971



CURVE	MADE	DELTA	CHORD	ARC
1	175	1430	4417	4423
2	225	11215	2627	2624
3	15	110545	2451	2456
4	14	9344	2451	2456
5	15	47920	2451	2456
6	115	8700	1521	1521
7	225	47920	5079	5092

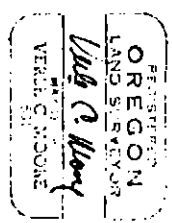
Ranch Acres

SURVEYOR'S CERTIFICATE

## APPROVALS

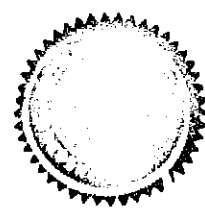
This plat approved this \_\_\_\_\_ day of \_\_\_\_\_ 1971.  
 Planning Commission, Albany County  
 City and County of Albany, Oregon  
 Mayor: \_\_\_\_\_  
 City Clerk: \_\_\_\_\_

Benion County  
 Benion County Commission  
 Benion County Commissioner  
 Benion County Clerk  
 Benion County Treasurer  
 Benion County Surveyor



**DEDICATION**  
 I, \_\_\_\_\_, do hereby dedicate to the public use of the people of Benion County, Oregon, the above described land, and I do hereby certify that the public use of the same is in the best interest of the people of Benion County, Oregon.

**ACKNOWLEDGEMENT**  
 I, \_\_\_\_\_, do hereby acknowledge the above described land as being dedicated to the public use of the people of Benion County, Oregon.

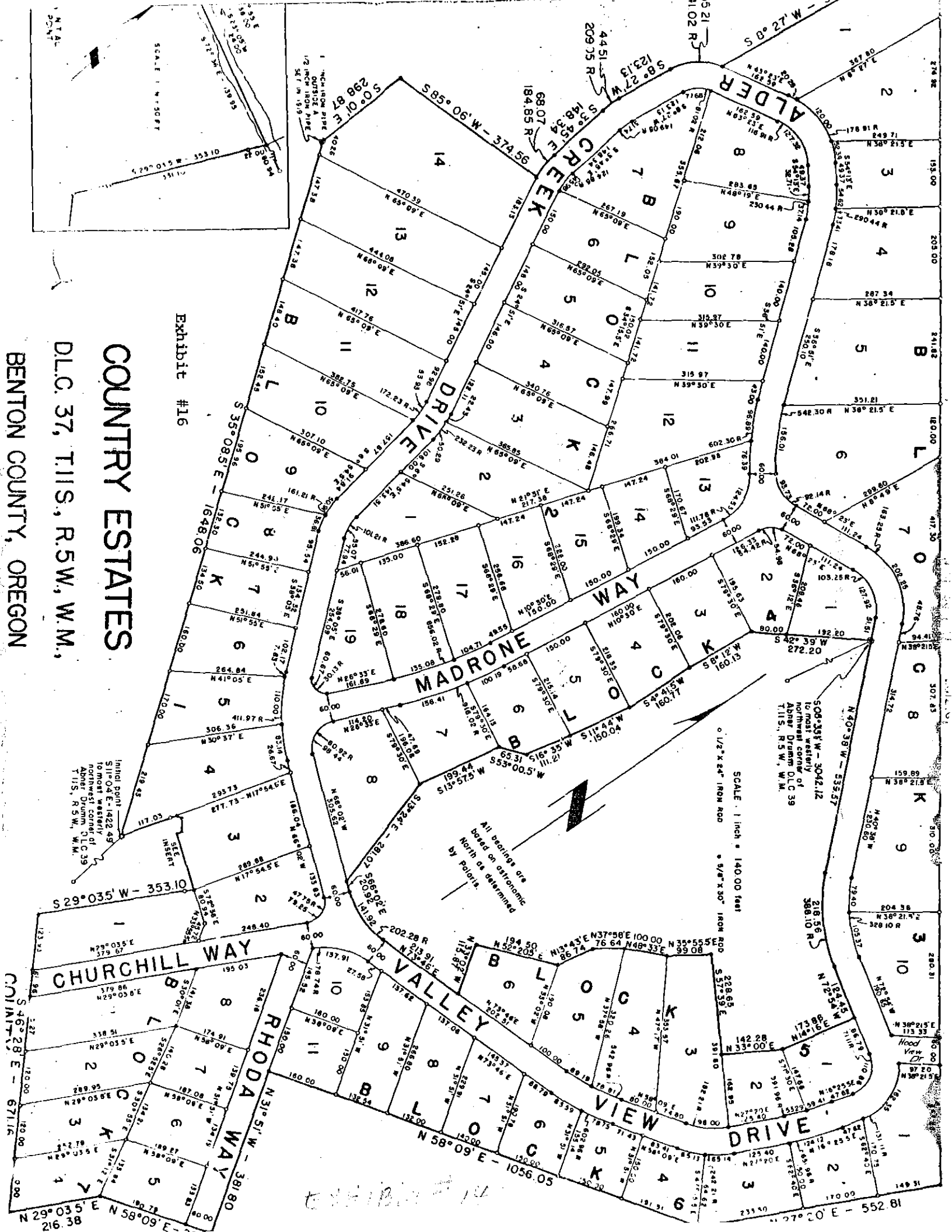


State of Oregon  
 County of Benion  
 I, \_\_\_\_\_, do hereby certify that the above described land is being dedicated to the public use of the people of Benion County, Oregon, and that the same is in the best interest of the people of Benion County, Oregon.

Exhibit #15

**COUNTRY ESTATES**  
D.L.C. 37, T.11S., R.5W., W.M.,  
BENTON COUNTY, OREGON

Exhibit #16



Initial point  
S11°04'E - 1422.49'  
to most westerly  
northwest corner of  
Admiral's D.L.C. 39  
T.11S., R.5W., W.M.

All bearings are  
based on astronomic  
North as determined  
by Polaris.

SCALE - 1 inch = 140.00 feet

506°31'W - 3042.12'  
to most westerly  
northwest corner of  
Admiral's D.L.C. 39  
T.11S., R.5W., W.M.

N 29°03'5\"

N 58°09' E - 552.81

S 46°28' E - 671.14

S 29°03'5\"

N 58°09' E - 552.81

S 46°28' E - 671.14

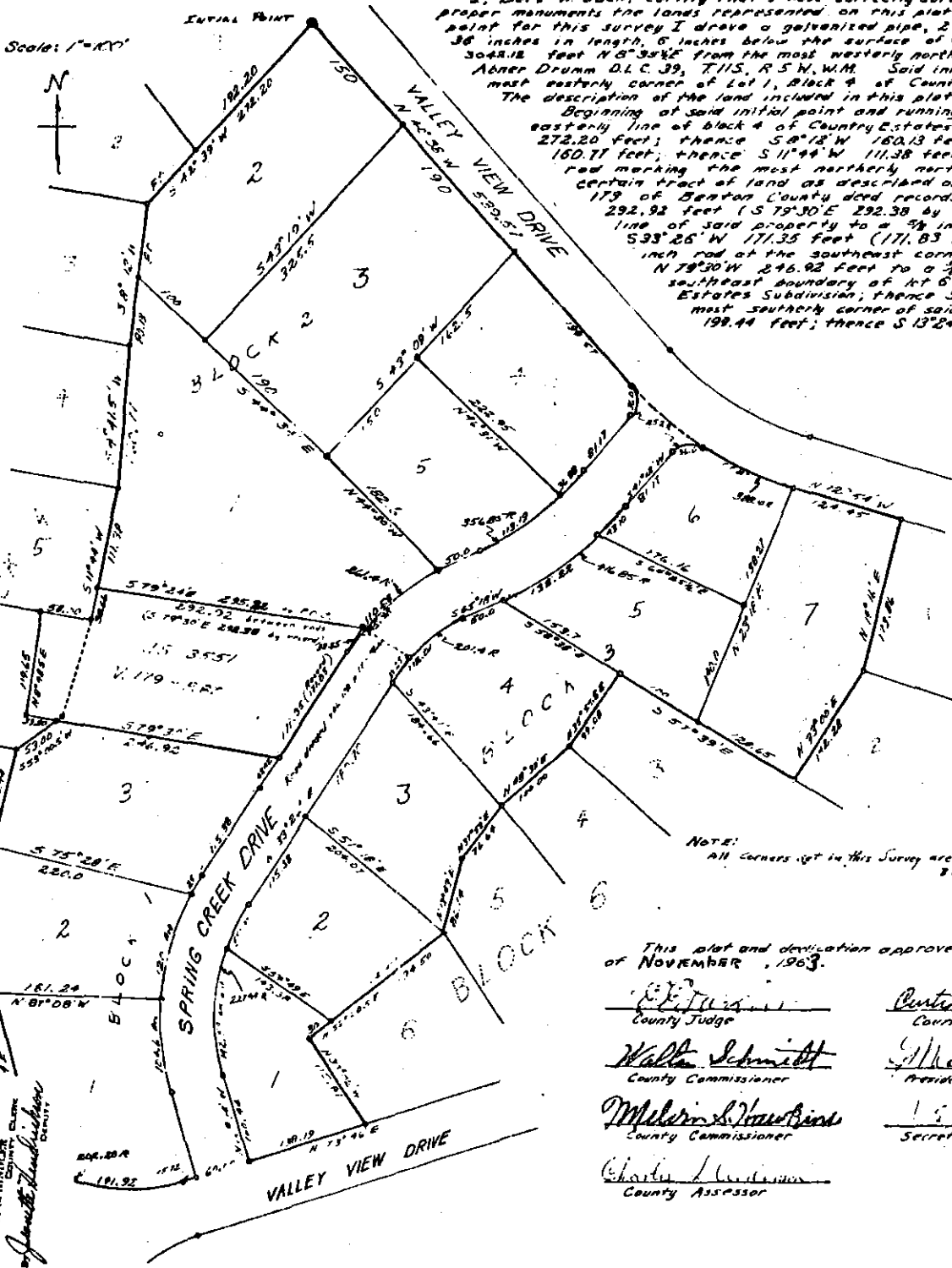
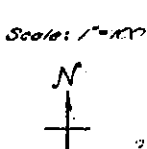
S 29°03'5\"

N 58°09' E - 552.81

S 46°28' E - 671.14

S 29°03'5\"

# FIRST ADDITION TO COUNTRY ESTATES D.L.C. 37, T.11S., R.5W., W.M., BENTON COUNTY, OR.



I, Bert W. Udell, certify that I have correctly surveyed and marked with proper monuments the lands represented on this plat; that as an initial point for this survey I drove a galvanized pipe, 2 inches in diameter and 36 inches in length, 6 inches below the surface of the ground at a point 3048.18 feet N 6° 30' E from the most westerly northwest corner of the Abner Drumm D.L.C. 39, T.11S., R.5W., W.M. Said initial point being also the most easterly corner of Lot 1, Block 4 of Country Estates Subdivision. The description of the land included in this plat is as follows:

Beginning at said initial point and running thence along the easterly line of block 4 of Country Estates Subdivision S 42° 39' W 272.20 feet; thence S 8° 18' W 160.13 feet; thence S 4° 41.5' W 160.71 feet; thence S 11° 44' W 111.38 feet to a 3/8 inch iron rod marking the most northerly northwest corner of that certain tract of land as described on page 87 of volume 179 of Benton County deed records; thence S 79° 24' E 292.92 feet (S 79° 30' E 292.38 feet by record) along the northerly line of said property to a 3/8 inch iron rod; thence S 33° 26' W 171.35 feet (171.83 feet by record) to a 3/8 inch iron rod at the southeast corner of said tract; thence N 79° 30' W 246.92 feet to a 3/8 inch iron rod on the southeast boundary of lot 6 of block 4 of Country Estates Subdivision; thence S 53° 00.5' W 53 feet to the most southerly corner of said lot 6; thence S 18° 51.5' W 198.44 feet; thence S 13° 24' E 281.07 feet; thence

S 66° 08' E 20 along a 202.28 (139.33 feet) to iron rod at the Subdivision; thence N 13° 43' E 100.00 feet; thence S 72° 54' W 124.1 foot radius curve; thence 7.5e above which was deeded page 783 of is entirely on this plat.

Subscribed on

Know all men by these presents husband and wife, and COUNTRY ESTATES, Inc. owners of the lands described and surveyed and platted as shown hereon to the public use forever. In witness hereof, we do hereon NOVEMBER, 1963.

Scott Churchill  
by Rhoda Churchill attorney  
Rhoda Churchill,  
COUNTRY ESTATES, Inc.  
William Y. Frank  
president  
W. J. Kinney  
secretary

NOTE: All corners set in this survey are 8 1/2 inch iron rods.  
This plat and dedication approved this 26<sup>th</sup> day of NOVEMBER, 1963.

Bert W. Udell  
County Surveyor  
Walter Schmidt  
County Commissioner  
Melvin S. Newland  
County Commissioner  
Charles Lewis  
County Assessor  
Berta C. Hanson  
County Surveyor  
W. J. Kinney  
President, Planning Commission  
W. J. Kinney  
Secretary, Planning Commission

On the 1<sup>st</sup> day of NOVEMBER, 1963, before me, William Y. Frank, Esq., a Notary Public for Benton County, Oregon, William Y. Frank, President, and W. J. Kinney, Secretary, of COUNTRY ESTATES, Inc., who were sworn, did say and declare that the description hereon is a true and correct description of the land and premises last written on this plat.

My Commission Expires

I hereby certify that this is a true and correct copy of the original plat on file in my office.

Exhibit #17

DEERHAVEN HEIGHTS

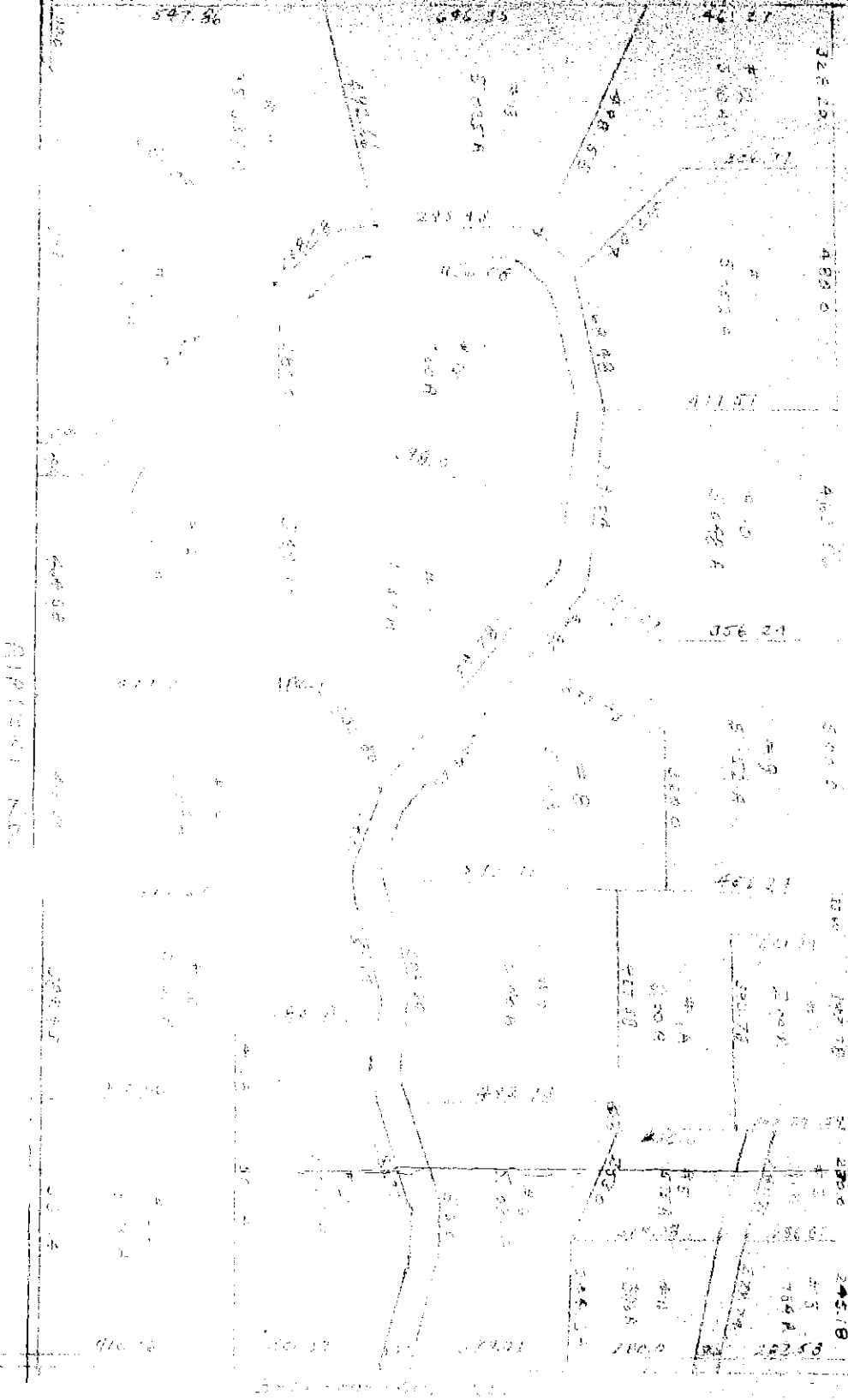


Exhibit #18

# LINN COUNTY HEALTH DEPARTMENT

Exhibit #19

COURT HOUSE  
ALBANY, OREGON

97321

May 23, 1973

NEWS RELEASE

AN IMMEDIATE MORATORIUM IS HEREBY DECLARED BY THE LINN COUNTY HEALTH DEPARTMENT ON THE ISSUANCE OF SEPTIC TANK PERMITS IN THE MIDWAY-FOSTER AREA, LINN COUNTY. THIS AREA HAD A COMMUNITY SANITATION SURVEY MARCH 19-30, 1973, WITH THE SURVEY A COMBINED EFFORT OF THE LINN COUNTY HEALTH DEPARTMENT, THE STATE SANITATION SECTION AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY, AND INVOLVING 225 RESIDENCES.

THESE PRELIMINARY FINDINGS INDICATE THAT THERE IS THE POSSIBILITY THAT A HEALTH HAZARD, AS DEFINED BY THE 1973 RULES GOVERNING THE SUBSURFACE DISPOSAL OF SEWAGE, EXISTS. HEALTH HAZARD DEFINED MEANS A CONDITION WHICH PRESENTS THE POSSIBILITY OF EXPOSING THE PUBLIC TO AN ILLNESS, DISORDER, OR DISABILITY NOT LIMITED TO BACTERIA, VIRUSES, POLLUTANTS OR OTHER NOXIOUS WASTES NORMALLY FOUND IN HUMAN WASTE, ANIMAL WASTE, OR AS BY-PRODUCTS RESULTING FROM THEIR DISPOSAL.

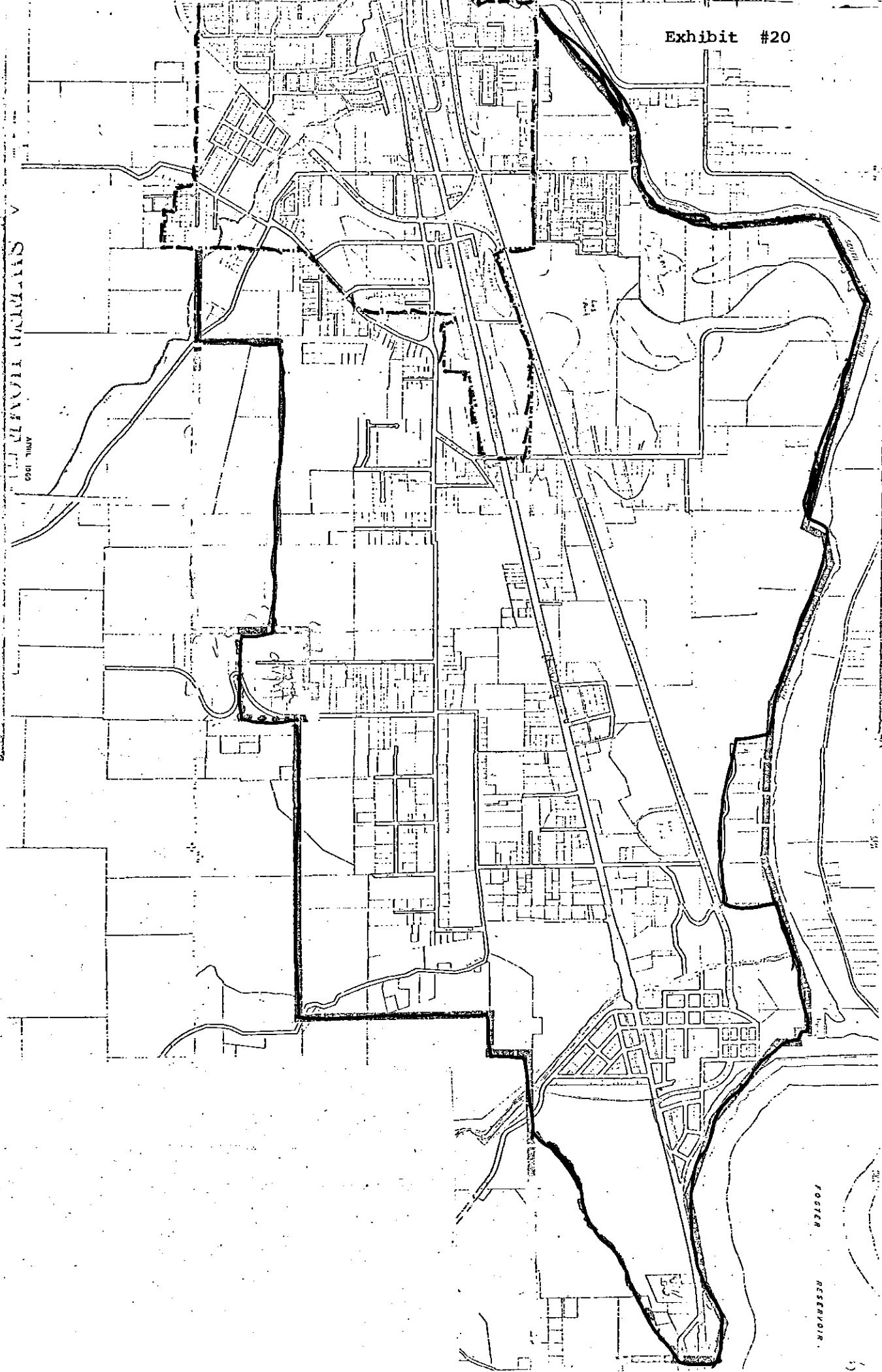
WITH THE EXISTENCE OF MANY SHALLOW, UNPROTECTED WATER SUPPLIES IN THE STUDY AREA PARAGRAPH 5, PAGE 10, IN THE 1973 RULES, PRECLUDES THE ADDITION OF ANY FURTHER SUBSURFACE SEWAGE DISPOSAL SYSTEMS IN THE AREA. PARAGRAPH 5 ON EXISTING WATER SUPPLY STATES "IF, IN THE JUDGMENT OF THE ADMINISTRATOR OR HIS AUTHORIZED REPRESENTATIVE, THE INSTALLATION OF A SUBSURFACE SEWAGE DISPOSAL SYSTEM WILL ADVERSELY AFFECT THE QUALITY OF AN EXISTING DOMESTIC WATER SUPPLY, HE SHALL NOT AUTHORIZE THE INSTALLATION OF THE SYSTEM."

THE PURPOSE OF THE MORATORIUM IS TO ALLOW SUFFICIENT TIME FOR A MORE DETAILED STUDY OF THE AREA AND FORMULATE RECOMMENDATIONS TO ADEQUATELY CORRECT THESE HAZARDS. THE MORATORIUM ON THE ISSUANCE OF PERMITS FOR SEPTIC TANK SYSTEMS WITHIN THIS AREA IS RECOMMENDED BY CORNELIUS BATESON, ADMINISTRATOR OF THE OREGON STATE HEALTH DIVISION, AND HE OFFERS THE SERVICES OF HIS STAFF TO ASSIST IN FINDING THE LONG RANGE SOLUTION TO THE PROBLEMS FACING THIS AREA.

Julius Varga, M.D.  
Linn County Health Officer



APRIL 1929



FOSTER RESERVOIR



# ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

## MEMORANDUM

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item F, May 23, 1975 EQC Meeting

Consideration of Adoption of Proposed Revisions to  
Oregon Administrative Rules Pertaining to Subsurface  
Sewage Disposal

### Background

In January, 1974, the Environmental Quality Commission, after statewide public hearings, adopted the present rules on subsurface sewage disposal. During these hearings, there was much conflicting testimony. It was felt by the Director that a task force could help resolve conflicts and propose a more equitable, workable set of rules.

Just over a year ago the Citizen's Task Force on Subsurface Sewage Disposal (CTF) was appointed, consisting of sixteen members. Since then this task force has met regularly and has held several public hearings at different locations around the State.

The Department considers this task force to have been very effective in performing the task assigned to it. There have been frank and helpful discussions between Department staff and the CTF. Minutes of the CTF meetings have been supplied to those sanitarians, soil scientists, and others working directly with the program in the field. In addition, a number of meetings involving field personnel were held by the Department to discuss proposals and progress of the CTF. The task force has tried to involve anyone having a position in this matter.

The proposed rules before the Commission are the result of more than a year's work by the CTF.



Contains  
Recycled  
Materials

Discussion

The more significant of the changes proposed are summarized in the accompanying attachment.

The record in the May 21, 1975 hearing before the Commission's hearing officer will be closed to further written comment on June 2. The hearing officer's report will be made available to the Commission promptly. Since the CTF's proposals respond to advice from every quarter as gathered and pondered for more than a year, it is felt that any eventual permanent rule will be substantially in alignment with the current proposals. Any worthy suggestions received on May 21 may result in a revised Director's recommendation to be presented in the Commission meeting.

In the interim, prior approvals effective under the current rule expire July 1, 1975. Also, the construction season is upon us. For these reasons a rule change is needed now.

Conclusions

Failure to act promptly will result in serious prejudice to the public interest for the specific reasons that the expiration of prior approvals under the current rule is imminent and maximum advantage to builders under the proposed rules for the current building season requires immediate action.

Pursuant to ORS 183.335(2), the Commission may adopt a temporary rule to become effective immediately upon filing with the Secretary of State and to remain effective for 120 days thereafter. Subject to review of the May 21 hearing, after formal closure of the record on June 2, the Commission may later adopt a permanent rule revision to become effective ten days after publication in the Secretary's Bulletin.

Recommendation

It is the Director's recommendation that the Commission act as follows:

1) Enter a finding that failure to act promptly will result in serious prejudice to the public interest for the specific reasons that the expiration of prior approvals under the current rule is imminent and maximum advantage to builders under the proposed rules for the current building season requires immediate adoption.

~~2) Adopt the Proposed Revisions to Oregon Administrative Rules Chapter 340, Division Seven, Subsurface Sewage Disposal, as presented by the Citizens' Task Force on Subsurface Sewage Disposal, to be a temporary rule, effective immediately upon filing with the Secretary of State.~~



KESSLER R. CANNON  
Director

Revision to Director's recommendation

2) Except for the following deletion, adopt as a temporary rule to become effective immediately upon filing with the Secretary of State the Proposed Revisions to Oregon Administrative Rules Chapter 340, Division 7, Subsurface Sewage Disposal, as presented by the Citizens' Task Force on Subsurface Sewage Disposal, including the corrections shown on the errata sheet and the further proposed amendments to Definition (39) on page 6, to the new subsection 71-030(4)(d) on page 46, to the design of drop box shown in Diagram 11A on page 55, and to paragraphs V. A and B of Appendix B on page 70:

In Subsection 71-030(5)(a) delete "Seepage pits and cesspools shall not be used, except in those counties of three hundred fifty thousand (350,000) population or greater. No new land partitioning or subdivision shall be made based on the use of seepage pits or cesspools."

There may be some objections by people working directly in the field to a small number of the proposed changes, but by-and-large the package of amendments has been accepted by them.

The most controversial proposed amendment is the one dealing with "Prior Approvals". That amendment is on page 29 of the document. This is the rule that requires that written approvals on permits issued prior to DEQ taking jurisdiction (Jan. 1, 1974) would, under certain conditions, be recognized for a definite period of time.

The present rule requires that applications for a permit based on prior approval must be made by July 1, 1975 and that installation of the system be completed by July 1, 1976. Under the proposed amendment, the dates would be advanced one year. Specifically, application would have to be made by July 1, 1976 and installation of the system completed by July 1, 1977.

There are numerous housekeeping amendments proposed, but some others are quite significant and need to be discussed in detail. Those significant proposed changes that should be mentioned are:

(1) Definitions:

- (a) "Escarpment" - Page 5. There has been confusion between cuts - escarpments by some people in the field. This definition clarifies that and allows rules citing escarpments.
- (b) "Effective sidewall" - Page 5. The change in this definition will provide some additional flexibility in the rules. This will be especially important where land area is a problem.
- (c) "Temporarily abandoned well" - Page 12. The intent here is to recognize that a well, even though not in use, can serve as an access point for sewage contamination of underlying ground water bodies to which it may be connected. Appropriate setbacks are therefore required.

- (e) "Unstable landform" - Page 12. This definition attempts to establish the fact that it is hazardous to construct on unstable land subject to slippage, and requires setbacks for the disposal system from such areas.

There is a new general requirement on Page 26: Proposed OAR 71-012. Discharge of sewage or septic tank effluent on the surface of the ground or into waters of the state is prohibited. This is designed to clarify that such practices are unlawful. Requested by Department of Justice.

In the Daily sewage flow chart, page 31, mobile home parks are lowered from 375 gal/unit/day to 250 gal/unit/day. This is in keeping with figures most often used nationally.

There is a new table of separation distance, page 34. The most significant change is the setback from intermittent streams lowered from 100 feet to 50 feet. It is felt that 50 feet will provide adequate protection for such streams.

The table on Page 39. The minimum liquid capacity list for septic tanks for certain facilities is deleted completely because it is unnecessary.

Conditions under which water table measurements may be performed are set forth on page 42. This would come into play whenever mottling of the soil would indicate a high water table but this should be verified by actual observations during rainy season, irrigation season or during periods of snow melt runoff.

On Page 47, the minimum depth of the disposal trench was raised from 24" to 18". This would take advantage of the more favorable soil characteristics near the surface, that is, better reduction of wastes by bacteria and oxygen which are more prevalent near the surface.

Cesspools and seepage pits, page 47, would be allowed only in counties of 350,000 population or greater (Multnomah County) and not for new subdivisions.

Page 57, permit requirements would not apply to pit privies used for temporary farm labor.

New specifications of cesspool and seepage pit design are contained on page 72. This is one of the major shortcomings of the present rules. Such facilities were allowed but the construction standards were deficient.

New subdivision 4, Page 87. Provides for methods to test new or experimental systems.

In addition to the Amendments proposed, the following changes are proposed to those Amendments:

Page 29. Add a new subsection (10) to 71-015 to read as follows:

- (10) Connection to existing system. No mobile home, trailer, other dwelling or building shall be connected to an existing subsurface sewage disposal system that was not originally designed to serve that mobile home, trailer, other dwelling or building without first obtaining a connection permit from the Department or contract agent.

If in the opinion of the Department the connection of a mobile home, trailer, other dwelling or building to an existing system not originally designed to serve that mobile home, trailer, other dwelling or building would likely result in failure of the existing system a connection permit shall be denied.

Page 6. Definition (39) - First line delete "tight jointed" and in fourth line after "Box" add ",drop box,".

Page 46. New proposed subsection (d), in second line after "watertight,"

add "within four (4) feet of any diversion valve, drop box, or distribution box,".

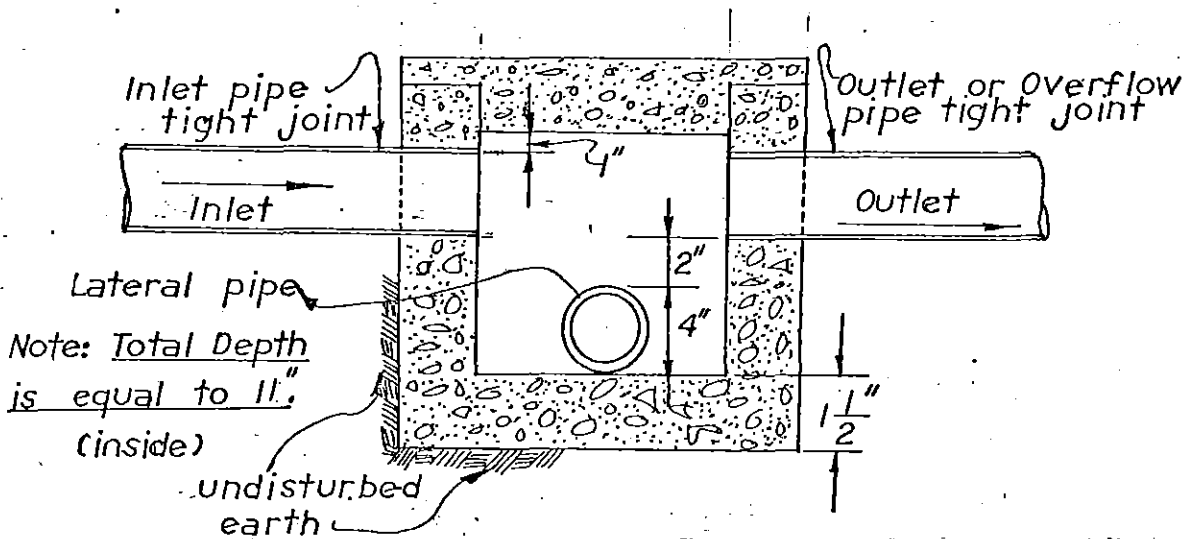
Page 70. Section V Drop Boxes

After "A. Sump" delete the entire subsection and substitute "sumps are optional".

After "B. Invert elevations" delete the entire subsection and substitute "Overflow and inlet pipe inverts shall be at the same level. The invert of the header pipe leading to the disposal field shall be six (6) inches below overflow and inlet pipe inverts".

Page 55. At bottom of page substitute new drawing "drop box cross section" for one shown.





DROP BOX CROSS SECTION



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item G, May 23, 1975, EQC Meeting

### Boise Cascade Corporation, Salem Pulp and Paper Plant

#### STATUS REPORT

### Installation of the Mist Eliminator on Recovery Furnace and Fugitive Emission Control

#### Background

At the May 24, 1974 EQC Meeting, the Environmental Quality Commission granted a variance of one year (July 1, 1974 to July 1, 1975) to Boise Cascade Corporation, Salem Pulp and Paper Plant, for the control of the recovery system particulate emissions. In granting this time extension, the Commission approved the following compliance schedule for the installation of a mist eliminator system (highest and best practical treatment available) on the recovery furnace:

1. By no later than July 1, 1974, submit plans and specifications to the Department for all necessary construction and/or modification work.
2. By no later than August 1, 1974, obtain approval from the Department of engineering plans and specifications with any required amendments of the air contaminant control system.
3. By no later than September 1, 1974, issue all purchase orders for component and control equipment.
4. By no later than December 1, 1974, commence construction and/or modification work.
5. By no later than May 15, 1975, complete all construction and/or modification work.



Contains  
Recycled  
Materials

6. By no later than July 1, 1975, demonstrate that the recovery boiler is operated in compliance with Condition 4.a

Condition 4.a of the company's Air Contaminant Discharge Permit requires that, after July 1, 1975, particulate emissions from the recovery system not exceed: (1) 4 pounds of particulate per ADT of pulp produced; and (2) an opacity equal to or greater than twenty percent for an aggregated time of more than three minutes in any one hour exclusive of uncombined moisture.

At the June 27, 1974, public hearing in Salem, the Environmental Quality Commission approved Boise Cascade's request to increase pulping capacity subject to conditions contained in Amendment II of the company's Air Contaminant Discharge Permit (Attachment A). The conditions in this Amendment reduce the allowable sulfur dioxide (SO<sub>2</sub>) emission from the present limit of 800 ppm as an hourly average to 200 ppm as an hourly average after July 1, 1975 (400 ppm if the 200 ppm limit proves unattainable). An increase in pulping capacity to 310 average ADT/day was also approved provided the permittee adequately demonstrates compliance with all Air Contaminant Discharge Permit conditions for a six-consecutive-months' period commencing when operation of the recovery furnace with the new mist eliminator is stabilized.

The Amendment to the Permit also referred to a joint DEQ-Boise Cascade study of perceivable concentrations of sulfur dioxide off the plant site (Condition 10, Section A) and an evaluation and control program for fugitive emissions (wood particles, chemicals, etc.) escaping or having the potential of escaping from the plant site (Condition 12, Section A).

#### Mist Eliminator Installation

Boise Cascade notified the Department by letter dated April 2, 1975, that due to equipment delivery delays, the compliance date of May 15, 1975 for completion of all construction was no longer obtainable. Since this notice, the Department has remained in close contact with the company in regard to equipment delivery and construction completion. The most recent communication, on May 8, 1975, informed the Department that the only item yet to be delivered is the main valve leading to the mist eliminator from the top of the existing absorption tower. Due to continuous delays by the company with whom the purchase order for this valve was made, Boise Cascade cancelled the order and is now manufacturing this part. Completion of the construction and actual start-up of the mist eliminator is now programmed for the week of May 25, 1975. Barring unforeseen start-up problems, the company feels that the recovery boiler will be in full compliance by the July 1, 1975 deadline.

### Fugitive Emission Control

On October 31, 1974, Boise Cascade submitted its fugitive emission evaluation and control study. It should be noted that an extension from the September 1, 1974 date (Condition 12, Section A) was granted by the Department in order to schedule, test, and analyze certain air quality emissions. The study included but was not limited to evaluation of the adequacy of the present pneumatic chip blowing operation, chip transfer cyclone and knot storage bin.

In regard to the above, the company has agreed to install chip transfer cyclones on the six original digesters (the newest, 7th digester has a cyclone already). The test result on the cyclone on the 7th digester showed insignificant emissions (0.038 lbs/hour). The above program is scheduled to be accomplished early in 1976.

In response to the knot storage bin problem, the company relocated the bin and transfer equipment. This facility was previously located near Front Street at a high elevation. The relocation has placed it almost 100 yards further onto company property and at a lower elevation. Visual observation by the Department staff since this relocation has shown that this is no longer a source of fugitive emission off the plant site.

During the spring of 1974, the majority of public complaints were in regard to the blowing of sawdust and chip fines off the plant site during the unloading of rail cars and trucks. In response to this, the company implemented the following program:

- a. Chips are thoroughly wetted while they travel off the drag chain and prior to leaving the pneumatic blower.
- b. The distance between the pipe outlet and chip pile is being maintained as short as practical.
- c. The chips are being blown into the low side of an existing chip pile.
- d. Stockpiling of chips is restricted during high winds.

In conjunction with all of the above fugitive emission program, particle fallout buckets were located at 5 approved sites around the mill. In addition to this, the Department has set up a particulate and sulfur dioxide (SO<sub>2</sub>) monitoring program on the downtown side of the mill.

It should be noted that from July 1, 1974 to May 1, 1975, no complaints on wood particles were received. During this time, many field investigations were conducted by the Department staff with no nuisance problems noted. However, two complaints were received from the same person on May 5, 1975, with reference back to May 2, 3, and 4 (weekend). Subsequent field evaluation by the staff verified the problem as well as the area involved. The results of this investigation are now being evaluated for the appropriate Department action. In addition, the company has been apprised of the problem, and meetings are being scheduled to develop the necessary corrective program.

#### DEQ-Boise Cascade Air Quality Monitoring Program

In order to obtain background information on the off-plant-site sulfur dioxide (SO<sub>2</sub>) concentration levels, as well as the fugitive emission program, the Department of Environmental Quality commenced an Air Network Monitoring Program on September 25, 1974. Two sulfur dioxide (SO<sub>2</sub>) monitors, four particle fallout buckets, four high volume samplers, and four sticky paper samplers were located on the downtown side of the mill as shown in Attachment B.

The summary of the data collected showed that allowable ambient sulfur dioxide (SO<sub>2</sub>) levels (OAR 340-31-020: 260 ug/m<sup>3</sup> of air (0.10 ppm) maximum 24 hour average) were exceeded on three occasions at the Pioneer Trust Building. In addition, perceivable concentrations (0.3 ppm SO<sub>2</sub> is considered the threshold or perceivable level) were exceeded 0.34% of the time at the Civic Center and 3.14% of the time at the Pioneer Trust Building.

Data from the sticky paper and particle fallout buckets revealed the presence of wood fibers, with the average percentage of such material increasing for the Hogg Brothers and Pioneer Trust Building sampling stations in closer proximity to the northern side of the company's property (chip pile area).\* Violations in the allowable ambient particulate fallout levels for residential and commercial areas were noted at those stations, while none were noted at the more distant stations. These violations cannot be wholly attributable to Boise Cascade due to the particulate emissions associated with the adjacent Salem Iron Works operation.

As was the case with the particulate fallout, levels of suspended particulates were found to increase as the distance from plant property decreased. Possible violations in allowable ambient suspended particulate levels were noted; however, a greater number of samples would be required to make an official determination of violation.

\* Hogg Brothers Warehouse and Pioneer Trust Building are approximately 250 feet and 1,100 feet, respectively, from the chip pile.

The first phase of this monitoring program was suspended on March 3, 1975. The data collected during this phase serves as ample base information prior to the installation of the recovery boiler mist elimination system.\*\* The two Beckman 906-A sulfur dioxide (SO<sub>2</sub>) monitors used in phase one of the sampling study will be replaced by Technicon sulfur dioxide (SO<sub>2</sub>) analyzers (purchased by Boise Cascade). The monitoring program with the new superior analyzers will be reactivated on May 21, 1975, prior to the start-up of the mist eliminator.

### Complaints

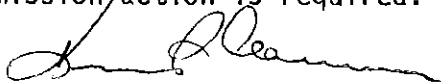
A total of 94 complaints has been received in the Department's Salem office since July 1, 1974 (up to May 6, 1975). Of these, 28 complained of sulfur dioxide (SO<sub>2</sub>) only, 50 of sulfur dioxide (SO<sub>2</sub>) and visibility, 7 of visibility only, and 2 of wood particles. 48 of the people desired no call back with 36 of the remaining 46 contacted by the Salem staff, with complete explanation of the pollution control programs being installed at the plant.

### Air Contaminant Discharge Permit

A proposed renewal Air Contaminant Discharge Permit was sent to Boise Cascade, Salem Pulp and Paper Plant on April 21, 1975 (Attachment C). Comments have been received back from the company and are being evaluated by the Department staff prior to placement on public notice. Permit processing has been delayed slightly by a request from Boise Cascade to allow increased production of yeast from present production of 16,000 lbs/day (dry basis) to a maximum of 55,000 lbs/day. This request is being evaluated jointly by the Department of Environmental Quality and the Mid Willamette Valley Air Pollution Authority.

### Director's Recommendation

This report is intended to apprise the EQC of the status of the air pollution control program at Boise Cascade Corporation, Salem Pulp and Paper Plant, in regard to Commission action taken in May 1974. No Commission action is required.



KESSLER R. CANNON

EJW:lg  
5/12/75

ATTACHMENT A, B, & C

\*\* It should be noted that the recorded violations of ambient air standards were anticipated by the Department; however installation of the mist elimination system should prevent these occurrences.

# AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality  
1234 S.W. Morrison Street  
Portland, Oregon 97205  
Telephone: (503) 229-5696  
Issued in accordance with the provisions of  
ORS 449.727

<p>ISSUED TO: Boise Cascade Corporation Paper Group Salem, Oregon 97301</p> <p>PLANT SITE:  Boise Cascade Corporation Paper Group Salem, Oregon 97301</p>	<p>REFERENCE INFORMATION</p> <p>Application No. 0012</p> <p>Date Received November 1, 1972</p>
---	--

### Amendment No. II

In accordance with Oregon Administrative Rules 340-20-033.02 Air Contaminant Discharge Permit Number 24-4171, is modified as follows:

Condition 2, Section A, is replaced by the following new condition:

2. After July 1, 1975, sulfur dioxide (SO<sub>2</sub>) emissions from the sulfite pulp mill, excluding steam generating boiler facilities, shall be kept to the lowest practicable levels and shall not exceed the following:
  - a. 200 ppm as an hourly average;
  - b. 3075 lbs per day as a yearly average;
  - c. 3075 lbs per day as a monthly average;
  - d. Nine ( 9.0) lbs per unbleached air dried ton (ADT)  
or 3075 lbs per day as a maximum daily emission.

Except, if after operation of the recovery furnace with the new mist eliminator is stabilized, the Department determines, after public hearing, that the specific emission limitations set forth above cannot be met when the mill operates at the increased pulping capacity provided herein, the following limits shall apply:

AMENDMENT NO. II

Sulfur dioxide (SO<sub>2</sub>) emission from the sulfite pulp mill, excluding steam generating boiler facilities, shall be kept at the lowest practicable levels but shall not exceed the following:

- a. 400 ppm as an hourly average;
- b. 4100 lbs per day as a yearly average;
- c. 4500 lbs per day as a monthly average;
- d. Fifteen and eight-tenths (15.8) lbs per unbleached air dried ton (ADT) or 5400 lbs per day as a maximum daily emission.

The following new conditions are added to the "Performance Standards and Emission Limits" portion of Section A:

8. The permittee shall be allowed to increase pulping capacity to 310 average AD tons/day by simultaneous operation of eight digesters only after adequately demonstrating compliance with all air contaminant discharge permit conditions for a six-consecutive-month period commencing when operation of the recovery furnace with new mist eliminator is stabilized.
9. Prior to increasing pulping capacity to 310 average ADT/day but not later than February 1, 1976, the permittee shall vent acid plant and counter current washer sulfur dioxide emissions to the recovery furnace control system or provide equivalent control acceptable to the Department.
10. After installation and operation of the recovery furnace mist eliminator, the permittee shall undertake a program in conjunction with the Department which will determine to what extent, if any, emissions from the recovery furnace systems result in perceivable concentrations of sulfur dioxide off the plant site. The study shall be completed by not later than November 1, 1975. If results of the study indicate perceivable off site concentrations of SO<sub>2</sub> occur at a frequency determined by the Department to constitute a nuisance, the permittee shall submit a program to the Department by not later than January 1, 1976, for review and approval which should in the judgement of the Department eliminate this problem.  
  
If a control program is required, consideration shall be given to increasing buoyance of the recovery furnace exhaust gas by injection of auxiliary heat and/or increasing the stack height.
11. The permittee shall utilize water sprays or equivalent control approved by the Department on the mechanical chip conveyor whenever the conveyor is operating to adequately pre-wet wood chips and fines prior to pneumatic transfer.



AMENDMENT NO. II

12. The permittee shall submit by September 1, 1974, to the Department for review and approval a proposed study and evaluation program to identify fugitive emissions which may be escaping or have the potential of escaping from the mill site in such a manner and such amount as to cause a nuisance as defined in OAR 21.050.
- a. The study shall include but not be limited to evaluation of the adequacy of the present pneumatic chip blowing operation, chip transfer cyclone, and knot storage bin.
  - b. The permittee shall submit to the Department by November 1, 1974, a compliance schedule for remedial actions if any are required as a result of the study. The compliance schedule shall be developed with a compliance demonstration objective date of July 1, 1975.
13. By July 1, 1975, the permittee shall install an opacity monitor and recorder acceptable to the Department on the recovery furnace exhaust stack.

The remaining condition numbers in Section A of the permit are re-numbered as follows:

Condition 8.	is renumbered	condition 14.
" 9.	" "	" 15.
" 10.	" "	" 16.
" 11.	" "	" 17.
" 12.	" "	" 18.

This amendment shall be attached to and made part of Air Contaminant Discharge Permit Number 24-4171.

DEPARTMENT OF ENVIRONMENTAL QUALITY

By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_



Cascade  
Saw  
Mill

① Pioneer Trust

502  
PFO

H: Vol

Sticky Paper

② Hogs Brothers Warehouse

PFO

H: Vol

Sticky Paper

③ International Duane's Motel

PFO

H: Vol

Sticky Paper

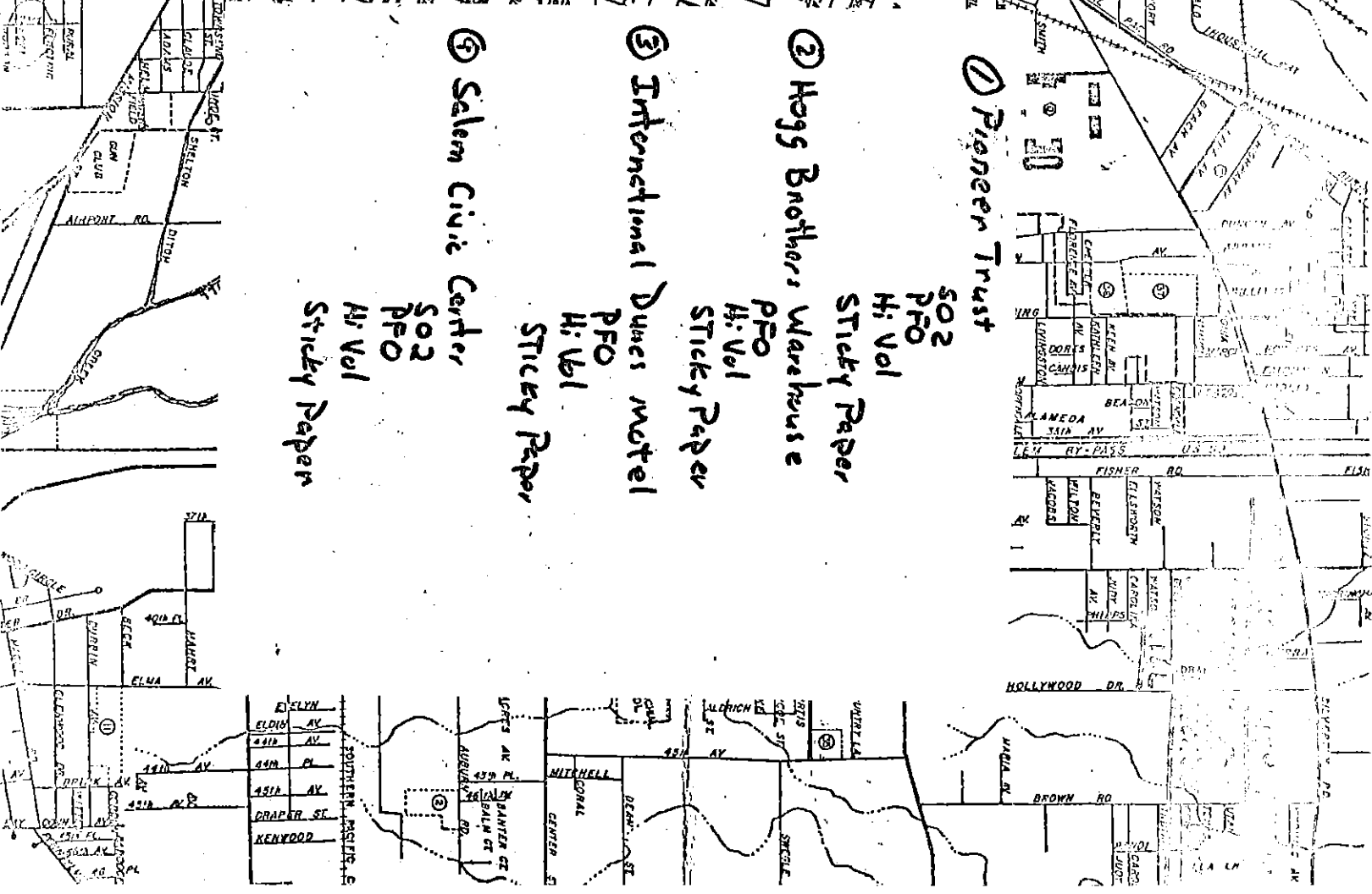
④ Salem Civic Center

502  
PFO

H: Vol

Sticky Paper

Sticky Paper



ELLYN  
AV  
4410  
AV  
4400  
AV  
4390  
AV  
4380  
AV  
DRAPER ST  
KENWOOD

4375  
AV  
4365  
AV  
4355  
AV  
4345  
AV  
4335  
AV  
4325  
AV  
4315  
AV  
4305  
AV  
4295  
AV  
4285  
AV  
4275  
AV  
4265  
AV  
4255  
AV  
4245  
AV  
4235  
AV  
4225  
AV  
4215  
AV  
4205  
AV  
4195  
AV  
4185  
AV  
4175  
AV  
4165  
AV  
4155  
AV  
4145  
AV  
4135  
AV  
4125  
AV  
4115  
AV  
4105  
AV  
4095  
AV  
4085  
AV  
4075  
AV  
4065  
AV  
4055  
AV  
4045  
AV  
4035  
AV  
4025  
AV  
4015  
AV  
4005  
AV  
3995  
AV  
3985  
AV  
3975  
AV  
3965  
AV  
3955  
AV  
3945  
AV  
3935  
AV  
3925  
AV  
3915  
AV  
3905  
AV  
3895  
AV  
3885  
AV  
3875  
AV  
3865  
AV  
3855  
AV  
3845  
AV  
3835  
AV  
3825  
AV  
3815  
AV  
3805  
AV  
3795  
AV  
3785  
AV  
3775  
AV  
3765  
AV  
3755  
AV  
3745  
AV  
3735  
AV  
3725  
AV  
3715  
AV  
3705  
AV  
3695  
AV  
3685  
AV  
3675  
AV  
3665  
AV  
3655  
AV  
3645  
AV  
3635  
AV  
3625  
AV  
3615  
AV  
3605  
AV  
3595  
AV  
3585  
AV  
3575  
AV  
3565  
AV  
3555  
AV  
3545  
AV  
3535  
AV  
3525  
AV  
3515  
AV  
3505  
AV  
3495  
AV  
3485  
AV  
3475  
AV  
3465  
AV  
3455  
AV  
3445  
AV  
3435  
AV  
3425  
AV  
3415  
AV  
3405  
AV  
3395  
AV  
3385  
AV  
3375  
AV  
3365  
AV  
3355  
AV  
3345  
AV  
3335  
AV  
3325  
AV  
3315  
AV  
3305  
AV  
3295  
AV  
3285  
AV  
3275  
AV  
3265  
AV  
3255  
AV  
3245  
AV  
3235  
AV  
3225  
AV  
3215  
AV  
3205  
AV  
3195  
AV  
3185  
AV  
3175  
AV  
3165  
AV  
3155  
AV  
3145  
AV  
3135  
AV  
3125  
AV  
3115  
AV  
3105  
AV  
3095  
AV  
3085  
AV  
3075  
AV  
3065  
AV  
3055  
AV  
3045  
AV  
3035  
AV  
3025  
AV  
3015  
AV  
3005  
AV  
2995  
AV  
2985  
AV  
2975  
AV  
2965  
AV  
2955  
AV  
2945  
AV  
2935  
AV  
2925  
AV  
2915  
AV  
2905  
AV  
2895  
AV  
2885  
AV  
2875  
AV  
2865  
AV  
2855  
AV  
2845  
AV  
2835  
AV  
2825  
AV  
2815  
AV  
2805  
AV  
2795  
AV  
2785  
AV  
2775  
AV  
2765  
AV  
2755  
AV  
2745  
AV  
2735  
AV  
2725  
AV  
2715  
AV  
2705  
AV  
2695  
AV  
2685  
AV  
2675  
AV  
2665  
AV  
2655  
AV  
2645  
AV  
2635  
AV  
2625  
AV  
2615  
AV  
2605  
AV  
2595  
AV  
2585  
AV  
2575  
AV  
2565  
AV  
2555  
AV  
2545  
AV  
2535  
AV  
2525  
AV  
2515  
AV  
2505  
AV  
2495  
AV  
2485  
AV  
2475  
AV  
2465  
AV  
2455  
AV  
2445  
AV  
2435  
AV  
2425  
AV  
2415  
AV  
2405  
AV  
2395  
AV  
2385  
AV  
2375  
AV  
2365  
AV  
2355  
AV  
2345  
AV  
2335  
AV  
2325  
AV  
2315  
AV  
2305  
AV  
2295  
AV  
2285  
AV  
2275  
AV  
2265  
AV  
2255  
AV  
2245  
AV  
2235  
AV  
2225  
AV  
2215  
AV  
2205  
AV  
2195  
AV  
2185  
AV  
2175  
AV  
2165  
AV  
2155  
AV  
2145  
AV  
2135  
AV  
2125  
AV  
2115  
AV  
2105  
AV  
2095  
AV  
2085  
AV  
2075  
AV  
2065  
AV  
2055  
AV  
2045  
AV  
2035  
AV  
2025  
AV  
2015  
AV  
2005  
AV  
1995  
AV  
1985  
AV  
1975  
AV  
1965  
AV  
1955  
AV  
1945  
AV  
1935  
AV  
1925  
AV  
1915  
AV  
1905  
AV  
1895  
AV  
1885  
AV  
1875  
AV  
1865  
AV  
1855  
AV  
1845  
AV  
1835  
AV  
1825  
AV  
1815  
AV  
1805  
AV  
1795  
AV  
1785  
AV  
1775  
AV  
1765  
AV  
1755  
AV  
1745  
AV  
1735  
AV  
1725  
AV  
1715  
AV  
1705  
AV  
1695  
AV  
1685  
AV  
1675  
AV  
1665  
AV  
1655  
AV  
1645  
AV  
1635  
AV  
1625  
AV  
1615  
AV  
1605  
AV  
1595  
AV  
1585  
AV  
1575  
AV  
1565  
AV  
1555  
AV  
1545  
AV  
1535  
AV  
1525  
AV  
1515  
AV  
1505  
AV  
1495  
AV  
1485  
AV  
1475  
AV  
1465  
AV  
1455  
AV  
1445  
AV  
1435  
AV  
1425  
AV  
1415  
AV  
1405  
AV  
1395  
AV  
1385  
AV  
1375  
AV  
1365  
AV  
1355  
AV  
1345  
AV  
1335  
AV  
1325  
AV  
1315  
AV  
1305  
AV  
1295  
AV  
1285  
AV  
1275  
AV  
1265  
AV  
1255  
AV  
1245  
AV  
1235  
AV  
1225  
AV  
1215  
AV  
1205  
AV  
1195  
AV  
1185  
AV  
1175  
AV  
1165  
AV  
1155  
AV  
1145  
AV  
1135  
AV  
1125  
AV  
1115  
AV  
1105  
AV  
1095  
AV  
1085  
AV  
1075  
AV  
1065  
AV  
1055  
AV  
1045  
AV  
1035  
AV  
1025  
AV  
1015  
AV  
1005  
AV  
995  
AV  
985  
AV  
975  
AV  
965  
AV  
955  
AV  
945  
AV  
935  
AV  
925  
AV  
915  
AV  
905  
AV  
895  
AV  
885  
AV  
875  
AV  
865  
AV  
855  
AV  
845  
AV  
835  
AV  
825  
AV  
815  
AV  
805  
AV  
795  
AV  
785  
AV  
775  
AV  
765  
AV  
755  
AV  
745  
AV  
735  
AV  
725  
AV  
715  
AV  
705  
AV  
695  
AV  
685  
AV  
675  
AV  
665  
AV  
655  
AV  
645  
AV  
635  
AV  
625  
AV  
615  
AV  
605  
AV  
595  
AV  
585  
AV  
575  
AV  
565  
AV  
555  
AV  
545  
AV  
535  
AV  
525  
AV  
515  
AV  
505  
AV  
495  
AV  
485  
AV  
475  
AV  
465  
AV  
455  
AV  
445  
AV  
435  
AV  
425  
AV  
415  
AV  
405  
AV  
395  
AV  
385  
AV  
375  
AV  
365  
AV  
355  
AV  
345  
AV  
335  
AV  
325  
AV  
315  
AV  
305  
AV  
295  
AV  
285  
AV  
275  
AV  
265  
AV  
255  
AV  
245  
AV  
235  
AV  
225  
AV  
215  
AV  
205  
AV  
195  
AV  
185  
AV  
175  
AV  
165  
AV  
155  
AV  
145  
AV  
135  
AV  
125  
AV  
115  
AV  
105  
AV  
95  
AV  
85  
AV  
75  
AV  
65  
AV  
55  
AV  
45  
AV  
35  
AV  
25  
AV  
15  
AV  
5  
AV



DEPARTMENT OF ENVIRONMENTAL QUALITY

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229- 6242

Robert W. Straub GOVERNOR

KESSLER R. CANNON Director

APR 21 1975

Final Date for Submission of Written Comments:

MAY 5 1975

"ATTACHMENT C"

Boise Cascade Corporation Paper Group P. O. Box 2089 Salem, Oregon 97308

Attention: C. J. Fahlstrom, Resident Manager

Re: AQ - Boise Cascade Corp., Paper Group Marion County

Sum Acpp

Gentlemen:

The proposed Air Contaminant Discharge Permit for your sulfite pulp and paper plant is attached. You are invited to submit any comments you may have concerning the permit in writing prior to the date indicated above.

A copy of the public notice allowing 30 days for comments from the public and governmental agencies is also attached for your review and comments. All comments received will be evaluated by the Department and final action on your proposed permit will be taken 30 days after the public notice is distributed.

The permit fees you submitted with your renewal application of 11/27/74 did not include the \$25 filing fee. Please pay this fee so that the Department can proceed with issuing the permit.

If you have any questions, please do not hesitate to contact Mr. Ray Potts of the Northwest Region Office at 238-8471.

Very truly yours,

KESSLER R. CANNON Director

RP:lb

E. J. Weathersbee Director, Technical Programs

Attachments

- cc: Salem District, DEQ
cc: Air Quality Division, DEQ
cc: Mid-Willamette Valley Air Pollution Authority



Northwest Region Office  
1010 N. E. Couch Street  
Portland, Oregon 97232

AIR CONTAMINANT DISCHARGE PERMIT APPLICATION REVIEW REPORT

Boise Cascade Corporation  
Paper Group  
P.O. Box 2089  
Salem, Oregon 97308

File 24-4171  
Appl 352  
Date 2-11-75

Background

1. The Boise Cascade Corporation operates a sulfite pulp and paper mill and torula yeast plant located at 315 commercial Street, Salem, Oregon.
2. The annual production capacity is approximately 100,000 tons pulp.
3. The installation of a "mist eliminator" emissions control system to control emissions from the recovery furnace is on schedule and should be completed by July 1, 1975. The recovery furnace is the main source of emissions at the mill. After observing a similar system in operation at another paper mill, Departmental personnel were favorably impressed with the effectiveness of the system.
4. The estimated annual rate of air contaminant emissions is 162 tons particulate and 3,000 tons sulfur oxides.
5. The emissions from this facility are scheduled to be in compliance with Department of Environmental Quality emission limitations by July 1, 1975.

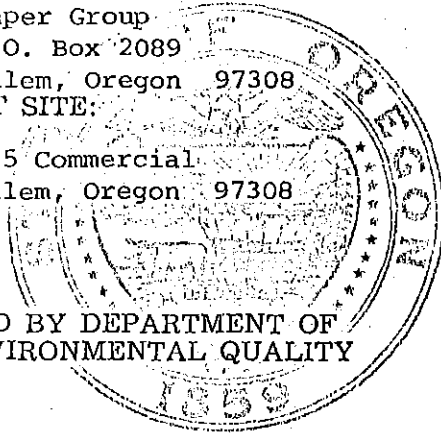
# PRELIMINARY DRAFT

Permit Number: \_\_\_\_\_  
Expiration Date: 12/31/79  
Page 1 of 11

## AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality  
1234 S.W. Morrison Street  
Portland, Oregon 97205  
Telephone: (503) 229-5696

Issued in accordance with the provisions of  
ORS 468.310

<p>ISSUED TO: Boise Cascade Corporation Paper Group P.O. Box 2089 Salem, Oregon 97308</p> <p>PLANT SITE: 315 Commercial Salem, Oregon 97308</p> <p>ISSUED BY DEPARTMENT OF ENVIRONMENTAL QUALITY</p>  <p>_____ Kessler R. Cannon Director</p> <p>_____ Date</p>	<p>REFERENCE INFORMATION</p> <p>Application No. <u>352</u></p> <p>Date Received <u>11/27/74</u></p> <p>Other Air Contaminant Sources at this Site:</p> <table><thead><tr><th>Source</th><th>SIC</th><th>Permit No.</th></tr></thead><tbody><tr><td>(1) _____</td><td></td><td></td></tr><tr><td>(2) _____</td><td></td><td></td></tr></tbody></table>	Source	SIC	Permit No.	(1) _____			(2) _____		
Source	SIC	Permit No.								
(1) _____										
(2) _____										

### SOURCE(S) PERMITTED TO DISCHARGE AIR CONTAMINANTS:

Name of Air Contaminant Source	Standard Industry Code as Listed
Sulfite Pulp and Paper	2621
Fuel Burning Equipment; Residual oil 250 million or more BTU/hr.; heat input (multiple devices)	4961

### Permitted Activities

Until such time as this permit expires or is modified or revoked, Boise Cascade Corporation, Paper Group is herewith permitted in conformance with the requirements, limitations and conditions of this permit to discharge air contaminants from its sulfite pulp and paper plant and torula yeast plant located at Salem, Oregon.

Compliance with the specific requirements, limitations and conditions contained herein shall not relieve the permittee from complying with all rules and standards of the Department and the laws administered by the Department.

<u>Divisions of Permit Specifications</u>	<u>Page</u>
Section A: Sulfite Pulp and Paper	2
Section B: Torula Yeast Manufacture	6
Section C: Power Boilers	8
Section D: General Conditions	10

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS  
Issued by the  
Department of Environmental Quality for

Expiration Date: 12/31/79  
Page 2 of 11  
Appl. No.: 352  
File No.: 24-4171

Boise Cascade Corp., Paper Group

---

SECTION A: SULFITE PULP AND PAPER

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating processes and all contaminant control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels, and in addition:

1. Until July 1, 1975, sulfur dioxide (SO<sub>2</sub>) emissions from the sulfite pulp mill excluding the steam generating boiler facilities, shall not exceed the following:
  - a. 800 ppm as an hourly average,
  - b. 5,500 pounds per day as a monthly average, or
  - c. Twenty (20) pounds per unbleached, air-dried ton (adt) or 6,200 pounds per day as a maximum daily emission.
2. After July 1, 1975, sulfur dioxide (SO<sub>2</sub>) emissions from the sulfite pulp mill, excluding steam generating boiler facilities, shall be kept to the lowest practicable levels and shall not exceed the following:
  - a. 200 ppm as an hourly average,
  - b. 3,075 pounds per day as a yearly average, or
  - c. 3,075 pounds per day as a monthly average, or
  - d. Nine (9.0) pounds per unbleached air dried ton (adt) or 3,075 pounds per day as a maximum daily emission.

Except, if after operation of the recovery furnace with the new mist eliminator is stabilized, the Department determines, after public hearing, that the specific emission limitations set forth above cannot be met when the mill operates at the increased pulping capacity provided herein, the following limits shall apply:

- Sulfur dioxide (SO<sub>2</sub>) emissions from the sulfite pulp mill, excluding steam generating boiler facilities, shall be kept at the lowest practicable levels but shall not exceed the following:
- a. 400 ppm as an hourly average,
  - b. 4,100 pounds per day as a yearly average,
  - c. 4,500 pounds per day as a monthly average, or
  - d. Fifteen and eight-tenths (15.8) pounds per unbleached air dried ton (adt) or 5,400 pounds per day as a maximum daily emission.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS  
Issued by the  
Department of Environmental Quality for

Application Date 2/11/75  
Page 3 of 11  
Appl. No.: 352  
File No.: 24-4171

Boise Cascade Corp., Paper Group

---

3. As soon as practicable, but not later than July 1, 1975, the recovery system particulate emissions shall not exceed the following:
  - a. Four (4) pounds per adt of pulp processed, or
  - b. An opacity equal to or greater than twenty percent (20%) for an aggregated time or more than three (3) minutes in any one (1) hour exclusive of uncombined moisture.
4. The use of residual fuel oil containing more than one and three-quarters percent (1.75%) sulfur by weight is prohibited.

Special Conditions

5. The permittee shall be allowed to increase pulping capacity to 310 average AD tons/day by simultaneous operation of eight digesters only after adequately demonstrating compliance with all air contaminant discharge permit conditions for a six-consecutive-month period commencing when operation of the recovery furnace with new mist eliminator is stabilized.
6. Prior to increasing pulping capacity to 310 average ADT/day, but not later than February 1, 1976, the permittee shall vent acid plant and counter current washer sulfur dioxide emissions to the recovery furnace control system or provide equivalent control acceptable to the Department.
7. After installation and operation of the recovery furnace mist eliminator, the permittee shall undertake a program in conjunction with the Department which will determine to what extent, if any, emissions from the recovery furnace systems result in perceivable concentrations of sulfur dioxide off the plant site. The study shall be completed by not later than November 1, 1975. If results of the study indicate perceivable off site concentrations of SO<sub>2</sub> occur at a frequency determined by the Department to constitute a nuisance, the permittee shall submit a program to the Department by not later than January 1, 1976, for review and approval which should in the judgement of the Department, eliminate this problem.

If a control program is required, consideration shall be given to increasing buoyance of the recovery furnace exhaust gas by injection of auxiliary heat and/or increasing the stack height.
8. The permittee shall utilize water sprays or equivalent control approved by the Department on the mechanical chip conveyor whenever the conveyor is operating to adequately pre-wet wood chips and fines prior to pneumatic transfer.
9. The permittee shall prevent fugitive emissions from escaping the mill site in such a manner and such amount as to cause a nuisance as defined in OAR 21.050.
10. By July 1, 1975, the permittee shall install an opacity monitor and recorder acceptable to the Department on the recovery furnace exhaust stack.

Boise Cascade Corp., Paper Group

Emission Reduction Plan

11. The permittee shall implement the following emission reduction plan as previously agreed to during air pollution episodes when notified by the Department or by the Mid-Willamette Air Pollution Authority (Regional Authority).

<u>Notice Condition</u>	<u>Action To Be Taken By Permittee</u>
a. Alert	1. Switch to low sulfur fuels 2. Cut recovery system back to 75% of furnace capacity 3. Prepare to shut down pulp mill and recovery system
b. Warning	1. Continue alert measures 2. Start to shut down pulp mill and recovery system 3. No new cooks
c. Emergency	1. Continue alert and warning measures 2. Shut down sulfite pulp mill and SSL recovery system

Compliance Schedule

12. The permittee shall continue the installation of the mist eliminator to control recovery boiler emissions, as approved by the Department of Environmental Quality, in accordance with the following schedule:
- By no later than May 15, 1975, complete all construction and/or modification work of the recovery boiler and mist eliminator.
  - By no later than July 1, 1975, demonstrate recovery boiler operation in compliance with conditions 2 and 3 above.
  - The permittee shall notify the Department in writing within fourteen (14) days of the completion of each of these conditions.

Monitoring and Reporting

13. The permittee shall effectively monitor the operation and maintenance of the sulfur pulp and paper production and control facilities. A record of all such data shall be maintained and submitted to the Department of Environmental Quality within fifteen (15) days after the end of each calendar month unless requested in writing by the Department to submit this data at some other frequency. Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with the testing, monitoring and reporting recognized applicable standard methods approved in advance by the Department, and shall include, but not necessarily be limited to, the following parameters and monitoring frequencies:



AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS  
Issued by the  
Department of Environmental Quality for

Expiration Date: 12/31/79

Page 5 of 11

Appl. No.: 352

File No.: 24-4171

Boise Cascade Corp., Paper Group

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Recovery system, sulfur dioxide emissions	Continually
b. Recovery furnace, particulate emissions	Three times per month
c. Production of unbleached pulp	Summarized monthly from production records
d. Recovery system opacity emissions	Continually

14. In addition to the above, the permittee shall monitor the following parameters with the collected data maintained at the plant site for a period of one year and made available to representatives of the Department of Environmental Quality upon request:

<u>Parameter</u>	<u>Minimum Monitoring Frequency</u>
a. Meteorological conditions of wind direction, wind speed, and ambient temperature	Continually
b. Particulate fall out associated with the plant's fugitive emission monitoring program	Monthly

15. The final monthly report required in condition 14 submitted during any calendar year shall also include quantities and types of fuels used during that calendar year by the recovery system.
16. The Department shall be promptly notified of any upset condition in accordance with OAR, Chapter 340, "Upset Conditions" which may cause or tend to cause any detectable increase in atmospheric emissions. Such notice shall include the reason for the upset and indicate the precautions taken to prevent a recurrence.

Boise Cascade Corp., Paper Group

SECTION B: TORULA YEAST MANUFACTURINGPermitted Activities

Until such time as this permit expires or is modified or revoked, Boise Cascade Corporation is herewith permitted to discharge treated exhaust gases containing air contaminants in conformance with the requirements, limitations and conditions of this permit from its 1,400 pound per hour (dry basis) Torula Yeast Plant (14,500 pounds/hour spent sulfite liquor input) consisting of fermenters, separators, wash tanks, pasteurizer, spray dryer with exhaust cyclones and scrubber, and packing station exhaust baghouse collector located at Salem, Oregon.

Performance Standards and Emission Limits

The permittee shall at all times maintain and operate all air contaminant generating control equipment at full efficiency and effectiveness, such that the emissions of air contaminants are kept at the lowest practicable levels, and in addition:

1. Particulate emissions from the plant shall not:
  - a. Exceed 0.1 grain per standard cubic foot of exhaust gas from any single source, or
  - b. Exceed 12.8 pounds per hour of particulates from all emission sources in the plant at a production rate of 1,400 pounds per hour.
2. Air contaminant emissions from any single source of emission shall not be as dark or darker in shade as that designated as number one (No. 1) on the Ringlemann Chart or equal to or greater than twenty percent (20%) opacity for a period of more than three (3) minutes in any one (1) hour.

Monitoring and Reporting

3. The permittee shall effectively monitor the operation and maintenance of the Torula Yeast production and control facilities. A record of all such data shall be maintained and made available upon request by the Department of Environmental Quality or the Mid-Willamette Valley Air Pollution Authority (Regional Authority). Unless otherwise agreed to in writing the information collected and submitted shall be in accordance with testing, monitoring and reporting procedures on file at the Department of Environmental Quality or Regional Authority, or in conformance with recognized applicable standard methods approved in advance by the Department and Regional Authority.
4. At the end of each calendar year a report shall be submitted including annual production and operating hours to both the Department of Environmental Quality and the Mid-Willamette Valley Air Pollution Authority (MWVAPA).

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS  
Issued by the  
Department of Environmental Quality for

Page 7 of 11  
Appl. No.: 352  
File No.: 24-4171

Boise Cascade Corp., Paper Group

---

5. Any schedule maintenance of operation or emission control equipment which would result in any violation of this permit shall be reported at least twenty-four (24) hours in advance to the Department of Environmental Quality and the Mid-Willamette Valley Air Pollution Authority.
6. Any upsets or breakdowns which result in any violations of this permit shall be reported within one (1) hour to the Department of Environmental Quality and the Mid-Willamette Valley Air Pollution Authority.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS  
Issued by the  
Department of Environmental Quality for

Application Date: 12/11/79  
Page 8 of 11  
Appl. No.: 352  
File No.: 24-4171

Boise Cascade Corp., Paper Group

SECTION C: POWER BOILERS

Performance Standards and Emission Limits

1. The permittee shall at all times maintain and operate all fuel burning and related equipment listed below at full efficiency such that the emissions of air contaminants are kept at the lowest practicable levels. Operation shall be limited to only those fuels listed below and shall not exceed the maximum heat input stated.

<u>Type of Equipment</u>	<u>Type of Fuel</u>	<u>Maximum Heat Input BTU/hr or gal/hr</u>
No. 4 Power Boiler	No. 6 Fuel oil/Natural Gas	125 million BTU/hr.
No. 5 Power Boiler	No. 6 Fuel oil/Natural Gas	100 million BTU/hr.
No. 6 Power Boiler	No. 6 Fuel oil/Natural Gas	100 million BTU/hr.

2. Emissions of air contaminants from the fuel burning equipment shall not exceed any of the following:
  - a. Visible emissions shall not equal or exceed 20% opacity for a period or periods aggregating more than three minutes in any one hour except for the presence of uncombined water.
  - b. Particulate emissions shall not exceed 0.1 grains per standard cubic foot of exhaust gas.
3. The permittee shall not use any residual fuel oil containing more than 1.75 percent by weight of sulfur.

Special Conditions

4. The permittee shall provide, within 30 days of issuance of this permit, an easily accessible sampling port in the exhaust stack which is 5/16 inch in diameter. If a damper exists, the sampling port must be located between the firebox section and the damper or any other source of dilution air.

Emergency Emission Reduction Plan

5. The permittee shall implement the following emission reduction plan as previously agreed to during air pollution episodes when notified by the Department.

Notice Condition

Action to be Taken by Permittee

- a. Alert

1. Switch to low sulfur fuels
2. Cut recovery system back to 75% of furnace capacity
3. Prepare to shut down pulp mill and recovery system

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS  
Issued by the  
Department of Environmental Quality for

Page 9 of 11  
Appl. No.: 352  
File No.: 24-4171

Boise Cascade Corp., Paper Group

---

Notice Condition

Action to be Taken by Permittee

b. Warning

1. Continue alert measures
2. Start to shut down pulp mill and recovery system
3. No new cooks

c. Emergency

1. Continue alert and warning measures
2. Shut down sulfite pulp mill and SSL Recovery System

Monitoring and Reporting

6. The permittee shall conduct or have conducted a smoke spot test (ASTM D2156-65 "Standard Method to Test for Smoke Density"), after each instance of oil burner service or adjustment. The results shall be maintained for a five-year period and be made available on request to Department personnel.
7. The permittee shall submit an annual quantities and types of fuels used on a monthly basis report to the Department by not later than January 15 of each year this permit is in effect.

SECTION D: GENERAL CONDITIONS

General Conditions

- G1. A copy of this permit or at least a copy of the title page and an accurate and complete extraction of the operating and monitoring requirements and discharge limitations shall be posted at the facility and the contents thereof made known to operating personnel.
- G2. This issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- G3. The permittee is prohibited from conducting any open burning at the plant site or facility.
- G4. The permittee is prohibited from causing or allowing discharges of air contaminants from source(s) not covered by this permit so as to cause the plant site emissions to exceed the standards fixed by this permit or rules of the Department of Environmental Quality.
- G5. The permittee shall at all times conduct dust suppression measures to meet the requirements set forth in "Fugitive Emissions" and "Nuisance Conditions" in OAR, Chapter 340, Section 21-050.
- G6. (NOTICE CONDITION) The permittee shall dispose of all solid wastes or residues in manners and at locations approved by the Department of Environmental Quality.
- G7. The permittee shall allow Department of Environmental Quality representatives access to the plant site and record storage areas at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and otherwise conducting all necessary functions related to this permit.
- G8. The permittee, without prior notice to and written approval from the Department of Environmental Quality, is prohibited from altering, modifying or expanding the subject production facilities so as to affect emissions to the atmosphere.
- G9. The permittee shall be required to make application for a new permit if a substantial modification, alteration, addition or enlargement is proposed which would have a significant impact on air contaminant emission increases or reductions at the plant site.

AIR CONTAMINANT DISCHARGE PERMIT PROVISIONS

Issued by the  
 Department of Environmental Quality for  
Boise Cascade Corp., Paper Group

Page 11 of 11  
 Appl. No.: 352  
 File No.: 24-4171

G10. This permit is subject to revocation for cause, as provided by law, including:

- a. Misrepresentation of any material fact or lack of full disclosure in the application including any exhibits thereto, or in any other additional information requested or supplied in conjunction therewith;
- b. Violation of any of the requirements, limitations or conditions contained herein; or
- c. Any material change in quantity or character of air contaminants emitted to the atmosphere.

G11. The permittee shall notify the Department by telephone or in person within one (1) hour of any scheduled maintenance, malfunction of pollution control equipment, upset or any other conditions that cause or may tend to cause a significant increase in emissions or violation of any conditions of this permit. Such notice shall include:

- a. The nature and quantity of increased emissions that have occurred or are likely to occur,
- b. The expected length of time that any pollution control equipment will be out of service or reduced in effectiveness,
- c. The corrective action that is proposed to be taken, and
- d. The precautions that are proposed to be taken to prevent a future recurrence of a similar condition.

G12. Application for a modified or renewal of this permit must be submitted not less than 60 days prior to permit expiration date. A filing fee and Application Investigation and Permit Issuing or Denying Fee must be submitted with the application.

G13. The permittee shall submit the Annual Compliance Determination Fee to the Department of Environmental Quality according to the following schedule:

<u>Amount Due</u>				<u>Date Due</u>
Section A	Section B	Section C	Total	
\$175.00	--	\$120.00	\$295.00	12/1/75
175.00	--	120.00	295.00	12/1/76
175.00	--	120.00	295.00	12/1/77
175.00	--	120.00	295.00	12/1/78
(see G12)	(see G12)	(see G12)	(see G12)	11/1/79

G14. The permittee shall provide adequate controls and safeguards to prevent the escapement of ammonia (NH<sub>3</sub>) from all handling and process systems in such quantities that cause ammonia odors to be detected off the plant premises.



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

KESSLER R. CANNON  
GOVERNOR

### MEMORANDUM

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No.H(1), May 23, 1975, EQC Meeting

Variance Request - Reichhold Chemicals, Inc.  
Columbia County

### Background

In December 1972, Reichhold Chemicals, Inc. purchased from Shell Chemical Company the ammonium nitrate fertilizer plant constructed by Shell at St. Helens, Oregon, in 1965. It has operated continuously since then in its present location 3-1/2 miles northwest of St. Helens and presently employs 61 people.

In addition to an ammonium nitrate solution, the plant produces ammonia, nitric acid, and a dry form of urea. The urea is manufactured by reacting ammonia with carbon dioxide and by spraying the molten urea mixture from the top of a large tower through an updraft of air. During this process the droplets solidify and harden into spherical pellets or "prills." These are subsequently bagged and sold for fertilizer.

During this process, particulate matter escapes from the top of the prill tower. The average grain loading is 0.018 gr/SCF which is in compliance with Department standards. Sixty-two percent (62%) of this particulate matter is in the 0.5-1.0 micron range which is the critical visible spectrum and results in visible emissions in excess of the Department's opacity standard. An additional 25 percent of the particulate emission is in the 1.0-2.0 micron range. The facility annually emits in excess of 75 tons per year of particulate.

Early in the plant's operation, Shell Chemical conducted process studies and engineering work on various scrubbing systems for the urea prill tower in an attempt to correct the opacity problem. Three devices were tested at the St. Helens plant and others in California. Shell was considering total recycle of the prill tower exhaust when it sold the operation to Reichhold in 1972.



Contains  
Recycled  
Materials



## Analysis

As previously mentioned, Reichhold Chemicals, Inc. is located 3-1/2 miles northwest of St. Helens, Oregon, near the sparsely populated community of Columbia City. The plant property encompasses approximately 800 acres and the physical plant occupies 50 acres of this parcel. The nearest resident is located approximately 1/4-1/2 mile from the physical plant and the Department has not recorded any complaints related to the urea production process.

Reichhold was aware of the opacity problem upon assuming control of the operation in December 1972. Since that time efforts by the company through the chemical fertilizer industry and air pollution consultants to obtain guarantees of an economically feasible system have proven unsuccessful. Attached as Exhibits, A, B, and C are summations of Shell Chemical Company's and Reichhold Chemicals' efforts toward recuding the opacity of the prill tower visible emissions.

On December 19, 1974, representatives of Reichhold and the Department met to discuss the Air Contaminant Discharge Permit proposed for the urea process. As a result of this meeting, it was mutually agreed that the company would either submit a compliance schedule or apply for a variance relative to the prill tower opacity problem.

Subsequently, in correspondence submitted December 23, 1974, Reichhold stated that investigations had thus far not disclosed any "practicable method of treatment or control to reduce the opacity of the prilling tower to 20 percent or less," and in a meeting with Department officials that same day confirmed their intention to submit a written request for a variance.

On January 13, 1975, Reichhold submitted to this Department a written request for a five-year variance from the existing opacity standard. This request was made on the basis of Reichhold's belief that it is presently using the highest and best practicable control available, "since practicable technology to achieve a plume opacity of less than 20 percent for urea prill towers has not been demonstrated."

In a letter dated February 11, 1975, the Department responded that it did not concur with the statement that the highest and best practicable treatment is presently being employed. Several of the vendors cited by Reichhold would guarantee particulate collection efficiencies which the Department believes would be capable of attaining compliance with our opacity standard. The Department stated that practically no equipment manufacturer will guarantee to meet opacity limits regardless of the application of their equipment, but most will guarantee a collection efficiency or outlet grain loading. The Department contended that a grain loading or collection efficiency can be established which would meet opacity limits and that a schedule and vendor guarantee could be developed based upon this approach. This procedure has been used many times in the past by the Department and industries in the state.

The Department's response further stated that the variance request did not present any evidence that strict compliance would result in substantial curtailment or plant closure. Also, the length of the variance was considered unreasonably long, particularly since no definitive schedule for ultimately attaining compliance was presented.

After meeting with the Department on February 19, 1975, Reichhold Chemicals, Inc. submitted a modified request (copy attached) for a one year operational variance during which time various devices capable of reducing particulate emissions to a level which would give a good assurance of attaining compliance with the opacity standard would be tested.

Oregon Revised Statutes (ORS), Chapter 468.345, 1974 Replacement Part, Variances from Air Contaminant Rules and Regulations, paragraph (1) states that:

The Commission may grant specific variances which may be limited in time from the particular requirement of any rule or standard . . . if it finds that strict compliance with the rule or standard is inappropriate because:

- a. Conditions exist that are beyond the control of the persons granted such variance; or
- b. Special circumstances render strict compliance unreasonable, burdensome or impractical due to special physical conditions or cause; or
- c. Strict compliance would result in substantial curtailment or closing down of a business, plant or operation; or
- d. No other alternative facility or method of handling is yet available.

### Conclusions

1. Reichhold Chemicals, Inc. operates a chemical fertilizer plant 3-1/2 miles northwest of St. Helens, Oregon.
2. The company employs approximately 61 people whose annual payroll and annual operating expenses has a significant impact on local economics.
3. The company employs a prill tower in its production of pelletized urea from which visible particulate matter escapes in excess of the Department's opacity standards.

4. Company investigation has thus far resulted in no guaranteed solution to opacity problems.
5. From an overall environmental viewpoint, the granting of a variance will have little impact due to the plant's location. The Department has no record of complaints relative to this source.
6. Granting of a variance by the Environmental Quality Commission would be allowable in accordance with ORS 468.345.
7. Since this source is included in the control strategy of the Oregon State Implementation Plan, granting of the said variance will also necessitate an amendment of the Implementation Plan.

Recommendations

It is the Director's recommendation that the Implementation Plan be amended and that a one year variance be granted to Reichhold Chemicals, Inc. from June 1, 1975, to June 1, 1976, under the following conditions:

1. Amend the current Air Contaminant Discharge Permit to include the variance period and conditions.
2. During the variance period the company will conduct investigations and pilot testing of the control devices which appear most capable of meeting grain loading or efficiency requirements which the company and the Department mutually agreed are likely to result in compliance with the Department's opacity standard.
3. Forty-eight (48) hours prior to the testing of any pilot equipment, the company shall notify the Department.
4. Thirty (30) days prior to the expiration of the variance, Reichhold shall submit a written report to the Department describing the results of the testing program and be prepared to enter a compliance agreement for any method proven acceptable.



KESSLER R. CANNON  
Director

SMW/kz  
Attachments:  
Exhibits A, B, and C  
Reichhold Chemicals, Inc. letter dated March 13, 1975  
5/12/75

EXHIBIT A

SUMMARY OF SHELL CHEMICAL COMPANY'S STUDIES

ON PRILL TOWER PLUME CONTROL

Shell Chemical did process studies and engineering work on various scrubbing systems for the urea prill tower. They actually tested three devices at the St. Helens plant site and others at the Ventura, California plant. Reichhold does not have the written summary of this test work, nor the raw data that was collected. The various tests at St. Helens are briefly described below:

1. A High Pressure Drop Venturi Scrubber

This venturi was installed temporarily and a slip stream of air from one of the prill tower fans was directed to grade. Tests of grain loading in and out of the test scrubber were conducted for various pressure drops. Shell Chemical discarded the concept of the venturi because of the very high pressure drop required to achieve an acceptable efficiency on the submicron fume that is generated in the tower.

2. Bag Filters

A pilot baghouse was tested at the plant site. Reasonably good efficiencies were obtained, but high humidity caused the bags to clog, making a baghouse installation impractical in this application.

3. A Brink HV (High Velocity) Mist Eliminator

This system involves the inertial impaction removal technique for particles and mist greater than 3 microns. After studying the system's geometry for installation in the prill tower itself rather than at grade, it was determined that an HV unit could be installed physically in the tower. However, the removal efficiencies for the HV unit were not sufficient to achieve an opacity of less than 20%, so Shell determined this was not an acceptable system.

4. Total Recycle of Tower Air

This concept was considered by Shell in 1971. It involved recycling the prill tower exhaust through a

scrubber-cooler to the base of the tower, and the treatment of a slip stream with a high efficiency scrubber. This was the scheme that Shell proposed to reduce the plume opacity. The installation itself was not started, however, before Shell decided to shut down the St. Helens operation in 1972.

The design engineering material for this emission control facility was given to Reichhold under a secrecy agreement as part of the purchase agreement for the plant.

EXHIBIT B

SUMMARY OF REICHHOLD CHEMICALS, INC.'S EFFORTS TOWARD  
REDUCING THE OPACITY OF THE PRILL TOWER PLUME

Reichhold Chemicals, Inc. purchased the St. Helens plant from Shell Chemical Company in December of 1972, and by February of 1973 started ammonia and urea production. Engineering efforts were, of course, directed to the initial start up and shake down period of the previously moth-balled plant. It was realized that while the urea prill tower emission was in compliance with the process weight table, the plume opacity generally exceeded 20% and that we were expected to find a suitable means to maintain the opacity below the 20% level. Efforts were started toward this end, and Exhibit C lists the major contacts made in this regard.

Initial emphasis to reduce opacity was placed on the Shell recycle scheme, since this was the result of their extensive investigation. There are many potential problems with this approach. The prilling system is not designed for the high temperature, high humidity conditions this scheme would require. Build up of urea on the tower walls and collection cone is a problem during normal operations, and would have to get more severe, since the recycle air stream would be saturated. Further, as the temperature of the inlet air increases, the urea prills do not solidify completely before reaching the bottom of the tower, resulting in a solid build up that must be manually chipped out. The removal procedure is time consuming, a safety hazard, and often requires the tower to be shut down to achieve satisfactory results. Accelerated build up rates anticipated with the recycle scheme would magnify the problems we now have with the tower.

During the summer months the tower capacity is barely adequate. We expect both a build up problem and reduced rate operation if the recycle scheme were used. Furthermore, we do not know of any such system operating on any prilling tower. The concept has been proposed for high density ammonium nitrate prill towers, but the problems of refrigerating the air economically and achieving a tower system that is completely enclosed have so far discouraged anyone from pursuing this method.

For the above reasons we decided this scheme is not practicable and redirected our efforts to other possible alternatives. Through industry meetings we contacted and became members of the Ammonium Nitrate Pollution Study Group (ANPSG) which is an industry association of manufacturers that organized to exchange information and technology on pollution problems associated with ammonium nitrate plants. Their primary concern was the ammonium nitrate high density prilling tower and NOx

abatement from nitric acid plants. At the meeting in February 1973, the first held after we joined, we requested that the study group consider urea plants, since many of the manufacturers present also operated urea production facilities.

In talking with the other urea manufacturers at these meetings, we learned that only one other company was actively pursuing modifications to urea prill towers to reduce emissions. However, their work was primarily concerned with reducing the grain loadings to achieve an emission within the process weight table. To our knowledge, there is no urea prill tower currently in operation in the United States that achieves an effluent cleaner than ours. Several people are very interested in our system, and we have talked at length with Borden Chemicals, Inc. regarding wet scrubbing for their urea prill tower. The February 1975 meeting of the ANPSG will hold a special one day conference initiated at Reichhold's request, directly aimed at urea plant pollution problems.

In addition to contacts we've had in the industry, we've continued to evaluate different collection equipment that could be applicable to our urea prill tower. Several contacts were made with Monsanto Envirochem about their Brink systems. A basic problem with the Brink is the susceptibility of the glass fiber elements to corrosion in an alkaline environment. The small amount of ammonia present in the prill tower exhaust would contribute to this problem substantially. Plugging of the fiber elements by biuret is also a potential problem. The long term effectiveness in our environment, therefore, is very questionable. Monsanto will guarantee a removal efficiency, but they will not guarantee the results on the opacity level of the treated air stream. No 2/11

Environeering Inc.'s proposal was also evaluated. It appears possible that Environeering can install a modified rod type scrubber in the existing prill tower. However, their collection efficiencies on submicron particulate is low, and they have stated that they would not guarantee an opacity of the resultant effluent from their scrubber system. It appears that although the energy requirements for this system are moderate, the overall efficiencies are too low to effectively remove the submicron urea that is the main contributor for light scattering and resultant visibility of our plume. It does not appear that their system would be successful in reducing our opacity below 20%.

Johns-Manville has recently developed a scrubbing system that they claim would be capable of removing submicron particles with moderate energy requirements. We have arranged for them

to run tests on our tower with their pilot scrubbing unit in late February or early March to see if it is applicable in our situation.

As an alternate to installing scrubbing equipment to catch the fume (submicron particle) after it has been generated, efforts were made during 1973-1974 to reduce the amount of submicron material that is generated within the tower. These efforts include:

1. Revision of prill heads.

We modified the existing prill plates to produce a smaller, more uniform prill that would resist mechanical break up and dust formation. Although we were successful in reducing the particle size distribution of the product from the tower, we were not able to detect any visible change in the plume opacity. We theorized that although the drop of molten urea would be cooled faster with the smaller diameter, and thus emit less fume, the compensating factor of having more available surface area apparently counteracted the desirable effect.

2. Melter design changes.

Various ideas were considered on possible changes to the crystal melter in the urea prill tower to minimize fume generation by preventing excessive temperatures and reducing residence time. We concluded there would be little advantage to a major change in melter design, and have, therefore, discarded this approach for the time being. New ideas are actively being sought, and discussed within the industry.

3. Reduction of Air Flow.

Consideration was given to the possibility of reducing the air flow through the tower to limit the amount of particulate matter in micro prills entrained in the gas stream. However, a reduction in air flow would probably aggravate our problem rather than improve it since entrainment of submicron material is not dependent on velocity. Reducing the air flow would increase the prill temperature and this would result in additional fume generation which would increase the opacity. As mentioned earlier, the tower capacity is marginal during warm weather, so rate reduction would be necessary if the air flow is decreased.



4. Alternates to prilling.

We are considering major revisions and expansion of the urea plant, which, if carried out, may make it feasible to abandon the prilling operation altogether. There are only two alternate processes currently available to urea technology. These are a spherodizing system as licensed by C & I/Girdler and pan granulation system as licensed by Norsk Hydro.

We have obtained preliminary information on both these processes, and have visited the Norsk Hydro pilot plant unit near Oslo, Norway, the TVA pan granulation unit at Muscle Shoals, Alabama, and the C & I/Girdler installation at Cominco Ltd. in Calgary, Alberta, Canada. Additionally, we plan to visit a C & I/Girdler installation in Louisiana in early February 1975.

From observations and discussions during these visits, it appears that both processes will meet mass emission standards, but there is still some question on guarantees for the opacity standards. More information must be gathered and evaluated before concluding that either process may be better than prilling for our situation. Since these choices involve major process changes and are not primarily pollution control equipment, they could only be economically feasible if the proposed expansion is undertaken. Additional time is needed to make a decision on the expansion, particularly in view of the natural gas shortages experienced so far and the uncertainty of this supply, which is our basic raw material, for the next few years.

EXHIBIT C

CHRONOLOGICAL LISTING OF CONTACTS

WITH VENDORS AND CONSULTING ENGINEERING FIRMS

RELATING TO UREA PRILL TOWER PLUME OPACITY REDUCTION

- 1/3/73 P. S. Hewett - Vice President Environmental Services - Reichhold Chemicals, Inc. Discussed possible use of scrubber manufactured by Entoleter Corporation. Information was requested from the manufacturer. (Subsequent investigation indicated high pressure drop required to effect clean up and overall system not suitable for our tower.)
- 3/5/73 E. T. Comeau - Cooperative Farm Chemical Association (CFCA), Lawrence, Kansas. Discussion of work on ammonium nitrate tower emission problem at CFCA. Urea towers not yet considered by CFCA, and their approach requires urea vapor pressure data which they've not found in the literature. (CFCA forwarded copy of paper on "Abatement of Prilling Tower Effluent" by Mitsui Toatsu. Not applicable to particles near or in submicron size range, however.)
- 4/1/73 Day Tooley - Monsanto Envirochem Systems. Discussed application of Brink mist eliminator systems for urea prill tower application. Reviewed our problem and requested additional information from them on their system.
- 7/31/73 Richard S. Reid - CH<sub>2</sub>M Hill. Discussions at our site regarding sampling the prill tower effluent.
- 8/8/73 Day Tooley - Monsanto. Discussions on application of the Brink mist eliminator in urea service, and a brief review of our existing analytical information on our tower effluent. Information was also obtained on Monsanto's MBS10 sampling system and subsequent to this meeting a purchase order was placed to Monsanto for use of their sampler on both our ammonium nitrate neutralizer effluent stack and the urea prill tower effluent. (Meaningful results not obtained in the urea plant.)

- 8/12/73 Received CH<sub>2</sub>M proposal dated 8/9/73. Subsequent decision made not to proceed since study would only be a duplicate of the previous test work.
- 10/73 Joined Ammonium Nitrate Pollution Study Group (ANPSG).
- 11/30/73 Ivo Mavrovic, Consulting Engineer - Scientific Design. During discussions of possible plant expansion, possible methods for control of the prill tower effluent were considered.
- 2/7-8/74 Ammonium Nitrate Pollution Study Group (ANPSG) meeting. Attended by E. J. Stipkala and J. H. Cramer. RCI requested time slot be allocated at future meeting to discuss urea towers. Contacted other urea tower operators and discussed common problems. Other plants concerned with grain loading limitations, not with opacity.
- 2/19/74 Glen T. Sparrow, Norman J. Walton - URS/Engineering and Construction Company. Meeting at RCI, St. Helens to discuss prill tower plume opacity control.
- 3/5/74 Phil Keown - Borden Chemical, Louisiana. Mr. Keown discussed their approach on prill tower effluents. Noted that Enviroengineering Inc. was doing test work for and with them.
- 3/5/74 N. S. Balakrishnan - Enviroengineering, Inc. Discussed the application of the Enviroengineering venturi rod scrubber system in urea service. Requested additional information.
- 3/19/74 Received proposal from URS/Engineering and Construction Company. Study not undertaken as Enviroengineering's experience with test work on urea towers judged to promise more help to us.
- 3/38/74 Roy L. Duggan - Air Products and Chemicals, Pensacola, Florida. Follow up contact regarding system mentioned at ANPSG meeting being tested for

abatement of prill tower effluent. Told that more tests required before any results will be given out. Also secrecy agreement details not firmed up yet.

- 4/18/74 Submitted data sheets to Heat Systems Ultrasonics, Inc. to determine if their scrubber system may be applicable to our problem. Subsequently told that their units so far cannot handle the air volume that we have.
- 4/74 Phil Keown - Borden Chemical. Discussed results of Enviroengineering's "dust difficulty determinator" testing. Results inconclusive because of extreme difficulties in getting representative samples from their system. Briefly discussed Lone Star Steel's agglomeration approach to particulate removal, but they are bound by a secrecy agreement, and could not divulge any details at this time.
- 5/21/74 N. S. Balakrishnan - Enviroengineering. Discussed test work at Borden Chemicals and Triad Chemical. Based on preliminary test experience, Enviroengineering felt they could reduce grain loading at those plants to the level at which we are now operating.
- 6/1/74 Phil Keown - Borden Chemical. Borden not confident of the results of their and Enviroengineering tests. Now planning to undertake a study of possible changes in melter design to minimize formation of fume.
- 8/4/74 N. S. Balakrishnan - Enviroengineering. Determined scope cost for sampling work. Grain loading to be determined only on the inlet, with outlet loadings calculated from material balance around the unit.
- 8/10/74 W. E. Brown - C & I/Girdler, Inc. Requested price information and effluent standards for spherodizing process.

- 8/19/74 Received Enviroengineering proposal for a "dust difficulty determinator survey". Proposal for testing not accepted, but alternate proposal requested for guarantees utilizing inlet loadings as determined from their testing at Borden, Triad, and W. R. Grace.
- 9/5/74 John Stover - Cooperative Farm Chemicals Association, Lawrence, Kansas. Discussion centered around the applicability of the CFCA shroud design for urea plants. They have installed a system to allow separation of highly contaminated ammonium nitrate effluent air from their ammonium nitrate prill tower. They have not designed nor worked on a similar system for use in urea prill towers, and did not know if it could be applied to our situation.
- 11/12/74 Al Dierl - E & L Associates, Inc. They discussed work being performed by E & L for the purchasers of the moth-balled Shell Chemical plant at Ventura, California. Requested a proposal from them for engineering and design services.
- 11/25/74 N. S. Balakrishnan - Enviroengineering, Inc. They have done some preliminary investigations to see if their scrubbing system could be installed in our existing tower. They predict an outlet loading of 0.012 grains/SCF but stated that they could not guarantee opacity. (Written proposal dated 12/13/74 is Exhibit D, attached.)
- 12/10/74 Al Dierl - E & L Associates, Inc. Discussed their position on performance guarantees. They are a construction engineering firm and would only pass on equipment guarantees from vendors.

# REICHHOLD CHEMICALS, INC.

*Creative Chemistry... Your Partner in Progress*



*Executive Offices* • RCI BUILDING, WHITE PLAINS, N. Y. 10602

March 13, 1975

ADDRESS REPLY TO  
P.O. BOX 810  
ST. HELENS, OREGON 97081  
—  
TELEPHONE (503) 397-2224

Department of Environmental Quality  
Northwest Region  
1010 N.E. Couch Street  
Portland, Oregon 97232

Attention: Mr. E. J. Weathersbee  
Administrator

Gentlemen:

Further to your letter of February 11, 1975 and our meeting of February 19, 1975, Reichhold Chemicals, Inc. requests a modified variance of the opacity provision item 2(b) of Section A of the Air Contaminant Discharge Permit to allow continued operation of our St. Helens urea plant for a period of one year.

This variance period will be used to test various devices to reduce the opacity of the air stream exit the prilling tower. We have completed one series of tests with the Johns-Manville filter system, but do not yet have the final reports. Additionally, we have scheduled preliminary sampling work with Monsanto Envirochem Inc. which will be followed by a 10-12 week test run using a Brink pilot unit installed on our tower. This pilot run should answer some of the concerns regarding element corrosion and plugging.

We will also continue to investigate other methods and equipment that may be effective in reducing the effluent opacity.

Please let us know if more information is necessary.

Very truly yours,

REICHHOLD CHEMICALS, INC.

E. J. Stipkala  
Manager, Plant Operations

EJS:beb



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

### MEMORANDUM

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item H.2 for EQC Meeting of May 23, 1975

Oregon Portland Cement Co., Lime, Oregon  
Variance Request - Extension of Compliance Schedule

### BACKGROUND

Oregon Portland Cement Company owns and operates a wet process cement manufacturing plant located along U. S. Highway 80-N about 5 miles north of Huntington, Oregon. The plant produces about 550 tons of cement per day and employs 110 people at full production. Plant production generally parallels the construction activity in the Eastern Oregon and Boise, Idaho areas.

### DISCUSSION

The cement plant includes a raw grind section, slurry tanks, two natural gas or coal-fired rotary kilns, a finish grind section, bins, silos, bagging and truck and rail loading facilities. A pozzolan cinder drier also operates infrequently at the site.

The exhausts from the two kilns, which are combined and discharged to the atmosphere via a 150 foot tall stack, are not in compliance with Department regulations and are not on an approved compliance schedule. The remainder of this facility is considered to be in compliance or on an approved compliance schedule. Therefore, only the kilns are being considered at this time.

Oregon Portland Cement Company and the Department began discussing the reduction of kiln emissions about a year ago during the process of developing an Air Contaminant Discharge Permit for the cement plant (see attached May 10, 1974 letter from OPC). At that time the Company indicated consideration had been given to controlling the kilns with either a precipitator or a baghouse, but decisions were not being made since long range plans were in the state of flux. During this period it was understood that the Company would be evaluating its long range plans and would submit a control program for the kilns as soon as practical.



Contains  
Recycled  
Materials

A Notice of Construction for an electrostatic precipitator to control emissions from kiln No. 2 was submitted by the Company on December 26, 1974. The Company, on January 15, 1975, submitted additional information and requested a variance to operate kiln No. 2 at the existing level during the construction period. The Department approved the precipitator proposal by letter dated February 10, 1975 and began processing the variance request. Some five bids, subsequently obtained by the Company, indicated that the total installed cost of the precipitator would approximate \$800,000 (letters attached).

In the January 15, 1975 correspondence, the Company also requested a variance to operate kiln No. 1 at the current emission level until its production would be supplemented by increased productivity at their Inkom, Idaho plant. It was projected that kiln No. 1 would operate intermittently in response to market demand until permanent retirement in 1978 or 1979.

In early March the Company informed the Department that it wished to reassess its previous commitments due to the results of a recently completed long range planning study and the cost of the precipitator installation. Essentially, this study indicated that the existing cement plant should be replaced with a new modern facility. In a letter dated March 28, 1975, the Company indicated that it would make a decision regarding a new plant on or before September 1, 1975. Proposed schedules, one based on a decision to build and one based on a decision not to build, were also submitted.

The Company revised and expanded these schedules by copying the Department on a letter dated April 4, 1975 and addressed to the EPA. (Since the Huntington plant will not be in final compliance by July, 1975, and is not on a DEQ approved compliance schedule, the EPA has also been involved in this source.)

The proposed schedules and requested variances under consideration at this time are summarized below:

Case I - Based on a decision to build a new plant

A. Proposed Schedule

1. On or before September 1, 1975, decide to construct new plant.
2. By March 10, 1975, begin preliminary engineering (accomplished).
3. By September 1, 1975, begin design engineering.
4. By October 1, 1975, submit Notice of Construction and Application for Approval for air contaminant sources contemplated in new plant.
5. By February 1, 1976, issue purchase orders for major equipment.
6. By June 1, 1976, award construction contract, or contracts.



7. By August 1, 1976, begin construction.
8. By June 1, 1978, complete construction.
9. By September 1, 1978, demonstrate compliance with applicable air discharge standards.

B. Requested Variances

1. Kiln No. 1 - Until December 1, 1977.
2. Kiln No. 2 - Until September 1, 1978.

Case II - Based on a decision to defer building a new plant

A. Proposed Schedule

1. On or before September 1, 1975, decide to defer building a new plant.
2. By July, 1974, begin preliminary engineering for an electrostatic precipitator (ESP) for Kiln No. 2 (accomplished).
3. By December 26, 1974, submit Notice of Construction and Application for Approval for ESP (accomplished).
4. By September 1, 1975, begin design engineering for ESP.
5. By September 15, 1975, issue purchase order for ESP.
6. By January 1, 1977, award construction contract.
7. By January 15, 1977, begin construction.
8. By May 1, 1977, complete construction.
9. By June 1, 1977, demonstrate compliance with applicable air discharge standards.
10. By December 1, 1977, cease operating Kiln No. 1 without controls adequate to achieve compliance.

B. Requested Variances

1. Kiln No. 1 - Until December 1, 1977.
2. Kiln No. 2 - Until June 1, 1977.

## ANALYSES

Oregon Administrative Rules, Chapter 340, Sections 21-015, 21-030 and 21-040 limits the amounts of particulates emitted from industrial processes. Cement Kiln No.'s 1 and 2 at the Oregon Portland Cement Company plant along U. S. Highway I-80N north of Huntington, Oregon are not capable of complying with these limits as currently equipped. Therefore, the Company has proposed compliance schedules to correct this matter and requested appropriate variances to allow legal operation in the interim.

The Department has reviewed the proposed schedules for both Case I and Case II, including the decision on constructing a new plant and designing, procuring and installing equipment, and did not see any obvious way whereby they might be shortened. A new modern plant (Case I) is considered by the Department to be the preferred long term solution. Should this be deferred (Case II), the precipitator would provide adequate control for kiln No. 2.

The economic importance of the plant includes being the major employer in the Huntington area, plus the major supplier of cement for the construction activity in the eastern Oregon - Boise, Idaho area.

Particulate emissions from the plant are not known to cause any adverse effects except for aesthetics in the area near the plant. The current emissions are not suspected of causing any violations of ambient air quality standards beyond the site area.

Forasmuch as Oregon Revised Statutes (ORS) Chapter 468.345, 1974 Replacement Part, "Variances From Air Contaminant Rules and Regulations", paragraph (1) states:

"The Environmental Quality Commission may grant specific variances which may be limited in time from the particular requirements of any rule, regulation or order...if it finds that special circumstances render strict compliance unreasonable, burdensome or impractical due to special conditions or cause; or strict compliance would result in substantial curtailment or closing down of the business, plant or operation."

Oregon Portland Cement Company has petitioned the Environmental Quality Commission for variances from Oregon Administrative Rules, Chapter 340, Sections 21-015, 21-030 and 21-040 to operate kilns 1 and 2 at its cement plant near Huntington, Oregon.

## SUMMARY AND CONCLUSIONS

1. Oregon Portland Cement Company operates a two kiln wet process, cement manufacturing plant near Huntington, Oregon. This facility has a significant impact on local economics.
2. The company is considering the construction of a new dry process plant. A decision on whether or not to start construction will be made on, or before, September 1, 1975.

3. If the new plant is to be constructed, kilns 1 and 2 would be permanently phased out by December 1, 1977 and September 1, 1978, respectively.
4. If the new plant is not to be constructed, kiln No. 1 would be permanently phased out or not operated in non-compliance by December 1, 1977 and kiln No. 2 would be controlled by June 1, 1977.
5. The company has requested variances for kilns No. 1 and No. 2 with the appropriate time limits as necessitated by the dates in 3. and 4. above.
6. The granting of this variance by the Environmental Quality Commission would be allowable in accordance with ORS 468.345.
7. The requested variances are not expected to cause any violations of ambient air standards beyond the plant site area.
8. The results of the Commission action regarding the proposed schedules and requested variances will be incorporated in the Air Contaminant Discharge Permit upon its issuance for this facility.

DIRECTOR'S RECOMMENDATION

It is the Director's recommendation that the proposed schedules be accepted and variances from Oregon Administration Rules, Chapter 340, Sections 21-015, 21-030 and 21-040 be granted to the Oregon Portland Cement Company plant near Huntington for kiln No. 1 until December 1, 1977 and for kiln No. 2 until June 1, 1977 with the provision that the latter date be extended to September 1, 1978 if a decision to build a new plant is reached on or before September 1, 1975.



KESSLER R. CANNON  
Director

Attachments - Oregon Portland Cement Company-DEQ correspondence  
in reverse chronological order

FAS:h



## OREGON PORTLAND CEMENT COMPANY

INCORPORATED 1915

April 4, 1975

Ms. Floye Nui Sumida  
Mail Stop 513, Region X, EPA  
1200 Sixth Avenue  
Seattle, WA 98101

RE: NOTICE OF VIOLATION FILE NO. X75-02-45-113

Dear Ms. Sumida:

As suggested at our conference held March 31, 1975, regarding the subject Notice of Violation, we have revised the schedule which we submitted by letter to the Oregon DEQ on March 28, 1975. It is our intention that the revisions we have made, along with the supplementary information herewith provided, will satisfy requirements of both the DEQ and EPA. As previously stated to you, we will appreciate your keeping this material confidential to the extent possible.

The schedule which we intend to follow is as follows:

- 1) Our company will complete the installation of the bag-type dust collector in the Finish Grind as shown on the schedule already approved by DEQ. Other control measures for fugitive dust to be taken as may be agreed upon between company and DEQ staffs.
- 2) On, or before, September 1, 1975, our company will make the decision to undertake the construction of a new plant at its Durkee, Oregon quarry site, or will make the decision to defer such construction pending a more favorable economic outlook.

In the event that the new plant construction is deferred, the dates and actions shown for steps 3A through 10A, below, will apply.

In the event that new plant construction is to proceed, steps (3) through (10) will apply.

- 3) March 10, 1975, preliminary engineering was started.
- 4) September 1, 1975, begin design engineering.
- 5) October 1, 1975, submit Notice of Construction and Application for Approval for air contaminant sources contemplated in new plant.
- 6) February 1, 1976, issue purchase orders for major equipment.

Ms. Floye Nui Sumida

April 4, 1975

- 7) June 1, 1976, award construction contract, or contracts.
- 8) August 1, 1976, begin construction.
- 9) June 1, 1978, complete construction.
- 10) September 1, 1978, demonstrate compliance with applicable air discharge standards.
- 3A) July, 1974, preliminary engineering was started for an electrostatic precipitator (ESP) to control stack emissions from Kiln No. 2 at existing plant.
- 4A) December 26, 1974, submitted Notice of Construction and Application for Approval for ESP.
- 5A) September 1, 1975, begin design engineering.
- 6A) September 15, 1975, issue purchase order for ESP.
- 7A) January 1, 1977, award construction contract.
- 8A) January 15, 1977, begin construction.
- 9A) May 1, 1977, complete construction.
- 10A) June 1, 1977, demonstrate compliance with applicable air discharge standards.

We do not wish to provide emission controls for Kiln No. 1 at the existing plant due to its age, design, poor fuel utilization and other reasons explained to you in our conference. Also, we have found that we cannot replace that kiln's production at our Idaho plant as contemplated in our January 15, 1975, request for a variance to the Oregon DEQ. If the new plant is not constructed, our request to your agency and to the DEQ is for a waiver to allow us to operate Kiln No. 1 with its present level of emission control until December 1, 1977. With such a waiver, we would then have the option of acquiring clinker (or cement) from others to maintain our market after December 1, 1977, or we could do whatever was necessary to provide suitable control to allow us to operate the kiln after that date.

We think that the waiver, if granted in this situation, is justified because it limits the existing operation of Kiln No. 1 to only about six months operation beyond the time when Kiln No. 2 would be controlled. At the same time it allows the company six months, or more, extra time to attempt to negotiate with other companies for product before ordering a collector which would allow us to keep Kiln No. 1 on the line after December 1, 1977.

Whatever course taken by the company for Kiln No. 1, it is very important to the construction industry in the Huntington plant's trade area that sufficient cement is available. Also it is important to the company to maintain its market position

Ms. Floye Nui Sumida

April 4, 1975

by supplying the required cement. We submit, therefore, that the adverse impact of operating Kiln No. 1 with existing level of control until December 1, 1977, would be minimal due to the location which is remote from significant population and which is in an area well ventilated through the year. On the other hand, the adverse impact of a shortage of cement could be very noticeable in the area's construction industry and the loss of business could have the adverse effect of further postponing or eliminating the company's ultimate plan for replacing the existing plant with a new plant. A new plant would be subject to new plant emission standards which are much more restrictive and would use only about 50% as much energy per ton of clinker made as the existing plant.

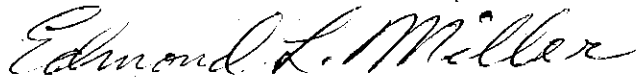
Please see Attachment I to this letter which is supportive of our time schedule for construction of a new cement plant.

Also please see Attachments II and III which are supportive of our time schedule for construction of an ESP for Kiln No. 2 at the existing plant.

We will be pleased to further discuss any of the foregoing material with your agency or with the DEQ. In any event we wish to have the opportunity to read a draft of a Consent and Order prior to its being issued to us.

Very truly yours,

OREGON PORTLAND CEMENT COMPANY



Edmond L. Miller  
Assistant Vice President

EIM/pk

Enclosures: Attachment I  
Attachment II  
Attachment III

cc: Mr. Harold Patterson, Oregon DEQ ✓



4260 SHORELINE DRIVE • EARTH CITY, (ST. LOUIS COUNTY) MISSOURI 63045 • 314-291-2030

TELEX 44-7673

April 2, 1975

Mr. Edmond L. Miller  
Assistant Vice President  
Oregon Portland Cement Company  
111 S.E. Madison Street  
Portland, Oregon 97214

Dear Mr. Miller:

Currently, Bendy is engaged in several cement plant projects. We draw on these experiences to estimate with reasonable accuracy the time required to put into operation a new cement producing facility.

In some cases we are performing a feasibility study (preliminary engineering) to define the project, an assignment that may extend over a period of four to six months. At the conclusion of such a feasibility study, the technical features, a normal schedule, and the costs have all been defined sufficiently to base a decision to proceed with design and construction.

An entire cement plant for a new site justifies several months of study. This practice of investigating the operational, technical, and economic aspects is well established in the cement industry's approach to a large project.

For a new plant of 400,000 to 500,000 tons per annum, we currently estimate 36 months for design, procurement, construction, and placing in productional operation. This calendar time may be increased by about three months if the delivery of equipment and materials is delayed or if unusual difficulty occurs in construction. A shorter interval might be enjoyed, perhaps with a saving of three months, if, for example, equipment delivery schedules meet or anticipate the vendors' promises.

Presently, the delivery of the principal equipment (grinding mills, kilns, and clinker coolers, large dust collectors) is the chief determinant in getting ready for production.

One example may illustrate the matter: the time of delivery of a large grinding mill is currently quoted as 17 to 20 months with an "open" gear and pinion drive while 26 months is quoted for a mill with an enclosed gearbox drive. Adding three months lead time from project decision day to purchase order date plus four months after the delivery of the mill gearbox to make the mill and motor ready for test, we have 33 months for this unit by itself. The schedules of other sections of the plant overlap so that the construction schedule for the plant takes more than 33 months.

April 2, 1975

1. Plans for Permit to Construct the Plant

Assuming that authorization may be granted on review of the feasibility study report (which would depict all of the dust control equipment), such authorization would coincide nearly with the Owner decision to build the plant. These two events could occur about four to six months after starting a feasibility study. This interval may be shorter if some of the information from earlier surveys of your plants can be salvaged, updated, and elaborated.

2. Issuance of Purchase Orders and Selection of a Contractor

Within three to five months after the decision to build, all orders for the principal mechanical and electrical equipment will have been placed.

During this interval, certain structural design work which does not depend on having drawings of vendors' equipment can be started. Storage buildings and silos are typical.

It is also during this time that the Owner may be able to negotiate a cost plus a fee-type agreement with a contractor company, on the basis of the feasibility report, and returned bid from several contractors. (However, if it is necessary to award a lump sum contract for construction, the letting of this contract must await the execution of a substantial percentage (more than 60%) of the working drawings. This would delay the construction activity several months.)

3. Initiation of Construction

We estimate that this could begin from six to seven months after the Owner's decision to proceed (authorization to build assumed, of course). This schedule depends on taking bids on the basis of the feasibility report. This is frequently done.

4. Completion of Construction (and Start-up)

Construction could be completed in about 33 months after the decision to build by the Owner. Add to this about three months for testing, start-up, and early productional operations. During this last three-month interval, the vendors will test their equipment for fulfillment of stipulated or guaranteed performance.



April 2, 1975

5. Final Compliance with the Law

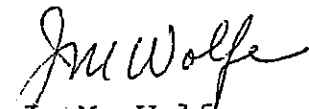
As indicated in Section 4 above, testing of the equipment to verify compliance with the law might be completed in 36 months, if all plans go well, or later if equipment delivery is delayed beyond current delivery promises, or if there are faults in the equipment.

\* \* \* \*

The above statements constitute our best estimate for the construction of a new cement plant. In arriving at this estimate, we have utilized recently completed studies on similar plants. In one of these studies we collaborated with The H. K. Ferguson Company which has experience in heavy industrial construction and its scheduling.

We would be glad to furnish further information.

Yours very truly,



J. M. Wolfe  
Senior Consultant

JMW/mg

*Industrial Marketing Systems, Inc.*

DIVISION OF ENVIRO ENERGY CORPORATION

16161 Ventura Boulevard, Suite 220B

Encino, California 91316

213-990-6152

April 1, 1975

Edmond L. Miller, Asst. Vice Pres.,  
Oregon Portland Cement Company,  
111 Southeast Madison,  
Portland, Oregon 97214

RE: Electrostatic Precipitator  
Huntington, Oregon  
Proposal No. KPN-4030F

Dear Mr. Miller:

We wish to reconfirm the statements made in our proposal No. KPN-4030-F with regards schedule performance. As of this date, April 1, 1975:

1. Drawings

A Load Diagram and General Arrangement drawing showing firm dimensions and loads at the points of application will be mailed within four (4) weeks from date of an order or letter of intent. This drawing will have adequate information to complete all structural and layout work relative to the precipitator. Electrical drawings will be mailed within eight (8) weeks from receipt of an order. Meetings will be held at the plant or Purchaser's offices to resolve problems as need warrants.

2. Material and Erection

The delivery of material will require approximately 16 months to start erection. The erection of the equipment proposed will require approximately 3-1/2 months based on a 40 hour work week.

This information was confirmed with Mr. Steve Mitchell, Environmental Elements Corporation, Baltimore, Maryland. If we may be of any further service to you, please let us know.

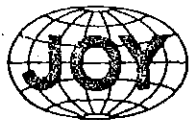
Very truly yours,

INDUSTRIAL MARKETING SYSTEMS, INC.



Jack Cooper

JC:dlr



# JOY MANUFACTURING COMPANY

WESTERN PRECIPITATION DIVISION

RP-9645C

## ABSTRACT

In response to Oregon Portland Cement Company inquiry, Joy Manufacturing Company (Western Precipitation Division) proposes to design, fabricate and deliver electrostatic precipitation equipment for the purpose of removing dust and fume from the gases arising from wet process cement kiln #2, located at Huntington, Oregon.

An electrostatic precipitator (following an existing mechanical collector) will be provided as described in Section 190 of this proposal; the equipment arrangement will consist of a single chamber and three (3) fields in series, with twenty-three (23) gas passages formed by 9' x 24' collecting surfaces (on 9" centers) as illustrated by the proposal drawing.

## IDENTIFICATIONS

The Purchaser

Oregon Portland Cement Company

JOY

Joy Manufacturing Company (Western Precipitation Division)

Ready for Operation

The precipitator will be ready for operation at the conclusion of mechanical/electrical checkout, after installation by others.

Initial Operation

Initial operation will occur when exhaust gas first passes through the collector.

## DIMENSIONS

As indicated by proposal drawing #K-143441-A, Section 800.

## SELLING PRICES

As indicated by Section 120.

## SCHEDULE

As indicated by Section 130.

## APPROXIMATE NET WEIGHTS

(a) Precipitator	141,340 lbs.
(b) Inlet/outlet nozzles	<u>13,820 lbs.</u>
(c) Total estimated net weights	<u>155,160 lbs.</u>



# JOY MANUFACTURING COMPANY

WESTERN PRECIPITATION DIVISION

RP-9645C

## 130 SCHEDULE

131 After written or telegraphic notification of award, and agreement as to scope, configuration, price, terms and conditions, JOY will:

- .1 Provide general arrangement drawings, electrical single line diagrams and loading schedules for approval, within 12 weeks
- .2 Submit final certified drawings, assuming return of approval drawings within two (2) weeks; within 20 weeks
- .3 Begin shipment of proposed equipment within 13 months
- .4 Complete delivery within 15 months

132 Shipment will be made by a combination of rail/trucking facilities judged most expedient, economical and efficient based upon both source of supply and the nature of the equipment/materials.

133 The proposed schedule is subject to prior orders and is premised upon prompt receipt of information and/or required approvals during the engineering and production phases of the work. Purchaser, if unable to receive the materials when ready for shipment, will promptly advise JOY where delivery may be made with payment due as if delivered to Purchaser's plant; any storage or additional transportation or handling cost so-occasioned will be for Purchaser's account.



**OREGON PORTLAND CEMENT COMPANY**

INCORPORATED 1915



March 28, 1975

Department of Environmental Quality  
Air Contaminant Discharge Program  
1234 S. W. Morrison Street  
Portland, Oregon 97205

Re: Air Contaminant Discharge Permit  
Huntington, Oregon Plant

Gentlemen:

We are pleased to provide for your information the schedule which we have verbally requested that you incorporate in the subject permit when issued. The schedule is as follows:

- 1) OPC will complete the installation of the bag-type dust collector in the Finish Grind as shown on the schedule already approved by DEQ. Other control measures for fugitive dust to be taken as may be agreed upon between OPC and DEQ staffs.
- 2) On, or before, September 1, 1975, OPC will make the decision to undertake the construction of a new plant at its Durkee, Oregon quarry site, or will make the decision to defer such construction pending a more favorable economic outlook.

In the event that the new plant construction is deferred, the dates and actions shown for steps 3A through 6A, below, will apply.

In the event that new plant construction is to proceed, begin to finalize the engineering agreement and follow through steps 3 to 8.

- 3) By October 1, 1975, begin detailed engineering. Begin, or continue financial negotiations. Begin, or continue the obtaining of all necessary permits.
- 4) By April 1, 1976, place orders for long delivery major equipment.

- 5) By January 1, 1977, engineering substantially complete. Begin construction contract negotiations. Complete placing of orders for vendor items.
- 6) By April 1, 1977, begin construction.
- 7) By October 1, 1978, construction complete and start trials.
- 8) By December 1, 1978, shut down production at Lime, Oregon plant and operate new plant. Ship from Lime to use up inventory before closing completely.
- 3A) Under the alternate schedule, by October 1, 1975, place order for equipment to control particulate emissions to bring about compliance with applicable Oregon standards.
- 4A) By November 1, 1976, initiate onsite construction for collector(s).
- 5A) By April 1, 1977, complete onsite construction.
- 6A) By June 1, 1977, demonstrate compliance with Sec. 21-040 OAR 340 by source testing.

We believe that it is in the overall best interest of the company, its employees, people living in its trade area and of the regulatory authorities that the EQC approve the above schedule.

Very truly yours,

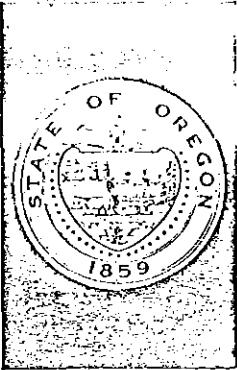
OREGON PORTLAND CEMENT COMPANY



Edmond L. Miller  
Assistant Vice President

ELM:er

*Blue Chair*



**DEPARTMENT OF ENVIRONMENTAL QUALITY**

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5296

ROBERT W. STRAUB  
GOVERNOR

February 10, 1975

KESSLER R. CANNON  
Director

Oregon Portland Cement Company  
111 SE Madison  
Portland, OR 97214

Attn: Edmond L. Miller                      Re: File #10-0010, SIC #3241  
Assistant Vice President                      & NC #283

Gentlemen:

The Department has reviewed the "Notice of Construction and Application for Approval" forms which you submitted for the anticipated installation of an electrostatic precipitator to control emissions from kiln #2 at the Huntington plant. It is the Department's understanding that the construction will also include a completely enclosed conveyor and storage bin system which will return collected dust to the kiln to the maximum extent possible. It is also the Department's understanding that the completion of this control plan will enable kiln #2 to comply with the limits set forth in OAR Chapter 340, Sections 21-015 and 21-040, and that the outlet grain loading from the electrostatic precipitator will be less than 0.026 gr./acf.

In view of these understandings your proposal has preliminary approval subject to the Department's review of the final plans and specifications.

If you have any questions, please feel free to contact J. A. Broad or F. A. Skirvin of this office.

Cordially,

KESSLER R. CANNON  
Director

F. A. Skirvin, Chief  
Engineering Section

JAB:fmh  
cc: ERO





**OREGON PORTLAND CEMENT COMPANY**

INCORPORATED 1915

January 15, 1975

Department of Environmental Quality  
Air Quality Control Division  
1234 S. W. Morrison Street  
Portland, OR 97205

RE: AIR CONTAMINANT DISCHARGE PERMIT - HUNTINGTON, OREGON PLANT

Gentlemen:

On December 26, 1974, we submitted to you our Notice of Construction and Application for Approval to install a control facility for Kiln #2 at our Huntington, Oregon plant. As part of the application, we submitted as Exhibit II dates for increments of progress in that installation.

We hereby request a variance under ORS 468.345 to allow operation of said Kiln #2 with existing level of control during the construction period shown by the aforementioned increments of progress.

Very truly yours,

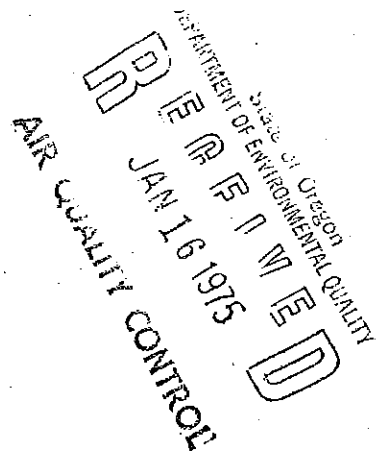
OREGON PORTLAND CEMENT COMPANY

*Edmond L. Miller*

Edmond L. Miller  
Assistant Vice President

ELM/pk

cc: R. E. Cooke, Huntington Plant







## OREGON PORTLAND CEMENT COMPANY

INCORPORATED 1915

January 15, 1975

Department of Environmental Quality  
Air Quality Control Division  
1234 S. W. Morrison Street  
Portland, Oregon 97205

RE: AIR CONTAMINANT DISCHARGE PERMIT - HUNTINGTON, OREGON PLANT

Gentlemen:

Our Application for Air Contaminant Discharge Permit for our Huntington cement plant submitted to you under date of April 24, 1973, shows the emissions from the two kilns to be a major source of contaminants at that plant. In meetings with DEQ staff we have been informed that a permit could be issued only after proper control, or after a schedule for proper control of that source has been submitted. Having submitted a Notice of Construction and Application for Approval on December 26, 1974 covering a new collector to suitably control Kiln #2, we hereby request a variance for Kiln #1 for a period of time sufficient to replace the productive capacity of that kiln at our Idaho facility. The requested variance could be issued under ORS 468.345 for reasons detailed in this letter.

Kiln #1 is a 9' and 10' x 210' kiln installed in 1923. It is very small by modern standards and inherently poor in fuel economy due to its size and age. Fuel consumption for Kiln #1 averages about 78 therms per ton of clinker which does not compare well with new, larger wet process kilns which produce clinker with less than 50 therms per ton. Kiln #2, somewhat larger than Kiln #1, uses about 58 therms per ton. For the foregoing, and other reasons, our company has now developed a plan under which new productive capacity will be installed at our Idaho plant which will allow the phasing out of Kiln #1 at the Huntington plant and the absorption of a larger part of our Idaho market by the Idaho plant.

No time schedule for having the new capacity available at our Idaho plant has been made but it seems unlikely that it could be on line until 1978 or 1979. As we foresee the market for cement, however, it probably will be necessary to use Kiln #1 only intermittently until it is permanently retired in 1978 or 1979.

Prior to making this request for a variance, the alternatives of either providing a suitable collector for Kiln #1 or combining the collection for Kilns #1 and #2 were considered. We found that a capital expenditure of from \$400,000 to \$700,000, depending on the option selected, to provide suitable control for a probable total production from Kiln #1 of less than 150,000 tons of clinker in 1977 and 1978 could not be made.

Department of Environmental Quality  
Air Quality Control Division

January 15, 1975

In view of the circumstances alluded to above, and in view of the geographical location of the facility, we feel that compliance with Sections 21-015 and 21-040 of Chapter 340, Oregon Administrative Rules, for the operation of Kiln #1 in the period 1975 through 1978 would be unreasonable, burdensome and impractical. Your favorable response to our request for a variance is urgently sought.

Very truly yours,

OREGON PORTLAND CEMENT COMPANY



Edmond L. Miller  
Assistant Vice President

ELM/pk

cc: R. E. Cooke, Huntington Plant



**OREGON PORTLAND CEMENT COMPANY**

INCORPORATED 1915

December 26, 1974

Department of Environmental Quality  
Air Quality Control Division  
1234 S. W. Morrison Street  
Portland, Oregon 97205

RE: AIR CONTAMINANT DISCHARGE PERMIT - HUNTINGTON, OREGON PLANT

Gentlemen:

Attached hereto please find our Notice of Construction and application for approval for an electrostatic precipitator to control emissions from Kiln No. 2 at our Huntington plant. We understand that the subject permit, when issued, will be compatible with all terms and conditions which may be imposed by your approval of the attached application.

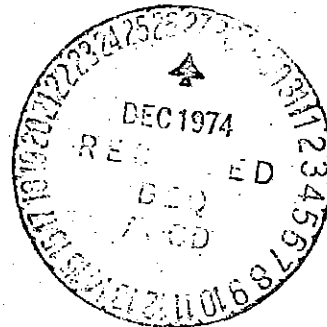
Very truly yours,

OREGON PORTLAND CEMENT COMPANY

Edmond L. Miller  
Assistant Vice President

ELM/pk  
Enclosures

cc: R. E. Cooke, Huntington Plant





**OREGON PORTLAND CEMENT COMPANY**

INCORPORATED 1915

May 10, 1974

Mr. F. A. Skirvin  
Air Quality Control Division  
Department of Environmental Quality  
1234 S. W. Morrison Street  
Portland, Oregon 97205

RE: AIR CONTAMINANT DISCHARGE PERMIT -- Huntington, Oregon Plant

Dear Mr. Skirvin:

This letter is in response to your request that we list for you the various proposals which have been discussed internally to satisfy conditions which would likely be attached to subject permit when issued.

As Mr. Voldbaek explained to you at our meeting on May 2, 1974, we have had trouble coming to grips with the problem due to the state of flux of company long range plans. Unfortunately, consultant's input and company decisions on such long range plans will not be forthcoming until possibly early fall this year. In the interim, for purposes of negotiating a compliance program with your department, we are going to assume that the plant will remain in operation for about ten more years and that during those ten years, the company will obviously choose to minimize capital expenditures.

As to proposals that have been considered within the company, only two have had much attention. The first and most obvious of these is a proposal to install a dust collector on No. 1 and 2 kiln exhaust. Either a precipitator or a bag house would bring this source within the Oregon standard. The other proposal is to replace the Finish Grind clinker dust collector with another unit of sufficient capacity to properly eliminate emissions in that area.

These items may be further discussed when you visit the plant later this month.

Very truly yours,

OREGON PORTLAND CEMENT COMPANY

Edmond L. Miller  
Assistant Vice President

ELM/pk

cc: Dick Cooke, Huntington, Oregon Plant





OREGON PORTLAND CEMENT COMPANY

INCORPORATED 1915

May 19, 1975

Mr. Kessler R. Cannon, Director  
Department of Environmental Quality  
1234 S. W. Morrison Street  
Portland, OR 97205

RE: FILE #10-0010 VARIANCE REQUEST

Dear Mr. Cannon:

We have received a copy of your memorandum directed to the Environmental Quality Commission concerning Agenda Item H.2 for EQC meeting of May 23, 1975 -- Oregon Portland Cement Company, Lime, Oregon, Variance Request - Extension of Compliance Schedule.

We find that there has been a misunderstanding concerning our variance request for Kiln No. 1 in the event the decision is made to build a new plant on or before September 1, 1975. It was our intention in both oral and written communication with the staff that Kiln No. 1 as well as Kiln No. 2 would operate with a variance until September 1, 1978 when construction of the new plant would have been completed and compliance demonstrated.

As presently proposed we would have to shut down Kiln No. 1 on December 1, 1977, nine months prior to completion of the new plant. To do so would adversely affect the construction industry in that plant's trade area and the company's market position. The adverse impact would be compounded in the event Kiln No. 2 was unable to operate during this period. We submit that the adverse impact of operating Kiln No. 1 for nine additional months would be minimal.

We request that the Director's recommendation be modified by providing that the date of December 1, 1977 (for Kiln No. 1) be extended to September 1, 1978, but only if a decision to build a new plant is reached on or before September 1, 1975.

If our request for modification is not granted at this time, we reserve the right to renew our request at a later date.

Thank you for your consideration.

Very truly yours,

OREGON PORTLAND CEMENT COMPANY

Edmond L. Miller  
Assistant Vice President

ELM/pk

cc: Mr. Harold M. Patterson



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

TO: Environmental Quality Commission  
FROM: Director  
SUBJECT: Agenda Item No. H (3), May 23, 1975, EQC Meeting  
Variance Extension Request: Union Oil of California

### Background

On September 20, 1974, the Environmental Quality Commission considered the attached Department report entitled, "Variance Request: Union Oil of California" (Attachment 1). Based on the information available in September 1974, the Department recommended, and the EQC granted a variance effective until July 1, 1975 to Union Oil of California and its customers, from the Department's residual fuel oil requirement limiting sulfur content to a maximum 1.75%. Specific conditions imposed with the variance are contained in the aforementioned Department report.

On April 21, 1975, Union Oil of California submitted a request to the Department to extend their variance from July 1, 1975 to July 1, 1976, and as before requested that it be applicable to the fuel oil customers served by Union Oil Company. This request by Union Oil, which included a progress report toward achieving compliance with the Department's rules is also attached (Attachment 2).

Union Oil Company has complied with the conditions of their present variance by not distributing residual oil having a sulfur content greater than 2.5%, submitting quarterly reports on oil shipments and sulfur content, and submitting a report on progress toward achieving compliance with Department rules.



Contains  
Recycled  
Materials

## Discussion

At the time Union Oil Company was granted a variance, fuel oil supplies were extremely scarce and Federal allocation controls on oil product distributions were in effect. Had Union Oil not been granted a variance, it was very doubtful if any other oil company could have supplied Union Oil customers.

Union Oil Company's latest request for a one-year variance extension is accompanied by a rather generalized report that indicates compliance with the Department's residual fuel oil rule could not be expected before 1978 or 1979. The Department is concerned about the equity of granting continual extensions of the Union Oil variance, since it now appears that:

1. All other Oregon oil suppliers are complying and appear capable of continuing compliance with the Department's residual fuel oil rule.
2. Crude oil supplies and supplies of oil products appear to have significantly improved in the past year.
3. The Federal allocation requirements on oil product distribution appears to have become less restrictive in the past year.
4. Other Oregon fuel oil suppliers may now be able to supply Union Oil customers with oil meeting current Department rules.

The Department is equally concerned about setting a precedent in granting Union Oil a variance extension in light of the possibility of similar variance requests coming in 1979 from many other oil companies who can now meet the 1.75% sulfur limit, but who may not be able to meet the new 0.5% sulfur limit which is scheduled to become effective in 1979 in the Portland Metropolitan Area. This concern is justified since new local refining capacity should be able to supply the required 0.5% sulfur fuel in 1979.

Fully examining the justification for perpetuating Union Oil's variance will take many weeks since contacts and confirmation letters with local oil suppliers and their headquarter offices, and State and Federal energy offices will be necessary. Further detailed information will also be needed from Union Oil to more explicitly describe their program for achieving compliance with the Department's 1.75% sulfur content of residual fuel oil rule and more stringent requirement of 0.5% sulfur content in the Portland Area by 1979.

It is apparent that insufficient time is available for the Department to complete the necessarily thorough evaluation of Union Oil's variance extension request before Union Oil's present variance expires. A short-term extension of Union Oil's existing variance appears justified to allow the Department time to complete its evaluation and give Union Oil and its customer's sufficient time to adjust fuel supplies should the Department recommend, and the Commission approve modifications or termination of Union Oil's variance.

### Conclusions

1. Union Oil of California was granted a one-year variance from the Department's sulfur content of residual fuel oil rule at a time when oil supplies were scarce and stringent Federal controls (allocations) on fuel oil products were in effect. In fact, it appeared at the time the variance was granted, in September 1974, that customers of Union Oil could not obtain oil supplies from other sources if Union Oil Company's variance request was denied.
2. Union Oil of California has now requested a one-year extension of their variance which expires July 1, 1975, and at the same time Union Oil has indicated essentially no possibility of complying with the Department's residual fuel oil rules until 1978 or 1979.
3. The Department is concerned with the equity of granting Union Oil further variance extensions in light of the fact that:
  - a. All other Oregon oil suppliers are complying with the Department's residual fuel oil rules and appear capable of continual compliance for some time into the future.
  - b. Oil supplies appear to have significantly improved in the past year.
  - c. Federal control (allocations) on oil product distribution may have become less restrictive in the past year.
  - d. Other Oregon fuel oil suppliers may now be able to supply Union Oil customers with oil meeting current Department rules.
  - e. A precedent may be set for similar variance requests coming in 1979 from many other oil companies who can meet the 1.75% sulfur limit now, but who may not be able to meet the new 0.5% sulfur limit in 1979 in the Portland Metropolitan Area.




4. Extension of Union Oil's variance will result in continued excessive air contaminant emissions from some facilities in the State, many of which are located in the already overloaded Portland Metropolitan Area airshed.
5. There is insufficient time for the Department to fully evaluate Union Oil Company's variance extension request prior to termination of Union Oil's existing variance, due to apparent recent changes in fuel oil supplies and Federal allocation regulations which need to be fully identified.

Director's Recommendation

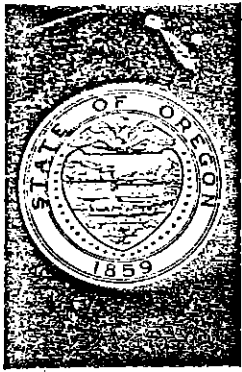
As there is insufficient time for the Department to fully investigate Union Oil of California's request for a variance extension before their present variance expires, it is the Director's recommendation that Union Oil be granted a 90 day extension of their present variance subject to the following conditions:

1. The maximum sulfur content of residual fuel oil to be sold, distributed, or used shall not be more than 2.5% sulfur by weight.
2. Union Oil shall continue to submit to the Department a report containing the sulfur analysis and quantity of each shipment sold or distributed in the State on a quarterly basis.
3. Union Oil Company shall provide, to the extent possible, all information requested by the Department to fully evaluate Union Oil's variance extension request and that such information shall be supplied in the shortest time possible.
4. This variance extension shall terminate October 1, 1975.



KESSLER R. CANNON

JFK:cs  
5/14/65  
Attachment (2)



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

TOM McCALL  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

### MEMORANDUM

To : Environmental Quality Commission

From : Director

Subject: Agenda Item No. I, September 20, 1974 EQC Meeting

Variance Request: Union Oil of California

### Background

On June 21, 1974, the Environmental Quality Commission considered the attached staff report entitled "Consideration of Variance Request, Sulfur Content of Residual Fuel Oil." Based on the information available in June, the Department recommended and the Commission granted a short-term variance to the Union Oil Company of California until October 1974, with the conditions contained in the attached staff report.

The primary basis for the staff recommendation to limit the variance period for approximately 90 days was to allow sufficient time for the staff to meet with each of the oil companies and obtain additional information to evaluate their short and long range programs as related to the Department rule.

As planned, the Department had discussions with representatives of Shell Oil Company, Standard Oil of California, Mobil Oil, Texaco, Inc., Atlantic Richfield Company, and Union Oil of California.

### Discussion

Based on the discussions held and the information obtained, the following general observations and conclusions are made:

1. As presently projected, the sulfur content of residual oil in Oregon for the next three to four years will be primarily dependent upon the sulfur content of the crude oil processed. In general, compliance with the Department's existing rule is achievable when processing domestic crudes and some foreign crudes. However, compliance will be difficult if not impossible in some cases where it is necessary to process higher sulfur foreign crude oils, primarily Arabian crude.

The most significant potential effect on the availability of crude oil as related to sulfur content in the near future (1979) will be the entry of North Slope crude oil. It is anticipated the North Slope crude will replace most of the foreign crude now used in the West Coast refineries. If no further refining changes are made, the sulfur content of processing North Slope crude should result in a residual product with a sulfur content consistently less than two percent or near that, presently obtained when processing present domestic crudes.

Other potential changes in crude supply such as shale oil are not expected to have any major effect until after 1980.

2. Another potential method of obtaining lower residual fuel oil would be to add residual desulfurization at existing refineries. Most of the companies are investigating this possibility; however, actual planning is only being conducted by one or two companies. It appears most of the companies are weighing the economics of desulfurization as compared to utilizing the higher sulfur oil in other processes such as coking.

If desulfurization units were added to existing plants, such units would not be operational for three to four years.

3. Market demand and refinery location can also affect the quality of oil received in Oregon.

Except for very small quantities, all the residual oil used in Oregon is received by ships from refineries located in California. In most cases the same vessel that delivers oil to Oregon also delivers oil to Washington. Consequently, frequently the same quality of oil is received by both states and often from the same vessel.

From the oil companies' viewpoint, it would be desirable to have identical regulations for fuel oil in both states.

4. According to the best information available to the staff, it appears that most of the suppliers and users of residual oil in the state have stored residual oil near their storage capacity. Also, with the increased availability of foreign crude, approximately the same quantity of oil as in the past appears to be available for use this coming winter.

Based upon all of the information thus far obtained, the staff is not recommending any changes in the Department rule concerning this matter at this time. However, it is the Department's intention to evaluate the need for any rule revision that may be necessary as part of the Maintenance of Air Quality Areas project work that is to be completed by July 1, 1975.

It is our opinion the Commission should continue the same policy as in the past in this matter, and that is to consider each variance request submitted on a case-by-case basis.

Variance Request, Union Oil of California

Attached is a request submitted by Union Oil to extend their existing variance from October 1, 1974 to July 1, 1975, including the basis for such request.

Also attached is a complete list of all Union Oil Residual Fuel Oil Customers in Oregon, as requested by the staff. As outlined in our June staff report, the primary users of Union's residual oil in Oregon are Crown Zellerbach and Hanna Nickel.

The Department has evaluated the information submitted and concurs with the request as submitted.

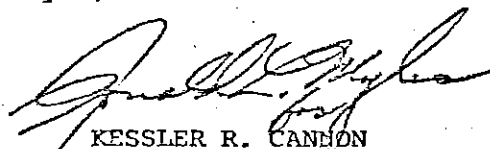
Recommendation

It is the Director's recommendation that the Commission grant a variance from the Department rule, Oregon Administrative Rules, Chapter 340, section 22-010(2) pertaining to the sulfur content of residual fuel oil to the Union Oil Company of California, and to its distributors and users of residual oil, until July 1, 1975, with the following conditions based upon a finding by the Commission that strict compliance with the Department rule is inappropriate because:

- a) no other alternative facility or method of handling is yet available; or
- b) conditions exist, as described in the letter request for extension of variance and in the staff report, that are beyond the control of the persons granted such variance.

Conditions

1. The maximum sulfur content of residual fuel oil to be sold, distributed or used shall not be more than 2.5 percent sulfur by weight.
2. Union Oil shall submit to the Department a report containing the sulfur analysis and quantity of each shipment sold or distributed in the state on a quarterly basis beginning October 1, 1974.
3. On or before May 15, 1974, Union Oil shall submit to the Department a written report describing plans or programs adopted to achieve compliance with the Department rules including expected dates of implementation.
4. This variance shall terminate July 1, 1975.

  
KESSLER R. CANNON  
Director

Union Oil Company of California  
2901 Western Avenue, Seattle, Washington 98111  
Telephone: (206) 223-7646



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**R E C E I V E D**  
APR 23 1975

D. J. Fogelquist  
Division Sales Manager

April 21, 1975

**OFFICE OF THE DIRECTOR**

Mr. Kessler R. Cannon  
Director  
Department of Environmental Quality  
1234 S. W. Morrison Street  
Portland, Oregon 97205

Dear Mr. Cannon:

The Environmental Quality Commission granted a variance from Oregon Administrative Rules, Chapter 340, Section 22-010 to the Union Oil Company of California on September 20, 1974 pertaining to the sulfur content of residual fuel oils. In accord with requirements of this variance, Union Oil has:

1. Not distributed residual fuel oil with more than 2.5% sulfur by weight.
2. Reported to the Department the sulfur analysis of fuel sold or distributed on a quarterly basis. The most recent report covering the first quarter of 1974 was submitted to your office April 4, 1975.
3. Continued to develop plans to achieve compliance with the Department's rules.

Union's current position is summarized with the following comments:

- a. Union's Los Angeles Refinery continues to operate on 45 to 50% foreign crude.
- b. Union continues to be dependent upon short term and spot purchase contracts for crude supply to the Los Angeles Refinery.

Mr. Kessler R. Cannon  
Department of Environmental Quality  
Portland, Oregon  
April 21, 1975

-2-

- c. The most readily available crude oil is high sulfur crude.
  - d. Union has been able to obtain enough lower sulfur foreign crude (from Ecuador) to maintain fuel oil sulfurs within the 2.5% limit.
  - e. 1978 still is our best estimate of when North Slope Alaskan crudes should be available to reduce overall sulfur content.
  - f. Meantime the average sulfur level will not decrease.
  - g. Preliminary work is continuing toward design and installation of resid processing facilities at the Los Angeles Refinery with completion expected in 1979.
4. We request that the termination date of the variance be extended from July 1, 1975 to July 1, 1976 and as before that it be applicable to the fuel oil customers served by the Union Oil Company.

Union will have representation at your May 23 meeting for any further questions or discussion you desire.

Sincerely,

UNION 76 DIVISION: WESTERN REGION  
UNION OIL COMPANY OF CALIFORNIA



D. J. Fogelquist  
Division Sales Manager

djf:ed



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN I. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item H(4), May 23, 1975 EQC Meeting

Variance Request: SWF Plywood Company, Fir-Ply Division,  
White City, Jackson County, Oregon

### Background

The SWF Plywood Company operates the Fir-Ply No. 1 mill in White City which it purchased in 1974. Air Contaminant Discharge Permit, No. 15-0012, was issued to the company for this mill on October 2, 1974.

### Analysis

At the Fir-Ply Division there are six cyclones, one is not operational, one has a negative pressure at its mouth and hence is not a source of particulate emissions, two are in compliance, as determined by source test reports submitted to the Department, and two sander dust cyclones which require particulate emissions control equipment.

SWF Plywood Company submitted a "Notice of Construction", along with plans and specifications, for a Carter-Day baghouse filter unit to control the sander dust emissions (see April 23, 1975 letter attached). They indicate in this letter that the equipment probably could be delivered by August 1975. The Department approved the "Notice of Construction" in a letter to SWF dated May 7, 1975.

Condition No. 8 of their permit requires that the plywood mill, including emissions from the sander dust cyclones, be in compliance by December 1, 1974. Due to the economic difficulties encountered by the wood products industries in general, and specifically



Contains  
Recycled  
Materials

to cash flow problems and to the Fir-Ply mill shut down from November 1974 , to February 1975, the SWF Plywood Company deferred the purchase and installation of the baghouse filter unit. In February, 1975, the Fir-Ply mill resumed production. They are now going ahead with installation plans and have requested this variance to update their permit which will allow them legally to operate the Fir-Ply mill within the requirements, limitations and prohibitions of their permit.

Certain permit modifications, to be legal, require a variance from rules. Oregon Administrative Rules, Chapter 340, Section 25-315(2c), requires that all plywood mills shall achieve final compliance by December 31, 1973; the Fir-Ply mill was operating on a permit compliance schedule up to December 1, 1974. Any exception to this rule necessitates a variance, as per Oregon Revised Statutes, Chapter 468.345, which states in part that "The Commission shall grant such specific variance only if it finds that strict compliance with the rule is inappropriate because strict compliance would result in closing down (the) plant or operation." Pursuant to ORS 468.345 SWF Plywood Company requests a variance from OAR, Chapter 340, Section 25-315(2c) until November 30, 1975.

It should be noted that the result of not approving this variance request will be non-compliance of the sanderdust system with the applicable Air Quality Rules. This in turn could result in the shut down of the sanding operation which is a significant part of the mill's production.

The sanderdust system at Fir-Ply is not a major source of particulate emissions in the Regional Air Shed. No complaints about this system or the mill have been received by the Department. Until the Carter-Day unit is operating it is concluded that the effect of the uncontrolled sanderdust system on the overall air quality of the Region will be minimal and can be tolerated.

#### Summary and Conclusions

1. SWF Plywood Company operates a veneer and plywood mill, called the Fir-Ply Division, at White City, Oregon.
2. As per Air Contaminant Discharge Permit Condition No. 8, compliance, including particulate emissions from the two sanderdust cyclones, was to be achieved by December 1, 1974. A baghouse filter unit was decided as the control equipment for the sanderdust emissions. Economic difficulties, including a mill shutdown deferred the purchase and installation of this control equipment last year.
3. In March 1975, the Fir-Ply mill resumed using its sanderdust system. The SWF Plywood Company submitted a "Notice of Construction", including plans and specifications, for a Carter-Day baghouse filter unit for the sanderdust system. The Department approved the installation and equipment delivery is expected in August, 1975, with installation and operation by November 30, 1975.

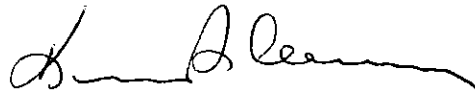


4. The proposal to install the baghouse filters by November 30, 1975, is acceptable to the Department considering the extenuating circumstances. The time schedule is reasonable and baghouse filtration represents the highest and best practicable treatment for emissions of this type.
5. In order to operate legally the Air Contaminant Discharge Permit for the Fir-Ply mill must be modified to contain the November 30, 1975, compliance achievement date. In this case, the permit modification requires a variance, since Oregon Administrative Rules, Chapter 340, Section 25-315(2c) requires all plywood mills to be in compliance as of December 1, 1973.
6. The Environmental Quality Commission is empowered by ORS, Chapter 468.345 to grant this variance.

Director's Recommendation

It is the Director's recommendation that:

1. A variance from Oregon Administrative Rules, Chapter 340, Section 25-315(2c) be granted to the SWF Plywood Company, Fir-Ply Division until November 30, 1975.
2. This variance be incorporated into Air Contaminant Discharge Permit No. 15-0012, for the Fir-Ply Division mill.



KESSLER R. CANNON  
Director

Attachment

AFB: 5/12/75



## SWF Plywood Company

A SUBSIDIARY OF SOUTHWEST FOREST INDUSTRIES

P. O. Box 370  
Medford, Oregon 97501  
Telephone (503) 773-7766

April 23, 1975

Department of Environmental Quality  
1234 S. W. Morrison  
Portland, Oregon 97205

Attention: Air Quality Control Division

Re: Air Contaminant Discharge Permit No. 15-0012, Fir-Ply No. 1

Gentlemen:

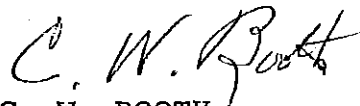
Enclosed herewith is a Notice of Construction and Application for Approval covering the installation of a Carter Day Baghouse-Air Filter for control of sander dust emissions at our Fir-Ply No. 1 Division in White City. Also enclosed are plans for this installation.

Upon approval of these plans, we will ask for quotations covering the equipment and installation after which purchase orders will be issued. It appears that delivery of the equipment could probably not be accomplished before July or August of 1975 and therefore we hereby request a variance from paragraph 8 of our Discharge Permit until November 30th, 1975.

Upon completion of the project, we intend to apply for tax credit in accordance with Oregon statutes.

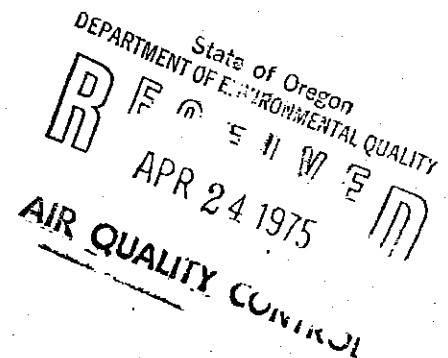
Yours truly,

SWF PLYWOOD COMPANY

  
C. W. BOOTH  
Secretary

CWB:jp

cc: R. A. Miller  
E. L. Quirk  
Glen Jones  
Red Hayden  
Gary Grimes





## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

ROBERT W. STRAUB  
GOVERNOR

### MEMORANDUM

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. H(5), May 23, 1975, EQC Meeting

Variance Request: Continental Forest Products Company,  
DBA Little River Box Company  
Glide, Douglas County, Oregon

### Background

The Little River Box Company operates a sawmill in Glide, Oregon. Air Contaminant Discharge Permit, No. 10-0021, was issued to the company on November 14, 1974.

In 1974, the company purchased and installed a hogged fuel steam boiler from the Foster-Wheeler Corporation. The fuel for the new boiler was bark, which had formerly been a waste product that was disposed of in their wigwam waste burner. The new boiler, which supplies steam to the drying kilns, permitted them to phase out the use of the wigwam waste burner and reduced the consumption of fossil fuel, which was used to fire their old steam boiler.

### Discussion

Condition No. 5 of the Little River Box Company's Air Contaminant Discharge Permit, No. 10-0021, required that a source test be performed before January 1, 1975, on the hogged fuel steam boiler in order to demonstrate compliance with Oregon's particulate emissions standards. The source test was performed on schedule; however, the boiler failed to meet the particulate emissions limitation of 0.1 grains/standard cubic foot. The reported grain loadings were 0.91, 0.69, and 0.71 GR/SCF.

The company now needs to develop a control strategy to bring the new boiler into compliance. This control program will culminate in another source test which will demonstrate the adequacy of the control project.



Contains  
Recycled  
Materials

Emissions from the boiler do not seriously impair the air quality of the regional air shed due to the relatively isolated location of the mill and to the fact that the company operates the new boiler only about 25% of the time. Currently and for the foreseeable future, the bulk of the mill's production does not require drying in the kilns. This has resulted in curtailed use of the boiler.

During the interim while the company is developing and completing their compliance attainment program, they need a variance to operate the hogged fuel boiler out of compliance with the applicable air quality rules. The Oregon Clean Air Act Implementation Plan required the source to be in compliance by May 30, 1975. Forasmuch as Oregon Revised Statutes (ORS), Chapter 468.345, "Variances from Air Contamination Rules and Standards," empowers the Environmental Quality Commission (EQC) to grant specific variances from particular requirements of any rule or standard, if it finds that strict compliance would result in the closing down of a business, plant, or operation, the Commission is herewith petitioned to grant a variance to the Little River Box Company.

#### Conclusion

1. The Little River Box Company operates a sawmill at Glide, Oregon. The company purchased and installed a new hogged fuel steam boiler in order to reduce the amount of fossil fuels they consume, to utilize economically the waste bark they generate, and to phase out the use of their wigwam waste burner.
2. The Department of Environmental Quality (DEQ) required that compliance with Oregon's Particulate Emission Rule, OAR, Chapter 340, Section 21-020(2), be demonstrated by performing a source test on the new steam boiler. The test was performed on schedule, but the new boiler failed to meet the State's Particulate Emissions Limitations.
3. The company is required to develop and conduct a compliance schedule program that will bring the boiler into compliance with Oregon's Emissions Standards.
4. While the compliance program is being developed, and until the compliance is demonstrated on the boiler, a variance to operate the boiler out of compliance is necessary.
5. Oregon Revised Statutes, Chapter 468.345 empowers the EQC to grant variances from air contaminant rules and standards.

#### Director's Recommendation

It is the Director's recommendation that the EQC grant the Little River Box Company a variance to operate their new hogged fuel steam boiler out of compliance with OAR, Chapter 340, Section 21-020(2), Particulate Emissions Limitations, and 21-015(2), Visible Emissions Limitations, under the following conditions:

1. The Little River Box Company shall operate and control the hogged fuel steam boiler to maintain the visible and particulate emissions at the lowest practicable level at all times.

2. Within ninety (90) days of the granting of this variance, the Little River Box Company will submit to the DEQ in writing, a proposed or tentative schedule to bring their new hogged fuel boiler into compliance with Oregon's Air Quality Rules and Standards.

3. The above compliance schedule shall include the five (5) increments of progress, which are as follows:

- a. By no later than \* the permittee will submit a final control strategy, including detailed plans and specifications, to the Department of Environmental Quality for review and approval.
- b. By no later than \* the permittee will issue purchase orders for the major components of emission control equipment and/or for process modification work.
- c. By no later than \* the permittee will initiate the installation of emission control equipment and/or on-site construction or process modification work.
- d. By no later than \* the permittee will complete the installation of emission control equipment and/or on-site construction or process modification work.
- e. By no later than \* the permittee will demonstrate that the hogged fuel steam boiler is capable of operating in compliance with the applicable Air Quality Rules and Standards.

\*Date to be supplied by company.

4. The above compliance schedule must be acceptable to the Department and it will be included in the company's Air Contaminant Discharge Permit, No. 10-0021.

5. Contingent upon the submission to the Department of an acceptable compliance schedule by the company, this variance shall cover the time frame up to and including the fifth step in the increments of progress schedule, compliance demonstration, in Condition No. 3.

6. As a contingency, the DEQ has the option of extending this variance sixty (60) days beyond the date in the fifth step of the increments of progress schedule (see Condition No. 3).



KESSLER R. CANNON  
Director



## ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. I (1), May 23, 1975, EQC Meeting

Proposed Regulation Adopting Federal New Source Performance Standards Relating to Air Contaminant Emissions - Request for Authorization to Hold Public Hearing

### Background

The Environmental Protection Agency (EPA) adopted five new source performance standards (NSPS) relating to air contaminant emissions on December 23, 1971 and seven others on March 9, 1974. EPA is presently responsible for enforcing NSPS in Oregon. EPA allows, and has encouraged states to request delegation of authority to administer NSPS.

EPA has adopted NSPS for the following source categories which generally specify allowable air contaminant emission rates.

1. Large fossil fuel fired steam generators,
2. Incinerators handling more than 50 tons per day of refuse,
3. Portland Cement plants,
4. Nitric Acid plants,
5. Sulfuric Acid plants,
6. Asphalt concrete plants,
7. Petroleum refineries,
8. Large gasoline, solvent, etc., storage tanks,
9. Furnaces at secondary lead smelters.
10. Furnaces at secondary brass and bronze plants,
11. Basic oxygen furnaces at iron and steel plants,
12. Sludge incinerators at municipal sewage treatment plants.

The NSPS for these source categories are, in some cases, more stringent than specific Department emission limits and are considered by EPA to be consistent with application of Best Available Control Technology (BACT).

EPA is expected to promulgate NSPS for other source categories in the future.



Contains  
Recycled  
Materials

### Discussion

EPA encourages states to administer NSPS primarily because states generally already have plan review and enforcement programs in existence. These programs would be duplicated by EPA should EPA administer these standards. The desirability of one government agency having environmental regulatory responsibility over industry is also obvious.

From a practical standpoint, the Department has been reviewing proposed new facilities for compliance with EPA NSPS as a first step in assessing whether Highest and Best Practicable Treatment and Control is being proposed. It is anticipated that no significant increase in work load will be imposed on the Department if NSPS are adopted by the State.

EPA does not expect states to enforce NSPS for facilities which are subject to the EPA standards prior to the time delegation of authority is given to the State to administer NSPS. EPA indicates they will bring these sources into compliance or certify compliance before Oregon will be asked to assume jurisdiction.

### Conclusions

It is concluded that it is in the best interest of the State for the Department to:

1. Adopt by Department rule, federal new source performance standard regulations and accompanying emission monitoring and performance test methods.
2. Immediately after adoption of such a rule, request EPA to delegate authority to the State of Oregon to administer the NSPS program.

The Department or appropriate regional air pollution authority could then administer these regulations.

### Director's Recommendation

It is recommended that the Environmental Quality Commission authorize the Director to schedule a public hearing, at a time and place to be determined, for the purpose of receiving testimony relevant to the adoption of Department regulation for administering the EPA new source performance standard regulations relating to air contaminant emissions.



KESSLER R. CANNON

PBB:cs  
5/7/75





# ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

TO: Environmental Quality Commission  
FROM: Director  
SUBJECT: Agenda Item No. I(2), May 23, 1975, EQC Meeting.

Proposed Emission Standards for Asbestos, Beryllium and  
Mercury - Request for Authorization to Hold Public Hearing

## Background

On December 7, 1971, proposed Emission Standards for Beryllium, Asbestos and Mercury were published by the Environmental Protection Agency under the title of National Emission Standards for Hazardous Air Pollutants (NESHAPS). In the interest of maintaining jurisdiction over sources of these contaminants within the State, the Department prepared a proposed rule and conducted a preliminary survey to determine those sources within the State which would be affected by the Rules if adopted. During the time that the Department's presentation was being prepared, EPA remained undecided as to whether jurisdiction over these sources would be delegated to the State.

Subsequent to the above events, the final NESHAPS rules were adopted by EPA on April 6, 1973. Jurisdiction over these sources was not immediately delegated to the State, and EPA has been enforcing the provisions of the regulations in Oregon since that time.

EPA has since determined that delegation of jurisdiction over these sources to State agencies would be permitted, and the rules contained as a part of this report are proposed to be adopted in order to accomplish the necessary requirements for delegation of this authority.

## Discussion

By Federal definition, hazardous air contaminants are those contaminants for which "no ambient air standard is applicable and which in the judgment of the Administrator may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness." Air contaminants currently considered to fit this definition include Asbestos, Beryllium and Mercury.



Contains  
Recycled  
Materials

The rules accompanying this report represent a modification of the NESHAPS regulations adopted by the EPA. Parts of the NESHAPS which were already regulated by existing Oregon Administrative Rules (OAR) were included only by reference, and all sampling methods required by NESHAPS are proposed to be adopted by reference.

Sources affected by these proposed rules are very limited, and few in number in Oregon. Surveys of sources by both EPA and the Department indicate that only one Beryllium source and one Mercury source will currently be affected, and that the probable number of Asbestos sources affected will be less than 50. As is indicated in Attachment 1 of this report, the majority of Asbestos sources will be demolition operations, and it is anticipated that only a few of these operations will be engaged in tear-out of Asbestos material at any given point in time.

The potential for additional Mercury sources exists in the State, inasmuch as Oregon was a major producer of this element at one time. The currently low prices for Mercury and the ready availability of Mercury from foreign sources will probably preclude any expansion of Mercury production in the State in the foreseeable future.

EPA contacts with existing sources of Beryllium emissions in the State indicate that all such sources are currently in compliance with NESHAPS, and would therefore be in compliance with the proposed Oregon Rules.

It is believed that all other requirements for delegation of authority not specifically delineated in the proposed rules are covered in existing Oregon Rules and Statutes. The Rules as proposed should be sufficient to permit delegation of authority over these sources to the Department.

### Conclusion

The proposed Rules establish emission limitations for Asbestos, Beryllium and Mercury and permit delegation of authority over sources of these contaminants from EPA to the Department. No known health hazards exist in Oregon from emissions of contaminants proposed to be regulated by these rules.

### Director's Recommendation

It is the recommendation of the Director that the Environmental Quality Commission authorize the Director to schedule a public hearing, at a time and place to be determined, for the purpose of receiving testimony relevant to the adoption of the Rules establishing limits on the emissions of Asbestos, Beryllium and Mercury for sources within the State.



KESSLER R. CANNON

RMJ:cs  
5/8/75

Attachment 1 - Table  
Attachment 2 - Rules

ATTACHMENT I

Present Sources in Oregon  
Affected by Hazardous Air Contaminant Rules

<u>Contaminant</u>	<u>Total Number Identified</u>	<u>Considered In Compliance</u>	<u>EPA Waiver Granted</u>	<u>Estimated Number for Rule Application</u>
Asbestos	41 (stationary) 33 (demolition)	41 Not Known	0 0	0 33*
Beryllium	3	3	0	0
Mercury	1	0	0	1

\*Rule applies to demolition contractors only when they are involved in tear-out of Asbestos material.

DEPARTMENT OF ENVIRONMENTAL QUALITY, AIR QUALITY CONTROL DIVISION  
PROPOSED RULES RELATING TO EMISSION STANDARDS FOR HAZARDOUS AIR CONTAMINANTS

A. POLICY

The Commission finds and declares that certain air contaminants for which there is no ambient air standard may cause or contribute to an increase in mortality or to an increase in serious irreversible or incapacitating reversible illness, and are therefore considered to be Hazardous Air Contaminants. Air contaminants currently considered to be in this category are Asbestos, Beryllium, and Mercury. Additional air contaminants may be added to this category provided that no ambient air standard exists for the contaminant, and evidence is presented which demonstrates that the particular contaminant may be considered as hazardous.

B. DEFINITIONS

- (1) "Asbestos" means actinolite, amosite, anthophyllite, chrysotile, crocidolite, or tremolite.
- (2) "Asbestos Material" means Asbestos or any material containing Asbestos, including particulate asbestos material.
- (3) "Asbestos Tailings" means any solid waste product of Asbestos mining or milling operations which contains Asbestos.
- (4) "Beryllium" means the element Beryllium. Where weight or concentrations are specified in these Rules, such weights or concentrations apply to Beryllium only, excluding any associated elements.
- (5) "Beryllium Alloy" means any metal to which Beryllium has been added in order to increase its Beryllium content, and which contains more than 0.1 percent Beryllium by weight.
- (6) "Beryllium Containing Waste" means any material contaminated with Beryllium and/or Beryllium compounds used or generated during any process or operation performed by a source subject to these Rules.

- (7) "Beryllium Ore" means any naturally occurring material mined or gathered for its Beryllium content.
- (8) "Commission" means the Environmental Quality Commission.
- (9) "Department" means the Department of Environmental Quality.
- (10) "Director" means the Director of the Department or Regional Authority and authorized deputies or officers.
- (11) "Friable Asbestos Material" means any asbestos material easily crumbled or pulverized, resulting in the release of Particulate Asbestos Material. This definition shall include any friable asbestos debris.
- (12) "Hazardous Air Contaminant" means any air contaminant considered by the Department or Commission to cause or contribute to an increase in mortality or to an increase in serious irreversible or incapacitating reversible illness, and for which no ambient air standard exists.
- (13) "Mercury" means the element Mercury, excluding any associated elements and includes Mercury in particulates, vapors, aerosols, and compounds.
- (14) "Mercury Ore" means any mineral mined specifically for its mercury content.
- (15) "Mercury Ore Processing Facility" means a facility processing Mercury Ore to obtain Mercury.
- (16) "Mercury Chlor-Alkali Cell" means a device which is basically composed of an electrolyzer section and a denuder (decomposer) section, and utilizes Mercury to produce chlorine gas, hydrogen gas, and alkali metal hydroxide.
- (17) "Particulate Asbestos Material" means any finely divided particles of Asbestos material.
- (18) "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political

subdivisions, the State and any agencies thereof, and the Federal Government and any agencies thereof.

(19) "Propellant" means a fuel and oxidizer physically or chemically combined, containing Beryllium or Beryllium compounds, which undergoes combustion to provide rocket propulsion.

(20) "Propellant Plant" means any facility engaged in the mixing, casting, or machining of propellant.

(21) "Regional Authority" means any regional air quality control authority established under the provisions of ORS 468.505.

(22) "Startup" means commencement of operation of a new or modified source resulting in release of contaminants to the ambient air.

C. GENERAL PROVISIONS

(1) Applicability. The provisions of these Rules shall apply to any source which emits air contaminants for which a Hazardous Air Contaminant Standard is prescribed. Compliance with the provisions of these Rules shall not relieve the source from compliance with other applicable sections of the Oregon Administrative Rules, Chapter 340, or with applicable provisions of the Oregon Clean Air Act Implementation Plan.

(2) Prohibited Activities.

(a) No person shall operate any source of emissions subject to these Rules without first registering such source with the Department. Such registration shall be accomplished within ninety (90) days following the effective date of these Rules.

(b) After the effective date of these Rules, no person shall construct a new source or modify any existing source so as to cause or increase emissions of contaminants subject to these Rules without first obtaining written approval from the Department.

(c) No person shall operate any new source in violation of these standards without written approval from the Department.

(d) Ninety (90) days after the effective date of these Rules, no person shall operate any existing source in violation of these standards without written approval from the Department.

(e) No person subject to the provisions of these emission standards shall fail to provide reports or report revisions as required in these Rules.

(3) Application for Approval of Construction or Modification. All applications for construction or modification shall comply with the requirements of OAR, Chapter 340, Sections 20-020 through 20-030 and the requirements of the standards set forth in these Rules.

(4) Notification of Startup. Notwithstanding the requirements of OAR, Chapter 340, Sections 20-020 through 20-030, any person owning or operating a new source of emissions subject to these emission standards shall furnish the Department written notification as follows:

(a) Notification of the anticipated date of Startup of the source not more than sixty (60) days nor less than thirty (30) days prior to the anticipated date.

(b) Notification of the actual Startup date of the source within fifteen (15) days after the actual date.

(5) Source Reporting and Approval Request.

(a) Any person operating any existing source, or any new source for which a standard is prescribed in these Rules which had an initial Startup which preceded the effective date of these Rules shall provide the following information to the Department within ninety (90) days of the

effective date of these Rules:

- [1] Name and address of the owner or operator.
- [2] Location of the source.
- [3] A brief description of the source, including nature, size, design, method of operations, design capacity, and identification of emission points of hazardous contaminants.
- [4] The average weight per month of the hazardous materials being processed by the source, including yearly information as available.
- [5] A description of existing control equipment for each emission point, including primary and secondary control devices and estimated control efficiency of each control device.
- [6] A statement indicating whether the source can attain compliance with these standards within ninety (90) days of the effective date of these Rules.

(b) Any person operating an existing source unable to attain compliance with these standards may request written approval for operation of the source for a period not to exceed two (2) years from the effective date of these Rules. Such request shall be made in writing to the Department, and shall include the following information:

- [1] A description of control equipment to be installed to insure that the source attains compliance with the standard.
- [2] A schedule of compliance, including dates of attainment of each increment of progress toward compliance. The following dates shall be included as a minimum:

- [a] Submission of proposal for approval.

- [b] Date of contract awards for purchase of control equipment or



process modifications; or date of issuance of orders for the purchase of components to accomplish emission control or process modification.

[c] Date of initiation of construction or initiation of control equipment or process change.

[d] Date of completion of installation or construction of control equipment or process change.

[e] Date by which final compliance is to be achieved.

[3] A description of interim emission control steps which will be taken during the approval period.

(c) Any changes in information provided under paragraph C(5)(a) of this section shall be reported to the Department within thirty (30) days.

(d) Based on the information provided in section (5)(b)[2], the Department may grant approval for operation of any source emitting contaminants for which a standard is included in these Rules for a period not to exceed two (2) years from the effective date of such standard. Such approval, if granted shall:

[1] Identify the source(s) covered.

[2] Specify the termination date of the approval.

[3] Specify the conditions for revocation of the approval if conditions are not met.

[4] Delineate dates of increments of progress toward compliance and any additional conditions which may be necessary to protect the public health.

(6) Source Emission Tests and Ambient Air Monitoring.

(a) Emission tests and monitoring shall be conducted using methods set forth in 40 CFR, Part 61, Appendix B, as published in the Federal Register,

Volume 38, No. 66, Friday, April 6, 1973. The methods described in 40 CFR, Part 61, Appendix B, are adopted by reference and made a part of these Rules. (40 CFR, Part 61, Appendix B is attached as Appendix 1 of these Rules.)

(b) At the request of the Department, any source subject to standards set forth in these Rules may be required to provide emission testing facilities as follows:

[1] Sampling ports, safe sampling platforms, and access to sampling platforms adequate for test methods applicable to such source.

[2] Utilities for sampling and testing equipment.

(c) Emission tests may be deferred if the Department determines that the source is meeting the standard as proposed in these Rules, or if the source is operating under, or has requested a written approval for operation under section C(5)(b) of these Rules. If such a deferral of emission tests is requested, information supporting the request shall be submitted with the request of written approval for operation. Approval of a deferral of emission tests shall not in any way prohibit the Department from cancelling the deferral if further information indicates that such testing may be necessary to insure compliance with these Rules.

(7) Delegation of Authority. The Commission may, when any Regional Authority requests and provides evidence demonstrating its capability to carry out the provisions of these Rules relating to Hazardous Contaminants, authorize and confer jurisdiction within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

D. EMISSION STANDARD FOR ASBESTOS

(1) Emission Standard for Asbestos Mills. There shall be no visible emissions

to the outside air from any asbestos milling operation except as provided under subsection (7) of this section. For purposes of these Rules, the presence of uncombined water in the emission plume shall not be cause for failure to meet the visible emission requirement. Outside storage of asbestos materials is not considered a part of an asbestos mill.

(2) Roadways. The surfacing of roadways with asbestos tailings is prohibited, except for temporary roadways on an area of asbestos ore deposits. For purposes of these Rules, the deposition of asbestos tailings on roadways covered by snow or ice is considered surfacing.

(3) Manufacturing. There shall be no visible emissions to the outside air from any manufacturing operation listed in this section except as provided in subsection (7) of this section. The presence of uncombined water in the emission plume shall not be cause for failure to meet the visible emission requirements. Manufacturing operations considered for purposes of These Rules are as follows:

- (a) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.
- (b) The manufacture of cement products.
- (c) The manufacture of fireproofing and insulating materials.
- (d) The manufacture of friction products.
- (e) The manufacture of paper, millboard, and felt.
- (f) The manufacture of floor tile.
- (g) The manufacture of paints, coatings, caulks, adhesives, or sealants.
- (h) The manufacture of plastics and rubber materials.
- (i) The manufacture of chlorine.
- (j) Any other manufacturing operation which results or may result in

the release of asbestos material to the ambient air.

(4) Demolition. All persons intending to demolish any institutional commercial, or industrial building, including apartment buildings having four or more dwellings units, structure, facility, installation, or any vehicle or vessel including, but not limited to ships; or any portion thereof which contains any boiler, pipe, or load supporting structural member that is insulated or fireproofed with friable asbestos material shall comply with the requirements set forth in this section.

(a) Notice of intention to demolish shall be provided to the Department at least twenty (20) days prior to commencement of such demolition, or at any time prior to commencement of demolition covered under section of this section. Such notice shall include the following information:

- [1] Name and address of person intending to engage in demolition.
- [2] Description of building, structure, facility, installation, vehicle, or vessel to be demolished, including address or location where the demolition is to be accomplished.
- [3] Scheduled starting and completion dates of demolition.
- [4] Method of demolition to be employed.
- [5] Procedures to be employed to insure compliance with provisions of this section.

(b) The following procedures shall be employed to prevent emissions of particulate asbestos material to the ambient air:

- [1] Friable asbestos materials used to insulate or fireproof any boiler, pipe, or load supporting structural member shall be wetted and removed from any building, structure, facility, installation, or vehicle or vessel before demolition of load supporting structural members is com-

menced. The friable asbestos debris shall be wetted adequately to insure that such debris remains wet during all stages of demolition and related handling operations.

[2] No pipe or load supporting structural member that is covered with asbestos material shall be dropped or thrown to the ground from any building structure, facility, installation, vehicle, or vessel subject to this section, but shall be carefully lowered or taken to ground level in such a manner as to insure that no particulate asbestos material is released to the ambient air.

[3] No friable asbestos debris shall be dropped or thrown to the ground from any building structure, facility, installation, vehicle, or vessel subject to this section, or from any floor to any floor below. Any debris generated as a result of demolition occurring fifty (50) feet or greater above ground level shall be transported to the ground via dust-tight chutes or containers.

(c) Any person intending to demolish a building, structure, facility, or installation subject to the provisions of this section, but which has been declared by proper State or local authorities to be structurally unsound and which is in danger of imminent collapse is exempt from the requirements of this section, other than the reporting requirements specified in subsection (4)(B)(1) of this section.

(d) Sources located in cities or other areas of local jurisdiction having demolition regulations or ordinances no less restrictive than those of this section may be exempted from the provisions of this section. Such local ordinance or regulation must be filed with and approved by the Department before an exemption from these Rules may be issued. Any

authority having such local jurisdiction shall annually submit to the Department a list of all sources subject to this subsection operating within the local jurisdictional area and a list of those sources observed by the local authority during demolition operations.

(5) Spraying.

(a) There shall be no visible emissions to the ambient air from any spray-on application of materials containing more than one (1) percent asbestos on a dry weight basis used to insulate or fireproof equipment or machinery, except as provided in subsection (7) of this section.

Spray-on materials used to insulate or fireproof buildings, structures, pipes, and conduits shall contain less than one (1) percent asbestos on a dry weight basis. In the case of any city or area of local jurisdiction having ordinances or regulations for spray application materials more stringent than those in this subsection, the provisions of such ordinances or regulations shall apply.

(b) Any person intending to spray asbestos materials to insulate or fireproof buildings, structures, pipes, conduits, equipment, or machinery shall report such intention to the Department at least twenty (20) days prior to the commencement of the spraying operation. Such report shall contain the following information:

[1] Name and address of person intending to conduct the spraying operation.

[2] Address or location of the spraying operation.

[3] Procedures to be followed to insure compliance with the provisions of this section.

(6) Options for Air Cleaning. Rather than meet the no visible emissions re-

quirements of subsections 1, 2, and 4 of this section, owners and operators may elect to use methods specified in subsection (7) of this section.

(7) Air Cleaning. All persons electing to use air cleaning methods rather than comply with the no visible emission requirements must meet all provisions of this subsection.

(a) Fabric filter collection devices must be used, except as provided in subsections 2 and 3 of this section. Such devices must be operated at a pressure drop of no more than four (4) inches water gage, as measured across the filter fabric. The air flow permeability, as determined by ASTM Method D737-9, must not exceed  $30 \text{ ft.}^3/\text{min.}/\text{ft.}^2$  for woven fabrics or  $35 \text{ ft.}^3/\text{min.}/\text{ft.}^2$  for felted fabrics with the exception that airflow permeability of  $40 \text{ ft.}^3/\text{min.}/\text{ft.}^2$  for woven and  $45 \text{ ft.}^3/\text{min.}/\text{ft.}^2$  for felted fabrics shall be allowed for filtering air emissions from asbestos ore dryers. Each square yard of felted fabric must weigh at least 14 ounces and be at least one-sixteenth (1/16) inch thick throughout. Any synthetic fabrics used must not contain fill yarn other than that which is spun.

(b) If the use of fabric filters creates a fire or explosion hazard, the Department may authorize the use of wet collectors designed to operate with a unit contacting energy of at least forty (40) inches of water gage pressure.

(c) The Department may authorize the use of filtering equipment other than that described in subsections 1 and 2 of this section if such filtering equipment is satisfactorily demonstrated to provide filtering of Asbestos Material equivalent to that of the described equipment.

(d) All air cleaning devices authorized by this section must be properly

installed, operated, and maintained. Devices to bypass the air cleaning equipment may be used only during upset and emergency conditions, and then only for such time as is necessary to shut down the operation generating the Particulate Asbestos Material.

(e) All persons operating any existing source using air cleaning devices shall, within ninety (90) days of the effective date of these rules, provide the following information to the Department:

[1] A description of the emission control equipment used for each process.

[2] If a fabric is utilized, the following information shall be reported:

[a] The pressure drop across the fabric filter in inches water gage and the airflow permeability in  $\text{ft.}^3/\text{min.}/\text{ft.}^2$ .

[b] For woven fabrics, indicate whether the fill yarn is spun or not spun.

[c] For felted fabrics, the density in ounces/yard<sup>3</sup> and the minimum thickness in inches.

[3] If a wet collector is used, the unit contact energy shall be reported in inches of pressure, water gage.

[4] All reported information shall accompany the information required in section C(5) of these Rules.

#### E. EMISSION STANDARD FOR BERYLLIUM

(1) Applicability. The provisions of this section are applicable to the following emission sources of Beryllium.

(a) Extraction plants, ceramic plants, foundries, incinerators, and Propellant Plants which process Beryllium, Beryllium ore, oxides, alloys, or Beryllium containing waste.



(b) Machine shops which process Beryllium, Beryllium oxides, or any alloy when such alloy contains more than five percent (5%) Beryllium by weight.

(c) Other Sources which may be determined to have Beryllium emissions in concentrations sufficient to be considered hazardous to public health.

(2) Emission Limit.

(a) Emissions to the ambient air from any source shall not exceed 10 grams of Beryllium for any 24 hour period, except as provided in subsection (b) of this section.

(b) Rather than meet the requirements of subsection (a) of this section, persons operating sources of Beryllium emissions may request approval from the Department to comply with an ambient air concentration limit for Beryllium emissions in the vicinity of the source. The ambient concentration shall not exceed 0.01 micrograms per cubic meter as an average of all samples taken during any one month period. Approval of such requests may be granted by the Director provided that:

[1] At least three (3) years of ambient sampling data is available which demonstrates that the future ambient concentrations of Beryllium will not exceed this standard concentration in the vicinity of the source. Such three (3) year period shall be the three years ending thirty (30) days before the effective date of these Rules.

[2] The person requesting this approval makes such request in writing to the Department within thirty (30) days after the effective date of this standard.

[3] The person making such request shall submit a report to the Depart-

ment within forty-five (45) days after the effective date of these Rules, including the following information:

[a] A description of the sampling procedures, including methods of sampling and averaging technique for determining monthly concentrations.

[b] Identification of sampling sites, including number of stations, distance and heading from the source, ground elevations, and height above ground of sampling inlets.

[c] Plots of source and surrounding area, including emission points, sampling sites, and topographic features significantly affecting dispersion of contaminants.

[d] Information necessary for estimating dispersion, including stack height and inside diameter, exit gas temperature and velocity or flow rate, and Beryllium concentration in exit gases.

[e] Air sampling data as required in subsection (b) of this section, including data for individual samples and site locations used to develop the one month average concentrations.

(c) Within sixty (60) days of receipt of such report, the Department will notify persons making this request of the decision to approve or deny the request. Prior to denying approval of provisions of subsection (b) of this section, the Department will consult with representatives of the source for which the report was submitted.

(d) Stack sampling

[1] Unless a deferral of emission testing is obtained under the provisions of section C(6), each person operating a source subject to the provisions of this standard shall test emissions from his source subject

to the following schedule:

[a] Within ninety (90) days of the effective date of these Rules for existing sources or for new sources having startup dates prior to the effective date of this standard.

[b] Within ninety (90) days of startup in the case of a new source having a startup date after the effective date of this standard.

[2] The Department shall be notified at least thirty (30) days prior to an emission test so that they may, as their option, observe the test.

[3] Samples shall be taken over such periods and frequencies as necessary to determine the maximum emissions occurring during any 24 hour period. Calculations of maximum 24 hour emissions shall be based on that combination of process operating hours and any variation in capacities or processes that will result in maximum emissions. No changes in operation which may be expected to increase total emissions over those determined by the most recent stack test shall be made until estimates of the increased emissions have been calculated, and have been reported to and approved in writing by the Department.

[4] All samples shall be analyzed and Beryllium emissions shall be determined and reported to the Department within thirty (30) days following the stack test. Records of emission test results and other data needed to determine Beryllium emissions shall be retained at the source and made available for inspection by the Department for a minimum of two years following such determination.

(e) Ambient air sampling

[1] Sources subject to the provisions of this section shall locate and operate ambient air sampling sites in accordance with a plan submitted

to and approved in writing by the Department. Such sites shall be located in such a manner as to detect maximum ambient air concentrations in the vicinity of the source.

[2] All monitoring sites shall be operated in such a manner as to provide continuous samples, except for a reasonable time allowed for instrument calibration and repair, or for replacement of equipment needing repair.

[3] Filters shall be analyzed and contaminant concentrations calculated within thirty (30) days of the date they are collected. Concentrations of contaminants at all sampling sites shall be reported to the Department each calendar month. Records of concentrations and other data necessary to determine concentrations shall be retained at the source and made available for inspection by the Department for a minimum of two (2) years after determinations have been made.

[4] The Department may require changes in the sampling network at any time in order to insure that the maximum ambient air concentrations of Beryllium in the area of the source are being measured.

F. EMISSION STANDARD FOR BERYLLIUM ROCKET MOTOR FIRING

(1) The emission standard for Beryllium Rocket Motor Firing, 40 CFR, Part 61, Section 61.40 through 61.44, adopted Friday, April 6, 1973; is adopted by reference and made a part of these Rules. (A copy of 40 CFR, Part 61, Section 61.40 through 61.44 is attached as Appendix 2 of these Rules.)

G. EMISSION STANDARD FOR MERCURY

(1) Applicability. The provisions of this section are applicable to sources which process mercury ore to recover mercury, sources using mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and to any

other source, the operation of which results in the emission of mercury to the ambient air.

(2) Emission Standard. Emissions to the ambient air from any source shall not exceed 2,300 grams of mercury during any 24 hour period.

(3) Stack Sampling.

(a) Mercury ore processing facility

[1] Unless a deferral of emission testing is obtained under section C(6) of these Rules, each person operating a source processing Mercury Ore shall test emissions from his source, following the provisions of section E(d)(1) through E(d)(4) of these Rules.

(b) Mercury Chlor-Alkali Plant

[1] Hydrogen and end-box ventilation gas streams

[a] Unless a deferral of emission testing is obtained under section C(6) of these Rules, each person operating a source of this type shall test emissions from his source following the provisions of section E(d)(1) through E(d)(4) of these Rules.

[2] Room Ventilation System

[a] Unless a deferral of emission testing is obtained under section C(6) of these Rules, all persons operating mercury chlor-alkali plants shall pass all cell room air enforced gas streams through stacks suitable for testing.

[b] Emissions from cell rooms may be tested in accordance with provisions of section B(1)(a) of this section or may demonstrate compliance with section B(2)(c) of this section and assume ventilation emissions of 1,300 grams/day of mercury.

[c] If no deferral of emission testing is requested, each person testing emissions shall follow the provisions of section E(d)(1) through E(d)(4) of these Rules.

(c) Any person operating a mercury chlor-alkali plant may elect to comply with room ventilation sampling requirements by carrying out approved design, maintenance, and housekeeping practices. A summary of these approved practices shall be available from the Department.

Date by which on-site construction or installation of emission control equipment or process modification is to be completed.

L54 L59 03  
MONTH DAY YEAR

Date by which final compliance is to be achieved.

L54 L59 04  
MONTH DAY YEAR

Signature of owner or operator

**B. WAIVER OF EMISSION TESTS.** A waiver of emission testing may be granted to owners or operators of sources of beryllium or mercury pollutants if, in the judgment of the Administrator of the Environmental Protection Agency the emissions from the source comply with the appropriate standard or if the owners or operators of the source have requested a waiver of compliance or have been granted a waiver of compliance.

This application should accompany the reporting information provided in Section I.

**1. Reason -** State the reasons for requesting a waiver of emission testing. If the reason stated is that the emissions from the source are within the prescribed limits, documentation of this condition must be attached.

Date

Signature of the owner or operator

#### APPENDIX B—TEST METHODS

##### METHOD 101. REFERENCE METHOD FOR DETERMINATION OF PARTICULATE AND GASEOUS MERCURY EMISSIONS FROM STATIONARY SOURCES (AIR STREAMS)

**1. Principle and applicability—1.1 Principle.** Particulate and gaseous mercury emissions are isokinetically sampled from the source and collected in acidic iodine monochloride solution. The mercury collected (in the mercuric form) is reduced to elemental mercury in basic solution by hydroxylamine sulfate. Mercury is aerated from the solution and analyzed using spectrophotometry.

**1.2 Applicability.** This method is applicable for the determination of particulate and gaseous mercury emissions when the carrier gas stream is principally air. The method is for use in ducts or stacks at stationary

sources. Unless otherwise specified, this method is not intended to apply to gas streams other than those emitted directly to the atmosphere without further processing.

**2. Apparatus—2.1 Sampling train.** A schematic of the sampling train used by EPA is shown in figure 101-1. Commercial models of this train are available, although construction details are described in APTD-0581, and operating and maintenance procedures are described in APTD-0576. The components essential to this sampling train are the following:

\* These documents are available for a nominal cost from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22151.

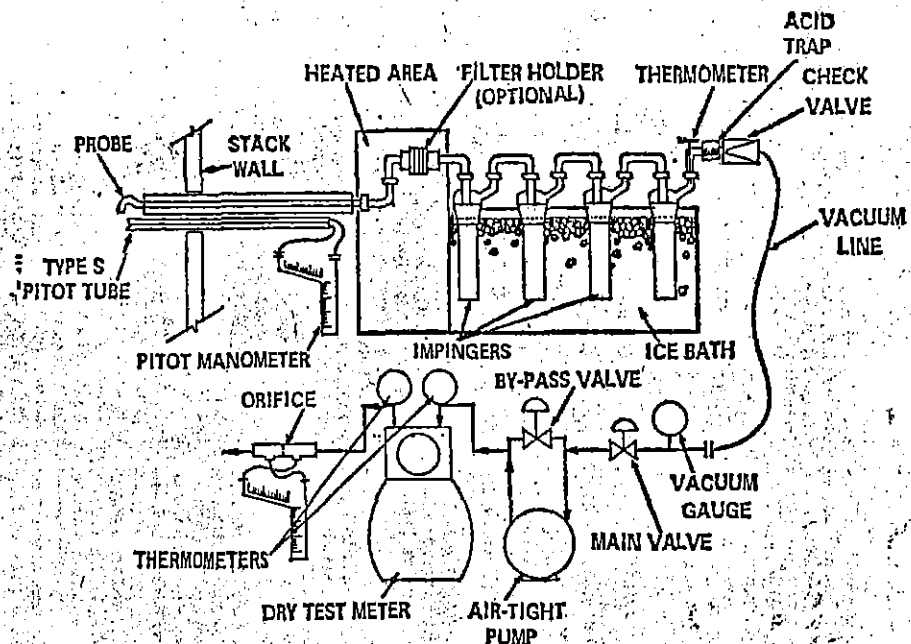


Figure 101-1. Mercury sampling train

**2.1.1 Nozzle.** Stainless steel or glass with sharp, tapered leading edge.

**2.1.3 Probe.** Sheathed Pyrex® glass. A heating system capable of maintaining a minimum gas temperature of 250° F at the probe outlet during sampling may be used to prevent condensation from occurring.

**2.1.3 Pitot tube.** Type S (Figure 101-2), or equivalent, with a coefficient within 5 percent over the working range, attached to probe to monitor stack gas velocity.

**2.1.4 Impingers.** Four Greenburg-Smith impingers connected in series with glass ball joint fittings. The first, third, and fourth impingers may be modified by replacing the tip with a one-half inch ID glass tube extending to one-half inch from the bottom of the flask.

**2.1.5 Acid Trap.** Mine Safety Appliances Air Line Filter, Catalogue Number 81857, with acid absorbing cartridge and suitable connections, or equivalent.

\* Mention of trade names or specific products does not constitute endorsement by the Environmental Protection Agency.

**2.1.6 Metering system.** Vacuum gauge, leakless pump, thermometers capable of measuring temperature to within 5° F, dry gas meter with 2 percent accuracy, and related equipment, described in APTD-0581, to maintain an isokinetic sampling rate and to determine sample volume.

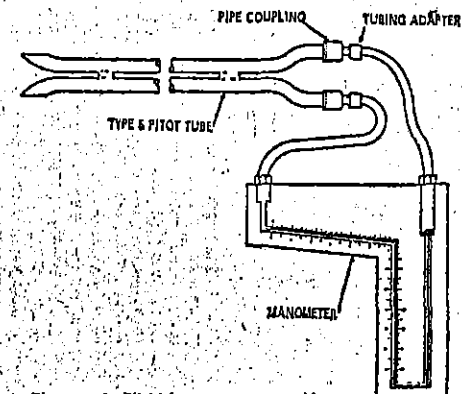


Figure 101-2. Pitot tube - manometer assembly.

**2.1.7 Filter Holder (optional)—Pyrex glass.** A filter may be used in cases where the gas stream to be sampled contains large quan-

titles of particulate matter. The filter holder must provide a positive seal against leakage from outside or around the filter. A heating system capable of maintaining the filter at a minimum temperature of 250° F. should be used to prevent condensation from occurring.

2.1.8 *Barometer.* To measure atmospheric pressure to ±0.1 in Hg.

2.2 *Measurement of stack conditions (stack pressure, temperature, moisture and velocity)*—2.2.1 *Pitot tube.* Type S, or equivalent, with a coefficient within 5 percent over the working range.

2.2.2 *Differential pressure gauge.* Inclined manometer, or equivalent, to measure velocity held to within 10 percent of the minimum value. Micromanometers should be used if warranted.

2.2.3 *Temperature gauge.* Any temperature measuring device to measure stack temperature to within 1° F.

2.2.4 *Pressure gauge.* Pitot tube and inclined manometer, or equivalent, to measure stack pressure to within 0.1 in Hg.

2.2.5 *Moisture determination.* Wet and dry bulb thermometers, drying tubes, condensers, or equivalent, to determine stack gas moisture content to within 1 percent.

2.3 *Sample recovery*—2.3.1 *Leakless glass sample bottles.* 500 ml and 100 ml with Teflon lined tops.

2.3.2 *Graduated cylinder.* 250 ml.

2.3.3 *Plastic jar.* Approximately 300 ml.

2.4 *Analysis*—2.4.1 *Spectrophotometer.* To measure absorbance at 253.7 nm. Perkin Elmer Model 303, with a cylindrical gas cell (approximately 1.5 in. O.D. x 7 in.) with quartz glass windows, and hollow cathode source, or equivalent.

2.4.2 *Gas sampling bubbler.* Tudor Scientific Glass Co., Smog Bubbler, Catalogue No. TP-1150, or equivalent.

2.4.3 *Recorder.* To match output of spectrophotometer.

3. *Reagents*—3.1 *Stock reagents*—3.1.1 *Potassium iodide.* Reagent grade.

3.1.2 *Distilled water*—3.1.3 *Potassium iodide solution, 25 percent.* Dissolve 250 g of potassium iodide (reagent 3.1.1) in distilled water and dilute to 1 to 1.

3.1.4 *Hydrochloric acid.* Concentrated.

3.1.5 *Potassium iodate.* Reagent grade.

3.1.6 *Iodine monochloride (ICl) 1.0M.* To 800 ml. of 25% potassium iodide solution (reagent 3.1.3), add 800 ml. of concentrated hydrochloric acid. Cool to room temperature. With vigorous stirring, slowly add 135 g. of potassium iodate and continue stirring until all free iodine has dissolved to give a clear orange-red solution. Cool to room temperature and dilute to 1800 ml. with distilled water. The solution should be kept in amber bottles to prevent degradation.

3.1.7 *Sodium hydroxide pellets.* Reagent grade.

3.1.8 *Nitric acid.* Concentrated.

3.1.9 *Hydroxylamine sulfate.* Reagent grade.

3.1.10 *Sodium chloride.* Reagent grade.

3.1.11 *Mercuric chloride.* Reagent grade.

3.2 *Sampling*—3.2.1 *Absorbing solution, 0.1M ICl.* Dilute 100 ml. of the 1.0M ICl stock solution (reagent 3.1.6) to 1 to 1 with distilled water. The solution should be kept in glass bottles to prevent degradation. This reagent should be stable for at least 2 months; however, periodic checks should be performed to insure quality.

3.2.2 *Wash acid.* 1:1 V/V nitric acid—water.

3.2.3 *Distilled, deionized water.*

3.2.4 *Silica gel.* Indicating type, 8 to 18 mesh dried at 350° F. for 2 hours.

3.2.5 *Filter (optional).* Glass fiber, Mine Safety Appliances 1106BH, or equivalent. A filter may be necessary in cases where the gas stream to be sampled contains large quantities of particulate matter.

3.3 *Analysis*—3.3.1 *Sodium Hydroxide, 10 N.*—Dissolve 400 g of sodium hydroxide pellets in distilled water and dilute to 1 to 1.

3.3.2 *Reducing agent, 12 percent hydroxylamine sulfate, 12 percent sodium chloride.*—To 60 ml of distilled water, add 12 g of hydroxylamine sulfate and 12 g of sodium chloride. Dilute to 100 ml. This quantity is sufficient for 20 analyses and must be prepared daily.

3.3.3 *Aeration gas.*—Zero grade air.

3.3.4 *Hydrochloric acid, 0.3N.*—Dilute 25.5 ml of concentrated hydrochloric acid to 1 to 1 with distilled water.

3.4 *Standard mercury solutions*—3.4.1 *Stock solution.*—Add 0.1354 g of mercuric chloride to 80 ml of 0.3N hydrochloric acid. After the mercuric chloride has dissolved, add 0.3N hydrochloric acid and adjust the volume to 100 ml. One ml of this solution is equivalent to 1 mg of free mercury.

3.4.2 *Standard solutions.*—Prepare calibration solutions by serially diluting the stock solution (3.4.1) with 0.3N hydrochloric acid. Prepare solutions at concentrations in the linear working range for the instrument to be used. Solutions of 0.2 µg/ml, 0.4 µg/ml and 0.6 µg/ml have been found acceptable for most instruments. Store all solutions in glass-stoppered, glass bottles. These solutions should be stable for at least 2 months; however, periodic checks should be performed to insure quality.

4. *Procedure*—4.1 *Guidelines for source testing* are detailed in the following sections. These guidelines are generally applicable; however, most sample sites differ to some degree and temporary alterations such as stack extensions or expansions often are required to ensure the best possible sample site. Further, since mercury is hazardous, care should be taken to minimize exposure. Finally, since the total quantity of mercury to be collected generally is small, the test must be carefully conducted to prevent contamination or loss of sample.

4.2 *Selection of a sampling site and minimum number of traverse points:*

4.2.1 *Select a suitable sampling site that is as close as is practicable to the point of atmospheric emission. If possible, stacks smaller than 1 foot in diameter should not be sampled.*

4.2.2 *The sampling site should be at least eight stack or duct diameters downstream and two diameters upstream from any flow disturbance such as a bend, expansion, or contraction. For a rectangular cross section, determine an equivalent diameter from the following equation:*

$$D_e = \frac{2LW}{L+W} \quad \text{eq. 101-1}$$

where:  
 $D_e$  = Equivalent diameter.  
 $L$  = Length.  
 $W$  = Width.

4.2.3 *When the above sampling site criteria can be met, the minimum number of traverse points is four (4) for stacks 1 foot in diameter or less, eight (8) for stacks larger than 1 foot but 2 feet in diameter or less, and twelve (12) for stacks larger than 2 feet.*

4.2.4 *Some sampling situations may render the above sampling site criteria impractical. When this is the case, choose a convenient sampling location and use figure 101-3 to determine the minimum number of traverse points. However, use figure 101-3 only for stacks 1 foot in diameter or larger.*

4.2.5 *To use figure 101-3, first measure the distance from the chosen sampling location to the nearest upstream and downstream disturbances. Divide this distance by the diameter or equivalent diameter to determine the distance in terms of pipe diameters. Determine the corresponding number of traverse points for each distance from figure 101-3. Select the higher of the two numbers of traverse points, or a greater value, such that for circular stacks the number is a multiple of four, and for rectangular stacks the number follows the criteria of section 4.3.2.*

4.2.6 *If a selected sampling point is closer than 1 inch from the stack wall, adjust the location of that point to ensure that the sample is taken at least 1 inch away from the wall.*

4.3 *Cross sectional layout and location of traverse points:*

4.3.1 *For circular stacks locate the traverse points on at least two diameters according to figure 101-4 and table 101-1. The traverse axes shall divide the stack cross section into equal parts.*

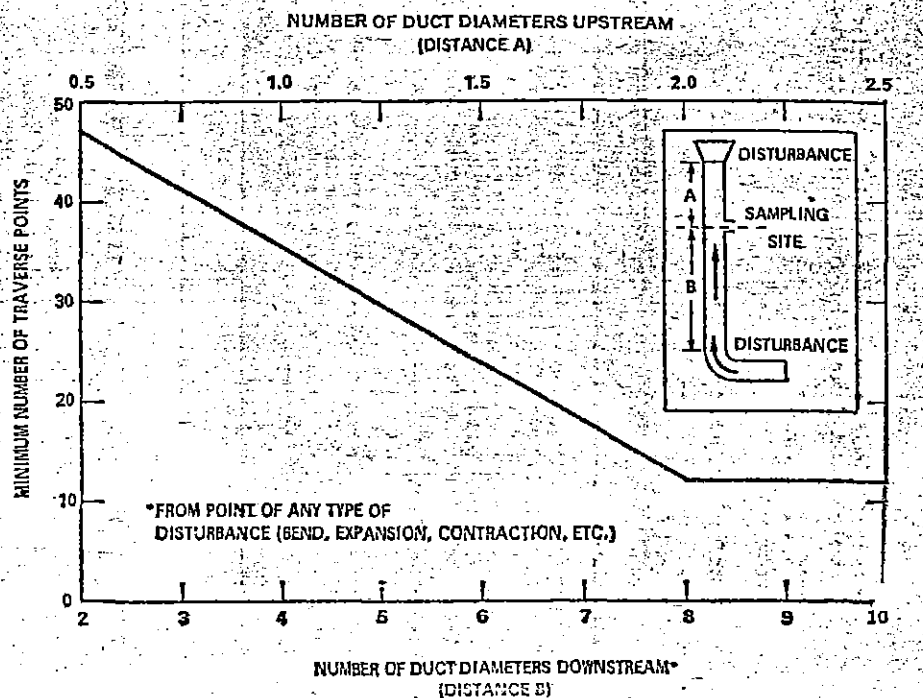


Figure 102-3. Minimum of traverse points.



Table 101-1. Location of traverse points in circular stacks  
(Percent of stack diameter from inside wall to traverse point)

Traverse point number on a diameter	Number of traverse points on a diameter											
	2	4	6	8	10	12	14	16	18	20	22	24
1	14.6	6.7	4.4	3.3	2.5	2.1	1.8	1.6	1.4	1.3	1.1	1.1
2	85.4	25.0	14.7	10.5	8.2	6.7	5.7	4.9	4.4	3.9	3.5	3.2
3		75.0	29.5	19.4	14.6	11.8	9.9	8.5	7.5	6.7	6.0	5.5
4		93.3	70.5	32.3	22.6	17.7	14.6	12.5	10.9	9.7	8.7	7.9
5			85.3	67.7	34.2	25.0	20.1	16.9	14.6	12.9	11.6	10.5
6			95.6	80.6	65.8	35.5	26.9	22.0	18.8	16.5	14.6	13.2
7				89.5	77.4	64.5	36.6	28.3	23.6	20.4	18.0	16.1
8				96.7	85.4	75.0	63.4	37.5	29.6	25.0	21.8	19.4
9					91.8	82.3	73.1	62.5	38.2	30.6	26.1	23.0
10					97.5	88.2	79.9	71.7	61.8	38.8	31.5	27.2
11						93.3	85.4	78.0	70.4	61.2	39.3	32.3
12						97.9	90.1	83.1	76.4	69.4	60.7	39.8
13							94.3	87.5	81.2	75.0	68.5	60.2
14							98.2	91.5	85.4	79.6	73.9	67.7
15								95.1	89.1	83.5	78.2	72.8
16								98.4	92.5	87.1	82.0	77.0
17									95.6	90.3	85.4	80.6
18									98.6	93.3	88.4	83.9
19										96.1	91.3	86.8
20										98.7	94.0	89.5
21											96.5	92.1
22											98.9	94.5
23												96.8
24												98.9

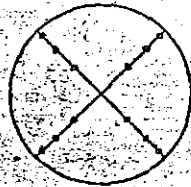


Figure 101-4. Cross section of circular stack showing location of traverse points on perpendicular diameters.

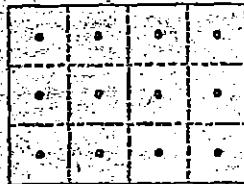


Figure 101-5. Cross section of rectangular stack divided into 12 equal areas, with traverse points at centroid of each area.

4.3.2 For rectangular stacks divide the cross-section into as many equal rectangular areas as traverse points, such that the ratio of the length to the width of the elemental areas is between one and two. Locate the traverse points at the centroid of each equal area according to figure 101-5.

4.4. Measurement of stack conditions:

4.4.1 Set up the apparatus as shown in figure 101-3. Make sure all connections are tight and leak-free. Measure the velocity head and temperature at the traverse points specified by section 4.2 and 4.3.

4.4.2 Measure the static pressure in the stack.

4.4.3 Determine the stack gas moisture.

4.4.4 Determine the stack gas molecular weight from the measured moisture content and knowledge of the expected gas stream composition. A standard Orsat analyzer has been found valuable at combustion sources. In all cases, sound engineering judgment should be used.





- $V_1$  = Total volume of condensed moisture and ICI in sample bottle, ml.
- $C_1$  = Concentration of mercury measured in sample bottle,  $\mu\text{g}/\text{ml}$ .
- $V_0$  = Total volume of ICI used in sampling (impinger contents and all wash amounts), ml.
- $C_0$  = Blank concentration of mercury in ICI solution,  $\mu\text{g}/\text{ml}$ .
- $V_f$  = Total volume of ICI used in filter bottle (if used), ml.
- $C_f$  = Concentration of mercury in filter bottle (if used),  $\mu\text{g}/\text{ml}$ .

6.7 Total mercury emission. Calculate the total amount of mercury emitted from each stack per day by equation 101-7. This equation is applicable for continuous operations. For cyclic operations, use only the time per day each stack is in operation. The total mercury emissions from a source will be the summation of results from all stacks.

$$R = \frac{W_1(v_s)_{avg} A_s}{V_{total}} \times \frac{86,400 \text{ seconds/day}}{10^6 \mu\text{g/g}} \quad \text{eq. 101-7}$$

- where:
- $R$  = Rate of emission, g/day.
  - $W_1$  = Total weight of mercury collected,  $\mu\text{g}$ .
  - $V_{total}$  = Total volume of gas sample (stack conditions), ft<sup>3</sup>.
  - $(v_s)_{avg}$  = Average stack gas velocity, feet per second.
  - $A_s$  = Stack area, ft<sup>2</sup>.

6.8 Isokinetic variation (comparison of velocity of gas in probe tip to stack velocity).

$$I = \frac{100V_{total}}{A_s \Theta (v_s)_{avg}} \quad \text{eq. 101-8}$$

- where:
- $I$  = Percent of isokinetic sampling.
  - $V_{total}$  = Total volume of gas sample (stack conditions), ft<sup>3</sup>.
  - $A_s$  = Probe tip area, ft<sup>2</sup>.
  - $\Theta$  = Sampling time, sec.
  - $(v_s)_{avg}$  = Average stack gas velocity, feet per second.

7. Evaluation of results—7.1 Determination of compliance.—7.1.1 Each performance test shall consist of three repetitions of the applicable test method. For the purpose of determining compliance with an applicable national emission standard, the average of results of all repetitions shall apply.

7.2 Acceptable isokinetic results.—7.2.1 The following range sets the limit on acceptable isokinetic sampling results:

If  $90\% \leq I \leq 110\%$ , the results are acceptable; otherwise, reject the test and repeat.

8. References.—1. Addendum to Specifications for Incinerator Testing at Federal Facilities, PHS, NCAPC, Dec. 6, 1967.

2. Determining Dust Concentration in a Gas Stream, ASME Performance Test Code No. 27, New York, N.Y., 1957.

3. Devorkin, Howard, et al., Air Pollution Source Testing Manual, Air Pollution Control District, Los Angeles, Calif., Nov. 1963.

4. Hatch, W. R. and W. L. Ott, "Determination of Sub-Microgram Quantities of Mercury by Atomic Absorption Spectrophotometry," Anal. Chem., 40:2085-87, 1968.

5. Mark, L. S., Mechanical Engineers' Handbook, McGraw-Hill Book Co., Inc., New York, N.Y., 1951.

6. Martin, Robert M., Construction Details of Isokinetic Source Sampling Equipment, Environmental Protection Agency, APTD-0581.

7. Methods for Determination of Velocity, Volume, Dust and Mist Content of Gases, Western Precipitation Division of Joy Mfg. Co., Los Angeles, Calif. Bul. WP-50, 1968.

8. Perry, J. H., Chemical Engineers' Handbook, McGraw-Hill Book Co., Inc., New York, N.Y., 1950.

9. Rom, Jerome J., Maintenance, Calibration, and Operation of Isokinetic Source Sampling Equipment, Environmental Protection Agency, APTD-0576.

10. Shigehara, R. T., W. F. Todd, and W. S. Smith, Significance of Errors in Stack Sam-

pling Measurements, Paper presented at the Annual Meeting of the Air Pollution Control Association, St. Louis, Mo., June 14-19, 1970.

11. Smith, W. S., et al., Stack Gas Sampling Improved and Simplified with New Equipment, APCA paper No. 87-119, 1967.

12. Smith, W. S., R. T. Shigehara, and W. F. Todd, A Method of Interpreting Stack Sampling Data, Paper presented at the 63d Annual Meeting of the Air Pollution Control Association, St. Louis, Mo., June 14-19, 1970.

13. Specifications for Incinerator Testing at Federal Facilities PHS, NCAPC, 1967.

14. Standard Method for Sampling Stacks for Particulate Matter, In: 1971 Book of ASTM Standards, part 23, Philadelphia, 1971, ASTM Designation D-2928-71.

15. Vennard, J. K., Elementary Fluid Mechanics, John Wiley and Sons, Inc., New York, 1947.

METHOD 102. REFERENCE METHOD FOR DETERMINATION OF PARTICULATE AND GASEOUS MERCURY EMISSIONS FROM STATIONARY SOURCES (HYDROGEN STREAMS)

1. Principle and applicability—1.1 Princ-

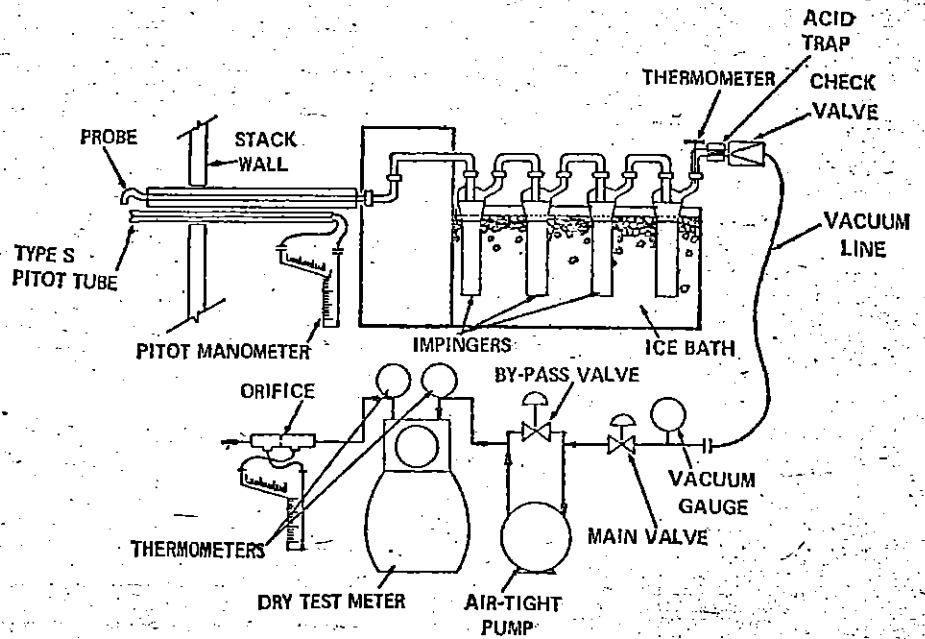


Figure 102-1. Mercury sampling train.

2.1.1 Nozzle. Stainless steel or glass with sharp, tapered leading edge.

2.1.2 Probe. Sheathed Pyrex<sup>3</sup> glass.

2.1.3 Pitot tube. Type S (figure 102-2), or equivalent, with a coefficient within 5 percent over the working range, attached to probe to monitor stack gas velocity.

2.1.4 Impingers. Four Greenburg-Smith impingers connected in series with glass ball-joint fittings. The first, third, and fourth impingers may be modified by replacing the tip with one-half inch ID glass tube extending to one-half inch from the bottom of the flask.

2.1.5 Acid trap. Mine safety appliances air line filter, catalogue No. 81857, with acid absorbing cartridge and suitable connections, or equivalent.

2.1.6 Metering system. Vacuum gage, leak-

ple.—Particulate and gaseous mercury emissions are isokinetically sampled from the source and collected in acidic iodine monochloride solution. The mercury collected (in the mercuric form) is reduced to elemental mercury in basic solution by hydroxylamine sulfate. Mercury is aerated from the solution and analyzed using spectrophotometry.

1.2 Applicability.—This method is applicable for the determination of particulate and gaseous mercury emissions when the carrier gas stream is principally hydrogen. The method is for use in ducts or stacks at stationary sources. Unless otherwise specified, this method is not intended to apply to gas streams other than those emitted directly to the atmosphere without further processing.

2. Apparatus—2.1 Sampling train.—A schematic of the sampling train used by EPA is shown in figure 102-1. Commercial models of this train are available, although complete construction details are described in APTD-0581,<sup>1</sup> and operating and maintenance procedures are described in APTD-0576. The components essential to this sampling train are the following:

less pump, thermometers capable of measuring temperature to within 5°F, dry gas meter with 2 percent accuracy, and related equipment, described in APTD-0581, to maintain an isokinetic sampling rate and to determine sample volume.

2.1.7 Barometer. To measure atmospheric pressure to  $\pm 0.1$  in. hg.

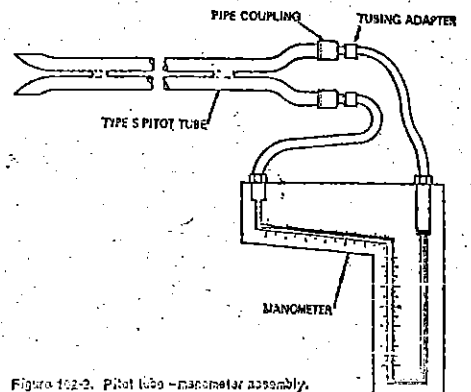


Figure 102-2. Pitot tube-manometer assembly.

<sup>1</sup> These documents are available for a nominal cost from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22151.

<sup>2</sup> Mention of trade names or commercial products does not constitute endorsement by the Environmental Protection Agency.

2.2 Measurement of stack conditions (stack pressure, temperature, moisture, and velocity)—2.2.1 Pitot tube. Type S, or equivalent, with a coefficient within 5 percent over the working range.

2.2.2 Differential pressure gage. Inclined manometer, or equivalent, to measure velocity head to within 10 percent of the minimum value. Micromanometers should be used if warranted.

2.2.3 Temperature gage. Any temperature-measuring device to measure stack temperature to within 1° F.

2.2.4 Pressure gage. Pitot tube and inclined manometer, or equivalent, to measure stack pressure to within 0.1 in. hg.

2.2.5 Moisture determination. Drying tubes, condensers, or equivalent, to determine stack gas moisture content in hydrogen to within 1 percent.

2.3 Sample recovery—2.3.1 Leakless glass sample bottles. 500 ml and 200 ml with Teflon-lined tops.

2.3.2 Graduated cylinder. 250 ml.

2.3.3 Plastic jar. Approximately 300 ml.

2.4 Analysis—2.4.1 Spectrophotometer. To measure absorbance at 253.7 nm. Perkin Elmer model 303, with a cylindrical gas cell (approximately 1.5 in. o.d. x 7 in.) with quartz glass windows, and hollow cathode source, or equivalent.

2.4.2 Gas sampling bubbler. Tudor Scientific Co. Smog Bubbler, catalogue No. TP-1150, or equivalent.

2.4.3 Recorder. To match output of spectrophotometer.

3. Reagents—3.1 Stock reagents—3.1.1 Potassium iodide. Reagent grade.

3.1.2 Distilled water.

3.1.3 Potassium iodide solution, 25 percent.—Dissolve 250 g of potassium iodide (reagent 3.1.1) in distilled water and dilute to 1 l.

3.1.4 Hydrochloric acid. Concentrated.

3.1.5 Potassium iodate. Reagent grade.

3.1.6 Iodine monochloride (ICl) 1.0M. To 800 ml of 25 percent potassium iodide solution (reagent 3.1.3), add 800 ml of concentrated hydrochloric acid. Cool to room temperature. With vigorous stirring, slowly add 135 g of potassium iodate and continue stirring until all free iodine has dissolved to give a clear orange-red solution. Cool to room temperature and dilute to 1,800 ml with distilled water. The solution should be kept in amber bottles to prevent degradation.

3.1.7 Sodium hydroxide pellets. Reagent grade.

3.1.8 Nitric acid. Concentrated.

3.1.9 Hydroxylamine sulfate. Reagent grade.

3.1.10 Sodium chloride. Reagent grade.

3.1.11 Mercuric chloride. Reagent grade.

3.2 Sampling. 3.2.1 Absorbing solution, 0.1M ICL. Dilute 100 ml of the 1.0M ICL stock solution (reagent 3.1.6) to 1 l with distilled water. The solution should be kept in glass bottles to prevent degradation. This reagent should be stable for at least 2 months; however, periodic checks should be performed to insure quality.

3.2.2 Wash acid. 1:1 V/V nitric acid-water.

3.2.3 Distilled, deionized water.

3.2.4 Silica gel. Indicating type, 6 to 16 mesh, dried at 350° F for 2 hours.

3.3 Analysis—3.3.1 Sodium hydroxide, 10N. Dissolve 400 g of sodium hydroxide pellets in distilled water and dilute to 1 l.

3.3.2 Reducing agent, 12 percent hydroxylamine sulfate, 12 percent sodium chloride. To 60 ml of distilled water, add 12 g of hydroxylamine sulfate and 12 g of sodium chloride. Dilute to 100 ml. This quantity is sufficient for 20 analyses and must be prepared daily.

3.3.3 Aeration gas. Zero grade air.

3.3.4 Hydrochloric acid, 0.3N. Dilute 25.5 ml of concentrated hydrochloric acid to 1 l with distilled water.

3.4 Standard mercury solutions—3.4.1 Stock solution. Add 0.1354 g of mercuric chloride to 80 ml of 0.3N hydrochloric acid. After the mercuric chloride has dissolved, add 0.3N hydrochloric acid and adjust the volume to 100 ml. One ml of this solution is equivalent to 1 mg of free mercury.

3.4.2 Standard solutions. Prepare calibration solutions by serially diluting the stock solution (3.4.1) with 0.3N hydrochloric acid. Prepare solutions at concentrations in the linear working range for the instrument to be used. Solutions of 0.2 µg/ml, 0.4 µg/ml and 0.8 µg/ml have been found acceptable for most instruments. Store all solutions in glass-stoppered, glass bottles. These solutions should be stable for at least 2 months; however, periodic checks should be performed to insure quality.

4. Procedure. 4.1 Guidelines for source testing are detailed in the following sections. These guidelines are generally applicable; however, most sample sites differ to some degree and temporary alterations such as stack extensions or expansions often are required to insure the best possible sample site. Further, since mercury is hazardous, care should be taken to minimize exposure. Finally, since the total quantity of mercury to be collected generally is small, the test must be carefully conducted to prevent contamination or loss of sample.

4.2 Selection of a sampling site and minimum number of traverse points.

4.2.1 Select a suitable sampling site that is as close as is practicable to the point of atmospheric emission. If possible, stacks smaller than 1 foot in diameter should not be sampled.

4.2.2 The sampling site should be at least eight stack or duct diameters downstream and two diameters upstream from any flow disturbance such as a bend, expansion or contraction. For rectangular cross section, determine an equivalent diameter from the following equation:

$$D_e = \frac{2LW}{L+W} \quad \text{eq. 102-1}$$

where:

$D_e$  = equivalent diameter.

$L$  = length.

$W$  = width.

4.2.3 When the above sampling site criteria can be met, the minimum number of traverse points is four (4) for stacks 1 foot in diameter or less, eight (8) for stacks larger than 1 foot but 2 feet in diameter or less, and twelve (12) for stacks larger than 2 feet.

4.2.4 Some sampling situations may render the above sampling site criteria impractical. When this is the case, choose a convenient sampling location and use figure 102-3 to determine the minimum number of traverse points. However, use figure 102-3 only for stacks 1 foot in diameter or larger.

4.2.5 To use figure 102-3, first measure the distance from the chosen sampling location to the nearest upstream and downstream disturbances. Divide this distance by the diameter or equivalent diameter to determine the distance in terms of pipe diameters. Determine the corresponding number of traverse points for each distance from figure 102-3. Select the higher of the two numbers of traverse points, or a greater value, such that for circular stacks the number is a multiple of four, and for rectangular stacks the number follows the criteria of section 4.3.2.

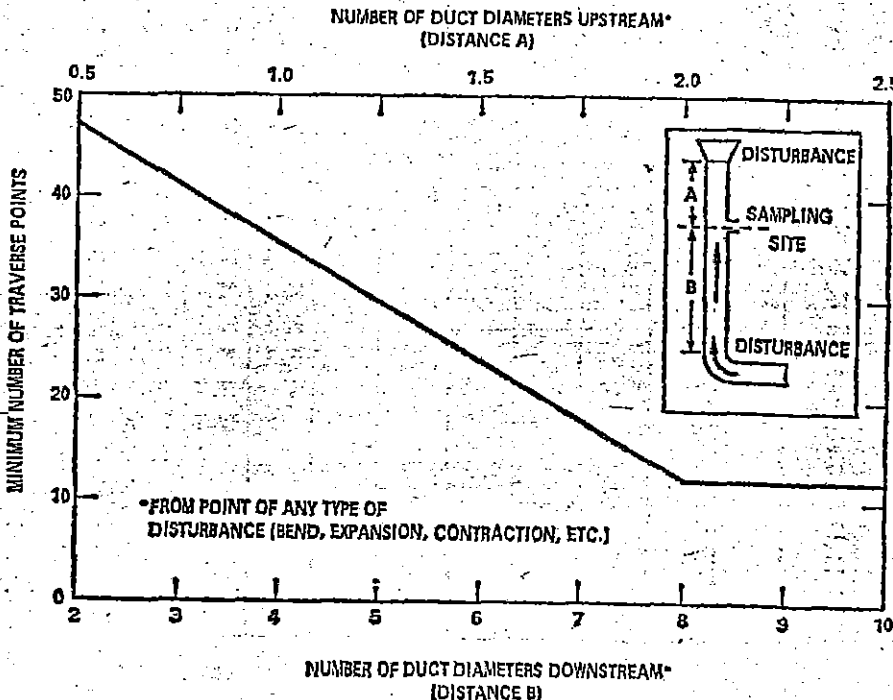


Figure 104-3. Minimum number of traverse points.

4.2.6 If a selected sampling point is closer than 1 inch from stack wall, adjust the location of that point to insure that the sample is taken at least 1 inch away from the wall.

4.3 Cross-sectional layout and location of traverse points.

4.3.1 For circular stacks locate the traverse points on at least two diameters according to figure 102-4 and table 102-1. The traverse axes shall divide the stack-cross section into equal parts.

4.3.2 For rectangular stacks divide the cross-section into as many equal rectangular areas as traverse points, such that the ratio of the length to the width of the elemental areas is between one and two. Locate the traverse points at the centroid of each equal area according to figure 102-5.

4.4 Measurement of stack conditions.

4.4.1 Set up the apparatus as shown in figure 102-2. Make sure all connections are tight and leak free. Measure the velocity head and temperature at the traverse points specified by section 4.2 and 4.3.

4.4.2 Measure the static pressure in the stack.

4.4.3 Determine the stack gas moisture.

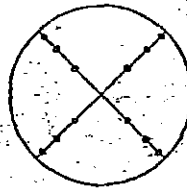


Figure 102-4. Cross section of circular stack showing location of traverse points on perpendicular diameters.

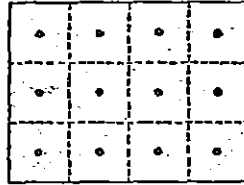


Figure 102-5. Cross section of rectangular stack divided into 12 equal areas, with traverse points at centroid of each area.

Table 102-1. Location of traverse points in circular stacks (Percent of stack diameter from inside wall to traverse point)

Traverse point number on a diameter	Number of traverse points on a diameter											
	2	4	6	8	10	12	14	16	18	20	22	24
1	14.6	6.7	4.4	3.3	2.5	2.1	1.8	1.6	1.4	1.3	1.1	1.1
2	85.4	25.0	14.7	10.5	8.2	6.7	5.7	4.9	4.4	3.9	3.5	3.2
3		75.0	29.5	19.4	14.6	11.8	9.9	8.5	7.5	6.7	6.0	5.5
4		93.3	70.5	32.3	22.6	17.7	14.6	12.5	10.9	9.7	8.7	7.9
5			85.3	67.7	34.2	25.0	20.1	16.9	14.6	12.9	11.6	10.5
6			95.6	80.6	65.8	35.5	26.9	22.0	18.8	16.5	14.6	13.2
7				89.5	77.4	64.5	36.6	28.3	23.6	20.4	18.0	16.1
8				96.7	85.4	75.0	63.4	37.5	29.6	25.0	21.8	19.4
9					91.8	82.3	73.1	62.5	38.2	30.6	26.1	23.0
10					97.5	88.2	79.9	71.7	61.8	38.8	31.5	27.2
11						93.3	85.4	78.0	70.4	61.2	39.3	32.3
12						97.9	90.1	83.1	76.4	69.4	60.7	39.8
13							94.3	87.5	81.2	75.0	68.5	60.2
14							98.2	91.5	85.4	79.6	73.9	67.7
15								95.1	89.1	83.5	78.2	72.8
16								98.4	92.5	87.1	82.0	77.0
17									95.6	90.3	85.4	80.6
18									98.6	93.3	88.4	83.9
19										96.1	91.3	86.8
20										98.7	94.0	89.5
21											96.5	92.1
22											98.9	94.5
23												96.8
24												98.9

4.4.4 Determine the stack gas molecular weight from the measured moisture content and knowledge of the expected gas stream composition. Sound engineering judgment should be used.

4.5 Preparation of sampling train.

4.5.1 Prior to assembly, clean all glassware (probe, impingers, and connectors) by rinsing with wash acid, tap water, 0.1M ICI, tap water, and finally distilled water. Place 100 ml of 0.1M ICI in each of the first three impingers, and place approximately 200 g. of preweighed silica gel in the fourth impinger. Save 80 ml of the 0.1M ICI as a blank in the sample analysis. Set up the train and the probe as in Figure 102-1.

4.5.2 Leak check the sampling train at the sampling site. The leakage rate should not be in excess of 1 percent of the desired sampling rate. Place crushed ice around the impingers. Add more ice during the run to keep the temperature of the gases leaving the last impinger at 70° F or less.

4.6 Mercury train operation.

4.6.1 Safety procedures. It is imperative that the sampler conduct the source test under conditions of utmost safety, since hydrogen and air mixtures are explosive. The sample train essentially is leakless, so that attention to safe operation can be concentrated at the inlet and outlet. The following specific items are recommended:

4.6.1.1 Operate only the vacuum pump during the test. The other electrical equipment, e.g. heaters, fans and timers, normally are not essential to the success of a hydrogen stream test.

4.6.1.2 Seal the sample port to minimize leakage of hydrogen from the stack.

4.6.1.3 Vent sampled hydrogen at least 10 feet away from the train. This can be accomplished easily by attaching a 1/2-in i.d. Tygon tube to the exhaust from the orifice meter.

4.6.2 For each run, record the data required on the sample sheet shown in figure 102-6. Take readings at each sampling point at least every 5 minutes and when significant changes in stack conditions necessitate additional adjustments in flow rate.

4.6.3 Sample at a rate of 0.5 to 1.0 cfm. Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which would occur in a 24-hour period. In the case of cyclic operations, sufficient tests shall be made so as to allow accurate determination or calculation of the emissions which will occur over the duration of the cycle. A minimum sample time of 2 hours is recommended. In some instances, high mercury concentrations can prevent sampling in one run for the desired minimum time. This is indicated by reddening in the first impinger as free iodine is liberated. In this case, a run may be divided into two or more subruns to insure that the absorbing solutions are not depleted.



6.3 Volume of water vapor.

$$V_{w_s} = K_w V_i \frac{T_s}{P_s} \quad \text{eq. 102-4}$$

where:  
 $V_{w_s}$  = Volume of water vapor in the gas sample (stack conditions), ft<sup>3</sup>.

$K_w = 0.00287 \frac{\text{in. Hg.} \cdot \text{ft}^3}{\text{ml.} \cdot ^\circ\text{R}}$ , when these units are used.

$V_i$  = Total volume of liquid collected in impingers and silica gel (see figure 102-7), ml.

$T_s$  = Average stack gas temperature, °R.

$P_s$  = Stack pressure,  $P_{b.s.}$  = static pressure, in. Hg.

6.4 Total gas volume.

$$V_{\text{total}} = V_{m_s} + V_{w_s} \quad \text{eq. 102-5}$$

where:

$V_{\text{total}}$  = total volume of gas sample (stack conditions), ft<sup>3</sup>.

$V_{m_s}$  = Volume of gas through dry gas meter (stack conditions), ft<sup>3</sup>.

$V_{w_s}$  = Volume of water vapor in gas sample (stack conditions), ft<sup>3</sup>.

	VOLUME OF LIQUID WATER COLLECTED	
	IMPINGER VOLUME, ml	SILICA GEL WEIGHT, g
FINAL		
INITIAL		
LIQUID COLLECTED		
TOTAL VOLUME COLLECTED		g ml

CONVERT WEIGHT OF WATER TO VOLUME BY DIVIDING TOTAL WEIGHT INCREASE BY DENSITY OF WATER. (1-g/ml):

$$\frac{\text{INCREASE, g}}{(1 \text{ g/ml})} = \text{VOLUME WATER, ml}$$

Figure 102-7. Analytical data.

6.5 Stack gas velocity—Use equation 102-6 to calculate the stack gas velocity.

$$(v_s)_{\text{avg.}} = K_p C_p (\sqrt{\Delta P})_{\text{avg.}} \sqrt{\frac{(T_s)_{\text{avg.}}}{P_s M_s}} \quad \text{eq. 102-6}$$

where:

$(v_s)_{\text{avg.}}$  = Average stack gas velocity, feet per second.

$K_p = 85.53 \frac{\text{ft}}{\text{sec}} \left( \frac{\text{lb-inHg}}{\text{lb-mole} \cdot \text{R-inH}^2\text{O}} \right)^{1/2}$ , when these units are used.

$C_p$  = Pitot tube coefficient, dimensionless.

$(T_s)_{\text{avg.}}$  = Average stack gas temperature, °R.

$(\sqrt{\Delta P})_{\text{avg.}}$  = Average square root of the velocity head of stack gas (in H<sub>2</sub>O)<sup>1/2</sup> (see figure 102-8).

$P_s$  = Stack pressure,  $P_{b.s.}$  = static pressure, in Hg.

$M_s$  = Molecular weight of stack gas (wet basis), the summation of the products of the molecular weight of each component multiplied by its volumetric proportion in the mixture, lb/lb-mole.

Figure 102-8 shows a sample recording sheet for velocity traverse data. Use the averages in the last two columns of figure 102-8 to determine the average stack gas velocity from equation 102-6.

6.6 Mercury collected. Calculate the total weight of mercury collected by using, eq. 102-7.

PLANT \_\_\_\_\_

DATE \_\_\_\_\_

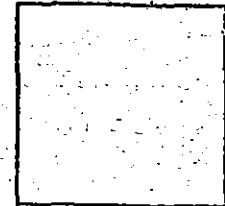
RUN NO. \_\_\_\_\_

STACK DIAMETER, in. \_\_\_\_\_

BAROMETRIC PRESSURE, in. Hg. \_\_\_\_\_

STATIC PRESSURE IN STACK ( $P_s$ ), in. Hg. \_\_\_\_\_

OPERATORS \_\_\_\_\_



SCHEMATIC OF STACK CROSS SECTION

Traverse point number	Velocity head, in. H <sub>2</sub> O	$\sqrt{\Delta P}$	Stack Temperature ( $T_s$ ), °F
AVERAGE:			

Figure 102-8. Velocity traverse data.



$$W_1 = V_1 C_1 - V_0 C_0 \dots \text{eq. 102-7}$$

where:

- $W_1$  = Total weight of mercury collected,  $\mu\text{g}$ .
- $V_1$  = Total volume of condensed moisture and ICI in sample bottle, ml.
- $C_1$  = Concentration of mercury measured in sample bottle,  $\mu\text{g}/\text{ml}$ .
- $V_0$  = Total volume of ICI used in sampling (impinger contents and all wash amounts), ml.
- $C_0$  = Blank concentration of mercury in ICI solution,  $\mu\text{g}/\text{ml}$ .

6.7 **Total mercury emission.**—Calculate the total amount of mercury emitted from each stack per day by equation 102-8. This equation is applicable for continuous operations. For cyclic operations, use only the time per day each stack is in operation. The total mercury emissions from a source will be the summation of results from all stacks.

$$R = \frac{W_1 (v_s)_{\text{avg}} A_s}{V_{\text{total}}} \times \frac{86,400 \text{ seconds/day}}{10^6 \mu\text{g/g}} \quad \text{eq. 102-8}$$

where:

- $R$  = Rate of emission, g/day.
- $W_1$  = Total weight of mercury collected,  $\mu\text{g}$ .
- $V_{\text{total}}$  = Total volume of gas sample (stack conditions),  $\text{ft}^3$ .
- $(v_s)_{\text{avg}}$  = Average stack gas velocity, feet per second.
- $A_s$  = Stack area,  $\text{ft}^2$ .

6.8 **Isokinetic variation (comparison of velocity of gas in probe tip to stack velocity).**

$$I = \frac{100 V_{\text{total}}}{A_s \oplus (v_s)_{\text{avg}}} \quad \text{eq. 102-9}$$

where:

- $I$  = Percent of isokinetic sampling.
- $V_{\text{total}}$  = Total volume of gas sample (stack conditions),  $\text{ft}^3$ .
- $A_s$  = Probe tip area,  $\text{ft}^2$ .
- $\oplus$  = Sampling time, sec.
- $(v_s)_{\text{avg}}$  = Average stack gas velocity, feet per second.

7. **Evaluation of results.**—7.1 Determination of compliance.—7.1.1 Each performance test shall consist of three repetitions of the applicable test method. For the purpose of determining compliance with an applicable national emission standard, the average of results of all repetitions shall apply.

7.2 **Acceptable isokinetic results.**—7.2.1 The following range sets the limit on acceptable isokinetic sampling results: If  $90\% \leq I \leq 110\%$ , the results are acceptable; otherwise, reject the test and repeat.

8. **References.**—1. Addendum to Specifications for Incinerator Testing at Federal Facilities, PHS, NCAPC, Dec. 6, 1967.

2. Determining Dust Concentration in a Gas Stream, ASME Performance Test Code No. 27, New York, N.Y., 1957.

3. Devorkin, Howard, et al., Air Pollution Source Testing Manual, Air Pollution Control District, Los Angeles, Calif., Nov. 1963.

4. Hatch, W. R. and W. L. Ott, "Determination of Sub-Microgram Quantities of Mercury by Atomic Absorption Spectrophotometry," Anal. Chem., 40: 2085-87, 1968.

5. Mark, L. S., Mechanical Engineers' Handbook, McGraw-Hill Book Co., Inc., New York, N.Y., 1951.

6. Martin, Robert M., Construction Details of Isokinetic Source Sampling Equipment, Environmental Protection Agency, APTD-0581.

7. Methods for Determination of Velocity, Volume, Dust and Mist Content of Gases, Western Precipitation Division of Joy Manufacturing Co., Los Angeles, Calif. Bull. WP-50, 1968.

8. Perry, J. H., Chemical Engineers' Handbook, McGraw-Hill Book Co., Inc., New York, N.Y., 1960.

9. Rom, Jerome J., Maintenance, Calibration, and Operation of Isokinetic Source Sampling Equipment, Environmental Protection Agency, APTD-0576.

10. Shigehara, R. T., W. F. Todd, and W. S. Smith, Significance of Errors in Stack Sampling Measurements, Paper presented at the Annual Meeting of the Air Pollution Control Association, St. Louis, Mo., June 14-19, 1970.

11. Smith, W. S., et al., Stack Gas Sampling Improved and Simplified with New Equipment, APCA paper No. 67-119, 1967.

12. Smith, W. S., R. T. Shigehara, and W. F. Todd, A Method of Interpreting Stack Sampling Data, Paper presented at the 63d Annual Meeting of the Air Pollution Control Association, St. Louis, Mo., June 14-19, 1970.

13. Specifications for Incinerator Testing at Federal Facilities PHS, NCAPC, 1967.

14. Standard Method for Sampling Stacks for Particulate Matter, In: 1971 Book of ASTM Standards, part 23, Philadelphia, 1971, ASTM Designation D-2928-71.

15. Vennard, J. K., Elementary Fluid Mechanics, John Wiley and Sons, Inc., New York, 1947.

METHOD 103. BERYLLIUM SCREENING METHOD

1. **Principle and applicability.**—1.1 **Principle.**—Beryllium emissions are isokinetically sampled from three points in a duct or stack. The collected sample is analyzed for beryllium using an appropriate technique.

1.2 **Applicability.**—This procedure details guidelines and requirements for methods acceptable for use in determining beryllium emissions in ducts or stacks at stationary sources, as specified under the provisions of § 61.14 of the regulations.

2. **Apparatus.**—2.1 **Sampling train.**—A schematic of the required sampling train configuration is shown in figure 103-1. The essential components of the train are the following:

2.1.1 **Nozzle.**—Stainless steel, or equivalent, with sharp, tapered leading edge.

2.1.2 **Probe.**—Sheathed Pyrex<sup>1</sup> glass.

2.1.3 **Filter.**—Millipore AA, or equivalent, with appropriate filter holder that provides a positive seal against leakage from outside or around the filter. It is suggested that a Whatman 41, or equivalent, be placed immediately against the back side of the Millipore filter as a guard against breakage of the Millipore. Include the Whatman 41 in the analysis. Equivalent filters must be at least 99.95 percent efficient (DOP Test) and amenable to the analytical procedure.

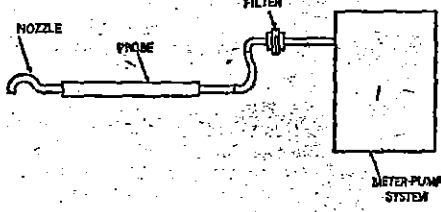


Figure 103-1. Beryllium screening method: sample train schematic.

2.1.4 **Meter-pump system.**—Any system that will maintain isokinetic sampling rate, determine sample volume, and is capable of a sampling rate of greater than 0.5 cfm.

2.2 **Measurement of stack conditions (stack pressure, temperature, moisture and velocity).**—The following equipment shall be used in the manner specified in section 4.3.1.

2.2.1 **Pitot tube.**—Type S, or equivalent, with a coefficient within 5 percent over the working range.

2.2.2 **Differential pressure gauge.**—Inclined manometer, or equivalent, to measure velocity head to within 10 percent of the minimum value.

<sup>1</sup>Mention of trade names or specific products does not constitute endorsement by the Environmental Protection Agency.

2.2.3 **Temperature gauge.**—Any temperature measuring device to measure stack temperature to within 5° F.

2.2.4 **Pressure gauge.**—Any device to measure stack pressure to within 0.1 in. Hg.

2.2.5 **Barometer.**—To measure atmospheric pressure to within 0.1 in. Hg.

2.2.6 **Moisture determination.**—Wet and dry bulb thermometers, drying tubes, condensers, or equivalent, to determine stack gas moisture content to within 1 percent.

2.3 **Sample recovery.**—2.3.1 **Probe cleaning equipment.**—Probe brush or cleaning rod at least as long as probe, or equivalent. Clean cotton balls, or equivalent, should be used with the rod.

2.3.2 **Leakless glass sample bottles.**

2.4 **Analysis.**—2.4.1 Equipment necessary to perform an atomic absorption, spectrographic, fluorometric, chromatographic, or equivalent analysis.

3. **Reagents.**—3.1 **Sample recovery.**—3.1.1 **Acetone.**—Reagent grade.

3.1.2 **Wash acid.**—1:1 V/V hydrochloric acid-water.

3.2 **Analysis.**—3.2.1 Reagents as necessary for the selected analytical procedure.

4. **Procedure.**—4.1 Guidelines for source testing are detailed in the following sections. These guidelines are generally applicable; however, most sample sites differ to some degree and temporary alterations such as stack extensions or expansions often are required to insure the best possible sample site. Further, since beryllium is hazardous, care should be taken to minimize exposure. Finally, since the total quantity of beryllium to be collected is quite small, the test must be carefully conducted to prevent contamination or loss of sample.

4.2 **Selection of a sampling site and number of runs.**—4.2.1 Select a suitable sampling site that is as close as practicable to the point of atmospheric emission. If possible, stacks smaller than 1 foot in diameter should not be sampled.

4.2.2 The sampling site should be at least eight stack or duct diameters downstream and two diameters upstream from any flow disturbance such as a bend, expansion or contraction. For rectangular cross-section, determine an equivalent diameter using the following equation:

$$D_e = \frac{2LW}{L+W} \quad \text{eq. 103-1}$$

where:

- $D_e$  = equivalent diameter
- $L$  = length
- $W$  = width

4.2.3 Some sampling situations may render the above sampling site criteria impractical. When this is the case, an alternate site may be selected but must be no less than two diameters downstream and one-half diameter upstream from any point of disturbance. Additional sample runs are recommended at any sample site not meeting the criteria of section 4.2.2.

4.2.4 Three runs shall constitute a test. The runs shall be conducted at three different points. The three points shall proportionately divide the diameter, i.e. be located at 25, 50 and 75 percent of the diameter from the inside wall. For horizontal ducts, the diameter shall be in the vertical direction. For rectangular ducts, sample on a line through the centroid and parallel to a side. If additional runs are required per section 4.2.3, proportionately divide the duct to accommodate the total number of runs.

4.3 **Measurement of stack conditions.**

4.3.1 Measure the stack gas pressure, moisture, and temperature, using the equipment described in § 2.2. Determine the molecular weight of the stack gas. Sound engineering estimates may be made in lieu of direct

measurements. The basis for such estimates shall be given in the test report.

4.4 *Preparation of sampling train.*—4.4.1 Assemble the sampling train as shown in figure 103-1. It is recommended that all glassware be precleaned by soaking in wash acid for 2 hours.

4.4.2 Leak check the sampling train at the sampling site. The leakage rate should not be in excess of 1 percent of the desired sample rate.

4.5 *Beryllium train operation.*—4.5.1 For each run, measure the velocity at the selected sampling point. Determine the isokinetic sampling rate. Record the velocity head and the required sampling rate.

4.5.2 Place the nozzle at the sampling point with the tip pointing directly into the gas stream. Immediately start the pump and adjust the flow to isokinetic conditions. At the conclusion of the test, record the sampling rate. Again measure the velocity head at the sampling point. The required isokinetic rate at the end of the period should not have deviated more than 20 percent from that originally calculated.

4.5.3 Sample at a minimum rate of 0.5 ft<sup>3</sup>/min. Samples shall be taken over such a period or periods as are necessary to determine the maximum emissions which would occur in a 24-hour period. In the case of cyclic operations, sufficient tests shall be made so as to allow determination or calculation of the emissions which would occur over the duration of the cycle. A minimum sampling time of 2 hours is recommended.

4.5.4 All pertinent data should be included in the test report.

4.6 *Sample recovery.*—4.6.1 It is recommended that all glassware be precleaned as in § 4.4.1. Sample recovery should also be performed in an area free of possible beryllium contamination. When the sampling train is moved, exercise care to prevent breakage and contamination. Set aside a portion of the acetone used in the sample recovery as a blank for analysis. The total amount of acetone used should be measured for accurate blank correction. Blanks can be eliminated if prior analysis shows negligible amounts.

4.6.2 Remove the filter and any loose particulate matter from filter holder and place in a container.

4.6.3 Clean the probe with acetone and a brush or long rod and cotton balls. Wash into the container. Wash out the filter holder with acetone and add to the same container.

4.7 *Analysis.*—4.7.1 Make the necessary preparation of samples and analyze for beryllium. Any currently acceptable method such as atomic absorption, spectrographic, fluorometric, chromatographic, or equivalent may be used.

5. *Calibration and standards.*—5.1 *Sampling train.*—5.1.1 As a procedural check, sampling rate regulation should be compared with a dry gas meter, spirometer, rotameter (calibrated for prevailing atmospheric conditions), or equivalent, attached to nozzle inlet of the complete sampling train.

5.1.2 Data from this test and calculations should be shown in test report.

5.2 *Analysis.*—5.2.1 Standardization is made as suggested by the manufacturer of the instrument or the procedures for the analytical method.

6. *Calculations.*—6.1 *Total beryllium emission.* Calculate the total amount of beryllium emitted from each stack per day by equation 103-2. This equation is applicable for continuous operations. For cyclic operations, use only the time per day each stack is in operation. The total beryllium emissions from a source will be the summation of results from all stacks.

$$R = \frac{W_i (v_i)_{avr} A_s}{V_{total}} \times \frac{86,400 \text{ seconds/day}}{10^6 \mu\text{g/g}}$$

where:

R = Rate of emission, g/day.  
 W<sub>i</sub> = Total weight of beryllium collected, μg.  
 V<sub>total</sub> = Total volume of gas sampled, ft<sup>3</sup>.  
 (v)<sub>avr</sub> = Average stack gas velocity, feet per second.  
 A<sub>s</sub> = Stack area, ft<sup>2</sup>.

7. *Test report.* 7.1 A test report shall be prepared which shall include as a minimum:

7.1.1 A detailed description of the sampling train used and results of the procedural check with all data and calculations made.

7.1.2 All pertinent data taken during test, the basis for any estimates made, calculations, and results.

7.1.3 A description of the test site, including a block diagram with a brief description of the process, location of the sample points in the cross section, dimensions and distances from any point of disturbance.

#### METHOD 104. REFERENCE METHOD FOR DETERMINATION OF BERYLLIUM EMISSIONS FROM STATIONARY SOURCES

1. *Principle and applicability.*—1.1 *Principle.*—Beryllium emissions are isokinetically sampled from the source, and the collected

sample is digested in an acid solution and analyzed by atomic absorption spectrophotometry.

1.2 *Applicability.*—This method is applicable for the determination of beryllium emissions in ducts or stacks at stationary sources. Unless otherwise specified, this method is not intended to apply to gas streams other than those emitted directly to the atmosphere without further processing.

2. *Apparatus.*—2.1 *Sampling train.*—A schematic of the sampling train used by EPA is shown in figure 104-1. Commercial models of this train are available, although construction details are described in APTD-0581,<sup>1</sup> and operating and maintenance procedures are described in APTD-0578. The components essential to this sampling train are the following:

2.1.1 *Nozzle.*—Stainless steel or glass with sharp, tapered leading edge.

2.1.2 *Probe.*—Sheathed Pyrex<sup>2</sup> glass. A heating system capable of maintaining a minimum gas temperature in the range of the stack temperature at the probe outlet during sampling may be used to prevent condensation from occurring.

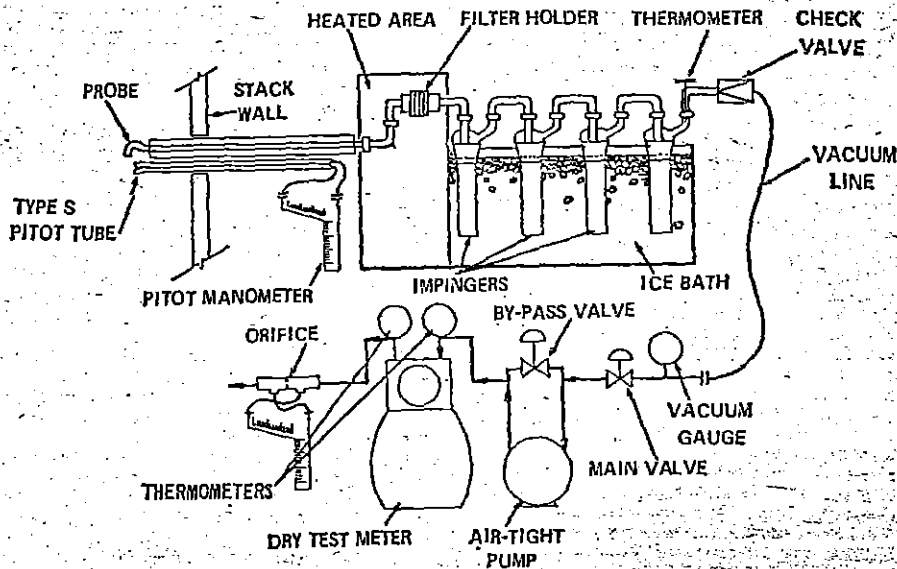


Figure 104-1. Beryllium sampling train

2.1.3 *Pitot tube.*—Type S (figure 104-2), or equivalent, with a coefficient within 5 percent over the working range, attached to probe to monitor stack gas velocity.

2.1.4 *Filter holder.*—Pyrex glass. The filter holder must provide a positive seal against leakage from outside or around the filter. A heating system capable of maintaining the filter at a minimum temperature in the range of the stack temperature may be used to prevent condensation from occurring.

2.1.5 *Impingers.*—Four Greenburg-Smith impingers connected in series with glass ball joint fittings. The first, third, and fourth impingers may be modified by replacing the tip with a 1/2-inch i.d. glass tube extending to one-half inch from the bottom of the flask.

2.1.6 *Metering system.*—Vacuum gauge, leakless pump, thermometers capable of measuring temperature to within 5° F, dry gas meter with 2 percent accuracy, and related equipment, described in APTD-0581,

to maintain an isokinetic sampling rate and to determine sample volume.

2.1.7 *Barometer.*—To measure atmospheric pressure to ± 0.1 in Hg.

2.2 *Measurement of stack conditions (stack pressure, temperature, moisture and velocity).*—2.2.1 *Pitot tube.*—Type S, or equivalent, with a coefficient within 5 percent over the working range.

2.2.2 *Differential pressure gauge.*—Inclined manometer, or equivalent, to measure velocity head to within 10 percent of the minimum value.

<sup>1</sup> These documents are available for a nominal cost from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22151.

<sup>2</sup> Mention of trade names on specific products does not constitute endorsement by the Environmental Protection Agency.

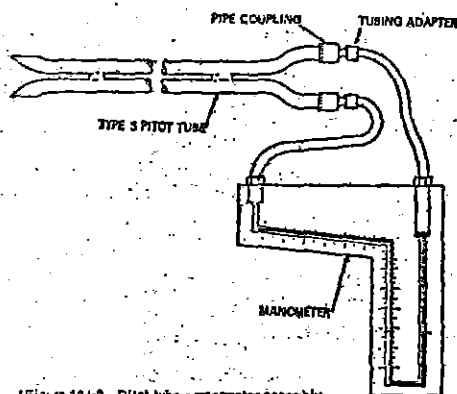


Figure 104-2. Pilot tube - manometer assembly.

2.2.3 **Temperature gage.**—Any temperature measuring device to measure stack temperature to within 5° F.

2.2.4 **Pressure gage.**—Pilot tube and inclined manometer, or equivalent, to measure stack pressure to within 0.1 in Hg.

2.2.5 **Moisture determination.**—Wet and dry bulb thermometers, drying tubes, condensers, or equivalent, to determine stack gas moisture content to within 1 percent.

2.3 **Sample recovery.**—2.3.1 **Probe cleaning rod.**—At least as long as probe.

2.3.2 **Leakless glass sample bottles.**—500 ml.

2.3.3 **Graduated cylinder.**—250 ml.

2.3.4 **Plastic jar.**—Approximately 300 ml.

2.4 **Analysis.**—2.4.1 **Atomic absorption spectrophotometer.**—To measure absorbance at 248 nm. Perkin Elmer Model 303, or equivalent, with N<sub>2</sub>O/acetylene burner.

2.4.2 **Hot plate.**

2.4.3 **Perchloric acid fume hood.**

3. **Reagents.**—3.1 **Stock reagents.**—3.1.1 **Hydrochloric acid.**—Concentrated.

3.1.2 **Perchloric acid.**—Concentrated, 70 percent.

3.1.3 **Nitric acid.**—Concentrated.

3.1.4 **Sulfuric acid.**—Concentrated.

3.1.5 **Distilled and deionized water.**

3.1.6 **Beryllium powder.**—98 percent minimum purity.

3.2 **Sampling.**—3.2.1 **Filter.**—Millipore AA, or equivalent. It is suggested that a Whatman 41 filter be placed immediately against the back side of the Millipore filter as a guard against breaking the Millipore filter. In the analysis of the filter, the Whatman 41 filter should be included with the Millipore filter.

3.2.2 **Silica gel.**—Indicating type, 6 to 16 mesh, dried at 350° F for 2 hours.

3.2.3 **Distilled and deionized water.**

3.3 **Sample recovery.**—3.3.1 **Distilled and deionized water.**

3.3.2 **Acetone.**—Reagent grade.

3.3.3 **Wash acid.**—1.1 V/V hydrochloric acid-water.

3.4 **Analysis.**—3.4.1 **Sulfuric acid solution, 12 N.**—Dilute 333 ml of concentrated sulfuric acid to 1 l with distilled water.

3.4.2 **25 percent V/V hydrochloric acid-water.**

3.5 **Standard beryllium solution.**—3.5.1 **stock solution.**—1 µg/ml beryllium. Dissolve 10 mg of beryllium in 80 ml of 12 N sulfuric acid solution and dilute to a volume of 1000 ml with distilled water. Dilute a 10 ml aliquot to 100 ml with 25 percent V/V hydrochloric acid, giving a concentration of 1 µg/ml. This dilute stock solution should be prepared fresh daily. Equivalent strength (in beryllium) stock solutions may be prepared from beryllium salts as BeCl<sub>2</sub> and Be(NO<sub>3</sub>)<sub>2</sub>, (98 percent minimum purity).

4. **Procedure.** 4.1 **Guidelines for source testing** are detailed in the following sections. These guidelines are generally applicable;

however, most sample sites differ to some degree and temporary alterations such as stack extensions or expansions often are required to insure the best possible sample site. Further, since beryllium is hazardous, care should be taken to minimize exposure. Finally, since the total quantity of beryllium to be collected is quite small, the test must be carefully conducted to prevent contamination or loss of sample.

4.2 **Selection of a sampling site and minimum number of traverse points.**

4.2.1 **Select a suitable sampling site** that is as close as practicable to the point of atmospheric emission. If possible, stacks

smaller than 1 foot in diameter should not be sampled.

4.2.2 **The sampling site should be at least 8 stack or duct diameters downstream and 2 diameters upstream from any flow disturbance** such as a bend, expansion or contraction. For a rectangular cross-section, determine an equivalent diameter from the following equation:

$$D_e = \frac{2LW}{L+W} \quad \text{eq. 104-1}$$

where:  
 D<sub>e</sub> = equivalent diameter  
 L = length  
 W = width

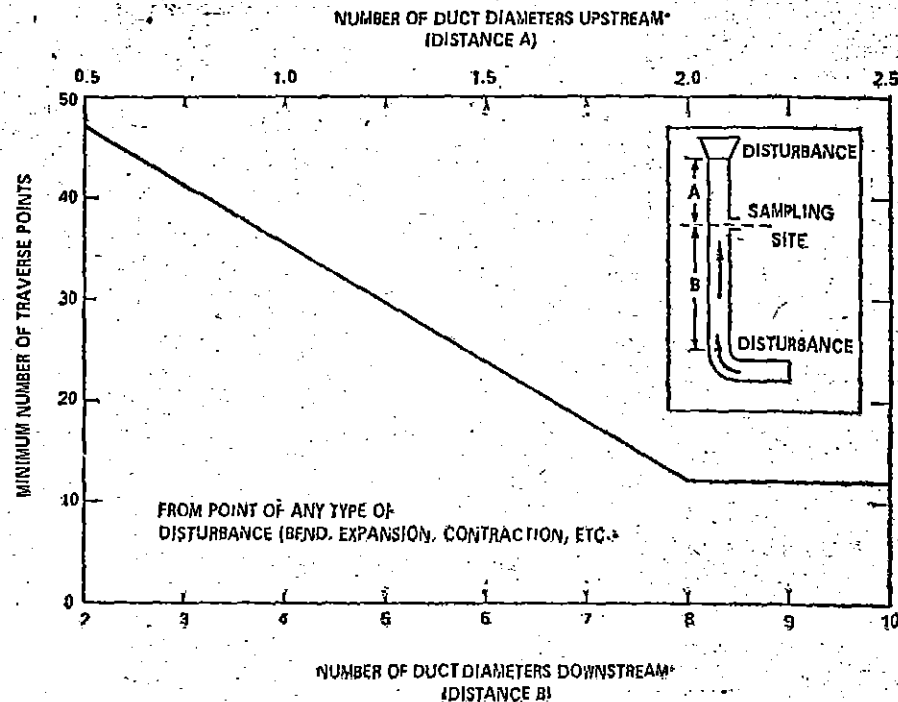


Figure 101-3. Minimum number of traverse points.

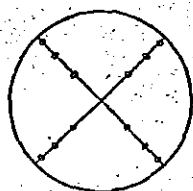


Figure 104-4. Cross section of circular stack showing location of traverse points on perpendicular diameters.

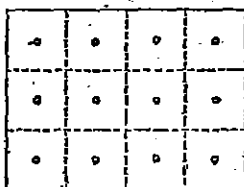


Figure 104-5. Cross section of rectangular stack divided into 12 equal areas, with traverse points at centroid of each area.

4.2.3 **When the above sampling site criteria can be met, the minimum number of traverse points is four (4) for stacks 1 foot in diameter or less, eight (8) for stacks larger than 1 foot but 2 feet in diameter or less, and twelve (12) for stacks larger than 2 feet.**

4.2.4 **Some sampling situations may render the above sampling site criteria impractical.** When this is the case, choose a convenient sampling location and use figure 104-3 to determine the minimum number of traverse points. However, use figure 104-3 only for stacks 1 foot in diameter or larger.

4.2.5 **To use figure 104-3, first measure the distance from the chosen sampling location to the nearest upstream and downstream disturbances.** Divide this distance by the diameter or equivalent diameter to determine the distance in terms of pipe diameters. Determine the corresponding number of traverse points for each distance from figure 104-3. Select the higher of the two numbers of traverse points, or a greater value, such that for circular stacks the number is a multiple of four, and for rectangular stacks the number follows the criteria of section 4.2.2.

4.2.6 **If a selected sampling point is closer than 1 inch from the stack wall, adjust the location of that point to ensure that the sample is taken at least 1 inch away from the wall.**

4.3 **Cross-sectional layout and location of traverse points.**



from the stack and handle in accordance with the sample recovery process described in § 4.7.

4.7 Sample recovery.—4.7.1 (All glass storage bottles and the graduated cylinder must be precleaned as in § 4.5.1.) This operation should be performed in an area free of possible beryllium contamination. When the sampling train is moved, care must be exercised to prevent breakage and contamination.

4.7.2 Disconnect the probe from the impinger train. Remove the filter and any loose particulate matter from the filter holder and place in a sample bottle. Place the contents (measured to ±1 ml) of the first three impingers into another sample bottle. Rinse the probe and all glassware between it and the back half of the third impinger with water and acetone, and add this to the latter sample bottle. Clean the probe with a brush or a long slender rod and cotton balls. Use acetone while cleaning. Add these to the sample bottle. Retain a sample of the water and acetone as a blank. The total amount of wash water and acetone used should be measured for accurate blank correction. Place the silica gel in the plastic jar. Seal and secure all sample containers for shipment. If an additional test is desired, the glassware can be carefully double rinsed with distilled water and reassembled. However, if the glassware is to be out of use more than 2 days, the initial acid wash procedure must be followed.

4.8 Analysis.

4.8.1 Apparatus preparation.—Clean all glassware according to the procedure of section 4.5.1. Adjust the instrument settings according to the instrument manual, using an absorption wavelength of 234.8 nm.

4.8.2 Sample preparation.—The digestion of beryllium samples is accomplished in part in concentrated perchloric acid. *Caution:* The analyst must insure that the sample is heated to light brown fumes after the initial nitric acid addition; otherwise, dangerous perchlorates may result from the subsequent perchloric acid digestion. Perchloric acid also should be used only under a perchloric acid hood.

4.8.2.1 Transfer the filter and any loose particulate matter from the sample container to a 150 ml beaker. Add 35 ml concentrated nitric acid. Heat on a hotplate until light brown fumes are evident to destroy all organic matter. Cool to room temperature and add 5 ml concentrated sulfuric acid and 5 ml concentrated perchloric acid. Then proceed with step 4.8.2.4.

4.8.2.2 Place a portion of the water and acetone sample into a 150 ml beaker and put on a hotplate. Add portions of the remainder as evaporation proceeds and evaporate to dryness. Cool the residue and add 35 ml concentrated nitric acid. Heat on a hotplate until light brown fumes are evident to destroy any organic matter. Cool to room temperature and add 5 ml concentrated sulfuric acid, and

5 ml concentrated perchloric acid. Then proceed with step 4.8.2.4.

4.8.2.3 Weigh the spent silica gel and report to the nearest gram.

4.8.2.4 Samples from 4.8.2.1 and 4.8.2.2 may be combined here for ease of analysis. Replace on a hotplate and evaporate to dryness in a perchloric acid hood. Cool and dissolve the residue in 10.0 ml of 25 percent V/V hydrochloric acid. Samples are now ready for the atomic absorption unit. The beryllium concentration of the sample must be within the calibration range of the unit. If necessary, further dilution of sample with 25 percent V/V hydrochloric acid must be performed to bring the sample within the calibration range.

4.8.3 Beryllium determination.—Analyze the samples prepared in 4.8.2 at 234.8 nm using a nitrous oxide/acetylene flame. Aluminum, silicon and other elements can interfere with this method if present in large quantities. Standard methods are available, however, to effectively eliminate these interferences (see Reference 5).

5. Calibration.—5.1 Sampling train.—5.1.1 Use standard methods and equipment as detailed in APTD-0576 to calibrate the rate meter, pitot tube, dry gas meter and probe heater (if used). Recalibrate prior to each test series.

5.2 Analysis.—5.2.1 Standardization is made with the procedure as suggested by the manufacturer with standard beryllium solution. Standard solutions will be prepared from the stock solution by dilution with 25 percent V/V hydrochloric acid. The linearity of working range should be established with a series of standard solutions. If collected samples are out of the linear range, the samples should be diluted. Standards should be interspersed with the samples since the calibration can change slightly with time.

6. Calculations.—6.1 Average dry gas meter temperature, stack temperature, stack pressure and average orifice pressure drop.—See data sheet (figure 104-6).

6.2 Dry gas volume.—Correct the sample volume measured by the dry gas meter to stack conditions by using equation 104-2.

$$V_{m_s} = V_m \frac{T_s}{T_m} \left( \frac{P_{bar} + \frac{\Delta H}{13.6}}{P_s} \right) \quad \text{eq. 104-2}$$

where:

- $V_{m_s}$  = Volume of gas sample through the dry gas meter (stack conditions), ft<sup>3</sup>.
- $V_m$  = Volume of gas sample through the dry gas meter (meter conditions), ft<sup>3</sup>.
- $T_s$  = Average temperature of stack gas, °R.
- $T_m$  = Average dry gas meter temperature, °R.
- $P_{bar}$  = Barometric pressure at the orifice meter, in Hg.
- $\Delta H$  = Average pressure drop across the orifice meter, in H<sub>2</sub>O.
- 13.6 = Specific gravity of mercury.
- $P_s$  = Stack pressure,  $P_{bar} \pm$  static pressure, in Hg.

6.3 Volume of water vapor.

$$W_{w_s} = K_w V_{l_s} \frac{T_s}{P_s} \quad \text{eq. 104-3}$$

- where:
- $V_{w_s}$  = Volume of water vapor in the gas sample (stack conditions), ft<sup>3</sup>.
- $K_w = 0.00267 \frac{\text{inHg-ft}^3}{\text{ml}^2 \text{R}}$ , when these units are used.
- $V_{l_s}$  = Total volume of liquid collected in impingers and silica gel (see figure 104-7), ml.
- $T_s$  = Average stack gas temperature, °R.
- $P_s$  = Stack pressure,  $P_{bar} \pm$  static pressure, in Hg.

6.4 Total gas volume.

$$V_{total} = V_{m_s} + V_{w_s} \quad \text{eq. 104-4}$$

- where:
- $V_{total}$  = Total volume of gas sample (stack conditions), ft<sup>3</sup>.
- $V_{m_s}$  = Volume of gas through dry gas meter (stack conditions), ft<sup>3</sup>.
- $V_{w_s}$  = Volume of water vapor in gas sample (stack conditions), ft<sup>3</sup>.

6.5 Stack gas velocity.

Use equation 104-5 to calculate the stack gas velocity.

$$(v_s)_{avr} = K_p C_p (\sqrt{\Delta p})_{avr} \sqrt{\frac{(T_s)_{avr}}{P_s M_s}} \quad \text{eq. 104-5}$$

where:

- $(v_s)_{avr}$  = Average stack gas velocity, feet per second.
- $K_p = 95.53 \frac{\text{ft}}{\text{sec}} \left( \frac{\text{lb-inHg}}{\text{lb-mole}^2 \text{R-inH}_2\text{O}} \right)^{1/2}$ , when these units are used.
- $C_p$  = Pitot tube coefficient, dimensionless.
- $(T_s)_{avr}$  = Average stack gas temperature, °R.
- $(\sqrt{\Delta p})_{avr}$  = Average square root of the velocity head of stack gas (in H<sub>2</sub>O)<sup>1/2</sup> (see figure 104-8).
- $P_s$  = Stack pressure,  $P_{bar} \pm$  static pressure, in Hg.
- $M_s$  = Molecular weight of stack gas (wet basis), the summation of the products of the molecular weight of each component multiplied by its volumetric proportion in the mixture, lb/lb-mole.

	VOLUME OF LIQUID WATER COLLECTED	
	IMPINGER VOLUME, ml	SILICA GEL WEIGHT, g
FINAL		
INITIAL		
LIQUID COLLECTED		
TOTAL VOLUME COLLECTED		ml

\* CONVERT WEIGHT OF WATER TO VOLUME BY DIVIDING TOTAL WEIGHT INCREASE BY DENSITY OF WATER. (1 g/ml)

$$\frac{\text{INCREASE, g}}{(1 \text{ g/ml})} = \text{VOLUME WATER, ml}$$

Figure 104-7. Analytical data.



(d) Air sampling data indicating beryllium concentrations in the vicinity of the stationary source for the 3-year period specified in paragraph (b)(1) of this section. This data shall be presented chronologically and include the beryllium concentration and location of each individual sample taken by the network and the corresponding 30-day average beryllium concentrations.

(2) Within 60 days after receiving such report, the Administrator will notify the owner or operator in writing whether approval is granted or denied. Prior to denying approval to comply with the provisions of paragraph (b) of this section, the Administrator will consult with representatives of the stationary source for which the demonstration report was submitted.

(c) The burning of beryllium and/or beryllium-containing waste, except propellants, is prohibited except in incinerators, emissions from which must comply with the standard.

#### § 61.33 Stack sampling.

(a) Unless a waiver of emission testing is obtained under § 61.13, each owner or operator required to comply with § 61.32(a) shall test emissions from his source.

(1) Within 90 days of the effective date in the case of an existing source or a new source which has an initial startup date preceding the effective date; or

(2) Within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(b) The Administrator shall be notified at least 30 days prior to an emission test so that he may at his option observe the test.

(c) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. Where emissions depend upon the relative frequency of operation of different types of processes, operating hours, operating capacities, or other factors, the calculation of maximum 24-hour-period emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions. No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Administrator.

(d) All samples shall be analyzed and beryllium emissions shall be determined within 30 days after the source test. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determination.

(e) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

#### § 61.34 Air sampling.

(a) Stationary sources subject to § 61.32(b) shall locate air sampling sites

in accordance with a plan approved by the Administrator. Such sites shall be located in such a manner as is calculated to detect maximum concentrations of beryllium in the ambient air.

(b) All monitoring sites shall be operated continuously except for a reasonable time allowance for instrument maintenance and calibration, for changing filters, or for replacement of equipment needing major repair.

(c) Filters shall be analyzed and concentrations calculated within 30 days after filters are collected. Records of concentrations at all sampling sites and other data needed to determine such concentrations shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

(d) Concentrations measured at all sampling sites shall be reported to the Administrator every 30 days by a registered letter.

(e) The Administrator may at any time require changes in, or expansion of, the sampling network.

#### Subpart D—National Emission Standard for Beryllium Rocket Motor Firing

##### § 61.40 Applicability.

The provisions of this subpart are applicable to rocket motor test sites.

##### § 61.41 Definitions.

Terms used in this subpart are defined in the Act, in Subpart A of this part, or in this section as follows:

(a) "Rocket motor test site" means any building, structure, facility, or installation where the static test firing of a beryllium rocket motor and/or the disposal of beryllium propellant is conducted.

(b) "Beryllium propellant" means any propellant incorporating beryllium.

##### § 61.42 Emission standard.

(a) Emissions to the atmosphere from rocket-motor test sites shall not cause time-weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per cubic meter of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an effect adverse to public health could occur.

(b) If combustion products from the firing of beryllium propellant are collected in a closed tank, emissions from such tank shall not exceed 2 grams per hour and a maximum of 10 grams per day.

##### § 61.43 Emission testing—rocket firing or propellant disposal.

(a) Ambient air concentrations shall be measured during and after firing of a rocket motor or propellant disposal and in such a manner that the effect of these emissions can be compared with the standard. Such sampling techniques shall be approved by the Administrator.

(b) All samples shall be analyzed and results shall be calculated within 30 days after samples are taken and before any subsequent rocket motor firing or propellant disposal at the given site. All results shall be reported to the Administrator by a registered letter dispatched

before the close of the next business day following determination of such results.

(c) Records of air sampling test results and other data needed to determine integrated intermittent concentrations shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

(d) The Administrator shall be notified at least 30 days prior to an air sampling test, so that he may at his option observe the test.

#### § 61.44 Stack sampling.

(a) Sources subject to § 61.42(b) shall be continuously sampled, during release of combustion products from the tank, in such a manner that compliance with the standards can be determined. The provisions of § 61.14 shall apply.

(b) All samples shall be analyzed, and beryllium emissions shall be determined within 30 days after samples are taken and before any subsequent rocket motor firing or propellant disposal at the given site. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determinations.

(c) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

(d) The Administrator shall be notified at least 30 days prior to an emission test, so that he may at his option observe the test.

#### Subpart E—National Emission Standard for Mercury

##### § 61.50 Applicability.

The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, and to those which use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide.

##### § 61.51 Definitions.

Terms used in this subpart are defined in the act, in subpart A of this part, or in this section as follows:

(a) "Mercury" means the element mercury, excluding any associated elements, and includes mercury in particulates, vapors, aerosols, and compounds.

(b) "Mercury ore" means a mineral mined specifically for its mercury content.

(c) "Mercury ore processing facility" means a facility processing mercury ore to obtain mercury.

(d) "Condenser stack gases" mean the gaseous effluent evolved from the stack of processes utilizing heat to extract mercury metal from mercury ore.

(e) "Mercury chlor-alkali cell" means a device which is basically composed of an electrolyzer section and a denuder (decomposer) section and utilizes mercury to produce chlorine gas, hydrogen gas, and alkali metal hydroxide.

(f) "Mercury chlor-alkali electrolyzer" means an electrolytic device which is part of a mercury chlor-alkali cell and utilizes a flowing mercury cathode to produce chlorine gas and alkali metal amalgam.



KESS CANNON  
Director

Pete McSwain: For your records of the meeting



KESS CANNON  
Director

Harold Sawyer: Best we call them - perhaps  
they'd like to attend.

Kess - I called him - his questions  
are answered. We certify "80% or more"  
Tax relief calculated as if 100%  
If we certify "60% or more and less than 80%"  
Tax relief is based on 80%

*[Signature]*





# Western

**WESTERN PULP PRODUCTS COMPANY**

P. O. Box No. 968, Corvallis, Oregon 97330 • Area Code 503 752-7179

757-1151

May 9, 1975

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
MAY 12 1975

Department of Environmental Quality  
1234 S.W. Morrison Street  
Portland, Oregon 97205

**OFFICE OF THE DIRECTOR**

Attn: Mr. K.R. Cannon, Director

Ref: Tax Application T-643

Gentlemen:

Thank you for your May 7, 1975, letter advising us of the status of the tax relief application for our new pollution control facility.

In reviewing the Department's report on our application, we note the Department recognizes " . . . installation of the claimed facility was necessary (to meet the) . . . NPDES Permit Condition(s) . . . ", and that ". . . no useable materials are recovered (by the system) for profit, . . . the only benefit derived is pollution control."

Therefore, when considering this application, we ask the Environmental Quality Commission to approve the full cost (100%) of the facility as qualifying for tax relief purposes.

In the event the Commission does not concur with this request, we ask for the opportunity to appear in support of our position at the May 23rd hearing in Salem.

Thank you for your assistance.

Very truly yours,

Richard D. Hurley  
Vice President

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
MAY 12 1975

**WATER QUALITY CONTROL**

RDH:b1

REPORT ON THE SEPTIC SYSTEM  
MORATORIUM OF MARCH 21, 1973 IN  
JACKSON COUNTY, OREGON

REPORT PREPARED BY:

Jackson County Department of Planning and Development  
Jackson County Health Department  
May 1975

## INTRODUCTION

During 1972 and early 1973, considerable pressure was building within the subsurface sewage disposal program of Jackson County. A general toughening of the rules governing the subsurface permit program and the implementation of more technically competent procedures for the evaluation of proposed disposal sites, considerably lengthened the time required for the issuance of a sewage disposal permit. This fact, coupled with the general upsurge of building and development activity in Jackson County, created in a short time a substantial backlog of applications awaiting review and consideration by the Health Department staff.

A series of procedural changes were instituted in order to accommodate the backlog and better serve the increased demand for services. Among these was the hiring of two soil scientists by the County Planning Department. These specialists devoted part of their time (eventually most of their time) to the provision of technical assistance to the sanitarians operating the subsurface sewage disposal program at the Health Department. Their assistance was in the area of site evaluations and the streamlining of various procedures and techniques utilized in the subsurface program.

It became apparent to all concerned with the subsurface program at the time, that applications within certain areas of the county were consistently denied permits. These denials were based on the relatively uniform characteristics of the sites, including soil types, in those areas. It was also common knowledge that many existing dwellings in those same areas had malfunctioning subsurface sewage systems, some of which could not be repaired. Concurrently, Jackson County experienced a major increase in the number of infectious Hepatitis cases. A preponderance of these cases were existent within or near these same areas of permit denial. Proper disposal of body wastes in infectious Hepatitis patients is an accepted part of the measures used to reduce its spread to other members of the community.

For two major reasons, then, the idea of establishing a septic system moratorium was discussed during late 1972 and early 1973:

- 1) To help curb the epidemic levels of infectious Hepatitis and other less dramatic diseases related to exposure to sewage in roadside ditches, on the surface of the ground, in irrigation waters and/or possible contamination of drinking waters.

- 2) To alleviate the requirement for site evaluations, re-evaluations, and consideration of individual applications for sewage disposal permits within an area wherein those permits should be categorically denied.

After thorough consideration of the many aspects of the matter, joint review of the problem by the Jackson County Board of Health and the Jackson County Planning Commission, and with concurrence of the Jackson County Board of Commissioners; the Health Officer, acting within the powers and authority vested in him by ORS Chapter 431, did on March 21, 1973, institute a septic system moratorium in the area depicted on page 3. This action was in conformance with procedures established by the Jackson County Sewage Disposal and Individual Water Supply Ordinance of 1972. The moratorium has been continuously enforced by the Jackson County Health Department, and its successor for subsurface disposal, the Jackson County Department of Planning and Development, until the present time.

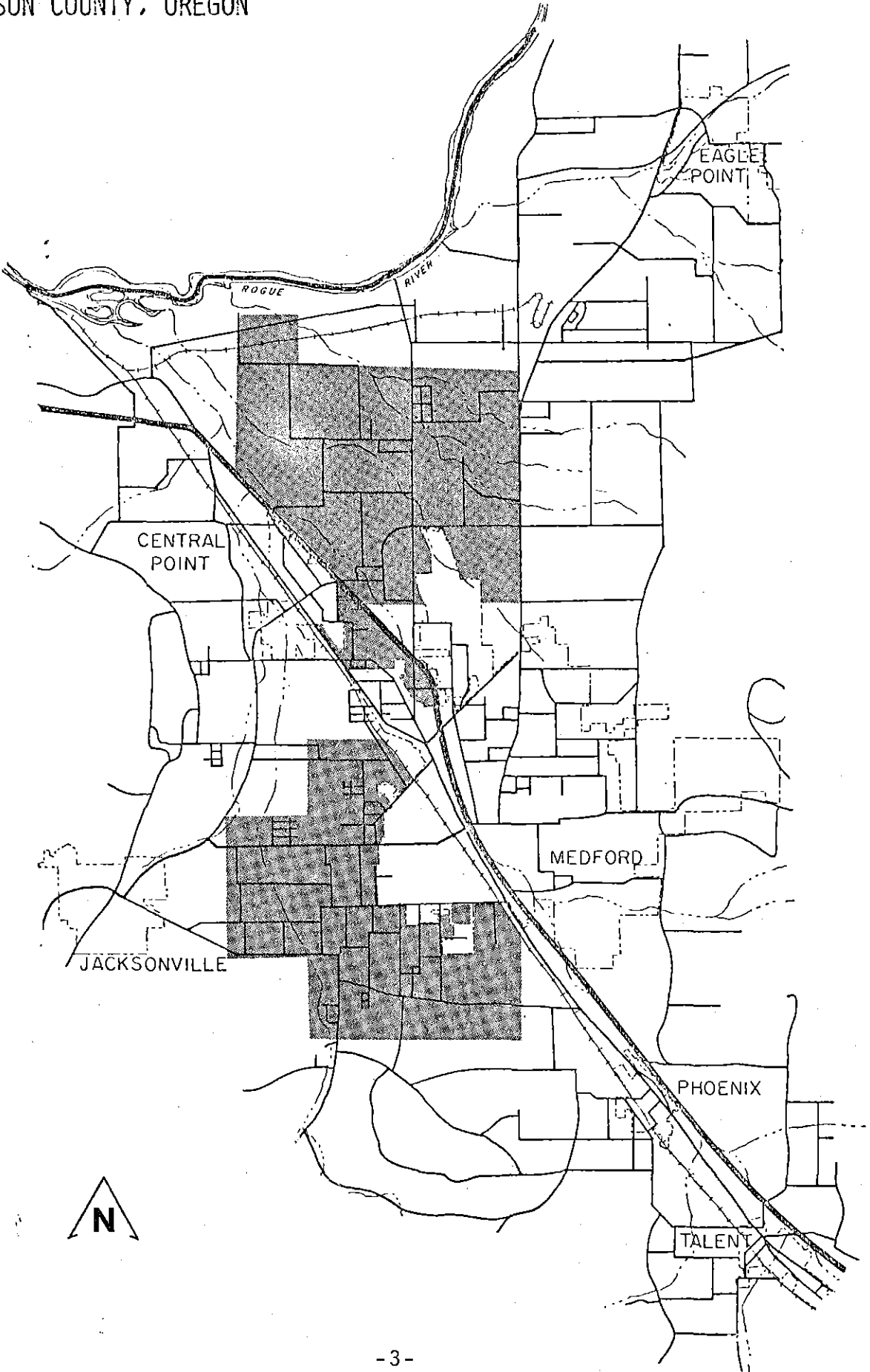
#### DEPARTMENT OF ENVIRONMENTAL QUALITY AUTHORITY IN THE MORATORIUM

In October of 1973, the statewide authority for subsurface sewage disposal previously vested in the Oregon State Health Division, was passed by the legislature to the Department of Environmental Quality (DEQ). However, by inter-agency agreement, the Health Division continued to operate the program until January of 1974. It now appears that along with the authority indicated above was conveyed under ORS Chapter 468, all prerogatives relating to the matter of septic system moratoriums. DEQ remained relatively silent on the question until recently, when it expressed its intent to continue existing moratoriums in effect until the matter could be considered by the Environmental Quality Commission (EQC) at public hearing on May 23, 1975. DEQ's recommendation to the EQC, which will be considered at that time, would extend all moratoriums in effect for a period of six months, during which the DEQ will study their present validity and make recommendations to the EQC regarding their continuation.

#### STUDY PURPOSE

In anticipation of the EQC's deliberations in this regard, the Jackson County Board of Commissioners has instructed the moratorium study committee authorized by the Jackson County Sewage Disposal and Individual Water Supply Ordinance of 1972, to investigate the present necessity for continuing the Jackson County moratorium, and to report its findings to the Board of Commissioners at a public meeting to be held at 10:00 a.m., Friday, May 16, 1975. The study committee is composed of the County Health Officer and his staff, and representatives of the

SEPTIC SYSTEM MORATORIUM AREA  
JACKSON COUNTY, OREGON



Soil Conservation Service, County Department of Planning and Development, and the Jackson County Planning Commission.

#### TOPOGRAPHY AND CLIMATE

The Bear Creek Valley, within which the moratorium area is situated, is a large, nearly flat, intermountain plain composed of alluvial materials. Its average elevation is about 1,300 feet.

The valley experiences mild, wet winters and hot, very dry summers, receiving less annual precipitation than any other area of Oregon west of the Cascades. At Medford, the average annual temperature is about 54 degrees, ranging from 37 degrees in January to 72 degrees in July. However, maximum temperatures in summer are often more than 90 degrees, and not infrequently over 100 degrees. In winter, minimum temperatures are often near or below freezing. Average annual precipitation at Medford is about 19 inches, 72 percent of which occurs from November through March. Only about two inches fall from June through September.

Aside from the general subsurface disposal problems associated with a well defined wet season, winter rains in the valley are frequently very intense over a period of several days, leading to annual flooding of low lying areas along drainageways and streams. During these periods, the prevalent clayey soils of the region quickly saturate and develop standing water conditions at the surface. These physical characteristics, which are found in many locations within the moratorium area, are very detrimental to the proper functioning of subsurface disposal systems.

#### SOILS INFORMATION

Basic to any consideration of subsurface disposal, is the quality and character of the soil underlying the surface upon which development will take place, and within which the effluent generated therefrom will pass. Soils left in their natural condition change almost imperceptibly, even over very long periods of time. Although some refinements have occurred in the soils mapping and evaluation techniques within the moratorium area, the data is relatively the same as was available for consideration in 1973. Generally, the soils range in character from poorly drained to well drained, with textures from loam to clay. They are derived from alluvium of volcanic, mixed, and metamorphic origin, occurring from nearly level to gently sloping (0-7%) alluvial fans, stream terraces, and bottom land.

The soil types within the moratorium have been categorized according to their probability of providing a suitable site for subsurface disposal on five acres of each soil category. In general, if a lot is substantially smaller than five acres within a given category, then the chances of finding a suitable site are reduced. It is important to note that this data does not take into consideration various requisite minimum distance requirements, odd-shaped lots where there may be difficulties in design of the drainfield, special usages that require larger systems than for single family dwellings, or other factors pertaining to suitability that are not soil related. Additionally, the saturated zone (regional water table) as defined by DEQ was not considered in this evaluation. As technical data increases, the depth requirement to the saturated zone (six feet or more) may negatively affect the chances of finding suitable sites in certain locations within the moratorium area. An acreage summary of soil categories within the moratorium follows.

#### ACREAGE AND SEPTIC SUITABILITY OF SOIL CATEGORIES

Soil Category	% Chance of Suitable Site on Five Acres	North Area		South Area		North & South Areas	
		# of Acres	% of Total	# of Acres	% of Total	# of Acres	% of Total
Very Good	85 - 100	440	7	136	2	576	5
Good	65 - 85	3	0	743	13	746	6
Fair	35 - 65	704	11	1,608	27	2,312	19
Poor	15 - 35	124	2	890	15	1,014	8
Very Poor	0 - 15	5,739	80	2,672	43	8,411	62
TOTAL		7,010	100	6,049	100	13,059	100

The primary reference for this soils information was the preliminary soils information sheet for subsurface sewage disposal, which was derived from basic soil resource data provided by the U.S. Department of Agriculture, Soil Conservation Service. Minimum standards set forth in current DEQ regulations (OAR 71-030) were used as the criteria for site suitability.

Between one-third and one-half of the south moratorium area, and about one-sixth of the north moratorium area, are given soils that offer at least a 35 percent chance of finding a suitable site on a five acre parcel. It would seem, at least from the standpoint of soils alone, that the odds of finding suitable sites are sufficiently in favor of the applicants to indicate the desirability of individual case evaluations, especially in those areas demonstrating fair, good, and very good prospects for approval.

## DOMESTIC WATER RESOURCES

Domestic water supplies within the moratorium area stem from two sources: individual wells, usually serving only one property, and the water supply and treatment facilities of the City of Medford. The status of ground water supplies was studied by the Oregon State Engineer's Office in 1971, and documented in a report entitled Availability and Quality of Ground Water in the Medford Area. Nearly all of the moratorium area is underlaid with alluvium materials (sand, gravel, and cobbles) deposited by Bear Creek and other tributaries of the Rogue River. The report discusses alluvium as follows:

"Alluvium is the most productive aquifer in the area. Where total thickness is generally 30 feet or more, the unit usually has a saturated thickness of more than 10-15 feet, and will yield 10-50 gallons per minute to wells. In a few areas, 100 gallons per minute or more is obtainable from properly designed and constructed wells. Water is likely to be of good chemical quality for most uses, except for excessive iron in shallow zones of the area."

The City of Medford has two water supply sources: Big Butte Springs, approximately 25 miles northeast of the City, and the Rogue River. Big Butte Springs supplies 26.5 million gallons per day (mgd), and a recently completed treatment plant on the Rogue River near the City can presently supply 15 mgd. However, the design capacity of the plant could ultimately yield 65 mgd, which is sufficient to meet all anticipated demands in its service area well beyond the year 1990.

The City of Medford presently supplies water to three other cities and eight water districts and associations. The Medford Water Commission and City Council have, in recent years, established firm policies for the provision of water outside their corporate jurisdiction. These include the necessity for an accompanying complete range of urban level services, as well as enforced land use, building and housing regulations. As a result of these policies, virtually no additional service to areas outside the City is anticipated for some time. At present, five water districts, all served by Medford, provide water to approximately 37 percent of the homes in the moratorium area.

## SEWER SERVICE

Since 1973, considerable expansion of the Bear Creek Valley Sanitary Authority collection system has occurred. At the present time, approximately 1,000 acres in the north moratorium area and 800 acres in the south moratorium area, which



were subject to subsurface disposal methods in 1973, are now within the Sanitary Authority's primary benefited area. This accounts for 237 connections in the north area and 485 connections in the south area. An additional 182 connections will be completed in the south area in the next few weeks. Although the Authority's program is directed toward areas of greatest need, future extensions are subject to the approval of each individual neighborhood to be served. For this reason, future line extensions are not entirely predictable. The Authority does, however, have the capability within its system of providing service throughout the moratorium area. In accordance with State law and the Authority's ordinances, any dwelling within 300 feet of existing sewer service must be connected.

Another factor has occurred in several areas of the moratorium since its inception. Approximately 349 acres of land, or 2.5 percent of the total moratorium area, have been annexed by the cities of Medford and Central Point, and are subject to the service policies administered by those cities. Central Point requires connection within 300 feet of service; however, Medford allows no new development within its boundaries unless it is served by the city's collection system.

#### INCIDENCE OF HEPATITIS

During the period from 1970 to 1973, prior to establishment of the moratorium, 350 cases of Hepatitis were recorded within Jackson County. Of this number 51 or 15 percent occurred within the moratorium area. It is significant to note that according to health officials, approximately six cases of Hepatitis go unreported for each single case brought to their attention. Since 1973, 102 cases of Hepatitis have been recorded throughout Jackson County, with four occurring within the moratorium area. Although this substantial reduction in the incidence of the disease is coincidental with the period of time covered by the moratorium, attempts to correlate the two factors must remain inconclusive. Significant reductions have also occurred in other areas of the county not covered by the moratorium. Hepatitis does not usually recur in an individual after he has once contracted the disease. After those persons in an area who are particularly susceptible have been infected, a general remission of the contagion normally follows, since re-infection of those persons is rare. These factors must be weighed in any conclusion regarding the effectiveness of the moratorium for the purposes of disease control.

#### COUNTYWIDE ZONING

Although Jackson County's Comprehensive Plan was adopted in June of 1972, zoning had not yet been effectuated when the moratorium went into effect in March of

1973. Land use and partitioning was then, as it always had been, controlled only by the economics of development and the discretion of individual developers. Through the years, many lots of five acres or less in size had been created along existing county roads or established in new subdivisions.

Countywide zoning became effective on September 1, 1973, and has since served to control the minimum size of newly created lots. Existing lots, however, were, by State Law, exempt from such restrictions. Article V, Section 2, Subsection 4, of the Jackson County Zoning Ordinance states the following:

"If a lot created prior to the effective date of this Ordinance has an area or dimension which does not meet the requirements of the district in which it is located, it may be occupied by a use permitted in the district, subject to the other requirements of the district."

In accordance with the above requirement, any lot of record existing as of September 1, 1973, the effective date of zoning, can be utilized for a dwelling unit, even though it may be well below the minimum lot size presently required for the zone in which it is located. Within the moratorium area there is a total of 3,871 individual tax lots. The number of lots within several categories of lot size and the respective percentage of the total represented by each category is summarized in the table below:

NUMBER OF LOTS BY SIZE GROUPING

Lot Size	North Area		South Area		North & South Areas	
	# of Lots	% of Total	# of Lots	% of Total	# of Lots	% of Total
10 Acres +	167	12	81	3	248	6
5-10 Acres	107	7	105	4	212	5
2½-5 Acres	364	24	435	18	799	21
1-2½ Acres	463	31	552	23	1,015	26
½-1 Acre	127	9	1,098	46	1,225	32
Up to ½ Acre	258	17	114	6	372	10
TOTAL	1,486	100	2,385	100	3,871	100

Although the above figures concern the existing lot pattern, legal partitioning of lots since September of 1973, could have occurred in only four general zoning categories (comprising less than 10 percent of the moratorium area). About 85 percent of the north moratorium area and 87 percent of the south moratorium area is zoned in a manner which would require at least one acre for the creation of

any new lot. Only the commercial, industrial, and aggregate zones, which account for 6 percent of the moratorium area, have no minimum lot size, and can be readily developed. However, the value of these properties for commercial and industrial use should effectively restrict their development for residential purposes. One remaining zone, the Exclusive Farm Zone, also has no minimum lot size. State law does require within this zone, however, that all partitions of land below ten acres in size be reviewed and approved by the Board of County Commissioners. After one and one-half years of administering the Exclusive Farm Zone, only four applications for reduced parcel size within that zone have been received for consideration throughout the County, none of which were within the moratorium area. The following table is a summarization of the acreage figures for the various zoning categories and annexed lands within the moratorium area:

Zoning Designation	ZONING DISTRICT ACREAGE			Total
	Minimum Lot Size	North Area Acreage	South Area Acreage	
Aggregate Resource	-	95	-	95
Exclusive Farm	-	439	424	863
Open Space Reserve	20 Acres	169	-	169
Open Space Development	5 Acres	231	-	231
Farm Residential	5 Acres	3,340	3,256	6,596
Rural Residential-5	5 Acres	1,477	668	2,145
Rural Residential-2.5	2.5 Acres	114	1,333	1,447
Rural Residential-1	1 Acre	170	-	170
Interchange Commercial	-	8	-	8
Rural Service Commercial	-	7	-	7
General Commercial	-	31	89	120
Light Industrial	-	334	28	362
General Industrial	-	328	169	497
Annexed Lands	Unknown	267	82	349
<b>TOTAL</b>		<b>7,010</b>	<b>6,049</b>	<b>13,059</b>

#### COMPREHENSIVE PLAN

Since zoning has effectively stopped the creation of dense residential patterns served by subsurface disposal methods, the next question which arises is the ability of today's zoning to maintain the status quo in the face of possible pressures to re-zone at higher densities. The answer to this question lies within the Comprehensive Plan for Jackson County, which sets forth the county policy concerning such changes of land use. With minor exceptions, the Comprehensive Plan Map por-

trays virtually the same basic land use and residential density pattern described in the section on zoning, page 9. However, the Plan does provide opportunities for urban density residential development under certain circumstances.

Page 14 of the Comprehensive Plan text makes the following statement concerning urban medium density residential development:

"Housing developments on nine thousand square foot lot sizes may be accomodated within this classification. However, this housing density is based on the assumption that community water and sewer services are available. Where the development alternative symbol is shown on the plan, urban medium housing densities are possible."

The development alternative symbol discussed in the Plan encompasses approximately 3,725 acres of the south moratorium area and 1,459 acres of the north moratorium area. Although water has been available in a number of these areas for some time, sewerage has become available through the efforts of the Bear Creek Valley Sanitary Authority only within the last two years. Even though the plan states that water and sewer service are prerequisites for urban densities, it does not imply nor does State law allow, that such land use changes occur automatically.

Since 1973, land use decisions in Oregon have been guided by the results of an Oregon Supreme Court case known as the "Fasano" decision. That case clarified the intent of the existing law by requiring not only that a requested change of land use be in conformance with the Comprehensive Plan, but also that proof be demonstrated by the applicant that there exists a public need for the change of use in question. The decision further required that the particular site proposed for the change be the best available site within the general area for the change being considered. The court also expressed the fact that the appropriate bodies hearing land use questions were quasi-judicial in nature, and must, therefore, refrain from any contact with a particular application outside of the deliberative process established by law; and must also, as a part of that process, make appropriate written findings to substantiate that all requirements of law have been met prior to issuing a decision concerning a land use question. Considering the fact that these procedural requirements would be followed within the moratorium area, it is reasonable to conclude that any change of zoning density would occur only after complete and thorough evaluation of total community need.

## EXISTING RESIDENTIAL DEVELOPMENT

Given a fixed number of pre-existing substandard lots, and a zoning pattern and comprehensive plan which preclude the uncontrolled proliferation of such lots in the future, two related questions concern the effect of legal partitions on subsurface disposal, and the proportion of existing lots which have not already been developed. The primary basis for the residential densities established by zoning was the suitability of the soil for subsurface disposal. For this reason, partitions accomplished in accordance with zoning should be in general conformance with sanitation requirements. The question concerning developed lots requires a more intensive analysis. The most recent residential land use survey by the Department of Planning & Development was completed in March of 1975. Of the 3,411 existing lots in the moratorium area of less than five acres in size, only 599 or 18 percent are undeveloped at the present time. A complete breakdown of existing development, categorized by lot size, is included in the table below:

### DEVELOPED AND UNDEVELOPED LOTS BY SIZE CATEGORY

NORTH AREA				
Lot Size	Number of Lots	Number Developed	Number Undeveloped	Percent Undeveloped
10 Acres +	167	38	129	33
5-10 Acres	107	67	40	10
2½-5 Acres	364	289	75	19
1-2½ Acres	463	377	86	22
½-1 Acre	127	99	28	6
Up to ½ Acre	258	220	38	10
<b>TOTAL</b>	<b>1,486</b>	<b>1,090</b>	<b>396</b>	<b>100</b>

SOUTH AREA				
Lot Size	Number of Lots	Number Developed	Number Undeveloped	Percent Undeveloped
10 Acres +	81	54	27	6
5-10 Acres	105	73	32	8
2½-5 Acres	435	375	60	14
1-2½ Acres	552	447	105	24
½-1 Acre	1,098	934	164	38
Up to ½ Acre	114	71	43	10
<b>TOTAL</b>	<b>2,385</b>	<b>1,954</b>	<b>431</b>	<b>100</b>

DEVELOPED AND UNDEVELOPED LOTS BY SIZE CATEGORY (con't)

Lot Size	NORTH & SOUTH AREA			Percent Undeveloped
	Number of Lots	Number Developed	Number Undeveloped	
10 Acres +	248	92	156	19
5-10 Acres	212	140	72	9
2½-5 Acres	799	664	135	16
1-2½ Acres	1,015	824	191	23
½-1 Acre	1,225	1,033	192	23
Up to ½ Acre	372	291	81	10
<b>TOTAL</b>	<b>3,871</b>	<b>3,044</b>	<b>827</b>	<b>100</b>

CAPACITY OF EXISTING SUBSURFACE SEWAGE DISPOSAL SYSTEMS

It is not possible to accurately report the capacity of all existing subsurface sewage disposal systems in the moratorium areas without conducting a survey of each developed property. Most of the septic tank systems installed before 1966, when the Jackson County sewage disposal permit system was started, were not inspected. Therefore, a search of all existing county records would reflect only those systems installed or reconstructed after 1966. In some pre-1966 installations where the County Health Department was called on to specify and/or inspect systems for builders on a voluntary basis, or where financing could not be arranged without Health Department approval, are also a matter of record. For these reasons, there are too many unknown systems in the County to develop a meaningful report on capacities without doing an individual property investigation and evaluation.

"PRIOR APPROVAL" SEWAGE DISPOSAL PERMITS

Present rules of the DEQ allow, under certain circumstances, the re-issuance of expired permits which were originally approved prior to January 1, 1974. This rule has not, however, applied within the moratorium area. It is apparent from a review of the permit files for the area, that only about 50 properties would be eligible for consideration under the "Prior Approval" rules. These properties are scattered throughout the moratorium area, and do not constitute a potential problem if the moratorium were lifted.

## CONCLUSIONS AND RECOMMENDATIONS

After review of the information contained in this report, the Moratorium Study Committee made the following findings concerning the present moratorium:

- 1) Even though the previous epidemic levels of infectious Hepatitis have subsided, no meaningful conclusions can be drawn concerning the effect of the moratorium in bringing about this fact.
- 2) The unworkable backlog of sewage disposal permits existent in 1973 has since been overcome. It is not expected that the removal of the moratorium would cause more than a temporary short-term increase in the workload of the sanitation section of the Department of Planning and Development.
- 3) Nearly one-third of the moratorium area has soil characteristics offering at least a 35 percent chance of finding a suitable site on five acres.
- 4) Sewer lines installed since 1973 presently or will soon serve about 900 homes and businesses, a high percentage of which were previously served by subsurface systems within the moratorium area.
- 5) Approximately 350 acres (2.5 percent) of the moratorium have been annexed by the cities of Medford and Central Point, and are subject to municipal services.
- 6) Countywide zoning adopted in September 1973, in concert with the Comprehensive Plan adopted in June 1972, precludes new residential development at densities not supportable by soil conditions, unless public water and sewer services are available and public need can be demonstrated.
- 7) Of the 3,411 existing lots of less than five acres in size within the moratorium area, only 599 or 18 percent are undeveloped at the present time. Of this number, nearly 100 are within soil areas offering at least a 35 percent chance of finding a suitable site on five acres.
- 8) Potential "prior approval" subsurface disposal permit applications within the moratorium area number only about 50, and are not concentrated in any particular location.

10) The question of possible health hazard stemming from the cumulative effect of otherwise individually acceptable subsurface systems cannot be answered without extensive monitoring, testing, and other research techniques beyond present capability.

11) The moratorium has served well the purposes for which it was established; however, it does not seem to sufficiently meet the requirements of present law to justify its continuation.

Based on these findings, the Moratorium Study Committee did, on May 14, 1975, unanimously recommend that the Septic System Moratorium of March 21, 1973 be lifted.



DAVIES, BIGGS, STRAYER, STOEL AND BOLEY  
LAW OFFICES

TWENTY-THIRD FLOOR 900 SW FIFTH AVENUE  
PORTLAND, OREGON 97204

TELEPHONE (503) 224-3380  
CABLE ADDRESS: HARTPORT

DAVID L. DAVIES  
HUGH L. BIGGS  
MANLEY B. STRAYER  
THOMAS B. STOEL  
PAUL L. BOLEY  
JAMES P. ROGERS  
RICHARD DEVERS  
GEORGE H. FRASER  
WILLIAM W. WYSE  
JOHN R. HAY  
CLEVELAND C. CORY  
CLARENCE R. WICKS  
ROBERT H. HUNTINGTON  
DAVID G. HAYHURST  
THOMAS P. DEERING  
CAMPBELL RICHARDSON  
MILO E. ORMSETH  
CHARLES J. McMURCHIE  
GARRY R. BULLARD  
ROBERT L. RIDGLEY  
RICHARD A. FRANZKE  
EDWARD L. EPSTEIN  
WILLIAM M. McALLISTER  
BARNES H. ELLIS  
HOWARD M. FEUERSTEIN  
PHILLIP D. CHADSEY  
DAVID P. MILLER  
TERRENCE R. PANCOAST

May 12, 1975

BERTRAND J. CLOSE  
VELMA JEREMIAH  
HARRY S. CHANDLER  
JIM D. KORSHOJ  
HENRY H. HEWITT  
RONALD S. GROSSMANN  
RICHARD E. ROY  
JEFFREY MICHAEL ALDEN  
CHARLES F. HINKLE  
RICHARD M. BOTTERI  
LESTER V. SMITH, JR.  
PHILIP RUBIN  
THOMAS R. NICOLAI  
WILLIAM A. MASTERS  
DOUGLAS B. GORDON  
ROBERT L. NASH  
FRANK JOSSSELSON  
RICHARD C. JOSEPHSON  
MATTHEW W. CHAPMAN  
KAREN K. CREASON  
STEPHEN T. JANIK  
JOEL D. KUNTZ  
GREGORY R. MOWE  
IRVING W. POTTER  
ROBERT A. STOUT  
THOMAS G. P. GUILBERT

Mr. B. A. McPhillips  
P.O. Box 571  
McMinnville, Oregon 97128

Dear Chairman McPhillips:

Enclosed, please find a copy of a transcribed segment of the April 25, 1975 EQC meeting relating to Portland Chain Manufacturing Company's petition for a declaratory ruling regarding the noise from its presses. As you will recall, the purpose of the agenda item that date was to comply with Chapter 340 Oregon Administrative Rules, Section 11-070(2) which states: "The Commission shall inform the petitioner promptly after the filing of the petition whether it intends to issue a ruling." The director's recommendation in the staff report which Mr. McSwain read was that you decline to issue a declaratory ruling. I appeared for the purpose of requesting that the declaratory ruling procedure be followed, and had begun to list my reasons when Mr. Somers interrupted (line 26 of page 3 of the transcript) with the motion, "I move that the Petitioner's request be granted."

Some discussion ensued, in which there was some confusion arising from the fact that the Commission had not yet given the requisite notice to grant the relief requested in the petition for declaratory ruling, but was deciding at that time only whether to grant a declaratory ruling hearing pursuant to Chapter 340 Oregon Administrative Rules, §§11-060 through 11-090. Dr. Crothers explicitly made this point immediately prior to the Commission's vote which was to pass Mr. Somers' resolution unanimously.

Section 6(d) of Petitioner's request for a declaratory ruling stated as one of the Petitioner's specific requests for relief that the Commission give policy direction to the

Mr. B. A. McPhillips  
May 12, 1975  
Page 2

Department of Environmental Quality to grant exceptions to Portland Chain Manufacturing Company under §§35-035(6)(b) and (c). As a reason in support of granting our petition for a declaratory ruling, Commissioner Somers expressed his belief that the cited sections of Rule 35-035 were applicable to Portland Chain's situation. As you will note, in the paragraph at the bottom of page 14 of Mr. McSwain's draft minutes of the April 25, 1975 meeting, the Department has interpreted that discussion to mean that the Commission decided that it would not grant Petitioners a declaratory ruling hearing, but rather instructed the Department to hold a hearing on an exception. In effect, the Department's interpretation of the Commission's action was that the director's recommendation from the staff report was accepted rather than that the Petitioner's request was granted.

We request that the minutes of the April 25 meeting be amended to reflect what transpired that day. The paragraph which begins at the bottom of page 14 and continues to the top of page 15 of the draft minutes should read, in full, as follows:

"Commissioner Somers inquired whether Petitioner was requesting the Commission to give policy direction to the Department that Petitioner's fact situation is the type of situation to which Section 35-035(6) applies. Mr. Guilbert replied that, among those sections upon which the petition prayed for a declaratory ruling, Section 35-035(6) is probably the most applicable. Commissioner Somers then MOVED that Petitioner's request be granted, and amended the motion to direct that the hearing be held before a hearing officer. The motion was seconded by Mrs. Hallock and carried."

We urge a second minor correction in the account of this discussion in the minutes. In the middle of the second full paragraph on page 14, the sentence "He noted that he did not wish the data to become a matter of public record, useable against Petitioner in any future nuisance action" appears. We wish to emphasize that our reluctance to supply the noise measurement data we have collected extends only to the situation where the Commissioner denies our petition for a hearing

Mr. B. A. McPhillips  
May 12, 1975  
Page 3

on a declaratory ruling. We have no reluctance to supply the data for the purposes of obtaining a legal interpretation of their effect, which interpretation would go into the public record alongside the data. We fear that the raw data, however, might be taken out of context and presented to a forum in which the protective clauses of the EQC's noise rules are absent.

Thank you for your time and consideration in reviewing this record and setting it straight.

Very truly yours,



Thomas Gilbert

TG:jg

Enclosures

cc: Morris K. Crothers, M.D. - w/ enclosures  
Grace S. Phinney, Ph.D. - w/ enclosures  
Mrs. Jacklyn L. Hallock - w/ enclosures  
Mr. Ronald M. Somers - w/ enclosures  
Mr. Kessler Cannon, Director

1 TOM GUILBERT: For the record I'm Tom Guilbert representing Portland  
2 Chain Manufacturing Company and as Mr. McSwain pointed out to you, the  
3 reason why we're here today is just to decide whether or not to schedule  
4 a declaratory ruling hearing, not to make the ruling itself. Of the nature  
5 of the application for petition for a declaratory ruling, you ask for  
6 the relief at the time you file the petition and so the variance request  
7 was within the petition for a declaratory ruling, and I would hope that the  
8 Department would recognize, if the Commission denies this request for a  
9 declaratory ruling that the request for a variance has already been made.  
10 If not we could always do it again. The reason why I didn't think the  
11 variance procedure was appropriate is because of some intricacies in the  
12 procedural rules. In Section 11-008 of the procedural rules it says that  
13 the procedure that you go through to hold a variance hearing is as in  
14 Section 11-007, and in Section 11-007, it refers you to Section 11-035(2)  
15 which has to do with a variance by the Department. What we're asking for  
16 here is a variance from the Commission, as specifically required by the noise  
17 rules. And also, I think that probably a variance or an exception can  
18 only be granted on facts which exist, and the facts which exist are the  
19 facts which would happen after the walls of these homes are built. We're  
20 asking for a ruling on whether or not the rules would apply before the  
21 houses get built. We think that this is the appropriate time to solve  
22 these problems, get them aired. If in fact we will not be granted a  
23 variance or an exception, we'd like to know about it now so we could look  
24 around for another place to move; because there's no way that the sound from  
25 the presses can be reduced below what it is now and if we are not going to  
26 get an exception or variance we're going to have to move as soon as those

1 houses are occupied and then become noise sensitive property. We'll  
2 be in violation from the first day those houses are occupied.

3 MR. SOMERS: Are you telling us that if the fellow utilized his  
4 property in the manner in which he'd like to utilize it that it would  
5 violate the noise ordinance?

6 MR. GUILBERT: There is a possibility. Now, in the staff report,  
7 they talk about the fact that we don't have any measurements in the petition  
8 and that's perfectly true. We have taken measurements, but we've also been  
9 informed by John Hector of the DEQ staff that probably the most limiting  
10 of the three possible measurements which might apply to us are impulse noise  
11 measurements which require a very, very, sophisticated machine ~~and~~ there are  
12 only two or three of them in the state of Oregon and John Hector has one.  
13 We don't have that kind of machine. Our consultant who works for the State  
14 Accident Insurance Fund does not have one. The measurements that we made on  
15 C scale and one-third octave bands, indicate that, in those parameters, we  
16 are very, very, close to the line on what is allowed. As you know, noise  
17 measurements are imprecise and we're within a significant deviation on that;  
18 so that one person measuring may find we're over and one person measuring  
19 may find we're under. We didn't include our figures in the petition for one  
20 reason that it would become a matter of public record and it might be used  
21 against us if you denied our petition and somebody came in on a nuisance  
22 action. But we will make the figures available to the DEQ staff <sup>if they</sup> ~~that~~ want  
23 them. As I say, their indication is that the impulse noise measurement is  
24 probably the most limiting of the three. Now this gets to another reason  
25 why we ask for a declaratory ruling, because we're asking for a ruling of  
26 law, not purely a question of fact. There are three separate criteria

1 which we might theoretically have to apply and comply with, one is the  
2 total noise measurement on the DBA scale, and this is weighted according  
3 to the human ear. A second one is one-third octave band scale measurements  
4 which is for any particular octave reading.-one third octave reading. They've  
5 got various numbers for various octave bands. And the third one is impulse  
6 noise which is a single frequency maintained for not more than one second.  
7 We believe that our noise, which is a "thunk" that's created by the presses  
8 coming down, stamping sheet metal into chain links, is an impulse noise;  
9 but when the presses are going full bore its repeated often enough that  
10 somebody else might allege that, in addition to being an impulse noise, its a  
11 noise that should be governed by the rule on the dBA scale and by the  
12 rule on the one third octave band scale. We would like a ruling of law  
13 on this question of whether or not all three criteria apply to us or only  
14 the impulse noise.

15 MR. SOMERS: Mr. Guilbert, in a sense what your're asking is that the  
16 Commission allow you to comply with Chapter 35 of our regulations.

17 MR. GUILBERT: That's right.

18 MR. SOMERS: Specifically, over on subsection (6) which says "exceptions:  
19 upon written request from the owner or controller of industrial or commercial  
20 noise source, the Department may authorize exceptions to the rules pursuant  
21 to Section 35-0350," or, omitting (a) since its not an unusual or infrequent  
22 event," (b) industrial or commercial facilities previously established in  
23 areas of new development of noise sensitive property----"

24 MR. GUILBERT: That's probably the most applicable of the rules that we  
25 cited in the----

26 MR. SOMERS: I move that the Petitioner's request be granted.

1 MR. GUILBERT: <sup>Which</sup> ~~This~~ is a request for a hearing at this point.

2 MR. SOMERS: That's your request.

3 MR. GUILBERT: That's right.

4 CHAIRMAN MCPHILLIPS: You move, Mr. Somers that the request for a  
5 declaratory-----

6 MR. SOMERS: -----request, which is for a hearing, be granted.

7 CHAIRMAN MCPHILLIPS: be granted.

8 MR. SOMERS: Yes. He's complying with our statutes. He is an industrial  
9 or commercial facility which he alleges previously established in areas of  
10 new development of noise sensitive property and he's asking for a ruling,  
11 as an exception I take it, so that he can get it cleared up.

12 CHAIRMAN MCPHILLIPS: You're moving that we hold a public hearing to  
13 establish this.

14 MR. SOMERS: Before a Hearings Officer.

15 CHAIRMAN MCPHILLIPS: Okay. Do we have a second?

16 MRS. HALLOCK: Mr. Chairman, does that mean you're granting-----

17 CHAIRMAN MCPHILLIPS: We're, in effect, denying I think-----

18 MR. SOMERS: We're not granting anything. We're setting it for a hearing  
19 so his people can come in, the property developer can come in and the Hearings  
20 Officer can take the testimony and that's all that's going to happen.

21 DR. PHINNEY: You're neither denying nor granting.

22 MR. SOMERS: No, we're just allowing him to have a hearing pursuant to  
23 our subsection (6) of the-----

24 CHAIRMAN MCPHILLIPS: Alright as a point of order then, you being a legal  
25 beagle, we're passing----- Actually they have petitioned to us for a dec-  
26 laratory ruling. Do we or do we not have to act on that as well as setting

1 up a hearing.

2 MR. SOMERS: No we're acting--we're setting up a hearing pursuant to  
3 Section 35-035 sub 1.

4 CHAIRMAN MCPHILLIPS: In other words we're ignoring their request for  
5 a declaratory ruling.

6 MR. SOMERS: Right.

7 DR. CROTHERS: I think confusion arises here that the Director's  
8 recommendation that the Commission respectfully decline to grant the petition  
9 for a declaratory ruling. The Petitioner hasn't asked for a declaratory,  
10 he's merely asked for a hearing on a declaratory ruling.

11 MR. GUILBERT: Mr. Chairman, under the rules of procedure, in order for  
12 there to be a declaratory ruling. there has to be a hearing at which all  
13 parties have an opportunity to present briefs. And therefore, it would be  
14 impossible for you to grant the petition as such until the developer and  
15 the other interested parties had an opportunity to present briefs and appear  
16 before him.

17 CHAIRMAN MCPHILLIPS: Okay, you've heard the motion and the second.  
18 Those in favor? All ayes. Opposed? Carried.

19  
20  
21  
22  
23  
24  
25  
26



PETITION FOR A DECLARATORY RULING - PORTLAND CHAIN MANUFACTURING CO.,  
A DIVISION OF WEBSTER INDUSTRIES, INC.

Mr. Peter McSwain, on behalf of the Department, presented the Director's recommendation that the Commission respectfully decline to grant Petitioner's request for a declaratory ruling. In response to inquiry by Commissioner Somers, Mr. McSwain explained that staff was not opposed to the granting of a variance and/or exception. It was the format of a petition for a declaratory ruling to which the staff was reported in disagreement with the petitioner. It was staff's position that Departmental rules governing hearings for declaratory rulings contended only oral arguments, indicating that a declaratory ruling granted through this channel would be limited to a hypothetical fact situation. In the instant case, it was argued, Petitioner was able to provide actual data gathered at the site and allow

staff to review this data in an informal setting, as in the case with all variances requests before the Commission. Mr. McSwain added his opinion that the granting of a variance was usually a non-coercive matter and, therefore, a declaratory order per se.

Mr. Tom Guilbert, counsel for Petitioner, addressed the Commission, concurring with Mr. McSwain that the present request of the Commission was to set a hearing and not to rule on a variance request. Mr. Guilbert asked the Commission, should it not grant the requested hearing, to construe the petition as one for a variance and/or an exception as well as a petition for a declaratory ruling. He explained to the Commission that Petitioner's request for a declaratory ruling was based in part on what he saw to be some confusion in the Department's rules. This confusion, he feared, would result in rules governing variance hearings before the Department being invoked; whereas authorization for a variance such as that requested was vested in the Commission under the noise rules. He added that, since the walls of the homes on the proposed noise sensitive property were not yet built, the ~~existing~~ facts upon which a variance might be granted had not yet come into play. Part of Petitioner's request was aimed at obtaining a ruling as to whether or not the rules could be invoked prior to the construction for the noise sensitive property. Mr. Guilbert asked that Petitioner be informed as soon as possible whether or not he could have an exception or a variance since he would, in the absence of exception or variance, be required to search for a new site.

Commissioner Somers inquired if, after the construction of the noise sensitive property, Petitioner would, in fact, be in violation when operating his two three hundred and fifty ton presses. Mr. Guilbert replied that this was a very serious possibility; that some measurements had been taken; and that the Department's Mr. John Hector had informed Petitioner that the most limiting of the noise regulations applicable to Petitioner's operation might be those governing impulse sounds. Mr. Guilbert added that his petition did not contain specific measurement with regard to the source for the reason that measurement of impulse noise was beyond the capability of his consultant, and within the capabilities of the Department. He noted that he did not wish the data to become a matter of public record, usable against the petitioner in any future nuisance action. Mr. Guilbert stated that measurements had been taken and that he would be willing to provide the data from these measurements to the staff upon their request. He stated his belief that, with regard to those regulations not dealing with impulse sound, his client's source was very close to the limitations prescribed by the rule. Mr. Guilbert stated that his client sought an interpretation of the rules as applied to his source to see which of the three dimensions of noise regulation would apply: dBA measurements, one third octave band measurement, and impulse sound measurement.

Commissioner Somers inquired whether Petitioner would be satisfied if the Commission authorized a hearing to determine whether or not the Department should grant an exception to the Petitioner. Mr. Guilbert replied that such a hearing would be satisfactory. It was MOVED by Commissioner Somers

seconded by Commissioner Hallock, and carried that the Commission decline to grant Petitioner a declaratory ruling and that the Commission instruct the Department to conduct a hearing to determine if (based on information supplied by the Petitioner and interested parties) Petitioner should be authorized an exception based on OAR Chapter 340, Section 35-035(6). Discussion on the intent of the motion revealed that the hearing was ~~intended~~ to be before a hearing officer.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

In the matter of Portland Chain  
Manufacturing Company, a division  
of Webster Industries, Inc.

PETITION FOR DECLARATORY  
RULING

The Commission, having reviewed this matter in its April 25, 1975 Meeting and having resolved the matter by motion as is reflected in the minutes of said meeting, hereby rules consistently with its motion in the matter as follows:

1. Pursuant to ORS 183.410 and OAR Chapter 340, Section 11-060, the Commission declines to issue a declaratory ruling as requested in Petitioner's filing of March 26, 1975.

2. The Department is instructed to construe Petitioner's filing as a request for authorization of an exception pursuant to OAR Chapter 340, Section 35-035(6).

3. The Department is instructed to hold an informational hearing before a hearing officer on said request for authorization for an exception. Said hearing is to be conducted pursuant to OAR Chapter 340, Sections 11-007, 11-025, and 11-035 and is to be preceded by reasonable notice to all known interested parties.

*Roy-*  
4. The Department is further instructed, subject to the information presented at said hearing and any information before it, to rule on Petitioner's request, either granting or denying him an exception pursuant to OAR Chapter 340, Section 35-035(6).

Respectfully entered by the undersigned Commissioners this \_\_\_\_\_ day of May, 1975.

\_\_\_\_\_  
B. A. McPhillips, Chairman

\_\_\_\_\_  
Morris K. Crothers

\_\_\_\_\_  
Grace S. Phinney

\_\_\_\_\_  
Ronald M. Somers

\_\_\_\_\_  
Jacklyn L. Hallock

45  
84  
129  
129  
258  
11  
258  
258  
2838

May 22, 1975

To the members of the Environmental Quality Commission

Attached, you will find a copy of Petitioner Portland Chain Manufacturing Company's proposed Order of Intent to Issue a Declaratory Ruling, which parallels the Director's proposed order which he sent to you by memo dated May 14, 1975.

Strictly as a matter of adherence to Robert's Rules of Order, I believe that the Commission's vote on Mr. Somer's motion, "I move that the Petitioner's request be granted," was conclusive on this matter. However, considering the matter anew, allow me to summarize, in the briefest possible manner, the distinctions between an exception by the Department and a declaratory ruling by the Commission.

1. An exception by the Department might be withdrawn by a future Director for any reason and without process. This is insufficient assurance to form the basis of a business decision to continue to operate at the same location. A declaratory ruling by the Commission, however, "is binding between the Commission and the petitioner on the state of facts alleged, or found to exist." OAR 340-11-090. Cf. ORS 183.410.

2. The City of Tigard, Washington County, and the land developer may conveniently ignore a public informational hearing on a Department exception. While neither the City of Tigard nor Washington County would be bound by the Commission's decision on a declaratory ruling, by notification as required by ORS 183.410 and ORS 340-11-070(3), they become parties to the proceeding and would be strongly encouraged by fear of laches to make their views known now. Since neither Tigard nor Washington County has jurisdiction over all of the real estate in question, neither government alone would be an appropriate forum for a similar proceeding.

3. An exception hearing is an incompetent forum to make a ruling as a matter of law as to whether subsections (a) and (e) and (f) of OAR 340-35-035(1), or only one or two of those subsections, apply to Portland Chain's operation.

4. A declaratory ruling is, as the Director's report on Agenda Item K of the April 25 meeting states, more appropriate than a variance or exception proceeding to determine the applicability of rules to fact situations which presently do not exist. Portland Chain's noise emissions presently violate no EQC rules, since there is no noise-sensitive property in the area yet.

5. Portland Chain has been approached since the April 25 meeting by a realtor interested in selling some of the lots on Commonwealth's subdivision. That realtor, too, wants a speedy and final resolution of this matter. The petition has been filed already two months. An expeditious determination of the matter is in everyone's best interests.

Very truly yours,

A handwritten signature in cursive script that reads "Thomas Gilbert". The signature is written in dark ink and is positioned above the printed name.

Thomas Gilbert

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

In the Matter of Portland Chain )  
Manufacturing Company, a division) ORDER OF INTENT TO ISSUE  
of Webster Industries, Inc. ) A DECLARATORY RULING

The Commission, having reviewed this matter in its April 25, 1975 Meeting and having resolved the matter by motion as is reflected in the minutes of said meeting, hereby rules consistently with its motion in the matter as follows:

1. Pursuant to ORS 183.410 and OAR 340-11-070(2), the Commission informs petitioner in this matter that it intends to issue a ruling.

2. The Commission instructs the Department to serve a copy of the petition, and a notice of a hearing at which the petition will be considered, on all persons named in the petition as "persons known by petitioner to be interested in the requested declaratory ruling."

3. The hearing referred to in paragraph 2 of this order shall be before a hearings officer, and shall be conducted not later than June 17, 1975.

4. The Commission instructs the hearings officer to exert best efforts to prepare and report his opinion to the Commission at its regularly scheduled June 1975 meeting.

5. The Commission instructs the hearings officer to make separate recommendations upon each prayer for relief contained in section (6) of the petition.

SO ORDERED by the undersigned Commissioners this 23rd day of May, 1975.

Barney A. McPhillips, Chairman

Morris K. Crothers, Vice Chairman

Grace S. Phinney, Commissioner

Jacklyn L. Hallock, Commissioner

Ronald M. Somers, Commissioner



HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

March 25, 1975 8:30 A.M. Room 315, The Capitol

Hearing on HB 2029, relating to noise emission controls

Members Present: Representatives Fadeley, C. Johnson, Kafoury,  
Mitchell

Members Excused Early Portion of Meeting: Representatives  
Whiting, Jones

Member Excused: Representative Kulongoski

Staff Present: John Hitchcock, Committee Counsel  
Helen Linde, Assistant Clerk

Tape 6,  
Side 2

Recording Log

0008 Meeting called to order

0013 Hearing on HB 2029

0017 Dr. Morris Crothers, member of Environmental Quality  
Commission

0500 Tom Donaca, representing Associated Oregon Industries

0650 Amendment to HB 2029 adopted

0865 Hearing resumed  
Ron Kathern, health physicist, Portland General Electric Co.

1071 John Hector, engineer, Dept. of Environmental Quality

1152 Dr. Paul Herman, psychologist, City of Portland

1332 Jeanatte Egger, chairman of Noise Committee, Oregon  
Environmental Council

1427 Meeting adjourned

The meeting was called to order by the chairman, REPRESENTATIVE NANCIE FADELEY.

Re: HB 2029, relating to noise emission control

Dr. Morris Crothers, member of the Environmental Quality Commission, testified that the legislature in 1971 declared that noise is a pollutant that harms the environment, and it directed the EQC and DEQ to develop standards for its control. EQC believes that it has the authority to grant variances, though there is some contrary opinion on this. Dr. Crothers feels that there are formidable conflicts involved in attempting to develop standards about noise that are consistent both with the statute and with common good sense. Resources, equipment and personnel are very limited. If EQC and DEQ are compelled to cut back programs, as appears possible because of money problems, he suspects that the first area to be cut back would be noise control.

Dr. Crothers said an issue of intense emotional pitch in the last couple of years has been the noise emitted by the jet-propulsion standbys for electrical generation located at Bethel and Harborton. The PGE jet-propulsion standby facility at Bethel is located in an area zoned for an industrial park and is perfectly in accord with the law but unfortunately is closer to some homes than is ideal. The issue about infrasound is one which affects relatively few people, but some seem to be abnormally and intensely affected by the infrasound pressure levels, and their situation must be sympathetically considered. Whether the practical solution lies in expanded regulatory powers is a question which the legislature must decide, but Dr. Crothers hopes that if it decides that it should direct the DEQ to regulate infrasound it will first satisfy itself that the technology is adequate to establish standards that can be precisely enforced. His own opinion is that it is impossible to materially contribute to the resolution of the conflict at Bethel.

Referring to HB 2029, Dr. Crothers expressed the hope that the legislators will put themselves in the position of a commissioner trying to weigh all these equities. The commission has taken no stand in support of or opposition to HB 2029 and will do its best to adopt and enforce reasonable regulations and be sensible about variances but, the witness concluded, "I would beg you to be merciful to the commission."

REPRESENTATIVE FADELEY inquired about Dr. Crothers' reference to reactions to infrasound being subjective, and he responded that some people are bothered by conditions which apparently don't affect others at all. The chairman expressed concern about physical damage other than to hearing, and Dr. Crothers felt that this is very much a function of what one has become accustomed to. He asserted that noise pollution is not the hazard to public health that water or air pollution is; that he has not, for instance, seen data supporting the claim that noise has insidious effects on longevity or function of the heart. He thought perhaps there is some relation with nervous disorders but "that can make you unhappy; it doesn't shorten your life."

Relative to HB 2029's providing that EQC and DEQ have the power to grant variances to noise standards, Dr. Crothers testified that the attorney general has said that EQC has an implied right to grant variances, but he thinks that spelling out the commission's powers to do so is desirable. "If you expect a viable program on noise pollution, I think you have to have variance authority."

REPRESENTATIVE FADELEY asked Dr. Crothers if he felt it was important to keep in the bill the regulation of inaudible sound. He responded that if enough people think it is important, it should be included, but there is no point in doing it unless the money is provided to implement regulation.

TOM DONACA, representative of Associated Oregon Industries, told the committee that HB 2029 was prompted in part by AOI's concern that the commercial and industrial noise regulations adopted by EQC contain exemptions, exceptions and variances although the statute does not grant specific authority to EQC to make these. It is of great importance to the state's industry that the power be unequivocal and beyond legal challenge, and AOI supports Sections 3 and 4 of HB 2029 as a necessary addition to the act.

Mr. Donaca went on to discuss other portions of HB 2029. He testified that the commission so far has adopted noise regulations pertaining to three areas: on-road vehicles, off-road vehicles, and commerce and industry. The noise emissions of road vehicles are far and away the most noxious, but enforcement is difficult in this area and the result is that the burden has fallen most heavily on commerce and industry.

AOI wants to see removed from Section 2 of the bill the inclusion of high and low frequencies beyond the audible range. Commerce and industry have enough problems with trying to conform to regulation of audible noise that they do not want this largely unknown area included now.

AOI supports Section 5, which Mr. Donaca said is in the bill at AOI's request. It was concerned with the problem of concurrent jurisdiction, taking the position that it wants to deal with only one agency in any particular matter--"one agency, one set of regulations, one set of enforcers".

MOTION: Representative Fadeley moved an amendment to Section 5 of HB 2029. On page 3 of the printed bill at line 22, after "that are" delete "consistent with and"; at the end of line 29 delete "con-"; at beginning of line 30 delete "sistent with and".

Without objection, the chairman ruled the bill is so amended.

Mr. Donaca continued his testimony, stating that AOI requests that the emergency clause be kept in the bill. Commercial and industrial regulations are now in operation, and in order to avoid the potential for litigation AOI wants the bill, if passed, to become effective at once.

RON KATHERN, health physicist with Portland General Electric

Company, testified that he in general agrees with HB 2029, and particularly the portion on variances, but he noted two exceptions: (1) the definition set forth in Section 2, and (2) the amendment adopted earlier at this hearing.

Audible noise, according to the federal Environmental Protection Agency, ranges from 16 hertz to 20,000 hertz, and EPA, according to Mr. Kathern, notes that inaudible sounds normally do not warrant consideration in most environments in which the public is present. Mr. Kathern feels that extending the definition to include infra- and ultrasounds serves no apparent useful purpose, nor would the expenditures for additional equipment and research required to develop and implement these controls provide a commensurate public benefit.

Mr. Kathern referred to a study entitled "Environmental Noise at Bethel", undertaken by Robin M. Towne, a licensed engineer and independent consultant in sound and vibrations, and commissioned by PGE. In his Summary Conclusions, Towne writes, "There does not appear to be any basis for physiological damage to humans through noise at the Bethel residences including noise in the infrasonic range." Mr. Kathern commented that the infrasound levels in an automobile traveling at 55 mph are "very, very, very much greater" than the levels produced at the nearby residences or even inside the installation enclosure at Bethel.

Commenting on Section 5 and the committee's earlier amendment of that section, Mr. Kathern thought that removal of the words "consistent with" could create problems. Different jurisdictions might have different standards, leading to confusion. He would suggest that using the phrase "consistent with the intent of" would overcome the difficulty.

JOHN HITCHCOCK asked Mr. Kathern for his opinion about the complaints from residents near the Bethel PGE jet-propulsion generator. Mr. Kathern responded that if there are complaints then there is a problem. However, he read from the Towne report the assertion that various subjective factors may influence complaints and feelings of annoyance. One such factor, for instance, is "the complainant's opinion of whether the source is necessary or whether the noise could be successfully controlled by the noise maker." In other words, people are sensitized to noise just by the plant's being there. He mentioned that 20% of the complaints received have pertained to periods when the plant was not operating. He does not question that those in the area who complain of the noise are indeed annoyed, but his professional opinion is that a noise study done with unbiased observers would show no annoyance.

REPRESENTATIVE JOHNSON asked how long the Bethel plant has been in place and the actual number of days that it has operated. Mr. Kathern did not have precise figures, but he said it had existed a little over 1-1/2 years and had been in operation perhaps 10% of the possible operating days.

JOHN HECTOR, engineer for the Department of Environmental Quality, read a prepared statement (EXHIBIT A) indicating that in general DEQ is in favor of the passage of HB 2029.

REPRESENTATIVE KAFOURY referred to Mr. Kathern's testimony about the difficulties of devising standards for regulating infrasounds and he asked Mr. Hector about the DEQ's view on this matter. Mr. Hector said DEQ's equipment for monitoring does not reach below 15 or 20 herz. A practical definition of infrasound is below 16 herz. The department would have to purchase new equipment to reach these levels, which Mr. Kathern estimated might cost a couple of thousand dollars.

REPRESENTATIVE WHITING said she wanted it noted for the record that her earlier comment to Mr. Kathern when she pointed out that she questioned his facts was not that she was discounting any medical evidence but discounting segmented scientific evidence.

DR. PAUL HERMAN is a psychologist working for the City of Portland in developing a noise ordinance. He said he had come primarily to speak for the deletion from Section 5 of HB 2029 of the phrase "consistent with", which the committee did earlier today by amendment, and he explained his reasons for approving its removal.

Commenting on testimony heard earlier, Dr. Herman asserted that the effects of infrasound are reasonably well documented. Most of the research comes from NASA and other federal governmental programs. The effects include nausea, dizziness, vomiting, headaches, in some instances resonance of certain body cavities in certain portions of the body. Because the ear is relatively insensitive to low frequencies, exposure would not be perceived as a loud sound, but the pressure is still there and the body is still exposed to it.

Dr. Herman asserted that noise is becoming suspect as a major contributor to high blood pressure or chronic hypertension. Chronic hypertension, with the associated cardiac failure, is the No. 1 killer in this country today. Other effects have been reported, some well documented and some not so well documented. Elevated serum blood cholesterol is thought to be related, as are impotency, higher incidence of mental hospital admissions, predisposition to ulcers and increased number of ulcers. The effects of noise seem to be related to the ears and hearing, related to the blood system, and related to a general collection of reactions called stress. He feels there is ample evidence that the effects of infrasound are real; that they are apparently not now extreme but that it is possible in the future problems will increase. He feels inclusion of infrasound in this bill is appropriate.

JEANATTE M. EGGER, chairman of the Noise Committee of the Oregon Environmental Council, testified that that organization supports the inclusion of Section 2 (the definition section) primarily because it makes possible the development of standards on infrasound in the future. It merely provides the legal authority for scientific work to be undertaken. Mrs. Egger said her understanding is that DEQ cannot now even study the problem.

Mrs. Egger read to the committee portions of a study entitled

Noise Pollution, edited by Fowler and Mervine of the University of Maryland, concerning effects of infrasound. She pointed out that most infrasound studies are laboratory studies of high-intensity, short-duration exposures of laboratory subjects. They do not show the long term effects on people.

JAMES B. LEE addressed his brief remarks to the matter of equipment to monitor infrasound. He said that instruments are available, cost between \$1,000 and \$2,000, and can be found in the Standard Instruments catalog.

The meeting was adjourned at 10:50 A.M.

Respectfully submitted,

Helen Linde, Assistant Clerk

Submitted for inclusion in the record of today's hearing:

EXHIBIT B, statement by Charles H. Frady, 390 Fir Knoll Lane, N.E. Salem, in support of HB 2029.



KESS CANNON  
Director

RECEIVED  
MAY 15 1975

Ron: Our people say they are "shocked" at what Walt Sellers said. No basis for his comment at all except again to place blame on DEQ. In any event, a copy of our letter is attached. The permit will be issued so far as we are concerned, and only local objection on other grounds would be involved.

Had we known a copy of the letter went to you I would have sent copies of our letter earlier.

Best wishes.

Kess

May 9, 1975

Mr. Walt Sellers  
Broker  
Sellers Realty  
P. O. Box 368  
Rogue River, Oregon 97537

Dear Mr. Sellers:

A copy of your letter of April 26, 1975 addressed to State Representative Al Densmore and concerning the matter of subsurface sewage disposal on tax lot 1600, T36S, R4W, WM, Section 27, Jackson County which is owned by Mr. John Lopez has been referred to this office for reply.

When the proposal by Mr. Lopez to replace the irrigation overflow ditch which runs diagonally through his property was first brought to the attention of our Medford office it was not clearly stated as to whether the proposal involved merely a simple replacement of the ditch by an enclosed watertight pipeline in the present location or if it also involved a diversion of the ditch and surface drainage to a different location.

In either case the proposal would require the approval of local drainage authorities to make sure that the pipeline would have sufficient capacity to prevent flooding of and damage to upstream properties. We understand that this aspect has since been discussed with you by Mr. David Couch of our Medford Office.

Please be advised that if the open ditch through the property owned by Mr. Lopez is replaced by a watertight pipeline meeting the approval of the local drainage authorities and the Jackson County Planning Department a minimum separation distance of 10 feet between it and a subsurface sewage drainfield would be acceptable.



Mr. Walt Sellers  
May 9, 1975  
Page 2

We understand that there would then be sufficient area available for such a sewage disposal system and consequently we concur with the Jackson County Planning Department that a permit for construction of a subsurface sewage disposal system meeting the approval of that department could be issued by them to Mr. Lopez.

With regard to the proposed increase in construction permits for subsurface sewage disposal systems it should be pointed out that it is in response to requests from certain counties which have been unable to finance their program costs under the present fee schedule. Such a proposal was therefore initiated by the counties and not by DEQ. Incidentally, the bill recently passed by the Legislature authorizing the fee increase also allows a county to charge less than the regular amount if it so desires, provided it can adequately finance its permit program by other means.

Cordially,

KESSELER R. CANNON  
Director

KHS:mm

cc: State Representative Al Densmore  
cc: State Senator Lenn Hannon  
cc: Dave Couch, Medford Office  
cc: Jackson County Planning Department

## Septic battle rages

Oregon's Environmental Quality Commission, which was given statewide authority by the Legislature to enforce waste disposal laws, may well be losing the battle of the septic tank.

Pressures have been growing at the Legislature to force the EQC into a wide retreat. Developers of housing tracts, trailer court operators and various individuals who have been restricted have turned the heat on the Legislature.

B. A. (Barney) McPhillips, chairman of the EQC, declared that the Department of Environmental Quality, the agency charged with enforcing the rules, is being "vilified, hounded, harassed and badgered by land developers."

McPhillips said the sewage and septic tank program was given to the DEQ without any funding, requiring the agency to rely entirely on fees, which because of their size are a big part of the complaints.

But the real problem is that the DEQ has been enforcing the law, long disregarded when it was left to local authorities. Developers, McPhillips said, charged to the Legislature when they found "they can't put a septic tank next to somebody's well any more."

Now the Legislature, judging by the amendments being proposed, is about to cave in, permitting a delay in the cutoff date of July 1, 1975, for approvals given prior to DEQ's authority by local officials on uninstalled septic tanks for lands that developers have been holding. Other amendments would permit local officials to grant variances.

At stake in this battle is the health of Oregon's citizens and the purity of the state's ground waters. If the Legislature caves in, one of the state's major environmental and health battles will have been lost.

Copies to EQC

(To Resolve Conflicts)

C-ENGROSSED

# Senate Bill 34

Ordered by the Senate May 19  
(Including Amendments by Senate February 19, May 14 and May 19)

By order of the President—In conformance with pre-session filing rules and indicates neither advocacy nor opposition (at the request of the Joint Interim Committee on Environmental/Agricultural and Natural Resources)

## SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Allows Environmental Quality Commission, after hearing, to grant variances from subsurface sewage disposal system construction rules on standards if strict compliance inappropriate, unreasonable, burdensome or impractical. Requires commission, on appropriate conditions, to delegate variance power to special variance officers. Establishes maximum fee. Continuously appropriates fee revenue to defray hearing expenses. Repeals provisions relating to subsurface sewage disposal permit appeals boards. Allows Department of Environmental Quality to enter into agreements, upon request, with local units of government for local units to perform variance duties.

Declares emergency.

**NOTE:** Matter in bold face in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted; complete new sections begin with **SECTION**.

1 (4) Each request for a variance shall be heard by the appropriate  
2 variance officer within 30 days after the date on which a completed appli-  
3 cation for a variance has been received by the Department of Environmen-  
4 tal Quality. A decision shall be made by the variance officer within 45  
5 days after completion of the hearing on the variance request.

6 **SECTION 4.** Each application for a variance submitted pursuant to  
7 section 2 of this 1975 Act must be accompanied by a nonrefundable fee,  
8 the amount of which shall be determined by a fee structure adopted by  
9 rule of the Environmental Quality Commission but not to exceed \$150  
10 per application. The moneys received are continuously appropriated to  
11 meet administrative expenses of the hearings.

12 Section 5. ORS 454.725, as amended by section 9, chapter —, Oregon  
13 Laws 1975 (Enrolled Senate Bill 297), is amended to read:

14 454.725. (1) The Department of Environmental Quality may enter into  
15 agreements with local units of government for the local units to perform  
16 the duties of the department under ORS 454.635, 454.655, 454.665 and  
17 454.695.

18 (2) If a fee is collected by a local unit of government performing duties  
19 under subsection (1) of this section, the department may disburse all or  
20 part thereof to the local unit.

21 (3) The Department of Environmental Quality may enter into agree-  
22 ments with local units of government when the local units so request for  
23 the local units to perform the variance duties of the department under  
24 sections 2 and 3 of this 1975 Act subject to variance criteria specified in  
25 the agreement by the department. Each county performing variance duties  
26 under an agreement may set and collect a nonrefundable variance applica-  
27 tion fee as provided in section 4 of this 1975 Act.

28 **SECTION 6.** ORS 454.785 is repealed.

29 **SECTION 7.** This Act being necessary for the immediate preservation  
30 of the public peace, health and safety, an emergency is declared to exist,  
31 and this Act takes effect on its passage.



# Columbia County Health Department

## DIVISION OF ENVIRONMENTAL HEALTH

ROOM 112, COURT HOUSE  
ST. HELENS, OREGON 97051  
PHONE 397-2262

May 21, 1975

Mr. B.A. McPhillips, Chairman  
Environmental Quality Commission  
Salem, Oregon

Re: Extension of deadline on  
prior permit approvals

Dear Mr. McPhillips:

It is the recommendation of the sanitarians from the Portland region counties that the deadline for expiration of prior approvals remain at July 1, 1975. The sanitarians from Multnomah, Clackamas, Washington and Columbia counties met on April 15, 1975 and discussed the situation at some length. The concensus was clear that the honoring of approvals based on unsound technology was not in keeping with the statement of purpose as outlined in Oregon Administrative Rules, Chapter 340-71-005.

In the statement of purpose it indicates that the rules are intended to restore and protect the public waters and protect the public health and general welfare of the public. To allow the continued installation of systems which have demonstrated a high risk of failure can hardly be in keeping with the goal of restoring and protecting the waters of the public.

To allow the continued installation of systems based on inferior technology cannot be interpreted as a step toward protecting the public health of the people of the state of Oregon, since failures lead without question to additional potential for disease transmission.

To continue constructing systems which in many cases do not offer the homeowner an adequate functional life expectancy cannot be construed as protecting his general welfare, since it is the home owner who ultimately is the loser when he is required to spend additional and unexpected sums of money because his developer purchased a lot and built his home under the provisions of a prior approvals section.

Page 2

B.A. McPhillips, E.Q.C.

5/21/75

The only fair way to deal with the problem is to require all development to proceed under an equal set of standards. The utilization of a double standard is both illogical and unfair to all parties involved.

The sanitarians from the Portland region made it very clear that they were not in favor of continuing the use of obsolete technology for drainfield construction. We sincerely hope that you will agree that it is not in the best interest of anyone to continue this provision beyond the July 1, 1975 deadline.

Sincerely,

COLUMBIA COUNTY HEALTH DEPARTMENT  
Division of Environmental Health

Terrance M. Rahe, R.S.,  
Supervising Sanitarian

TMR/mw

AREA	MORATORIUM HISTORY	PRESENT AND PROJECTED DENSITY OF POPULATION	SIZE OF BUILDING LOTS	TOPOGRAPHY	SOILS INFORMATION	ADVERSE GEOLOGICAL FORMATIONS & GROUND WATER CONDITIONS
Princeton Heights T10S, R4W, Sec. 26 North Albany	Moratorium ordered by Benton County Board of Health 9-1-71 as a result of survey findings by the Benton County Health Department. Survey conducted 8-3-71 because of concern (petition) of citizens with regard to the adequacy of the existing septic tank systems.	The development has 28 single family dwellings. There remains 28 vacant lots. The development lies within the North Albany County Service District which contains approximately 2700 acres and a population of over 4000 people. North Albany is estimated to grow to 17,000 persons by year 1995 provided sewerage is available. A May 6, 1975 election to annex the area to the city of Albany was defeated.	Approximately one third of an acre.	Located primarily on a single directional slope with variations from 3% to 20% in grade.	The predominant soil type is Veneta which has a slow permeability (.06-.2"/hr.) at 14-39" because of a heavy clay loam texture.	The positioning of the development on the landscape leads it to be in a ground water recharge area. There are ground water eruptions within the development and the water tables are perched at approximately 14-39" during saturated times of the year because of the soil texture previously mentioned.
Kingston Heights T10S, R4W Sec. 25 North Albany	Temporary moratorium ordered by Benton County Commissioners 9-4-74 as a result of citizen's concern over the adequacy of the existing septic tank systems. Survey conducted 1-28, 29, 30, 31-75 by Benton County Health Department to determine extent of the problem.	The subdivision has 55 lots of which 40 have single family dwellings built on them. The development lies within the County Service District. (See above for additional information.)	Approximately one half of an acre.	Located on a knoll with slopes in all directions ranging from 5% to 20% in grade.	The predominant soil type is Veneta. (see above) The northern portion of the subdivision contains an inclusion of Hazelair which has a slow permeability (.06-.2"/hr.) at 18-30" because of a clay textural classification.	There are ground water eruptions in certain areas of the development and perched water tables at approximately 12'-30" during the saturated times of the year.
Country Estates D.L.C. 37 Hills, R5W, W.M. North Corvallis	Moratorium ordered by Benton County Commissioners 8-28-74 as a result of survey findings of the Benton County Health Department. Surveys conducted 3-24, 4-7, & 5-11 of 74 as a result of a citizen's petition expressing concern with the existing sewage disposal conditions.	The subdivision has 92 lots of which 64 have been developed. The development lies in what is known as the Crescent Valley area approximately 5 miles North of Corvallis. The present population of the general area is about 1500 people. Present zoning with central services would allow for approximately 9000 people. The area relative to city of Corvallis zoning would allow for something like 50,000 people.	One acre and slightly less in size:	Located primarily on hilly terrain slopping to the South and East with a wide range of 3%-30% in grade.	The predominant soil is Dixonville silty clay loam which has a moderately slow permeability (.2-.6"/hr.) at 12-34". Depth to weathered bedrock is 20 to 40".	Bedrock is found at and near the surface in the Western portion of the development. Because of the slopes and relatively shallow depths to bedrock runoff (surface and perched water) is medium to rapid in the major portion of the area.
Deerhaven Heights T12S, R5W, Sec. 30	Temporary moratorium ordered by Benton County Board of Commissioners 2-26-74 as a result of citizen's requests and preliminary survey conducted by Benton County Health Dept. 2-10-74. Detailed survey conducted by the State Health Division 4-22-23-74 & Benton County Health Department 4-22-23-74.	The subdivision currently has 22 single family dwellings. The original survey of 1968 indicated 23 tracts. Recent information has shown that since 1968 to the present the area has been further subdivided to include a total of 37 lots. The overall area was zoned in 1974 for a minimum of 5 acre tracts. However, areas divided prior to this time are exempt from the minimum lot size. Because of zoning the general area will probably remain low density in the future	From approximately 1 to greater than 5 acres.	Located on a area with slopes in all directions varying from 3% to 10% in grade. Predominant slope influence is to the south west.	The predominant soil type is Veneta which has a slow permeability (.06-.2"/hr) at 14:39" because of a heavy clay loam texture. The south western portion of the subdivision contains Hazelair soil type which has a slow permeability (.06-.2"/hr) at 18-30" because of a clay textural classification.	The surface and ground water movement is mostly to the southwest. The area is positioned in such a manner that there is a natural bowl formation in this direction. Runoff is moderate, especially in the south west direction and the water tables are perched during saturated times at the aforementioned soil restrictive depths.
Southwest Corvallis Area Suburbs	Moratorium ordered by Benton County Board of Health February of 1967 at the request of the Benton County Health Department. The Health Department had received numerous complaints from residents of the area with regard to failing septic tank systems. An environmental sanitation survey was conducted Oct. 28 through Nov. 8 of 1968 by the State Health Division and Benton County Health Department.	The area contains 697 units which incorporate residential, commercial, and industrial developments that involve a population of about 2500 persons. Present county zoning would allow for an additional 5,000 people. City of Corvallis zoning & services would allow for a population of approximately 20,000 persons. About 200 units of the 697 were annexed to the city of Corvallis in 1969. Three elections to annex most of the remaining area have failed during the past 10 years.	The major portion of the area has city sized lots and less than one half acre lots. Some large acreages (greater than 5) exist but they have the potential for much higher density when services become available.	The topography is variable. The elevations range from approximately 250 feet to 400 feet. The land may be described as ranging from low, relatively flat land with slope of from 0% to 7% to gently rolling hills with grades ranging from 7% to 20%. However, in some instances, there are some steep slopes with residential lots ranging in grades from 20% upward.	There are 13 different soil types in the area. Ten of the soil types are classified by the U.S. Soil Conservation Service as soils that have severe limitations for septic tank system use. They have slow permeability ratings and relatively high perched water tables.	Because of the wide variations in topography and the 3.13 square miles of area involved, the movement of ground and surface water is in all directions, but mostly to the north central portion of the area that includes two streams. The streams flow east to the Marys River and from there east to the Willamette River. Soil limitations allow for seasonal perched water tables in much of the area.

To page 2

CLIMATE	PRESENT & PROTECTED WATER SUPPLIES & PROXIMITY TO DOMESTIC WATER SUPPLY SOURCES	TYPE OF & PROXIMITY TO EXISTING SURFACE WATERS	CAPACITY & STATUS OF EXISTING SYSTEMS
---------	---	--	---------------------------------------

Mid Willamette	The development is served by a community water system (groundwater) which has greater than 500 users. There are 12 other community water systems in the North Albany area. In addition, the city of Albany's supply is contiguous to the aforementioned service district.	The Willamette river serves as the Southern and Eastern boundaries for the North Albany area. The Princeton Heights development is approximately 1 3/4 miles from the river. There are no other major surface waters in the area.	The August 3, 1971 survey by the Benton County Health Department revealed that 11 of the 28 dwellings had failing septic tank systems. This constitutes a 39% failure rate. Correction of existing failures is difficult because of small lot sizes and the aforementioned topographical and soil conditions.
----------------	---	---	---

Mid Willamette	The development is served by the same water supply that presently serves the Princeton Heights Subdivision. (See above for additional information).	The subdivision lies approximately 3/4 of a mile from the Willamette river. (See above for additional information).	The January 28, 29, 30, & 31 of 1975 survey by the Benton County Health Department revealed 10 or 25% of the existing houses had septic tank system failures. Correction of systems appears difficult because of the small lot sizes and limiting soil conditions.
----------------	---	---	--

Mid Willamette	The area is served by individual water supplies. The quantity of water available appears questionable by way of review of well logs in the area and in the course of discussion with some of the residents. Long range projections indicate the area will be served by the city of Corvallis. Interim methods have not been proposed.	There are several streams & intermittent streams in this general area. However, there are no major surface waters (Willamette river) for approximately 5 miles.	The March 24, April 7, and May 11 of 1974 survey indicated that 23% of the septic tank systems in this area were malfunctioning. Overall physical conditions limit the feasibility for correcting many of these systems.
----------------	---	---	--

Mid Willamette	The subdivision is served by individual water supplies. The yield of water appears adequate at this time by way of review of some of the well logs in the area. There is one community water system immediate to this area. The present status and capacity is not known. The Deerhaven Heights subdivision is approximately 2 1/2 miles Southeast of the city of Philomath. Present and future plans do not indicate such a growth for Philomath to reach this area.	There is a stream approximately one-half mile to the Southeast of this development. It could not be considered a major surface water source.	The April 23-24 of 1974 survey by the State Health Division & the Benton County Health Department indicated that 8 or 36% of the 22 houses investigated had failing septic tank systems. Attempted corrections have been made on some of the failures. Success of the alterations cannot be predicted at this time. It is our opinion that the area must be restricted to low density development if the principals of sewage contaminant & any degree of treatment of septic tank effluents is to be effective.
----------------	---	--	--

Mid Willamette	Approximately one-half of the area is served by the city of Corvallis municipal water supply. The remainder has individual wells as its water supply sources. Since the area is contiguous to the city of Corvallis it is only reasonable to assume that the entire area will someday be served by the city.	There are the two previously mentioned streams that flow through the area. Because of the relatively small size their only benefit appears to be in the facilitation of drainage for the area. The Willamette river, being the major water source for Corvallis, would have to be considered as the most likely source to serve this entire area in the future.	The 1968 survey by the State Health Division and the Benton County Health Division showed that 22% of the units had failing septic tank systems. The sewage disposal failures are not restricted to any one area, but are spread rather uniformly throughout the area. The correction of existing systems has not been very successful because of the small lot sizes and the limiting physical conditions.
----------------	--	---	---

Prepared and submitted by  
 Benton County Health Department  
 Benton Plaza, 408 S.W. Monroe Ave.  
 Corvallis, Oregon 97330  
 May 22, 1975





# ENVIRONMENTAL QUALITY COMMISSION

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5696

Robert W. Straub  
GOVERNOR

May 29, 1975

B. A. McPHILLIPS  
Chairman, McMinnville

GRACE S. PHINNEY  
Corvallis

JACKLYN L. HALLOCK  
Portland

MORRIS K. CROTHERS  
Salem

RONALD M. SOMERS  
The Dalles

KESSLER R. CANNON  
Director

Mrs. Ione Hanson  
Office of the Secretary of State  
Elections and Public Records  
121 State Capitol  
Salem, Oregon 97310

Dear Mrs Hanson

Enclosed for filing as temporary rules are OAR chapter 340, sections 71-015(8) and 71-020(6) and the Environmental Quality Commission' Findings and Reasons for their temporary adoption.

Please provide this office with a date stamped copy of the enclosures.

Thankyou for your attention in this matter.

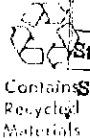
Sincerely,

*Peter W. McSwain*

Peter W. McSwain  
Hearing Officer

RECEIVED  
MAY 30 9 23 AM '75  
CLAY MYERS  
SECRETARY OF STATE

Filed <b>FILED</b> MAY 30 1975 CLAY MYERS SECRETARY OF STATE	Agency:	
	File #:	DEQ 90 (Temporary)
Repeals:	Effective:	Emergency Clause ( )
	5-23-75	5-30-75
		9-26-75
Statutory Authority:	Subject:	



Contains Recycled Materials

OREGON ENVIRONMENTAL QUALITY COMMISSION

CERTIFICATION OF RULE ADOPTION

I, Peter W. McSwain, hearing officer, certify as follows:

On May 23, 1975, the Environmental Quality Commission of the State of Oregon, having found that failure to act promptly would result in serious prejudice to the public interest, adopted amendments to the Rules on Subsurface Sewage Disposal (OAR chapter 340, section 71-015(8) and 71-020(6)) as temporary rules to take effect immediately upon filing with the Secretary of State.

Attached hereto are copies of said amendments together with the findings and reasons therefor.

I have compared said copies with the originals and they are correct transcripts thereof.

Dated this 28th day of May, 1975

  
Peter W. McSwain

ENVIRONMENTAL QUALITY COMMISSION  
ADMINISTRATION OF SUBSURFACE DISPOSAL  
1975

by: Paul A. DeBonny, Director  
Jackson County Department of  
Planning & Development  
May 23, 1975

In 1973 the Oregon state legislature centered authority for subsurface sewage disposal regulation in the Environmental Quality Commission and established the Department of Environmental Quality as the administrative agency. The justification for this move was based on generally ineffective management by local government agencies that threatened to pollute the waters of the state and increase potential health hazards.

Implementation of the controls centers around administrative rules adopted through a public hearing process; once adopted, the rules have the effect of law and set minimum acceptable standards for compliance. Administration of these rules is the responsibility of the Department of Environmental Quality.

In the months we have been working under this legislative mandate, we have experienced the pains of any new major program with such far reaching goals, and have identified many problems. In many cases, what may seem to have been a straight forward policy decision by the Environmental Quality Commission, becomes a complex entanglement of legal opinion and technical interpretations that do not always focus on the original legislative intent. In the end, many unsuspecting citizens suffer.

It is my firm conviction that every governmental official has two prime responsibilities; one is to the public at large and the other to each individual citizen who seeks his service. There is no question that the public need must be served, but that does not lessen our responsibility to the individuals.

Through a general lack of communication and clarity of the intent of the rules, there has been inconsistent and unjust administration of the rules that have been costly to a significant number of citizens.

It is not my position to fix blame, but to discuss the problem and seek an equitable solution. My concerns lie in the areas of prior approvals and variance from the rules.

#### PRIOR APPROVALS

When the commission decided to honor all outstanding prior permits and approvals, three basic criteria were set down:

- 1) Expressly authorized use of subsurface sewage disposal for an individual lot or for a specific lot within a subdivision.
- 2) Approvals or permits which were issued by a representative of a state or local agency authorized by law to grant such approval.
- 3) They were issued in accordance with all rules in effect at the time.

These three items have been interpreted in many ways. There have been slight changes in interpretation over time.

Since slight differences in interpretation can mean the difference between issuance or denial of a permit, consistency is extremely important.

I contend that the basic reason for allowing prior approvals is to protect the land owner who has invested in property in good faith based on the availability of a septic tank permit. Once we have established that a permit was issued by a responsi-

ble official, we should not measure it against any rules; we should go back to the intent of the law to prohibit water pollution and protect public health.

Since the rules in effect have been changed, and the existing rules are currently being considered for change; I feel prior approvals should be honored in all cases, except the extreme cases where successful installation and maintenance of a system is unlikely in the judgement of qualified professionals.

Extension of prior approvals another year will solve nothing unless a more equitable process can be established for administration of prior approvals.

#### RULE VARIANCES (rural areas, new legislation)

It has been acknowledged that the administrative rules can never perfectly deal with all cases. In some cases, because of weaknesses in the rules themselves, there has been created an allowance for variances from the rules in rural zoned areas approved by the director. In other cases, inappropriate interpretations can be dealt with by a local appeals board.

In the case of rural zoned areas, Jackson County submitted a formal request for designation by the director. The request did not base itself solely on zoning. Zoning changes over time, and conversions from rural to urban densities would defeat the intent of the rule. In Jackson County, we devised a set of criteria for identifying rural lands based on our Comprehensive Land Use Plan, zone districts, map locations, and a minimum parcel size of five acres. The director finally accepted our proposal with the exception of requirement for a minimum parcel size of ten acres. We asked for reconsideration of this parcel size requirement since our Zoning Ordinance sets five acres as the minimum rural lot size. We were turned down in anticipation of the passage of SB 34 that would create a statewide variance procedure.

The rural area process has not opened up much additional land to septic tanks, but has given our professional staffs the ability to judge rural parcels on their individual merits.

It seems rather apparent that the legislature will pass SB 34 in some form, and that a variance procedure will evolve.

Approximately 80% of the land in Jackson County has severe limitations for subsurface disposal systems. I am concerned that a major proportion of applications coming to our office will require a denial, fifty dollar fee and submission for a variance with an additional one hundred fifty dollar fee as a regular procedure.

It is my opinion that our professional sanitarians and soil scientists should be given more discretionary authority to determine suitability and design of systems, and not less. A hearings officer should only be necessary in extreme cases where all available local remedy is exhausted.

## RECOMMENDATIONS

- I. Environmental Quality Commission expand the O.A.R. concerning rural areas designations to specifically include compliance with the County's Comprehensive Land Use Plan, general rural character as designated by exhibit map, and minimum lot size of five acres.
- II. Removal of the criteria for Prior Approvals that requires compliance with the rules in effect at the time, and substitute
  3. Construction shall conform as nearly as possible with the current rules of the commission.
  4. The site is suitable for installation of a subsurface system (not including alternate systems unless approved by E.Q.C.) that will not pollute the waters of the state or endanger public health as determined by the department.
- III. Acknowledge that contract counties carry the full authority of statute that relates to the Department of Environmental Quality except for those areas specifically excluded by O.R.S. or O.A.R.

WITNESS REGISTRATION

I wish to testify before the Environmental Quality Commission on:

HB 2029 - PGE (Public Hearing)

Marlene Frady

(please print name)

PAST Salem (E.S.E.C.)  
Environmental Committee  
(organization or address)

File  
H

May 23, 1975

TO: Members of the Environmental Quality Commission

From: East Salem Environmental Committee, 390 Fir Knoll Lane N.E., Salem, Ore.

After the EQC decision July 19, 1974 to establish a 45 dBA limit for the PGE Bethel power plant, we received a telephone call from Dr. Morris Crothers. The nature of the call was to tell us that the 45 dBA ruling probably was not legal, that we would probably be much happier if we would sell to PGE and that he was sure PGE would pay us a very handsome price for our home. Also that lawsuits would be very expensive and there was a chance we may lose in court.

Dr. Crothers called us again in response to a letter we sent to the EQC members. He told us that the EQC had no power to regulate low frequency or infrasonic sound below 22 Hz, and that we should either sue PGE or go to the legislature.

Dr. Crothers was invited to testify at the hearing on HB 2029, March 25, 1975 before the House Environment and Energy Committee. Dr. Crothers signed the register as representing the EQC but did not mark for or against the bill.

Following are brief excerpts of Dr. Crothers statements as taken from the tape of the House Environment & Energy Committee:

The issue about infrasound is one which affects relatively few people, but some seem to be abnormally and intensely affected by the infrasound pressure levels, and their situation must be sympathetically considered. Referring to noise - what a person becomes accustomed to - - I don't pretend to be an expert on it at all - - noise in city - practically undetectable - getting enforceable standards - so different as it would be in Stayton, Salem or downtown Portland - - depends enormously on individual sensitivity. Noise - subjective area.

Questions then were asked by the Representatives:

Question: Are the cracks in the walls subjective?

Dr. Crothers: Great dispute about nature of the cracks in the walls - there are experts that have looked at the cracks and have a difference of opinion. (The Frady's would like to know who these experts are). Noise - relatively low priority as far as programs are concerned if the budget is cut back.

Chairman: Expressed concern about physical damage other than to hearing.

Dr. Crothers: This is very much a function of what one has become accustomed to. Noise pollution is not the hazard to public health that water or air pollution is.

Question: Do you think there are medical authorities who would disagree with you on this?

Dr. Crothers: I don't believe so - I've never seen data (statements) at all on the insidious effects on longevity on vital statistics.

Dr. Crothers: -- simple, more pragmatic ways of solving the Bethel problem than requiring PGE to move.

Question: What?

Dr. Crothers: Have them own a bigger zone around it.

Question: How can that be done?

Dr. Crothers: If the people were willing to sell, if they weren't you could give them power of condemnation - - - but I understand they are for transmission lines.



May 23, 1975

Dr. Crothers:- - only place where we have noise problem like this - - more intensity of feeling than any other place - similar to airport problems.

Chairman: Agency ought to be looking at this.

Dr. Crothers: - - part of the problem

Chairman: Should we keep inaudible sound in the bill?

Dr. Crothers: If there are enough people that feel so then we should. Expressed his fears about the enormous responsibility of the Commission in making economic decisions that may involve millions of dollars. I believe if the Commission has to cut back on programs, noise would be the first to be cut.

The people who live in East Salem, near the Bethel power plant, are not trying to put anyone on the spot but we simply would like to know if the above comments, by Dr. Crothers, are representative of all the members of the EQC? We hope it is not out of order to ask the Commission their position on HB 2029, either for or against, and whether or not the Commission supports section 2 of this bill?

*Marlene Spadey*

Mr Phillips ... that now ... the policy of this ...  
to ... any bill ...  
could not ...  
public ... about ... that affect this ...  
... taken a public stand ...  
... we leave that to the ... to ...  
... if they want ...  
... will do not make laws.

... thinks your position is answered  
by your comment that Mr. Crocker signed the  
bill as reported

but did not mark for  
or against the bill. This would be in  
line to our satisfaction. I think  
the program, but not the  
Commission.

There is a few things  
up issue at Berkeley  
wouldn't have if the  
wasn't there.

R E S O L U T I O N

Regarding: MORATORIUM on Sub-Surface Sewage Disposal Systems, Donald, Oregon.

WHEREAS The City of Donald, Oregon had very little if any regulation over the use of Sub-surface sewage systems prior to the enactment of Department of Environmental Quality Regulations, regulations that extended into Incorporated communities and

WHEREAS this, combined with small lot sizes, has resulted in direct connection to the Cities Storm drainage system in addition to infiltration of this drainage system with sewage effluent and

WHEREAS a serious Health Hazard for the citizens of this community has resulted and

WHEREAS the City of Donald, Oregon has initiated a formal moratorium by Council action in April 1974 after recommendation by the Marion Co. Health Department and

WHEREAS The City of Donald, Oregon has also initiated a Sewer study . . .

BE IT HEREBY RESOLVED that the Environmental Quality Commission be requested to support the City of Donalds Moratorium until such time as a Municipal Sewage Collection and Treatment system becomes a reality."

For Presentation by Richard Lerman at EQC Meeting 23 May 1975 9 a.m. City Council Chambers, Civic Center, Salem, Oregon

John T. Herron  
John T. Herron, M.D. Health Officer  
C. S. Sherman  
C.S. Sherman, R.S. Director  
Environmental Health Services



COUNTY COMMISSIONERS  
TAM MOORE, Chairman  
ISABEL SICKELS, Commissioner  
JON DEASON, Commissioner  
Administrative Assistant  
EDWARD S. BRESNAHAN

# Jackson County Oregon

## BOARD OF COUNTY COMMISSIONERS

(503) 773-6211, EXT. 311 • COUNTY COURTHOUSE • MEDFORD, OREGON • 97501

March 24, 1975

Mr. B. A. McPhillips, Chairman  
Environmental Quality Commission  
Multnomah County Courthouse  
1021 S. W. 4th Ave. Room 602  
Portland, Oregon 97207

Re: Proposed Rule Adoption, Open Burning  
O.A.R. Chapter 340, Sections 23 & 28  
Hearing 2:00 p.m., March 28, 1975  
Portland, Oregon

Dear Mr. McPhillips,

Both letters and verbal requests to the Department's Portland office failed to put Jackson County's governing board on the distribution list for the text of your commission agenda items.

The Medford office was kind enough, in response to verbal requests, to furnish us with a copy of the proposed rules in this case.

The board of commissioners was shocked, upon receiving these proposed rules on March 19th, to discover that they propose to ban all commercial burning in substantial portions of Douglas, Josephine and Jackson counties. And, we are surprised to find that in Jackson County, we have been the subject of boundary proceedings by the Commission on--to form "Special Control Areas"--without any public notice. I'm sure you have had notice served in Josephine and Douglas counties, and that omission of Jackson County was just an oversight on someone's part.

The Jackson County Board of Commissioners requests that, as a minimum, the Commission direct that a public hearing be conducted within the proposed Rogue Special Control area before any action is taken adopting these rules.

Sincerely,

JACKSON COUNTY BOARD OF COMMISSIONERS

  
Tam Moore, Chairman

TM:vj

cc: M. C. Loughridge  
Larry Michaels  
Debbs Potts  
Jason Boe  
Lenn Hannon

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED  
APR 3 1975

OFFICE OF THE DIRECTOR

March 31, 1975

Mr. Gene Hopkins  
Executive Vice President  
Greater Medford Chamber of Commerce  
304 South Central  
Medford, Oregon 97501

Dear Gene:

Barney McPhillips asked that I respond to your letter concerning open burning regulations which you directed to us March 24. The Commission, as you perhaps know, addressed the issue at the March 28 meeting here in Portland.

As a result of that meeting, the EQC decided to leave unchanged existing regulations, except for backyard burning periods in the Portland area which are extended. The Commission has been advised that legislation is being considered in Salem which would have a direct bearing on open burning regulations since it would deal with slash burning, agricultural clearing, etc., and therefore action by the EQC will be set aside pending legislative decision.

What had been proposed was that industrial and commercial burning controls remain the same as in current rules, that land clearing be modified to be more lenient in that the prohibition of open burning of land clearing would be on a population basis rather than the Rogue basin basis. That proposal, of course, was based upon our finding that by far most of the burning -- slash and agricultural clearing -- was exempt by law, and our controls were being applied only to a small fraction of the problem.

Best wishes.

Cordially,

KESSLER R. CANNON  
Director

KRC:cm

cc: Representative Brad Morris, Commissioner Tam Moore



COUNTY COMMISSIONERS

TAM MOORE, Chairman  
ISABEL SICKELS, Commissioner  
JON DEASON, Commissioner  
Administrative Assistant  
EDWARD S. BRESNAHAN

# Jackson County Oregon

## BOARD OF COUNTY COMMISSIONERS

(503) 773-6211, EXT. 311 • COUNTY COURTHOUSE • MEDFORD, OREGON • 97501

May 16, 1975

Mr. B. A. McPhillips, Chairman  
Environmental Quality Commission  
Multnomah County Courthouse  
1021 S. W. 4th Ave., Rm. 602  
Portland, Oregon 97207

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
MAY 19 1975

OFFICE OF THE DIRECTOR

Re: Moratorium Hearing 23 May 75

Dear Commissioners:

Attached is a resolution and order vacating all sub-surface sewage moratorium areas in Jackson County. The technical report, supporting the finding, is included for reference. I will be present at the hearing, with supporting maps, data and technical information, should a question arise as to any need for imposition of the proposed order.

Jackson County took its action today after giving thirty days notice and making extensive display advertising of the hearing time and place. There was no testimony in favor of any moratorium area being required within Jackson County.

Sincerely,

JACKSON COUNTY BOARD OF COMMISSIONERS

  
Tam Moore, Chairman

TM:mj

cc: Mr. Kessler Cannon

BEFORE THE BOARD OF COUNTY COMMISSIONERS FOR JACKSON COUNTY, OREGON

In the Matter of Vacating an )  
Order Prohibiting Installation )  
of Septic Systems in Certain )  
Areas of Jackson County )  
\_\_\_\_\_ )

RESOLUTION AND ORDER

WHEREAS, the Board has heretofore directed the formation of a study committee to consider the moratorium imposed by the County Health officer March 21, 1973, on installation of subsurface disposal systems in certain areas of the county, to investigate what changed conditions or new conditions may exist within the moratorium area, and to make a recommendation to this Board on whether the moratorium should be continued; and

WHEREAS, the committee has conducted its inquiry as requested by the Board and made its report, and the committee has found that because of the extension of service by the Bear Creek Valley Sanitary Authority into the area, the adoption of countywide zoning with minimum lot size requirements and the decline of incidence of hepatitis in the moratorium area, the public health considerations which resulted in imposition of the moratorium no longer exist, and the committee has recommended that the moratorium not be continued;

BE IT RESOLVED that the Board expresses its appreciation to the committee for its efforts in making its study and recommendation;

BE IT FURTHER RESOLVED that the Board adopts and endorses the recommendation of the committee that the moratorium should be ended and that no new moratorium under state law should be imposed by the Environmental Quality Commission; and

IT IS ORDERED that a certified copy of this Resolution be forwarded to the Environmental Quality Commission to be included in the proceedings to be held before that body on May 23, 1975.

DATED at Medford, Oregon, this 16th day of May, 1975.

MAY 16 11 48 AM '75  
HARRY CHIPMAN  
JACKSON COUNTY CLERK  
BY *Barbara J. Zolof*

JACKSON COUNTY BOARD OF COMMISSIONERS

*[Signature]*  
Chairman

*Isabel H. Sichel*  
Commissioner

*[Signature]*  
Commissioner

REPORT ON THE SEPTIC SYSTEM  
MORATORIUM OF MARCH 21, 1973 IN  
JACKSON COUNTY, OREGON

REPORT PREPARED BY:

Jackson County Department of Planning and Development  
Jackson County Health Department  
May 1975



## INTRODUCTION

During 1972 and early 1973, considerable pressure was building within the subsurface sewage disposal program of Jackson County. A general toughening of the rules governing the subsurface permit program and the implementation of more technically competent procedures for the evaluation of proposed disposal sites, considerably lengthened the time required for the issuance of a sewage disposal permit. This fact, coupled with the general upsurge of building and development activity in Jackson County, created in a short time a substantial backlog of applications awaiting review and consideration by the Health Department staff.

A series of procedural changes were instituted in order to accommodate the backlog and better serve the increased demand for services. Among these was the hiring of two soil scientists by the County Planning Department. These specialists devoted part of their time (eventually most of their time) to the provision of technical assistance to the sanitarians operating the subsurface sewage disposal program at the Health Department. Their assistance was in the area of site evaluations and the streamlining of various procedures and techniques utilized in the subsurface program.

It became apparent to all concerned with the subsurface program at the time, that applications within certain areas of the county were consistently denied permits. These denials were based on the relatively uniform characteristics of the sites, including soil types, in those areas. It was also common knowledge that many existing dwellings in those same areas had malfunctioning subsurface sewage systems, some of which could not be repaired. Concurrently, Jackson County experienced a major increase in the number of infectious Hepatitis cases. A preponderance of these cases were existent within or near these same areas of permit denial. Proper disposal of body wastes in infectious Hepatitis patients is an accepted part of the measures used to reduce its spread to other members of the community.

For two major reasons, then, the idea of establishing a septic system moratorium was discussed during late 1972 and early 1973:

- 1) To help curb the epidemic levels of infectious Hepatitis and other less dramatic diseases related to exposure to sewage in roadside ditches, on the surface of the ground, in irrigation waters and/or possible contamination of drinking waters.

2) To alleviate the requirement for site evaluations, re-evaluations, and consideration of individual applications for sewage disposal permits within an area wherein those permits should be categorically denied.

After thorough consideration of the many aspects of the matter, joint review of the problem by the Jackson County Board of Health and the Jackson County Planning Commission, and with concurrence of the Jackson County Board of Commissioners; the Health Officer, acting within the powers and authority vested in him by ORS Chapter 431, did on March 21, 1973, institute a septic system moratorium in the area depicted on page 3. This action was in conformance with procedures established by the Jackson County Sewage Disposal and Individual Water Supply Ordinance of 1972. The moratorium has been continuously enforced by the Jackson County Health Department, and its successor for subsurface disposal, the Jackson County Department of Planning and Development, until the present time.

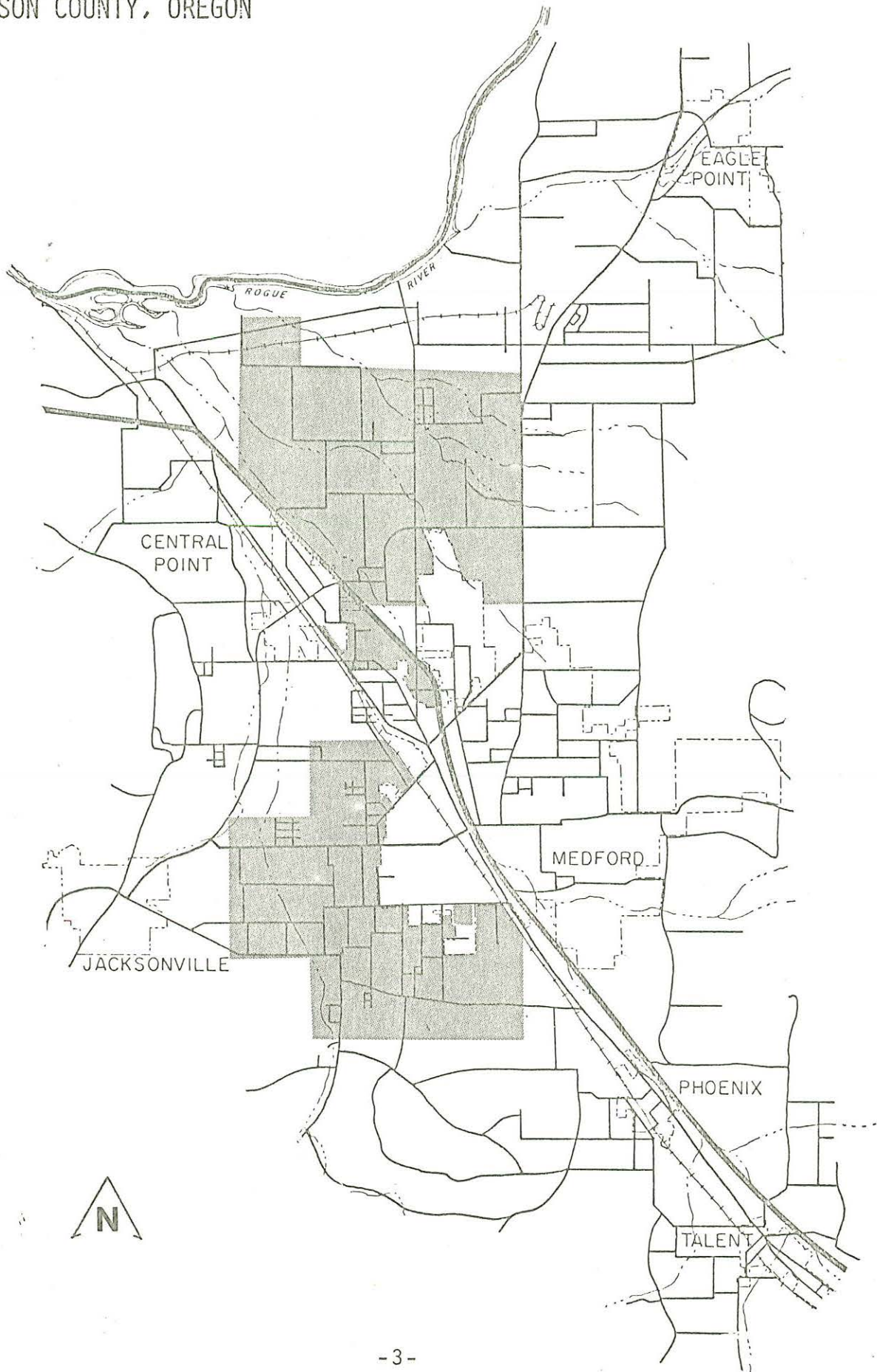
#### DEPARTMENT OF ENVIRONMENTAL QUALITY AUTHORITY IN THE MORATORIUM

In October of 1973, the statewide authority for subsurface sewage disposal previously vested in the Oregon State Health Division, was passed by the legislature to the Department of Environmental Quality (DEQ). However, by inter-agency agreement, the Health Division continued to operate the program until January of 1974. It now appears that along with the authority indicated above was conveyed under ORS Chapter 468, all prerogatives relating to the matter of septic system moratoriums. DEQ remained relatively silent on the question until recently, when it expressed its intent to continue existing moratoriums in effect until the matter could be considered by the Environmental Quality Commission (EQC) at public hearing on May 23, 1975. DEQ's recommendation to the EQC, which will be considered at that time, would extend all moratoriums in effect for a period of six months, during which the DEQ will study their present validity and make recommendations to the EQC regarding their continuation.

#### STUDY PURPOSE

In anticipation of the EQC's deliberations in this regard, the Jackson County Board of Commissioners has instructed the moratorium study committee authorized by the Jackson County Sewage Disposal and Individual Water Supply Ordinance of 1972, to investigate the present necessity for continuing the Jackson County moratorium, and to report its findings to the Board of Commissioners at a public meeting to be held at 10:00 a.m., Friday, May 16, 1975. The study committee is composed of the County Health Officer and his staff, and representatives of the

SEPTIC SYSTEM MORATORIUM AREA  
JACKSON COUNTY, OREGON



Soil Conservation Service, County Department of Planning and Development, and the Jackson County Planning Commission.

#### TOPOGRAPHY AND CLIMATE

The Bear Creek Valley, within which the moratorium area is situated, is a large, nearly flat, intermountain plain composed of alluvial materials. Its average elevation is about 1,300 feet.

The valley experiences mild, wet winters and hot, very dry summers, receiving less annual precipitation than any other area of Oregon west of the Cascades. At Medford, the average annual temperature is about 54 degrees, ranging from 37 degrees in January to 72 degrees in July. However, maximum temperatures in summer are often more than 90 degrees, and not infrequently over 100 degrees. In winter, minimum temperatures are often near or below freezing. Average annual precipitation at Medford is about 19 inches, 72 percent of which occurs from November through March. Only about two inches fall from June through September.

Aside from the general subsurface disposal problems associated with a well defined wet season, winter rains in the valley are frequently very intense over a period of several days, leading to annual flooding of low lying areas along drainageways and streams. During these periods, the prevalent clayey soils of the region quickly saturate and develop standing water conditions at the surface. These physical characteristics, which are found in many locations within the moratorium area, are very detrimental to the proper functioning of subsurface disposal systems.

#### SOILS INFORMATION

Basic to any consideration of subsurface disposal, is the quality and character of the soil underlying the surface upon which development will take place, and within which the effluent generated therefrom will pass. Soils left in their natural condition change almost imperceptibly, even over very long periods of time. Although some refinements have occurred in the soils mapping and evaluation techniques within the moratorium area, the data is relatively the same as was available for consideration in 1973. Generally, the soils range in character from poorly drained to well drained, with textures from loam to clay. They are derived from alluvium of volcanic, mixed, and metamorphic origin, occurring from nearly level to gently sloping (0-7%) alluvial fans, stream terraces, and bottom land.

The soil types within the moratorium have been categorized according to their probability of providing a suitable site for subsurface disposal on five acres of each soil category. In general, if a lot is substantially smaller than five acres within a given category, then the chances of finding a suitable site are reduced. It is important to note that this data does not take into consideration various requisite minimum distance requirements, odd-shaped lots where there may be difficulties in design of the drainfield, special usages that require larger systems than for single family dwellings, or other factors pertaining to suitability that are not soil related. Additionally, the saturated zone (regional water table) as defined by DEQ was not considered in this evaluation. As technical data increases, the depth requirement to the saturated zone (six feet or more) may negatively affect the chances of finding suitable sites in certain locations within the moratorium area. An acreage summary of soil categories within the moratorium follows.

#### ACREAGE AND SEPTIC SUITABILITY OF SOIL CATEGORIES

Soil Category	% Chance of Suitable Site on Five Acres	North Area		South Area		North & South Areas	
		# of Acres	% of Total	# of Acres	% of Total	# of Acres	% of Total
Very Good	85 - 100	440	7	136	2	576	5
Good	65 - 85	3	0	743	13	746	6
Fair	35 - 65	704	11	1,608	27	2,312	19
Poor	15 - 35	124	2	890	15	1,014	8
Very Poor	0 - 15	5,739	80	2,672	43	8,411	62
TOTAL		7,010	100	6,049	100	13,059	100

The primary reference for this soils information was the preliminary soils information sheet for subsurface sewage disposal, which was derived from basic soil resource data provided by the U.S. Department of Agriculture, Soil Conservation Service. Minimum standards set forth in current DEQ regulations (OAR 71-030) were used as the criteria for site suitability.

Between one-third and one-half of the south moratorium area, and about one-sixth of the north moratorium area, are given soils that offer at least a 35 percent chance of finding a suitable site on a five acre parcel. It would seem, at least from the standpoint of soils alone, that the odds of finding suitable sites are sufficiently in favor of the applicants to indicate the desirability of individual case evaluations, especially in those areas demonstrating fair, good, and very good prospects for approval.

## DOMESTIC WATER RESOURCES

Domestic water supplies within the moratorium area stem from two sources: individual wells, usually serving only one property, and the water supply and treatment facilities of the City of Medford. The status of ground water supplies was studied by the Oregon State Engineer's Office in 1971, and documented in a report entitled Availability and Quality of Ground Water in the Medford Area. Nearly all of the moratorium area is underlaid with alluvium materials (sand, gravel, and cobbles) deposited by Bear Creek and other tributaries of the Rogue River. The report discusses alluvium as follows:

"Alluvium is the most productive aquifer in the area. Where total thickness is generally 30 feet or more, the unit usually has a saturated thickness of more than 10-15 feet, and will yield 10-50 gallons per minute to wells. In a few areas, 100 gallons per minute or more is obtainable from properly designed and constructed wells. Water is likely to be of good chemical quality for most uses, except for excessive iron in shallow zones of the area."

The City of Medford has two water supply sources: Big Butte Springs, approximately 25 miles northeast of the City, and the Rogue River. Big Butte Springs supplies 26.5 million gallons per day (mgd), and a recently completed treatment plant on the Rogue River near the City can presently supply 15 mgd. However, the design capacity of the plant could ultimately yield 65 mgd, which is sufficient to meet all anticipated demands in its service area well beyond the year 1990.

The City of Medford presently supplies water to three other cities and eight water districts and associations. The Medford Water Commission and City Council have, in recent years, established firm policies for the provision of water outside their corporate jurisdiction. These include the necessity for an accompanying complete range of urban level services, as well as enforced land use, building and housing regulations. As a result of these policies, virtually no additional service to areas outside the City is anticipated for some time. At present, five water districts, all served by Medford, provide water to approximately 37 percent of the homes in the moratorium area.

## SEWER SERVICE

Since 1973, considerable expansion of the Bear Creek Valley Sanitary Authority collection system has occurred. At the present time, approximately 1,000 acres in the north moratorium area and 800 acres in the south moratorium area, which

were subject to subsurface disposal methods in 1973, are now within the Sanitary Authority's primary benefited area. This accounts for 237 connections in the north area and 485 connections in the south area. An additional 182 connections will be completed in the south area in the next few weeks. Although the Authority's program is directed toward areas of greatest need, future extensions are subject to the approval of each individual neighborhood to be served. For this reason, future line extensions are not entirely predictable. The Authority does, however, have the capability within its system of providing service throughout the moratorium area. In accordance with State law and the Authority's ordinances, any dwelling within 300 feet of existing sewer service must be connected.

Another factor has occurred in several areas of the moratorium since its inception. Approximately 349 acres of land, or 2.5 percent of the total moratorium area, have been annexed by the cities of Medford and Central Point, and are subject to the service policies administered by those cities. Central Point requires connection within 300 feet of service; however, Medford allows no new development within its boundaries unless it is served by the city's collection system.

#### INCIDENCE OF HEPATITIS

During the period from 1970 to 1973, prior to establishment of the moratorium, 350 cases of Hepatitis were recorded within Jackson County. Of this number 51 or 15 percent occurred within the moratorium area. It is significant to note that according to health officials, approximately six cases of Hepatitis go unreported for each single case brought to their attention. Since 1973, 102 cases of Hepatitis have been recorded throughout Jackson County, with four occurring within the moratorium area. Although this substantial reduction in the incidence of the disease is coincidental with the period of time covered by the moratorium, attempts to correlate the two factors must remain inconclusive. Significant reductions have also occurred in other areas of the county not covered by the moratorium. Hepatitis does not usually recur in an individual after he has once contracted the disease. After those persons in an area who are particularly susceptible have been infected, a general remission of the contagion normally follows, since re-infection of those persons is rare. These factors must be weighed in any conclusion regarding the effectiveness of the moratorium for the purposes of disease control.

#### COUNTYWIDE ZONING

Although Jackson County's Comprehensive Plan was adopted in June of 1972, zoning had not yet been effectuated when the moratorium went into effect in March of

1973. Land use and partitioning was then, as it always had been, controlled only by the economics of development and the discretion of individual developers. Through the years, many lots of five acres or less in size had been created along existing county roads or established in new subdivisions.

Countywide zoning became effective on September 1, 1973, and has since served to control the minimum size of newly created lots. Existing lots, however, were, by State Law, exempt from such restrictions. Article V, Section 2, Subsection 4, of the Jackson County Zoning Ordinance states the following:

"If a lot created prior to the effective date of this Ordinance has an area or dimension which does not meet the requirements of the district in which it is located, it may be occupied by a use permitted in the district, subject to the other requirements of the district."

In accordance with the above requirement, any lot of record existing as of September 1, 1973, the effective date of zoning, can be utilized for a dwelling unit, even though it may be well below the minimum lot size presently required for the zone in which it is located. Within the moratorium area there is a total of 3,871 individual tax lots. The number of lots within several categories of lot size and the respective percentage of the total represented by each category is summarized in the table below:

NUMBER OF LOTS BY SIZE GROUPING

Lot Size	North Area		South Area		North & South Areas	
	# of Lots	% of Total	# of Lots	% of Total	# of Lots	% of Total
10 Acres +	167	12	81	3	248	6
5-10 Acres	107	7	105	4	212	5
2½-5 Acres	364	24	435	18	799	21
1-2½ Acres	463	31	552	23	1,015	26
½-1 Acre	127	9	1,098	46	1,225	32
Up to ½ Acre	258	17	114	6	372	10
TOTAL	1,486	100	2,385	100	3,871	100

Although the above figures concern the existing lot pattern, legal partitioning of lots since September of 1973, could have occurred in only four general zoning categories (comprising less than 10 percent of the moratorium area). About 85 percent of the north moratorium area and 87 percent of the south moratorium area is zoned in a manner which would require at least one acre for the creation of



any new lot. Only the commercial, industrial, and aggregate zones, which account for 6 percent of the moratorium area, have no minimum lot size, and can be readily developed. However, the value of these properties for commercial and industrial use should effectively restrict their development for residential purposes. One remaining zone, the Exclusive Farm Zone, also has no minimum lot size. State law does require within this zone, however, that all partitions of land below ten acres in size be reviewed and approved by the Board of County Commissioners. After one and one-half years of administering the Exclusive Farm Zone, only four applications for reduced parcel size within that zone have been received for consideration throughout the County, none of which were within the moratorium area. The following table is a summarization of the acreage figures for the various zoning categories and annexed lands within the moratorium area:

Zoning Designation	ZONING DISTRICT ACREAGE			Total
	Minimum Lot Size	North Area Acreage	South Area Acreage	
Aggregate Resource	-	95	-	95
Exclusive Farm	-	439	424	863
Open Space Reserve	20 Acres	169	-	169
Open Space Development	5 Acres	231	-	231
Farm Residential	5 Acres	3,340	3,256	6,596
Rural Residential-5	5 Acres	1,477	668	2,145
Rural Residential-2.5	2.5 Acres	114	1,333	1,447
Rural Residential-1	1 Acre	170	-	170
Interchange Commercial	-	8	-	8
Rural Service Commercial	-	7	-	7
General Commercial	-	31	89	120
Light Industrial	-	334	28	362
General Industrial	-	328	169	497
Annexed Lands	Unknown	267	82	349
<b>TOTAL</b>		<b>7,010</b>	<b>6,049</b>	<b>13,059</b>

#### COMPREHENSIVE PLAN

Since zoning has effectively stopped the creation of dense residential patterns served by subsurface disposal methods, the next question which arises is the ability of today's zoning to maintain the status quo in the face of possible pressures to re-zone at higher densities. The answer to this question lies within the Comprehensive Plan for Jackson County, which sets forth the county policy concerning such changes of land use. With minor exceptions, the Comprehensive Plan Map por-

trays virtually the same basic land use and residential density pattern described in the section on zoning, page 9. However, the Plan does provide opportunities for urban density residential development under certain circumstances.

Page 14 of the Comprehensive Plan text makes the following statement concerning urban medium density residential development:

"Housing developments on nine thousand square foot lot sizes may be accomodated within this classification. However, this housing density is based on the assumption that community water and sewer services are available. Where the development alternative symbol is shown on the plan, urban medium housing densities are possible."

The development alternative symbol discussed in the Plan encompasses approximately 3,725 acres of the south moratorium area and 1,459 acres of the north moratorium area. Although water has been available in a number of these areas for some time, sewerage has become available through the efforts of the Bear Creek Valley Sanitary Authority only within the last two years. Even though the plan states that water and sewer service are prerequisites for urban densities, it does not imply nor does State law allow, that such land use changes occur automatically.

Since 1973, land use decisions in Oregon have been guided by the results of an Oregon Supreme Court case known as the "Fasano" decision. That case clarified the intent of the existing law by requiring not only that a requested change of land use be in conformance with the Comprehensive Plan, but also that proof be demonstrated by the applicant that there exists a public need for the change of use in question. The decision further required that the particular site proposed for the change be the best available site within the general area for the change being considered. The court also expressed the fact that the appropriate bodies hearing land use questions were quasi-judicial in nature, and must, therefore, refrain from any contact with a particular application outside of the deliberative process established by law; and must also, as a part of that process, make appropriate written findings to substantiate that all requirements of law have been met prior to issuing a decision concerning a land use question. Considering the fact that these procedural requirements would be followed within the moratorium area, it is reasonable to conclude that any change of zoning density would occur only after complete and thorough evaluation of total community need.

EXISTING RESIDENTIAL DEVELOPMENT

Given a fixed number of pre-existing substandard lots, and a zoning pattern and comprehensive plan which preclude the uncontrolled proliferation of such lots in the future, two related questions concern the effect of legal partitions on subsurface disposal, and the proportion of existing lots which have not already been developed. The primary basis for the residential densities established by zoning was the suitability of the soil for subsurface disposal. For this reason, partitions accomplished in accordance with zoning should be in general conformance with sanitation requirements. The question concerning developed lots requires a more intensive analysis. The most recent residential land use survey by the Department of Planning & Development was completed in March of 1975. Of the 3,411 existing lots in the moratorium area of less than five acres in size, only 599 or 18 percent are undeveloped at the present time. A complete breakdown of existing development, categorized by lot size, is included in the table below:

DEVELOPED AND UNDEVELOPED LOTS BY SIZE CATEGORY

NORTH AREA				
<u>Lot Size</u>	<u>Number of Lots</u>	<u>Number Developed</u>	<u>Number Undeveloped</u>	<u>Percent Undeveloped</u>
10 Acres +	167	38	129	33
5-10 Acres	107	67	40	10
2½-5 Acres	364	289	75	19
1-2½ Acres	463	377	86	22
½-1 Acre	127	99	28	6
Up to ½ Acre	258	220	38	10
<u>TOTAL</u>	<u>1,486</u>	<u>1,090</u>	<u>396</u>	<u>100</u>

SOUTH AREA				
<u>Lot Size</u>	<u>Number of Lots</u>	<u>Number Developed</u>	<u>Number Undeveloped</u>	<u>Percent Undeveloped</u>
10 Acres +	81	54	27	6
5-10 Acres	105	73	32	8
2½-5 Acres	435	375	60	14
1-2½ Acres	552	447	105	24
½-1 Acre	1,098	934	164	38
Up to ½ Acre	114	71	43	10
<u>TOTAL</u>	<u>2,385</u>	<u>1,954</u>	<u>431</u>	<u>100</u>

DEVELOPED AND UNDEVELOPED LOTS BY SIZE CATEGORY (con't)

Lot Size	NORTH & SOUTH AREA			
	Number of Lots	Number Developed	Number Undeveloped	Percent Undeveloped
10 Acres +	248	92	156	19
5-10 Acres	212	140	72	9
2½-5 Acres	799	664	135	16
1-2½ Acres	1,015	824	191	23
½-1 Acre	1,225	1,033	192	23
Up to ½ Acre	372	291	81	10
<u>TOTAL</u>	<u>3,871</u>	<u>3,044</u>	<u>827</u>	<u>100</u>

CAPACITY OF EXISTING SUBSURFACE SEWAGE DISPOSAL SYSTEMS

It is not possible to accurately report the capacity of all existing subsurface sewage disposal systems in the moratorium areas without conducting a survey of each developed property. Most of the septic tank systems installed before 1966, when the Jackson County sewage disposal permit system was started, were not inspected. Therefore, a search of all existing county records would reflect only those systems installed or reconstructed after 1966. In some pre-1966 installations where the County Health Department was called on to specify and/or inspect systems for builders on a voluntary basis, or where financing could not be arranged without Health Department approval, are also a matter of record. For these reasons, there are too many unknown systems in the County to develop a meaningful report on capacities without doing an individual property investigation and evaluation.

"PRIOR APPROVAL" SEWAGE DISPOSAL PERMITS

Present rules of the DEQ allow, under certain circumstances, the re-issuance of expired permits which were originally approved prior to January 1, 1974. This rule has not, however, applied within the moratorium area. It is apparent from a review of the permit files for the area, that only about 50 properties would be eligible for consideration under the "Prior Approval" rules. These properties are scattered throughout the moratorium area, and do not constitute a potential problem if the moratorium were lifted.

## CONCLUSIONS AND RECOMMENDATIONS

After review of the information contained in this report, the Moratorium Study Committee made the following findings concerning the present moratorium:

- 1) Even though the previous epidemic levels of infectious Hepatitis have subsided, no meaningful conclusions can be drawn concerning the effect of the moratorium in bringing about this fact.
- 2) The unworkable backlog of sewage disposal permits existent in 1973 has since been overcome. It is not expected that the removal of the moratorium would cause more than a temporary short-term increase in the workload of the sanitation section of the Department of Planning and Development.
- 3) Nearly one-third of the moratorium area has soil characteristics offering at least a 35 percent chance of finding a suitable site on five acres.
- 4) Sewer lines installed since 1973 presently or will soon serve about 900 homes and businesses, a high percentage of which were previously served by subsurface systems within the moratorium area.
- 5) Approximately 350 acres (2.5 percent) of the moratorium have been annexed by the cities of Medford and Central Point, and are subject to municipal services.
- 6) Countywide zoning adopted in September 1973, in concert with the Comprehensive Plan adopted in June 1972, precludes new residential development at densities not supportable by soil conditions, unless public water and sewer services are available and public need can be demonstrated.
- 7) Of the 3,411 existing lots of less than five acres in size within the moratorium area, only 599 or 18 percent are undeveloped at the present time. Of this number, nearly 100 are within soil areas offering at least a 35 percent chance of finding a suitable site on five acres.
- 8) Potential "prior approval" subsurface disposal permit applications within the moratorium area number only about 50, and are not concentrated in any particular location.

10) The question of possible health hazard stemming from the cumulative effect of otherwise individually acceptable subsurface systems cannot be answered without extensive monitoring, testing, and other research techniques beyond present capability.

11) The moratorium has served well the purposes for which it was established; however, it does not seem to sufficiently meet the requirements of present law to justify its continuation.

Based on these findings, the Moratorium Study Committee did, on May 14, 1975, unanimously recommend that the Septic System Moratorium of March 21, 1973 be lifted.

STATE OF OREGON, }  
County of Jackson } ss.

I, Harry Chipman, County Clerk and Clerk of the Board of Commissioners of the County and State aforesaid, do hereby certify that the foregoing copy of  
RESOLUTION AND ORDER

-----  
IN THE MATTER OF VACATING AN ORDER PROHIBITING

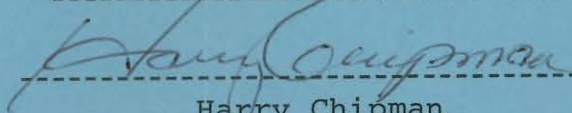
-----  
INSTALLATION OF SEPTIC SYSTEMS IN CERTAIN AREAS

-----  
OF JACKSON COUNTY - Report on the Septic System Moratorium  
of March 21, 1973 in Jackson County, Oregon  
has been by me compared with the original, and that it is a correct transcript therefrom and of the whole of such original as same appears of record at my office and in my custody.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of  
said

Board this 16th day

of May, 1975

  
-----  
Harry Chipman Clerk

By \_\_\_\_\_  
Deputy



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

To: Environmental Quality Commission

Date: May 22, 1975

From: Richard Reiter, Administrator *Reiter*  
Southwest Region

Subject: Moratorium Areas

Jackson County: Exhibits #1 and 2

Since the imposition of these moratoriums on March 21, 1973, extensive local activity has occurred to incorporate these areas, by annexation, into existing city or sewerage district boundaries. As a result of this annexation activity, it has been possible to plan for and construct needed sewer extensions to abate known problem areas. Based on this planned or completed construction activity, and also recognizing the degree of control presently provided through Jackson County's planning and subsurface sewage disposal programs, we would recommend that these moratoriums not be continued.

We would like the record to show, however, that several small pockets of unsewered, but developed, areas still exist ( i.e. Gibbon Road Area, Forest Acres Area) and it is our intent to coordinate with Jackson County on a reassessment of these areas this coming winter. Based on an updated survey, a new abatement strategy can be developed including the possible reimposition of a much more realistic moratorium program.

Josephine County: Exhibits #3 and 4

Since the imposition of this moratorium on July 1965, extensive local activity has occurred to provide sanitary sewer service to this area. Most recently, Josephine County, thru the Redwood County Service District, has attempted to construct the needed sanitary sewers, however, their efforts are presently delayed because EPA required the preparation of an Environmental Impact Statement.

Since the underlying problem remains (malfunctioning subsurface sewage disposal systems) and the installation of sanitary sewers is not assured at this time, it seems prudent to continue this moratorium for



at least six months during which time local hearings could be held, possible boundary changes recommended and possible resolution of the delays to the Redwood Sewerage Project attained.

Douglas County: Exhibits #5, SA, 6 and 7

Prior to and since this moratorium was established on October 4, 1973, extensive local efforts have been undertaken to provide sanitary sewers in the Glide - Idleyld Park area. All past efforts have failed, however, when bond elections were held to finance the local share of the project cost. At this time, no sewerage agency, other than Douglas County, exists to provide the needed sanitary sewers. Douglas County is presently working with the local citizens on the possible installation of a pressurized collection system (substantial anticipated savings in construction costs) to provide these sanitary sewers.

Considering a survey in the fall of 1974 confirmed the continued existence of a high malfunction rate, we would recommend the continuation of this moratorium area for at least six months pending local hearings, reevaluation of possible boundaries changes and progress on the possible installation of sanitary sewers.

To: Members of the Environmental Quality Commission

Re: Agenda Item I, May 23, 1975, EQC Meeting

As Agenda Item I of the May 23, 1975 EQC meeting, the Director requests you to authorize public hearings on two empty and meaningless acts. Primarily as a taxpayer who wants his state tax dollar to be spent on other than superfluous endeavors, I respectfully urge you to cancel the proposed public hearings.

Sections 111 and 112 of the Clean Air Act, 42 USC §§1857c-6 and 1857c-7 (at pages 545-547 in the federal laws section of your blue looseleaf binders) are unequivocal about new source performance standards and emissions standards for hazardous air pollutants. Once the EPA administrator has promulgated such standards, every new source or source, new or old, emitting hazardous pollutants in the United States must, at a minimum, comply with the standards. The requirement to comply is not contingent upon any state's adoption of the standards. The national standards are now, with no action by you, the law of this state. You may enact more stringent standards under §116 of the Clean Air Act, 42 USC §1857d-1, but you may not abrogate or relax the federal standards. Thus, your adoption of the federal standards would be redundant.

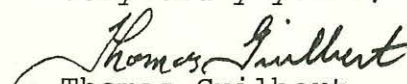
Both the new source performance standards section and the hazardous air pollutants section of the Clean Air Act expressly provide that the administrator may delegate his

enforcement authority under the respective sections to the states, but there is no requirement, express or implied, that the states need go through the charade of adopting the federal standards to qualify for delegation. I know of no requirement of state law which would prohibit the DEQ from enforcing a "naked" federal standard, but, if the Commission believes that it is necessary to clothe the federal standards in state rules in order to enforce them, I suggest that OAR 340-20-001, "Highest and Best Practicable Treatment and Control," is ample authority.

Several of the federal new source performance standards are real "patsies," and could only undercut the EQC's historic commitment to highest and best practicable treatment and control. The proposed standard for primary aluminum plants, for example, though differing slightly in measurement techniques and averaging periods from the Oregon standard, allows double the amount of fluoride emissions per ton of <sup>production</sup> ~~emissions~~ ~~that~~ the Oregon standard allows. The federal standard for coal-fired thermal electric generating plants allows twenty times the sulfur emissions of the New Mexico standard (as, incidentally, does the permit for the PGE Boardman plant which NTEC has determined you must issue). Enactment of the federal standards would thus give credence to foot-draggers who don't want to apply highest and best practicable treatment and control.

Adoption of the federal standards could accomplish nothing. I respectfully urge you to direct the Department to cease wasting its time on this project.

Very truly yours,

  
Thomas Guilbert

MINUTES OF THE SIXTY-NINTH MEETING  
of the  
ENVIRONMENTAL QUALITY COMMISSION  
May 23, 1975

Following the required notice and publication, the sixty-ninth meeting of the Oregon Environmental Quality Commission was called to order at 9:00 a.m. on Friday, May 23, 1975. The meeting was convened in the Salem City Council Chambers, 555 Liberty Street S.E., Salem, Oregon.

Commissioners present included Mr. B.A. McPhillips, Chairman; Dr. Morris Crothers; Dr. Grace Phinney; (Mrs.) Jacklyn L. Hallock; and Mr. Ronald M. Somers.

Department staff members present included Mr. Kessler R. Cannon, Director; Mr. Ronald L. Myles, Deputy Director; Mr. E.J. Weathersbee, Assistant Director (technical programs); Mr. Fred Bolton, Assistant Director (regional programs); Mr. Harold M. Patterson, Assistant Director (air quality program); Mr. Harold L. Sawyer, Assistant Director (water quality program); and Mr. Kenneth H. Spies, Assistant Director (land quality program). Mr. Raymond P. Underwood, Counsel to the Commission, and several other staff members were also present.

MINUTES OF THE APRIL 25, 1975 COMMISSION MEETING

It was MOVED by Commissioner Crothers, seconded by Commissioner Somers and carried that the minutes of the April 25, 1975 Commission meeting be adopted as distributed.

PROGRAM ACTIVITY REPORT

Mr. Ronald Myles, Deputy Director of the Department, presented the Program Activity Report.

Chairman McPhillips, addressing himself to the water quality items in the report, inquired whether listed gold mining operations were recreational or commercial in nature. Mr. Richard Reiter, Southwest Region Administrator, explained that the operations were commercial placer operations employing settling ponds and recirculation techniques. He added that the small recreational activities did not require a permit. It was reported that there were four commercial operations along the Rogue River whose proprietors have been reluctant to communicate with the Department about required permits.

Commissioner Phinney inquired how many of the municipal sources listed on page eight were treatment plants and how many were lagoons. Mr. Harold Sawyer, Assistant Director in charge of water quality, stated that he understood there was only one lagoon listed, the Winbrook facility in Eugene.

Commissioner Crothers asked that Mr. Myles summarize the Program Activity Report so that those present who hadn't read the report could learn of the Department's extensive efforts. This was done.

Commissioner Somers inquired if permits had been issued to Pennwalt, Oregon Steel Mills, and Portland Resource Recovery and received an affirmative reply.

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Commission approve Department action on plans and permits for the month of April as reflected in the report.

#### TAX CREDIT APPLICATIONS

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Commission approve eleven tax credit applications as recommended by the Director and set forth in distributions to the Commission. The applications were numbered as follows: T-636, T-638, T-639, T-642, T-643, T-647, T-648, T-652, T-653, T-654, and T-657.

#### PUBLIC FORUM

(Mrs.) Marlene Frady of the East Salem Environmental Committee addressed the Commission on the subject of HB 2029, legislation dealing with noise pollution control. Representing the people who live near the Bethel PGE power plant, Mrs. Frady made it clear she did not wish to cast blame and would not address the Commission if Dr. Crothers were absent. She asked if the comments made by Dr. Crothers before the House Environment and Energy Committee on March 25, 1975 regarding HB 2029 were representative of the members of the entire Commission. Mrs. Frady excerpted Dr. Crothers' statements as taken from the tape of the House Environment and Energy Committee hearing regarding noise and infrasound. Dr. Crothers reportedly stated that, in his opinion, noise is what a person becomes accustomed to and depends enormously on individual sensitivity; that noise pollution is not the hazard to public health that water or air pollution are; and that PGE should acquire larger easement around the plant site. Also, it was reported that he expressed concern about the enormous responsibility of the Commission in making economic decisions that could involve millions of dollars and said he believed any required cutback (due to budgetary problems), should start with noise.

Mrs. Frady asked the Commission to state its position on HB 2029; either for or against. She asked whether or not the Commission supported Section 2 of the bill. Chairman McPhillips responded that it is not the policy of the Commission to take a stand on any bill. He indicated that at various times all the Commissioners have been asked to answer questions regarding bills that affect the Department and have been known to do so. He added that no public stance on any bill had been assumed. He noted that the Commission does not make laws. Chairman McPhillips indicated to Mrs. Frady that her question had been answered by her comment that Dr. Crothers signed the register as representing the EQC but did not mark "for" or "against".

Commissioner Hallock noted that it was her recollection that when the EQC adopted current noise regulations, it was conjectured that these would protect those in the Bethel project's vicinity. Later, when this conjecture

proved erroneous, it was Commissioner Hallock's recollection, the Commission advised the neighbors of the project to seek legislation empowering the Commission to control infrasound. On this basis, Commissioner Hallock opined, Mrs. Frady's position was quite understandable.

PUBLIC HEARING: TO CONSIDER ADOPTION OF ORDER PROHIBITING CONSTRUCTION OF SUBSURFACE SEWAGE DISPOSAL SYSTEMS IN CERTAIN (MORATORIUM) AREAS

Mr. Jack Osborne of the Department's Land Quality Program presented the staff report. This report mentioned several local areas of previous moratoriums on new construction of subsurface sewage systems. It was legal counsel's opinion that 1973 legislation vesting in the Commission power to regulate subsurface sewage disposal (ORS 454.605 to 454.745) pre-empted the local moratoriums. The Director recommended that the Commission adopt, both as a temporary rule and as an order pursuant to ORS 454.685, several areas of moratorium previously enforced locally. During the 120-day life of the rule, it was contended, the Department could hold hearings in each local area affected and evaluate the advisability of each moratorium.

The moratoriums in issue were as follows:

Jackson County - three areas.

Josephine County - the Fruitdale-Harbeck-Redwood sewage disposal emergency area.

Douglas County - the Glide-Idleyld Park area.

Marion County - City of Donald.

Benton County - Southwest Corvallis area and the following subdivisions:  
Princeton Heights, North Albany.  
Kingston Heights, North Albany.  
Kingston Heights, 1st Addition, North Albany.  
Strawberry Acres, North Albany.  
Strawberry Acres, 1st Addition, North Albany.  
Country Estates, Lewisburg Area.  
Country Estates, 1st Addition, Lewisburg Area.  
Deerhaven Heights, S.E. of Philomath.

Linn County - Midway-Foster area.

Columbia County - Scappoose dike land septic tank ban area.

Mr. Osborne noted that, on May 16th Jackson County officials, after a detailed preliminary study, had conducted a hearing on the advisability of the Jackson County moratorium. The conclusions flowing from that hearing were that the proposed moratorium area in Jackson County was no longer needed. Mr. Osborne contended, by way of a revised Director's recommendation, it was unlikely a Departmental hearing would yield results differing from those advanced by Jackson County. For these reasons Mr. Osborne reported the Director's recommendation to delete Jackson County from the list of moratoriums sought to be invoked by temporary rule.

Commissioner Hallock asked whether or not Jackson County had used topographical health overlay maps in coming to its decision about the moratorium. Mr. Osborne replied that Jackson County officials were present to give a full account of the procedure they undertook. He added that the Department did not have topographical health overlays for the areas in question.

Mr. Tam Moore, Chairman of the Board of Commissioners for Jackson County, summarized a study conducted with regard to the proposed Jackson County moratorium area and presented the conclusions and recommendations resulting from that study. They were as follows:

- 1) Even though the previous epidemic levels of infectious hepatitis have subsided, no meaningful conclusions can be drawn concerning the effect of the moratorium in bringing about this fact.
- 2) The unworkable backlog of sewage disposal permits existent in 1973 has since been overcome. It is not expected that the removal of the moratorium would cause more than a temporary short-term increase in the workload of the sanitation section of the Department of Planning and Development.
- 3) Nearly one-third of the moratorium area has soil characteristics offering at least a 35 percent chance of finding a suitable site on five acres.
- 4) Sewer lines installed since 1973 presently or will soon serve about 900 homes and businesses, a high percentage of which were previously served by subsurface systems within the moratorium area.
- 5) Approximately 350 acres (2.5 percent) of the moratorium have been annexed by the cities of Medford and Central Point, and are subject to municipal services.
- 6) Countywide zoning adopted in September 1973, in concert with the Comprehensive Plan adopted in June 1972, precludes new residential development at densities not supportable by soil conditions, unless public water and sewer services are available and public need can be demonstrated.
- 7) Of the 3,411 existing lots of less than five acres in size within the moratorium area, only 599 or 18 percent are undeveloped at the present time. Of this number, nearly 100 are within soil areas offering at least a 35 percent chance of finding a suitable site on five acres.
- 8) Potential "prior approval" subsurface disposal permit applications within the moratorium area number only about 50, and are not concentrated in any particular location.
- 9) The question of possible health hazard stemming from the cumulative effect of otherwise individually acceptable subsurface systems cannot be answered without extensive monitoring, testing, and other research techniques beyond present capability.
- 10) The moratorium has served well the purposes for which it was established; however, it does not seem to sufficiently meet the requirements of present law to justify its continuation.

Based on these findings, the Moratorium Study Committee did, on May 14, 1975, unanimously recommend that the Septic System Moratorium of March 21, 1973 be lifted.

Chairman McPhillips inquired if a reported dispute over the South Medford sewer project of the Bear Creek Sanitary Authority would have any effect on the provision of sewer service to certain areas in the proposed moratorium. Mr. Moore replied that, though a suit was pending in federal district court, the project was almost completed and, in his opinion, would soon be a matter of fact. It was added that a series of negotiations involving the West Side sewer project were underway. It was noted, however, that the sewer would not affect the moratorium area.

Commissioner Hallock, upon asking Mr. Moore if any orchards would be damaged by sewer trunk lines, received the answer that Mr. Moore was unaware of any such problem. Mr. Moore noted that the City of Medford annexed one orchard and was removing the trees. Mr. Paul DeBonny, Administrator of the Jackson County Department of Planning and Development, explained that Bear Creek Valley Sanitary Authority, the City of Medford, and Jackson County had entered into an agreement to spend a 120 day period studying resolutions toward land use planning designed to protect existing agricultural interests as much as possible. Commissioner Hallock noted that Senator Hannon had stated that orchard owners were complaining of possible interruption of their use by sewer projects. She asked if any action proposed for the Commission today would exacerbate this problem. Mr. DeBonny answered that this was not the case.

Commissioner Somers asked if anyone representing the Bear Creek Sanitary Authority was present and received a negative answer. He then asked if Mr. Moore could enlighten the Commission on other general problems in the Jackson County area. Mr. Moore offered to discuss these matters with Commissioner Somers at lunch or some other time, noting that a public hearing was in progress and that he did not wish to consume more than the appropriate amount of the Commission's time.

In response to inquiry from Chairman McPhillips, Mr. Moore stated that, absent the moratorium, the County would proceed to receive applications from owners in the moratorium area which would be reviewed on their merits. Applications not conforming to existing Commission rules would be denied, he assured Chairman McPhillips. Chairman McPhillips asked if the Jackson County would be served by the Commission's invoking a moratorium and granting a variance procedure from the moratorium to the County. Mr. Moore replied that he found little substance to support the adoption of the moratorium and suggested that the Commission's current rules, combined with any legislation with regard to variances which might be forthcoming, would serve better.

Commissioner Crothers asked if, given the deletion of the moratorium, Jackson County planned to proceed on standard rules governing subsurface sewage system installations and contemplated no variance procedures in the



moratorium areas. Mr. Moore replied that, absent delegation of authority to Jackson County as a contract agent of the DEQ, the County would have no authority to proceed with variance permits.

Commissioner Somers asked if it was the conclusion of those conducting the investigations in Jackson County that the previous moratorium had, in fact, reduced the incidence of hepatitis. Mr. Moore replied that this was not the conclusion; that it was concluded that the moratorium's effect could not be evaluated positively or negatively with regard to hepatitis cases. He added that the incidence of hepatitis had abated within and without the moratorium area.

Mr. Richard Reiter, Administrator of the Department's Southwest Region, agreed the moratorium should be deleted due to the imminence of sewer service in much of the moratorium area, and the responsible management exercised by the Jackson County Department of Planning and Development. He added, however, that it was the intent of the regional office to coordinate with Jackson County during the coming winter and discover whether certain small geographic "pocket" areas would appropriately be subject to a later, much smaller, moratorium.

Commissioner Somers asked if Mr. Reiter would explain the circumstances in Jackson County leading up to the moratorium. Mr. Reiter stated it was his understanding that intense development prior to 1973 was dealt with under less stringent rules than those currently in effect. The result, he said, was the evolution of a problem with which the local people dealt through invoking their own moratorium.

Commissioner Somers asked if Mr. Reiter was, in essence, saying that, under the current stringent rules, there was no need for a moratorium in any area of the state. Mr. Reiter responded that there was, in his view, a need for a moratorium in those areas where, even though individual lots might qualify under the present rules, it was undesirable to encourage new development in an area ridden with health and pollution problems. He stated that this rationale would apply to two other moratorium areas in Josephine and Douglas Counties upon which he wished to comment later.

Commissioner Somers asked if Mr. Reiter predicted no wholesale installation of septic tanks after the moratorium was removed and whether Mr. Reiter thought that State and federal planning and grants would be used to help the local people provide sewer service. Mr. Reiter replied he did not expect the problem to recur, given local efforts to abate the problem and the stringency of current Commission regulations on subsurface sewage. He added that many of the houses in the area were over 30 years old and that the problem, which was essentially solved, had been a problem of long-standing with older facilities.

Mr. Jim Pomejavich, an attorney representing certain property owners in the Deerhaven Heights Subdivision in Benton County, near Philomath, addressed the Commission. Mr. Pomejavich contended the problem in the proposed

moratorium areas could be handled under existing rules on a case by case basis. He argued that the problem was an "acre by acre" problem, not deserving of a blanket moratorium. It was pointed out that a moratorium which included lots otherwise suitable for septic systems was tantamount to condemnation of those lots. He conceded that Deerhaven Heights, a subdivision said to contain approximately 100 acres in some 30 lots, had low-lying areas clearly unsuited for septic systems. On the other hand, he argued, a community sanitation study of the area clearly indicated that some of the property on higher ground could adequately support a septic system. He added that several systems in the area now were functioning perfectly well on lots varying from one to five acres in size. Mr. Pomejavich conjectured that Benton County health officials felt existing rules would allow for competent handling of Deerhaven Heights. He noted that some of the people he represents were sure their property would not support a septic system. On the other hand, he argued, some of his clients had properties which could support a septic system and should be allowed one.

Mr. Pomejavich asked the Commission to explain what variance procedures would be available should a moratorium be invoked. Mr. Cannon answered that current legislation (SB 34) would, if enacted, provide the Department and the Commission with powers to adopt rules for variance procedures previously unauthorized. He went on to explain that, under the proposed legislation, variance officers with expertise in soils sciences and sanitary systems would be named. The Department and the Commission, he said, would adopt rules specifying the methods to be used in naming variance officers who in turn would be empowered in specific cases to approve variances from the existing rules. Mr. Pomejavich predicted that, under this legislation, it would take the Commission and the Department from six months to a year to adopt the requisite rules and appoint personnel to begin considering variances. He asked if there were any interim relief by way of variance which would be available to residents of Deer Haven Heights in the event the moratorium were invoked.

Commissioner Crothers responded that, in his view, variances were not contemplated where a blanket moratorium was in effect. He added that these moratoriums had first been invoked by local authority and asked if Mr. Pomejavich was representing a local governmental agency. Mr. Pomejavich answered negatively, adding that he believed Mr. Heydon from Benton County was present and could be heard on the subject of local government's position.

Commissioner Somers inquired of the possibility for further subdivision in Deerhaven Heights, and its attendant increase in density of septic systems. Mr. Pomejavich responded that in his believe, under current zoning the minimum lot size would be five acres, leaving very little room for further subdivision in the area. He added that under previous zoning regulations some lots as small as one acre were developed.

Mr. Pomejavich proffered to the Commission a report on the sanitation study done in the area and a topographical overlay of the area which demonstrated that both high and low elevations were present in the subdivision.

He suggested that, if the moratorium were adopted, the Commission should order the Department to conduct a public hearing in the affected area, not simply authorize the Department to do so.

Commissioner Somers inquired why, given the previous regulations imposed by the Health Department, the problems now existing in Deerhaven Heights had occurred. Mr. Pomejavich replied that the Health Division's regulations had been subject to various changes and might have been inadequate during some previous term. Commissioner Somers opined that the rules had not changed to any great degree. Mr. Pomejavich added that there was always a risk of individual error in the interpretation of the rules. Commissioner Somers inquired as to the possibility that sewer service might be extended to Deerhaven Heights and received the answer that, in Mr. Pomejavich's opinion, it was unlikely given that the nearest sewer trunk line was some two and a half miles away in Philomath. Mr. Heydon concurred in this view.

Commissioner Somers inquired as to the average value of the tracts in Deer Haven Heights and received Mr. Pomejavich's estimate that \$1,000 to \$2,000 per acre would be a conservative guess. Mr. Pomejavich said that he knew of one owner holding 10 acres who had received an offer of \$15,000 for the land alone. He added that some of the residences were probably \$50,000 to \$60,000 in market value. Commissioner Somers inquired what would be the benefit in owning an expensive house if the septic system were working improperly. Mr. Pomejavich replied there were evidences of failure but no residence had been condemned and he knew of no problem which could not be corrected.

Directing the Commission's attention to Exhibit 18 of the staff report (an older map of Deerhaven Heights), Mr. Pomejavich pointed out several lots which had experienced septic tank problems and noted that in each case the lot was on low ground. Mr. Pomejavich then pointed out several lots which had experienced no malfunction and which were all on higher ground. In response to Commissioner Somer's inquiry, Mr. Pomejavich pointed out that, while he had been referring to lots with septic installations which had not experienced trouble, there was much undeveloped high ground left in the subdivision which, in his opinion, could support new septic systems.

In response to inquiry from Commissioner Hallock, Mr. Pomejavich pointed out that there were approximately 20 homes in the Deerhaven area, leaving the potential for development of approximately 15 more lots. He assured Commissioner Hallock that some of these undeveloped lots would not be developed under existing septic tank installation requirements and contended that the Department's rules governing septic tank installations would insure freedom from health and pollution hazards in the remaining cases.

Answering a question of Commissioner Phinney, Mr. Pomejavich stated that, of those he represented, only 2 presently owned dwellings in Deerhaven Heights.

Chairman McPhillips asked Mr. Pomejavich for an estimate as to how much construction would take place in the Deerhaven area during the next 120 days with no moratorium. Mr. Pomejavich stated that he knew of one, and perhaps as many as three, applications for permits that would be filed immediately. He added that he did not know if all of these applications would be found acceptable under current rules, and predicted that at least one of them would be found acceptable and result in immediate commencement of construction. Mr. Pomejavich cautioned that of the 17 remaining undeveloped lots in the area, he only represented a few owners and could not speak for the intentions of the remaining owners. He asked that the Commission call upon Mr. Heydon of Benton County to be sure that he had not unintentionally misstated Benton County's view in the matter.

Mr. Roger Heyden, Benton County Sanitarian, presented the Commission with written testimony prepared by his office with regard to areas of moratorium proposed for Benton County. He stated that the Commission could examine the testimony at its leisure but that he wished to comment fully on the Deerhaven Heights area. Mr. Heyden referred to a detailed study conducted jointly by the State Health Department and his office during April of 1974. He noted that, as of the present, there were 22 single family dwellings in the area and that subdivision since 1968 had resulted in a total of 37 lots, developed and undeveloped, in Deerhaven Heights. Zoning ordinances effective August 1, 1974, he reported, left an outlook of continued low density population in the area due to the minimum lot size of 5 acres now required. Mr. Heyden stated that lot sizes ranged from approximately one acre to greater than five acres and that the area topography involved sloping in all directions, ranging from 3 degrees to 10 degrees. He reported a predominant slope influence to the southwest. Mr. Heyden went on to state that the predominant soil type had a permeability of .06 to .2 inches per hour (low permeability) 14 to 39 inches, due to a relatively heavy clay-loam texture. He noted that the southwest portion of the area had a soils classification involving less permeability than the rest of the area, .06 to .2 inches per hour at 18 to 20 inches. Mr. Heyden said the soil classifications were from soil conservation charts and might vary within the Deerhaven Heights area. Dealing with adverse geological and water table formations, Mr. Heyden explained that the sloping toward the southwest formed a natural bowl which resulted in perched water tables at the restrictive depths during certain times of the year. He reported that well logs in the area, an area supplied primarily by individual sources, indicated adequate water supply at the present time. He mentioned the proximity of one community system whose capacity was unknown, and the prediction that future development of Philomoth, two and a half miles away, would not result in community water from that quarter being supplied to Deerhaven Heights in the near future. A stream one half mile from the Deerhaven Heights was not considered a major surface water source. Mr. Heyden reported that 36% of the 22 houses investigated in the survey had failing systems. He added that attempts to correct the failing systems could not be evaluated at the present time. It was the opinion of Mr. Heyden's office that the area must be restricted to low-density development to accommodate sub-surface sewage installation systems.

In response to inquiry from Commissioner Somers, Mr. Heyden stated that the present rules gave neither difficulty of understanding nor difficulty of enforcement and would, in his view, be adequate to protect Deerhaven Heights in the absence of a moratorium.

Commissioner Somers asked Mr. Heyden why it was necessary to have blanket moratoriums in any of the areas of Benton County, given the case by case possibilities of administration of the current stringent rules. Mr. Heyden replied that, in his belief, the moratoriums had arisen from a local philosophy wherein it was determined better to restrict further development in areas which already experienced a health problem, even though the restriction might include lots which otherwise would be suitable for septic tank installation. Commissioner Somers questioned whether or not this amounted to inverse condemnation.

Commissioner Crothers asked Mr. Heyden what would be the desire of the Benton County government in this matter and received the reply that, in Mr. Heyden's understanding, local government would prefer that local hearings be conducted with regard to each moratorium area. Commissioner Crothers asked if this meant they would have the Commission continue the moratorium in each of the areas until such time as local hearings could be conducted. He received an affirmative answer.

Commissioner Crothers asked Mr. Cannon what would be the time span necessary to conduct the requisite local public hearings and learned that the Department would attempt to conduct the hearings within a month and report on them June 27th.

Noting that past rules had resulted in a 36% failure, Commissioner Phinney asked Mr. Heyden what, in his professional opinion, would be an acceptable percentage of failures. Mr. Heyden replied that, on a statewide basis, he did not think a 20 to 25 percent failure rate on septic systems installed since 1968 was an uncommon occurrence. Commissioner Phinney stated that, while this percentage might not be uncommon, it was hardly acceptable in view of the investments lost by those 20 to 25 percent of the people installing the systems. Mr. Heyden agreed and noted that, in his view, the previous rules had been vague and unmanageable and predicted the present rules would improve upon this percentage.

In response to Commissioner Somers' question, Mr. Heyden stated that his experience in interpreting the rules had gone back to 1966. Commissioner Somers noted that Mr. Heyden had considerable experience in the field and added that it should be remembered that many septic systems would fail over a protracted period of time. Mr. Heyden agreed with this assumption. He said he felt there was a concensus of opinion among those in the field that there were now definable standards and concurred with Commissioner Somers that the enforcement of these standards would result in increased longevity for septic systems. Mr. Heyden added that, at the time the local moratoriums were invoked, the standards had not been satisfactory. Mr. Pat Emmons, owner of property in Kingston Heights, stated that he had a subsurface sewage disposal permit for his Kingston Heights property prior to the moratorium and urged that, if the Commission found Benton County authorities capable of handling Deerhaven Heights under existing rules without a moratorium, the same considerations would apply to Kingston Heights.

Mr. Robert Steel presented himself as a homeowner in Kingston Heights who had been victimized by a poor septic system installed to serve a home he had purchased. He stated that within 30 days after his purchase of this brand new home, a septic problem was apparent. He said there were many problems in the Kingston Heights area similar to his. Mr. Steel stated that he had \$35,000 invested in a house which by rights should be condemned and asked who protects homeowners from such catastrophies. Mr. Steel said subsurface sewage had risen in his backyard, rendering it impossible for him to build a fence in the backyard, plant a garden there, or otherwise enjoy the backyard.

In response to Commissioner Somers' inquiry, Mr. Steel stated that he had been in the house since February of 1974 and that he had discovered that the warranty required for new houses contained several loopholes which made it impossible for him to obtain any redress against the seller of the house. Mr. Steel reported that the builder was going bankrupt and he was unable to obtain satisfaction from that quarter. He said efforts to move against the required \$2,000 bond had been frustrating. Commissioner Somers noted that a \$2,000 bond was hardly sufficient to secure a \$35,000 investment.

Mr. Steel contended that there had been too many problems in the Kingston Heights area to permit further construction and urged that the moratorium be invoked. He argued there had been too many unexplainable mistakes involving new septic systems to risk further installation.

He informed Commissioner Phinney that there were approximately 30 houses in the area and that he did not know the exact number of houses experiencing septic problems because there was a tendency in the neighborhood to keep the matter quiet. He reported that there had been instances of the sale of houses with faulty systems which left the buyer with the problem. Because of his propensity to bring the matter out into the open, Mr. Steel said, many of his neighbors declined to associate with him.

In response to inquiry from Commissioner Crothers, Mr. Steel reported that current discussions going on with Albany indicated that it would be 5 to 10 years before sewer service could be made available for the Kingston Heights subdivision. He added that the indications at present were that the Kingston Heights area would have to be annexed to the City of Albany before sewer service would be available. In response to Commissioner Somers' inquiry, Mr. Steel reported that he lived on Woodcraft Street in the First Addition of Kingston Heights on Lot 3, Block 6. He reported this was a low-lying lot at the foot of the hill surrounding the subdivision. Mr. Steel said his home was built in the latter part of 1973 and he had moved into it in February of 1974. Mr. Steel emphasized the catastrophic effects of situations where builders construct houses for sale to innocent persons, leaving buyers with the problem. He noted that in one instance in his neighborhood a faulty system would not receive any redress because the builder was now bankrupt. He mentioned the effects on family life that evolved from the unpleasant odor and the unavailability of the land for normal recreational uses or gardening purposes. Mr. Steel urged the Commission to contemplate such circumstances prior to making any decision on the advisability of the moratoriums.

Mrs. Edna Richards of Linn County addressed the Commission with regard to the proposed moratorium in the Foster-Midway area. She inquired as to what percentage of septic tank failure was considered a health hazard and received an answer from the Department's Mr. Osborne that, in his recollection, something on the order of 20% was the threshold used by the State Health Division. Commissioner Crothers added that a single failing septic tank did constitute a health hazard.

Mrs. Richards asked if she correctly understood the Benton County Sanitarian to have stated that septic tanks in a moratorium area had been repaired after the invocation of the moratorium and received an affirmative answer. Mrs. Richards reported curiosity as to why she had been informed by the Linn County Sanitarian that the moratorium precluded undertaking repairs of septic systems.

Mrs. Richards objected that she was being forced to annex to the City of Sweethome while the city predicted it would take anywhere from 5 to 20 years before sewer service would be provided and that in some areas of Foster-Midway sewer service would never be provided. Chairman McPhillips told Mrs. Richards that this problem was one which the Commission could not address. Mrs. Richards replied that she understood but wished, in any event, to bring it to the Commission's and the public's attention.

Mrs. Richards also inquired as to what "strings" would be attached to the City of Sweethome's provision of sewer service to her area. Mr. Cannon assured Mrs. Richards that as soon as plans were completed in this area everyone concerned would be informed whether or not they had to hook up, what amount of property assessment would be involved, what the sewer charges would be, and so forth. He added that legislation currently pending would involve an economic assessment of annexation as well as a health hazard assessment and permit the municipality, in appropriate cases, to avoid annexation if it appeared that the cost to the city of annexation and provision of services would be impossible to restore through the imposition of assessments.

Mrs. Richards stated that much of the problem in their area was caused by poor drainage and asked that consideration be given to improvement of the drainage system along Highway 20.

Commissioner Somers urged Mrs. Richards to inform herself of what the regulations are with regard to repair of systems and noted that repair was permitted where it did not involve expansion of the facility. Mr. Cannon added that it was his understanding that when a moratorium existed, repair which did not contemplate expansion of the system would be perfectly permissible and asked that Mrs. Richards talk with him after the hearing so that her misunderstanding could be ironed out.

Mr. C. William Olson of Josephine County Health Department addressed the Commission. He pointed out that the boundary of the Josephine County moratorium area (Fruitdale-Harbeck-Redwood) was inaccurate as reflected on the Department's exhibit 3 of the staff report in that it included an area which was serviced by sewer. Mr. Olson reported that everything west of Allan Creek was hooked up to sewers and no longer in need of moratorium action. Mr. Olson stated that the remaining area involved land which would not qualify for subsurface installation under existing rules, leaving no possibility for development even in the absence of a moratorium. Consequently, it was reported, Josephine County Board of Health, in a meeting one month previous to the Commission meeting, had decided to take no stance whatever on the Commission's decision with regard to continuing or discontinuing the moratorium.

Commissioner Somers asked if Josephine County had made a predetermination that the entire area was not fit for septic installation without examining it lot by lot. Mr. Olson replied that the area had been accepted by the people as a problem area for many years now and there was no pressure at all to grant permits for septic tank installations in the area. He added that it was part of the Redwood Sewer District and plans to service it were just getting under way. He alluded to a survey taken in 1970 which indicated a failure percentage as high as 40 percent for the area. Mr. Olson assured Commissioner Somers that, without qualification, there was not a lot in the proposed area which under current subsurface sewage regulations, would qualify for a permit. He added that it had been the custom to conduct tests during high-water, winter season in the area and that these had always had disqualifying results. Restrictive layers and winter water tables prevented their qualification, he reported.

In response to inquiry by Mr. Cannon, Mr. Olson reported that the Josephine County ordinances required hookup to sewers if the sewer was within 160 feet of the property line. He stated that no new septic installations would be permitted in that part of the moratorium now serviced by sewers and that existing systems, if found failing, would be required to hookup regardless of cost or distance.

Commissioner Somers asked if, under current rules, the permit applicant could be made to wait until the winter season prior to the decision whether to grant or deny a permit. Mr. Olson replied that, under current regulations, questions about the winter conditions could result in deferral of an application for purposes of winter testing and conceded that there had been some complaints about this process which had not thus far been extremely adamant. He cited realtors as the group complaining most. Mr. Olson added that the area was virtually one hundred percent given to winter failures and that few failures occurred during the summer dry season. He stated that the Health Department had not been overly stringent in attempting to correct existing failures due to the probability of sewer service to correct the problem in the near future.

Mr. Dick Lermon, Marion Co. Health Department, addressed the Commission with regard to the moratorium proposed for the City of Donald. Mr. Lermon pointed out that the City of Donald had experienced little regulation in earlier days, had problems involving hookup of sewer facilities directly to drainage systems, had invoked its own moratorium in April of 1974, and had undertaken a sewer study. On these considerations, Mr. Lermon urged the Commission to invoke a moratorium in the City of Donald until such time as municipal sewage collection and treatment becomes a reality for Donald.

Commissioner Somers inquired if he had heard correctly that some systems in Donald were hooked directly to storm sewers without the intervention of a septic tank. Mr. Lermon affirmed that there was evidence of this along with evidence of other extremely obsolete practices. Mr. Lermon noted that most of the houses in Donald were very old. Commissioner Crothers noted that many of the houses in Donald were 50 years old or more. Mr. Lermon added that the majority of the lots in Donald were between 7,000 and 10,000 square feet, small lots which tended to exacerbate the situation.

Mr. Lermon and Commissioner Somers concurred that most of the lots of Donald would not qualify for septic system installation under current rules. Commissioner Somers inquired if lot owners whose property would qualify, should be considered. Mr. Lermon responded that, with the extremely high winter water table in the area, he did not believe that any lots would qualify. Commissioner Somers then asked what would be the need of the moratorium. Mr. Lermon said that while it was a matter of opinion, his office's position was that a moratorium should be invoked as a safeguard.

Richard Reiter, administrator of the Department's Southwest Regional Office, addressed the Commission with regard to the proposed moratorium in the Josephine County area, noting that in the Fruitdale-Harbeck area success had been obtained in attempts to provide sanitary sewer service. Mr. Reiter added, however, that in the Redwood area there was not sufficient sewer service at present. Mr. Reiter reported that the EPA's requirement of an EIS for the proposed Redwood sewer project was causing delay in the project's completion. In the interim, he stated, the area was still besieged with numerous failing systems and the rationale to the original moratorium was still valid. On these considerations, Mr. Reiter urged the moratorium be invoked for at least six months to enable local hearings to take place which might result in the resolution of some of the delays in the sewer project and might result in changes of the moratorium boundaries where the same were found appropriate.



Referring to Mr. Olson's estimation that none of the Redwood area lots would qualify under existing rules, Mr. Reiter contended that this would not be known for sure until each individual lot was evaluated. He then stressed the importance of a moratorium to preclude the introduction of new people in an area declared to be a health hazard area. This was important, he stated, regardless of whether or not new systems could be expected to work. Even with a properly working system, it was disadvantageous to allow new development in a health hazard area, he argued.

Commissioner Somers inquired rhetorically if any of the property owners whose lands would qualify under existing rules had approached the Board of County Commissioners toward obtaining a rebate on the property taxes paid. It was Commissioner Somers' opinion that serious consideration ought to be given to the plight of the lot owner who would qualify in a moratorium area. In Commissioner Somers' opinion, if rules in effect now worked properly, it might be good judgement to forgo a moratorium.

Commissioner Somers inquired if newcomers would not be made aware through their olfactory senses of the existing problem and, thus apprised, better left to make their own decision as to whether they wished to enter the area. Mr. Reiter responded that, at certain times of the year, the problem was not readily apparant. He added, also, that there might be those who wished to develop their property after holding it for a lengthy period of time and were ready to do so not withstanding the problem.

Commissioner Hallock suggested that the argument used by Commissioner Somers might work both ways in that it might be the case that, given the non-qualifying nature of the great majority of the lots concerned, a moratorium would have minimal impact on a few lot owners while, at the same time, affording maximum protection for the community. Mr. Reiter responded that he would favor a moratorium until such time as the regional office and local authorities had time to examine the problem and return to the Commission with more detailed information. Mr. Reiter said this recommendation held for Douglas County also.

Turning his attention to the Glide-Idleyd area of Douglas County, Mr. Reiter reported that many bond issues had failed in attempts to provide funding for sewer services and that no sanitation districts remained in tact. He stated, however, that Douglas County officials were presently studying the possibility of providing a pressurized collection system to the area which would substantially reduce the problem at a minimal cost. In view of the continued existance of the high failure rate of systems in the Glide-Idleyd area as revealed by a survey undertaken in the fall of 1974, Mr. Reiter urged that a temporary moratorium be invoked in order to afford time for public hearing and the gathering of more definite information about the area. Mr. Reiter noted that one issue in any proposed hearings should be the question of boundary changes in light of the fact that the 1974 survey did reveal certain areas within the moratorium suffering a rather low failure rate at present and with soil make-ups which rendered repair of systems possible. Evaluation of the progress on the possible installation of pressurized system would be another issue, he added.

An unidentified speaker presented herself as a property owner on Whistlers Lane, on the very fringe of the Glide-Idleyd moratorium area. She stated she was informed by Douglas County officials that there was little likelihood the proposed pressurized system would provide service to her area, an area which was five miles out of Glide. She lamented that her mother owned a piece of property contiguous to hers and found the property unusable for a great many

purposes, including as a dwelling site under the existing moratorium. She objected that the moratorium in its present form was sketchy and that people near her could install systems while her mother could not. She noted that her mother's land was of the same characteristic as hers and that she had an adequate septic system which was installed with the advice of county sanitarians and included a pumping device to carry the effluent to the drainage field.

Dr. Crothers suggested that a motion might be in order to adopt the moratorium except in those areas where written request comes from local county governments asking for the abandonment of the moratorium. He also suggested that the directions to the Department not only authorize but instruct the Department to conduct public hearings in the local areas of moratorium.

Mr. Raymond Underwood, Commission Counsel, expressed reservation about predicating a present action on a future writing, and suggested that the Commission try to make definite its resolution of the matter today, either invoking all the moratoriums, or deleting those requested to be deleted by local authorities. Commissioner Crothers agreed.

It was MOVED by Commissioner Crothers, seconded by Commissioner Phinney, and carried that the amended Director's recommendation be adopted invoking the moratoriums in all the proposed areas on a temporary rule basis with the exception of that area of the proposed Jackson County moratorium, and instructing the Department to conduct public hearings in all of the locally affected areas as was suggested.

Mr. Pomejavich asked if Dr. Crothers had misunderstood the position of Benton County with regard to whether or not moratoriums were desired in that area. Commissioner Phinney responded she had attended a meeting of the Benton County Commissioners recently wherein it was her understanding that the Commissioners thought the moratoriums were needful. Commissioner Crothers added that the moratorium was temporary in nature and only intended for a duration of time which would allow hearings to be conducted and recommendations to be formed in the light of additional evidence. He added the hope that by the next Commission meeting, or in any event, by the Commission meeting thereafter, the Department would be prepared to make recommendations to the Commission with regard to each of the moratorium areas.

#### COMMENTS BY JACKSON COUNTY OFFICIALS REGARDING SUBSURFACE SEWAGE DISPOSAL PRIOR APPROVALS

Mr. Paul A. DeBonny, Director of the Jackson County Department of Planning and Development addressed the Commission. Mr. DeBonny noted that his Department took over the task of administering subsurface sewage disposal regulations in Jackson County in July of 1974. Since that time, he reported, there had been a series of administrative problems which had evolved. He noted that it was at the invitation of Commissioner Hallock that he was appearing to discuss these problems. Mr. DeBonny stated his wish to concentrate on two primary areas of concern, those being the area of prior approvals, and the area of variance procedures. Mr. DeBonny recounted a series of vacillating decisions with regard to property requested to be reviewed by Realtor Mr. Walt Sellers of Jackson County. Mr. DeBonny cited the two-month period consumed prior to final decision on prior approval as evidence of administrative problems regarding prior approvals. In the matter to which Mr. DeBonny alluded, the site was finally recognized as one subject to the prior approval clause based on the fact that, while it may not have qualified as an approval in accord with the rules in effect at the time regarding the minimum depth of the water table,

this provision of the previous rules was more restrictive than the 1974 rules. It was decided that where previous rules were more restrictive than the present rules, conformance with the present rules in the relevant respects would be sufficient to support a recognition of prior approval. Mr. DeBonny emphasized that he had recounted the incident not to cast aspersions on anyone but simply to illustrate the type of problem being encountered in the administration of the prior approval provisions. Mr. DeBonny then addressed himself to a position paper prepared by his Department to inform the Commission of his staff's position on the matter. Mr. DeBonny noted that when the Commission decided to honor all outstanding prior permits and approvals, three basic criteria were set down: (1) expressly authorized use of subsurface sewage disposal for an individual lot or for a specific lot within a subdivision, (2) approvals or permits which were issued by a representative of a state or local agency authorized by law to grant such approvals, (3) issuance in accordance with all rules in effect at the time. These items, Mr. DeBonny contended, had been interpreted in many ways and with changes over periods of time. Mr. DeBonny contended that fine distinctions could make the difference between issuance and denial and were therefore extremely important. Consistency, he emphasized, should be sought in such matters. The basic reason for recognizing prior approvals, he said, was to protect the landowner who had invested on the strength of a good faith belief that a septic tank permit was available. Mr. DeBonny argued that once it had been established that a permit was issued, the permit should not be measured against any rules. In deciding whether or not to recognize the prior permit, he contended, the agency should go back to the intent of the law to prohibit water pollution and protect the public health. He contended that in adopting the proposed amendments to the subsurface sewage regulations, the Commission should take the course of ordering all prior approvals except those in the extreme cases where successful installation and maintenance of a system was considered unlikely in the judgement of qualified professionals.

He contended that extension of recognition of prior approvals for another year would solve nothing unless a more equitable process were established for the administration of their recognition or non-recognition.

Turning to rule variances for local areas, Mr. DeBonny noted that administrative rules cannot perfectly deal with all cases and thought it appropriate to create variance procedures to avert inequities in the rigid application of the rules. He reported that under current variance procedure, his county had applied for designation of its rural zoned areas by the Director and been turned down because the request went to parcels with a minimum lot size of five acres; whereas the Director had preferred that any designation be based on a minimum lot size of ten acres. A request for reconsideration had been turned down in anticipation of the passage of SB 34, which would create a statewide variance procedure. Mr. DeBonny thought it rather apparent that the legislature would pass SB 34 in some form and then some variance procedure would evolve. He was concerned that, due to the great area in Jackson County having severe limitations for subsurface systems, many applicants would apply for a permit, be denied after having paid \$50, and request a variance with an additional \$150 fee only to be denied again. Mr. DeBonny opined that professional sanitarians and soils scientists should be given more discretionary authority to determine suitability and design of systems. He thought a hearing officer should be necessary only in extreme cases where all available local remedy is exhausted. Based on these considerations, he made the following recommendation:

- 1) Environmental Quality Commission expand the O.A.R. concerning rural areas designations to specifically include compliance with the County's Comprehensive Land Use Plan, general rural character as designated by exhibit map, and minimum lot size of five acres.
- 2) Removal of the criteria for Prior Approvals that requires compliance with the rules in effect at the time, and substitute:
  3. Construction shall conform as nearly as possible with the current rules of the commission.
  4. The site is suitable for installation of a subsurface system (not including alternate systems unless approved by E.Q.C.) that will not pollute the waters of the state or endanger public health as determined by the Department.
- 3) Acknowledge that contract counties carry the full authority of statute that relates to the Department of Environmental Quality except for those areas specifically excluded by O.R.S. or O.A.R.

Mr. DeBonny urged that consistency and equitability be sought in the administration of any rules or statutes, and stated that problems existed which would have to be solved before the statutes could be administered in a manner conforming with legislative intent.

Mr. DeBonny stated that the reason for the last of his recommendations was extreme concern that, as a contract agent for the DEQ, the Jackson County Department of Planning and Development be able to issue or deny permits with a high degree of finality, and insure that all local remedies were sought prior to any further appeal.

Commissioner Somers inquired about Mr. DeBonny's procedure where prior approvals were discovered which did not conform to then existing rules. Mr. DeBonny replied that these were a problem. He noted that presently in Jackson County there was a danger that a great many permits would be subject to revocation and hoped that no stone would be left unturned which might lead to the granting of the permits. He feared that some permits might have to be revoked owing to technical interpretations of the rules, rather than a professional analysis of whether or not the system sought would pose a health hazard or water pollution problem.

Commissioner Somers asked for Mr. DeBonny's estimate of how many complaints flowed from a misinterpretation of staff's information to individuals and a failure to provide the individuals with the rule in issue so as to afford the individual an opportunity to study what could or could not be done. Mr. DeBonny replied that he thought very few problems of this nature arose, at least at the present time. Mr. DeBonny added that, since his Department took over the regulation of subsurface sewage, policies in force with the predecessor agency had been changed. He noted that the soils scientists had been instructed to evaluate each individual site with an eye to finding a portion of the site suitable for installation, rather than simply taking random tests at various points on the site. It was Mr. DeBonny's hope in operating the Department, to provide the maximum possible service to each individual.

Commissioner Somers then inquired how many private lagoons had been approved in Jackson County and whether or not any had been encouraged by Mr. DeBonny's department. Mr. DeBonny replied that he was unaware of the number of lagoons and that his Department did not encourage their use.

Commissioner Somers noted that a resident of a southern Oregon county had informed the legislature that that county sanitarian had forbidden him to install a septic tank on a 400 acre parcel of land. Mr. DeBonny responded that he was not aware of any such ruling having been made by his department. Commissioner Somers noted that it was the Commission which generally took the blame for such incidents.

Commissioner Somers asked how the Commission could effectuate Mr. DeBonny's third suggestion without actually returning the entire program to the county. Mr. DeBonny responded that he agreed with the concept of subsurface sewage regulations being left in a state agency to ensure uniform statewide administration. On this basis, he reported, he would not favor a return of the program to the county level. He urged, however, that the rules be drafted to avoid problems of interpretation and focus on legislative intent.

Commissioner Somers sympathized with the difficulties to which Mr. DeBonny alluded, agreed that in normal circumstances an applicant should not have to wait so long for interpretation of the rule, and recalled that in October the prior approval rule had been reevaluated and broadened even more than it had been originally. He asked if further broadening of the rule was desired. Mr. DeBonny responded affirmatively.

Jackson County Commissioner, Tam Moore, addressed the Commission and stated that he thought the problem was one of interpretation. He desired to inform the Commission of the scope of the problem encountered in Jackson County. He cited a report prepared by Mr. Dave Couch when the latter was a county employee in May of 1974 which analyzed the caseload of permits granted for undeveloped land over the 5200 files then in the Department's office. (Mr. Moore noted that the files now numbered over 5500). Mr. Couch's report indicated that, in 1971, 310 permits had been issued for undeveloped land. These had been preceded by standard percolation tests. In 1972, there were 534 undeveloped permits out of approximately 1100 applications. These had been granted in 50% of the cases after percolation tests and, in the remaining 50%, after soils analysis with the aid of back-hoe ditching. In 1973, it was reported, 968 permits were granted for undeveloped property out of 1379 permits. The total was, Mr. Moore reported, 1842 "undeveloped" permits out of 3300 granted in the three-year period. This amount, Mr. Moore reported, was over 55% of the total permits approved by the Jackson County Department of Planning and Development since May 1 of 1974. He added that approximately 160 prior approvals had been processed since invocation of the present rules, contending that this indicated the magnitude of the problem that lay ahead. Mr. Moore went on to quote from Mr. Couch's report, citing the latter's conclusion that the majority of the prior approvals were not valid under present rules due to a lack of information in the county's files. On the above consideration, Mr. Moore urged adoption of a rule going to the validity of the site itself, rather than going to what was contained in the files. He argued that it was a waste of Mr. Underwood's and Mr. Spies' time to sit in Portland and evaluate files and interpret rules when the problem was a problem going to the nature of each individual site. Mr. Moore interpreted Mr. Couch's report to indicate that of the prior approvals, outstanding in Jackson County, 882 probably could not meet the existing rules.

Commissioner Somers recalled that, in a neighboring county, a problem had occurred wherein the files indicated that, during spring high water runs, houses had been filled with 6 inches of water. Applications in these areas had been approved, apparently through the incompetence of the approving official. He inquired as to how the Commission should approach the problem of prior approvals without having to single out instances of incompetent behavior and fix blame. Mr. Moore suggested that the rule be amended so that the prior approval would receive recognition if it did not, in the opinion of the issuing official, constitute a health hazard or a water pollution problem. Mr. Somers rejoined that this would vest final authority in the discretion of a local official. Mr. Moore contended this would be appropriate if the applicant had recourse from wrongful judgement through the appeals procedure which had been set up.

Commissioner Somers asked Mr. DeBonny for an estimate of the cost that would be involved in having regulations printed up and adding the requirement that when a permit is sought the applicant receive a copy of the regulations so they can understand them. Mr. DeBonny responded that the principal problem with this was involved in people's reluctance to read handouts. He noted that fact sheets are often handed out in the case of permit issuances and seldom read. The only remedy for this problem that he knew was to persistently attempt to explain the regulations to people.

Mr. Moore added that, in his view, the basic problem was the lack of an adequate standard in the rule. He argued that the permit holder and the Department could both read the rule, but that the rule itself should go back to the question of health hazards and water pollution.

Chairman McPhillips inquired of Mr. Moore how long it was advisable to honor prior approvals. He noted that many of the prior approvals had been outstanding for several years.

Mr. DuBonny responded that, as was pointed out in his position paper, he felt that the time factor was not relevant in that the public would be protected by a basic standard going to the question of health hazards and water pollution.

CONSIDERATION OF ADOPTION OF PROPOSED REVISIONS TO OREGON ADMINISTRATIVE RULES PERTAINING TO SUBSURFACE SEWAGE DISPOSAL

Mr. Jack Osborne of the Department's Land Quality Program presented the staff report to the Commission. The history of the Citizens' Task Force efforts in drafting the proposed rule revision was summarized. It was reported that the record of a May 21st public hearing on the proposed revision would not be closed until June 2, 1975. For this reason it was the Director's recommendation that the Commission adopt as a temporary rule, to become effective immediately upon filing with the Secretary of State, the Proposed Revisions to OAR, Chapter 340, Division 7, Subsurface Sewage Disposal, May, 1975, as amended by the following:

- 1) The accompanying Errata Sheet,
- 2) Amendments to section 71-010(39) (Definition of "Header pipe"),
- 3) Amendments to section 71-030(4) (d) (Requirements for header pipes),
- 4) Amendment to the design of drop box in Diagram 11A,
- 5) Amendment to Paragraphs VA and VB of Appendix B,

- 6) And, Deletion of "Seepage pits and cesspools shall not be used, except in those counties of three hundred and fifty thousand (350,000) population or greater. No new land partitioning or subdivision shall be made based on the use of seepage pits or cesspools." from section 71-030(5) (a).

In response to inquiry from Commissioner Hallock, Mr. Osborne explained that the deletion of the above-mentioned sentences would leave the present regulations regarding seepage pits and cess pools in tact. He added that, under the present rules, seepage pits and cess pools were allowed where they could meet the requirements pertaining to them. Mr. Osborne added that the proposed provision relating to seepage pits and cess pools would have a great impact in Multnomah County, an impact which, in staff's view, justified delay until such time as the Commission could review all of the public testimony given on this subject in the May 21st hearing.

Commissioner Hallock inquired if it was the Director's recommendation that the Commission not accept the proposals by Jackson County with regard to the "prior approvals" clause. Mr. Osborne responded that the proposal to recognize prior approvals for one year longer than they are recognized under current rules was not an adequate solution, but an interim measure. He pointed out that the prior approvals problem was a very difficult one whose solution was being sought. It was Mr. Osborne's hope that, within the next 120 days, the citizens' Task Force would be able to deal with the prior approvals question a little more definitively than had been accomplished so far. Commissioner Hallock requested whether Mr. DeBonny's proposal would be more suitable than the proposal to postpone the prior approvals problem for another year and received Mr. Osborne's response that he would prefer to use the coming 120 days to allow the Citizens' Task Force to evaluate the problem further. Mr. Osborne added that he felt the philosophy behind Mr. DeBonny's proposal was more in alignment with the thinking of staff than was the notion of simply postponing the problem for another year. He explained that if the postponement were adopted as a temporary rule it would last for 120 days, affording an opportunity in the interim to come up with an alternative to the present proposal.

Commissioner Hallock questioned Mr. Osborne with regard to his technical views concerning the effect of Mr. DeBonny's proposal on the prior approvals that had to be revoked in Jackson County. She added that she was not asking for Mr. Osborne's view of whether Mr. DeBonny's proposal was politically sound, but rather whether it was technically sound. Mr. Osborne responded that he would have no personal, professional objection to handling prior approvals on a case by case basis and following the opinion of an experienced professional with regard to the questions of water pollution and health hazard.

Commissioner Somers noted that, unless the Commission took some action, those holding prior approvals would forfeit the current building season. He added that waiting 120 days to finally resolve the question would consume the building season.

Commissioner Crothers wished to know if he understood correctly that it was the Department's recommendation that the Commission temporarily adopt the rules as proposed by the Director to afford the Citizens' Task Force interim time to work on the controversial proposals. Mr. Osborne concurred with this understanding.

Commissioner Crothers said his only difficulty with Mr. DeBonny's proposal was that it would invite repetition of the conflict in those instances wherein it was decided the site was not suitable under Mr. DeBonny's standards. Commissioner Hallock replied that her understanding was that part of the present problem was that the present rule was contingent on matters other than whether or not a system on the prior approved site would constitute a health hazard or water pollution hazard. Commissioner Crothers stated that there was no question about the proper standard; that the object was to put an end to pollution of the waters of the state. He concluded that this process all came back to the reviewing of individual permit applications. Commissioner Crothers stated that his preference would be to have the Citizens' Task Force contemplate the matter further prior to any Commission action.

Mr. Osborne relayed the suggestion of Mr. Spies that the staff could return to the next Commission meeting with a specific proposal regarding prior approvals.

Commissioner Phinney inquired if prior approvals did not, in fact, receive preference over permits granted under the present rules in that the holder of a recognized prior approval was allowed a longer period of time in which to complete construction. Mr. Osborne replied that this was correct.

Commissioner Phinney asked whether the Proposals would exempt pit privies from only the permit requirement, or from both the permit requirement and other requirements relating to setback and so forth. Mr. Osborne said they would be exempted from the requirement of obtaining a permit but would not be exempt from other requirements of the rules. He stated the purpose to be relief for situations wherein, under the current rules, there was a technical requirement to obtain a no-fee permit each time a portable pit privy was moved.

Commissioner Phinney inquired as to why the proposals adopted a standard, per unit, daily capacity for mobile homes located in mobile home parks instead of adopting a capacity based on bedroom spaces as had been the case with all other dwellings. Mr. Osborne replied that, for reasons unknown, the mobile park industry was able to demonstrate that mobile homes located in mobile home parks produce a sewage flow per unit which is less than that resulting from other dwellings. He was unable to explain how mobile home park dwellers managed to use less water.

Commissioner Somers suggested that the question of prior approvals be tabled until later in the meeting to afford Commission Counsel, Mr. Spies, and the representatives of Jackson County an opportunity to confer privately toward drafting a proposed temporary rule to place before the Commission for consideration later on in the day. This suggestion was accepted.

Mr. Robert McDougal of the Home Builders Association of Metropolitan Portland addressed the Commission. Mr. McDougal noted that his organization presented testimony to the hearings officer on May 21st which could be considered by the Commission and added that his organization was in agreement with staff's recommendation that the proposals regarding restriction of cess pools and seepage pits be deleted. He presented the Commission with written testimony regarding the proposed rules.

Mr. Terry Rahe of the Columbia County Health Department, representing the sanitarians of Columbia, Washington, Multnomah, and Clackamas counties, recommended that the deadline for recognition of prior approvals remain July 1, 1975 as under the current rules. It was reported that the sanitarians of the Portland region



counties had met on April 15th and discussed the situation at some length. Their conclusion was that the honoring of approvals based on insufficient technology was not in keeping with the statement of general purpose included in the administrative rules. He contended that the homeowner was not well served by permission to install a system which did not have potential for adequate functional longevity. This is particularly unfortunate, he reported, where the homeowner purchases the home from a developer who installed a septic system based on a prior approval. He cited Mr. Steel's testimony as being indicative of the type of harm which could occur in this fashion. Mr. Ray argued that the only fair approach was to require all development in the state of Oregon to proceed under equal standards. Mr. Rahe quarreled with the notion that prior approvals should be allowed where they don't present a potential health hazard or water pollution problem on the ground that systems do not present these problems only if they conform with the present rules. He pointed out to the Commission that, under the current rules, prior approvals could be honored until July 1 of 1975 and, in turn, the completion of construction would not have to occur until July 1, 1976, affording the permit holder full use of the current building season.

Commissioner Somers asked if Mr. Rahe would concede that persons holding prior approvals had already gone through the permit application process in good faith. Mr. Rahe conceded this but added that, under the current rules, holders of prior approvals still had thirty days in which to obtain recognition of them and had over a year in which to complete construction. Commissioner Somers contended there was harshness involved, noting that, in other "phase-out" legislation, such as the phasing out of commercial signs along the highway, periods ranging from four to five years had been given for cessation. Mr. Rahe responded that, while the problem was not being approached by field technicians on a political basis, the Commission had, perhaps, not been informed of the very gross nature of a great many prior approvals left to be considered. From a technical standpoint, he argued, further solicitude would be unwarranted in that the same would open the door for some highly unsatisfactory installations. He added that technicians were grateful that they presently had a set of rules which were workable. He argued that he, as an individual, would not want to buy a house built under a prior approvals provision.

Commissioner Crothers inquired if Mr. Rahe would be happy with a provision that, when prior approvals are recognized, they are recognized with some type of attached warning stating the technician's opinion that, though the permit is valid, the system would probably fail. Mr. Rahe opined that this was already a requirement. Commissioner Somers said he thought the requirement of this kind attached only to bio-systems at present. Mr. Cannon stated that it was appropriate to add to obsolete permits based on prior approval language stating that the system was granted under obsolete standards, or would not meet current standards and involved a risk of failure. Commissioner Somers acknowledged this possibility, but questioned its usefulness where there is no provision to have the warning filed with the deed records, so as to place any potential buyer on notice of the deficiency.

Mr. Rahe responded that he would not prefer a situation wherein the lending agencies were called upon to enforce proper septic tank installations, rather than having the Department do the same. Commissioner Somers rejoined that there remained the equitable considerations to be extended to those persons who had in good faith obtained prior approvals and invested in properties on the strength of the Department's previous position with regard to their permits. Mr. Rahe noted, that, in his view, many of the prior approvals will meet present standards, a

circumstance which would diminish the number of persons injured by reliance on the previous approval.

Mr. Underwood speculated as to whether it would be necessary to have a statutory enactment to render such warning admissible to the deed records. Commissioner Somers commented that it was his understanding that all that was necessary for entry to the deed records was that the document contain a description of the property and the notarized signature of its owner. Mr. Underwood and Commissioner Somers discussed briefly whether additional legislation would be required in order to authorize the presence of such a warning in the deed records of the county clerks.

Commissioner Hallock asked Mr. Rahe if he knew how many prior approvals would meet current standards. Mr. Rahe responded that he did not know, adding that a system installed on a prior approval, if the system could have met current standards, would be reliable.

Mr. Harding Chinn, representing the Multnomah County Board of County Commissioners, noted that Multnomah County had presented its position on the proposed revisions before the hearings officer on May 21st and supported staff's recommendation that the proposed limitations on the use of seepage pits and cess pools in Multnomah County be deleted from the rule.

It was MOVED by Commissioner Somers, seconded by Commissioner Crothers, and carried that the Commission action on proposed rules be tabled until later in the day when interested parties had had opportunity to propose a clause dealing with prior approval which would resolve some of the problems discussed by the Commission.

BOISE CASCADE, SALEM - AIR QUALITY CONTROL PROGRAM: STATUS REPORT

Mr. Russ Fetrow, Administrator of the Department's Salem Regional Office, reported to the Commission on the progress of the Boise Cascade Salem plant mist eliminator installation with regard to its performance in attaining, within the July 1, 1975 deadline, emissions and opacity limitations for the plant's recovery system.

Commissioner Somers inquired if the mist eliminator was operating now. Mr. Fetrow responded that it was. Commissioner Somers asked why he was able to sense odor of the type emitted by the plant. Mr. Fetrow explained that the facility was being adjusted now and had many "bugs" to be worked out. At present, he said, the permittee was monitoring to see if filters were going to plug up. Upon ascertaining this information, adjustments in the recovery boiler might be necessary which might increase particulates to a level still within the limitation, but reduce SO<sub>2</sub> emissions. He stated that the mist eliminator was operating at approximately 90% capacity now, and that this was only the second day of its operation. Commissioner Somers conjectured that it was too early to draw any conclusions. Mr. Fetrow agreed, with the exception that it was apparent that the opacity problem in the Salem area had been diminished. Mr. Fetrow said that the permittee still had to install opacity and SO<sub>2</sub> monitoring equipment on the stack. It was MOVED by Commissioner Somers that the status report be continued until such time as the mist eliminator had operated long enough to provide data for its evaluation. Chairman McPhillips noted that the applicant had until July 1, 1975 to come into compliance and that it might not be until after the next Commission meeting when sufficient facts were known as to whether or not this had been achieved. Commissioner Somers concurred and added that it might not be fair to comment on the performance of the mist eliminator prior to the time when it was required to be effectively operating. Commissioner Somers' motion was seconded by Commissioner Crothers and carried.

VARIANCE REQUEST - REICHHOLD CHEMICAL COMPANY, ST. HELENS, OREGON

Mr. Tom Bispham of the Department's Northwest Regional Office presented the staff report and the Director's recommendation. The Director's recommendation was as follows:

It is the Director's recommendation that the Implementation Plan be amended and that a one year variance be granted to Reichhold Chemicals, Inc. from June 1, 1975, to June 1, 1976, under the following conditions:

1. Amend the current Air Contaminant Discharge Permit to include the variance period and conditions.
2. During the variance period the company will conduct investigations and pilot testing of the control devices which appear most capable of meeting grain loading or efficiency requirements which the company and the Department mutually agreed are likely to result in compliance with the Department's opacity standard.
3. Forty-eight (48) hours prior to the testing of any pilot equipment, the company shall notify the Department.
4. Thirty (30) days prior to the expiration of the variance, Reichhold shall submit a written report to the Department describing the results of the testing program and be prepared to enter a compliance agreement for any method proven acceptable.

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Director's recommendation be approved.

VARIANCE REQUEST - OREGON PORTLAND CEMENT CO., LIME, OREGON

Mr. Frederic Skirvin of the Department's Air Quality Program presented the staff report. He added that a letter received from the applicant on May 19th expressed disagreement with the originally proposed permit. After review of the letter, the staff was of the position, Mr. Skirvin reported, that the Director's recommendation should be accepted with the following amendments in the staff report before the Commission: Page 30, item B, subsection 1, "December 1, 1977" should read, "until September 1, 1978" (requested variances for kiln number 1). Page 5, item 3, "December 1, 1977" should be deleted. Also deleted would be the last word of the sentence, "respectively". With regard to the Director's recommendation, lines five and six should be changed by the deletion of the words "that the latter dates" and the substitution of "these dates."

It was MOVED by Commissioner Somers, seconded by Commissioner Hallock, and carried that the Director's recommendation be approved as amended.

It was MOVED by Commissioner Somers that the Director's recommendations with regard to the variance requests in Agenda Item H(3) (4) (5) be approved. Commissioner Phinney inquired with regard to the variance request of Continental Forest Products Company, Glide, Oregon, and was skeptical of staff's proposal to permit the applicant to supply the dates for his own compliance schedule. She asked if it were staff's intention to grant a variance for an unknown period of time plus 60 days. Mr. Skirvin explained that the applicant had installed a new boiler which was not working according to plan and which might be the subject of litigation in the near future. He said it was staff's intention to

give them some time to investigate whether the situation could be turned around, and, if not, to submit a compliance schedule upon discovery of this fact. The problem, Commissioner Somers and Mr. Skirvin concurred, was the indeterminate amount of time that any pending litigation might take up. Mr. Skirvin predicted that, absent the possibility of litigation with installation of additional controls, it would take approximately a year to come into compliance.

It was noted by Commissioners Somers and Crothers that the proposed variance would require the applicant to submit a tentative compliance schedule within 90 days and that that schedule was subject to the approval of the Department. It was mentioned also that the applicant's plant was in a relatively isolated area. Commissioner Somers' motion was seconded by Commissioner Hallock and carried. The Director's recommendation with regard to the three variances included in the motion were as follows:

Item No. H (3)

As there is insufficient time for the Department to fully investigate Union Oil of California's request for a variance extension before their present variance expires, it is the Director's recommendation that Union Oil be granted a 90 day extension of their present variance subject to the following conditions:

1. The maximum sulfur content of residual fuel oil to be sold, distributed, or used shall not be more than 2.5% sulfur by weight.
2. Union Oil shall continue to submit to the Department a report containing the sulfur analysis and quantity of each shipment sold or distributed in the State on a quarterly basis.
3. Union Oil Company shall provide, to the extent possible, all information requested by the Department to fully evaluate Union Oil's variance extension request and that such information shall be supplied in the shortest time possible.
4. This variance extension shall terminate October 1, 1975.

Item No. H (4)

It is the Director's recommendation that:

1. A variance from Oregon Administrative Rules, Chapter 340, Section 25-315(2c) be granted to the SWF Plywood Company, Fir-Ply Division until November 30, 1975.
2. This variance be incorporated into Air Contaminant Discharge Permit No. 15-0012, for the Fir-Ply Division mill.

Item No. H (5)

It is the Director's recommendation that the EQC grant the Little River Box Company a variance to operate their new hogged fuel steam boiler out of compliance with OAR, Chapter 340, Section 21-020(2), Particulate Emissions Limitations, and 21-015(2), Visible Emissions Limitations, under the following conditions:

1. The Little River Box Company shall operate and control the hogged fuel steam boiler to maintain the visible and particulate emissions at the lowest practicable level at all times.
2. Within ninety (90) days of the granting of this variance, the Little River Box Company will submit to the DEQ in writing, a proposed or tentative schedule to bring their new hogged fuel boiler into compliance with Oregon's Air Quality Rules and Standards.
3. The above compliance schedule shall include the five (5) increments of progress, which are as follows:
  - a. By no later than \* the permittee will submit a final control strategy, including detailed plans and specifications, to the Department of Environmental Quality for review and approval.
  - b. By no later than \* the permittee will issue purchase orders for the major components of emission control equipment and/or for process modification work.
  - c. By no later than \* the permittee will initiate the installation of emission control equipment and/or ~~on-site construction~~ or process modification work.
  - d. By no later than \* the permittee will complete the installation of emission control equipment and/or on-site construction or process modification work.
  - e. By no later than \* the permittee will demonstrate that the hogged fuel steam boiler is capable of operating in compliance with the applicable Air Quality Rules and Standards.

\*Date to be supplied by company.

4. The above compliance schedule must be acceptable to the Department, and it will be included in the company's Air Contaminant Discharge Permit, No. 10-0021.
5. Contingent upon the submission to the Department of an acceptable compliance schedule by the company, this variance shall cover the time frame up to and including the fifth step in the increments of progress schedule, compliance demonstration, in Condition No. 3.
6. As a contingency, the DEQ has the option of extending this variance sixty (60) days beyond the date in the fifth step of the increments of progress schedule (see Condition No. 3).

AUTHORIZATIONS FOR PUBLIC HEARING PERTAINING TO PROPOSED ADOPTION OF FEDERAL NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR CONTAMINANTS (NESHAP)

Mr. John Kowalczyk of the Department's Air Quality Program addressed the Commission on these agenda items. Commissioner Crothers asked Mr. Kowalczyk if he had any comment on a letter from Mr. Tom Guilbert wherein Mr. Guilbert declared that the holding of the proposed public hearings would constitute a meaningless act and a wasteful expense of the taxpayers monies. Mr. Kowalczyk replied that he

was not familiar with Mr. Guilbert's letter. Commissioner Crothers said that Mr. Guilbert had contended that the regulations proposed to be adopted were federal standards which the Department was compelled to enforce in any event and the holding of a hearing on whether they should be adopted would be meaningless. Mr. Kowalczyk noted that the federal government would be authorized to enforce the federal regulations in Oregon, but that he did not understand that the Department would be able to enforce them without first adopting them as a rule. Commissioner Crothers said that Mr. Guilbert had stated that he knew of no requirement of law that would prohibit the State from enforcing a naked federal standard. Commissioner Somers pointed out that the Commission could not adopt the federal standards as a rule without following the prescribed notice and hearing processes of the Administrative Procedure Act. Commissioner Crothers asked what would be the cost of a public hearing. No one present had a precise answer. Mr. Kowalczyk stated that it was the staff's intention to use a hearings officer to conduct both hearings.

Commissioner Hallock asked if, in some cases, the new federal standards were more strict than our own State standards and received an affirmative reply from Mr. Kowalczyk. Mr. Kowalczyk answered a question from Commissioner Phinney by stating that the new federal standards had been adopted with regard to the permits for the three proposed oil refineries. Commissioner Somers MOVED that the Director's recommendation to authorize both public hearings be approved. The motion was seconded by Commissioner Hallock and carried.

#### FIELD BURNING STATUS REPORT

Mr. Cannon reported to the Commission that the Speaker of the House had sent to the Trade and Economic Development Committee SB 311 and HB 2564. Mr. Cannon stated that a hearing was scheduled next Tuesday morning at 7:30 in the Public Service Building and that staff would be on hand to listen to the proceedings.

Commissioner Somers suggested that the Commissioners sign an order instructing the Department to construe Portland Chain Manufacturing Company's petition for a declaratory ruling to be a request for a hearing on the matter of an exception under the Department's noise rules and instructing the Department to conduct a public hearing on the issue of exception.

#### STATUS REPORT GERTZ-SCHMEER SEWER PROJECT

Mr. Harold Sawyer of the Department's Water Quality Program brought the Commission up to date on events relating to the Gertz-Schmeer Sewer Project which had been a subject of public forum discussion at the previous EQC meeting. Mr. Sawyer reported that the staff had reviewed, **once** again, the project plans for the sewer and had discovered several facts.

First, he reported that it was the understanding of the staff that houseboats would be served but were not included in the tax assessments. Since they were not property owners, they would not be assessed and the houseboat owners would be required to construct their own facilities to hook up to the sewer.

The second point of controversy was the depth of sewer lines. Mr. Sawyer reported that because of uneven ground the depth of the installations would be from six to twenty-one feet, ranging to greater depth when higher elevation was encountered. He added that there were basements in the houses to be served and that it was common, generally accepted design to place the sewer deep enough to serve the basements. From staff's point of view, in these respects, the planning was quite adequate.

With regard to Phase I of the project (the phase that would serve the area west of I-5, including the Multnomah County exposition grounds, Crown Zellerbach, and Portland Stock Yards) EPA had authorized the opening of bidding and this was expected to occur on the 29th of May. Mr. Sawyer reported that attorney Henry Biehner and the City of Portland were in negotiations with respect to the phase of the project dealing with the other side of I-5.

Commissioner Somers asked if there were any representatives of the City of Portland present who could answer questions with regard to the project. No one appeared.

Mr. Sawyer pointed out that his information with regard to the non-grant portion of the assessments of the cost for trunk lines and interceptors had been spread over the entire surface area on a "per square foot of property" basis since these were common aspects of the projects which were considered to benefit all property owners. He stated that this component of the assessment would be very low. The lateral lines, Mr. Sawyer stated, would be bought through an assessment based on property frontage. This latter component was said to be the largest portion of the cost to property owners. The final component of assessment would be the cost to the individual property owners to provide for the connectors running from the laterals to their homes or buildings.

Mr. Sawyer explained that when the City projected the assessments to be expected by property owners, the projection was based on 100% of the cost of the entire project. It was not reduced by virtue of grant expectations. This, he reported, gave an inflated value to the projection.

Mr. Sawyer reported that several of the properties involved dwelling setback in excess of 300 feet from the property line, a characteristic which made it necessary to increase the depth of the sewer line over what it otherwise would be and which involve heavy assessments to the property owners affected.

COMMISSION ACTION REGARDING PROPOSED REVISION FOR RULES GOVERNING SUBSURFACE SEWAGE DISPOSAL.

It was MOVED by Commissioner Phinney, seconded by Commissioner Somers, and carried that the Commission adopt as a temporary rule [subsequently designated OAR, Chapter 340, Section 71-015 (8)] providing as follows: Application for construction permits under the "prior approvals" section of the rule shall be made prior to September 1, 1975 and construction shall be completed by September 1, 1976. All permits and written approvals issued prior to January 1, 1974 shall expire September 1, 1975.

The hearing officer was instructed to file a temporary rule with the Secretary of State promptly. The Commission concurred in the hearing officer's understanding that the Commission intended no action with regard to any of the proposed revisions for the rules governing subsurface sewage disposal other than as reflected by the above temporary rule. The remaining proposals were tabled until the June 27th Commission meeting.

Plan Actions Completed (79)

## Water Quality Program

April, 1975

Municipal Sewerage Projects (71)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Klamath	Klamath Falls - County Facilities Sewer	3/31/75	Prov. Approval
Washington	USA - (Beaverton)-Broadway P.S. Bypass Sewer	4/1/75	Prov. Approval
Curry	Brookings - Harbor Int. Sewer	4/1/75	Prov. Approval
Washington	Oak Lodge S.D.-#2 System, Sewer Lateral 2A10-2	4/1/75	Prov. Approval
Marion	Salem-(Willow Lake)-Cross St. Area, S.E. Sewer Replacement	4/4/75	Prov. Approval
Clackamas	Sandy - City Park Sewer and Pump Station	4/4/75	Prov. Approval
Lincoln	Lincoln Co.-Beverly Beach State Park STP	4/4/75	Prov. Approval
Washington	USA-Durham STP C.O. #2,3,4, & 5	4/7/75	Approved
Sherman	Rufus-C.O. #3 STP Project	4/7/75	Approved
Washington	USA (Forest Grove) Trinity Subdivision Sewers	4/7/75	Prov. Approval
Marion	Salem-(Willow Lake) Iron Wood Estates Sewers	4/8/85	Prov. Approval
Washington	USA (Forest Grove)-C.O. #1 Corn. F.G. Intertie	4/8/75	Approved
Jackson	BCVSA-T & M Subdivision (White City) Sewers	4/8/75	Prov. Approval
Marion	Woodburn-West Hayes St. Sewer Lateral	4/8/75	Prov. Approval
Lane	Springfield - N. Olympic St. Sewer	4/8/75	Prov. Approval
Multnomah	Gresham - Binford Farms Subdn. Sewers	4/10/75	Prov. Approval
Klamath	Klamath Falls-Americanana Subdn. Sewers	4/10/75	Prov. Approval



## Plan Action Completed - Municipal (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Status</u>
Umatilla	Hermiston - Chateaubri Trailer Park Sewers	4/10/75	Prov. Approval
Multnomah	Portland - C.O.#1 Outfall Sewer	4/10/75	Approved
Washington	Aloha - STP Modifications - 3 Addenda	4/10/75	Approved
Lincoln	Newport-Edinview District Sewers	11/75	Prov. Approval
Lane	Oakridge - High Leah L.I.D. Sewers	4/14/75	Prov. Approval
Hood River	Hood River - Port Area Sewers	4/14/75	Prov. Approval
Douglas	Reedsport - Lower Umpqua Hosp. Sewer	4/15/75	Prov. Approval
Marion	Salem - (Willow Lake) - Fairway Ave. Apts., Phase 1 Sewers	4/15/75	Prov. Approval
Multnomah	Portland - (Columbia Blvd.) N, E. First Ave.	4/16/75	Prov. Approval
Multnomah	Portland - (USA-Fanno) S.W. 48th Place Sewer	4/16/75	Prov. Approval
Clackamas	Clackamas Co. S. D. #1 - S.E. 77th Ct. Sewer Ext.	4/16/75	Prov. Approval
Marion	East Salem S & D Dist. #1 Tierra Court Sewer	4/18/75	Prov. Approval
Linn	Albany - Adair Park Subdn Sewers	4/18/75	Prov. Approval
Benton	Corvallis - Edwin Addn Sewers	4/21/75	Prov. Approval
Coos	Eastside - C.O. #6 Force Main and Pump Station	4/21/75	Approved
Coos	Coos Bay - C.O. #3 Coos Bay Pump Station	4/22/75	Approved
Jefferson	Metolius - C.O. #1 STP Contract	4/22/75	Approved
Clatsop	Warrenton - C.O. #4 East Warrenton Int.	4/22/75	Approved
Curry	Gold Beach - C.O. #4 STP Contract	4/22/75	Approved

## Plan Action Completed - Municipal (Continued)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Status</u>
Lincoln	Newport - Addendum #1 - Edenvue Sewer	4/22/75	Approved
Multnomah	Portland (Tryon) - S.W. Trail Court Sewer	4/23/75	Prov. Approval
Klamath	Chiloquin - Re-evaluation of Hood Way Sewer	4/23/75	Prov. Approval
Marion	East Salem S. & D. #1 Hayesville Estates No. 2 Sewer	4/24/75	Prov. Approval
Umatilla	Milton-Freewater - Orchard Subdn. Sewers	4/24/75	Prov. Approval
Sherman	Rufus - C.O. #4 & 5 - STP Contract	4/28/75	Approved
Marion	Salem (Willow Lake) - Commercial St. Sewer (South of Barnes)	4/28/75	Prov. Approval
Lane	Junction City - Middle School Sewer Extension	4/28/75	Prov. Approval
Marion	Keizer S.D. - McNary Apts. Sewer	4/28/75	Prov. Approval
Washington	Hillsboro - Beaumead Subdn. - Phase II Sewers	4/28/75	Prov. Approval
Linn	Albany - White Truck Sales Sewer Extension	4/29/75	Prov. Approval
Marion	Salem (Willow Lake) - Sewer Replacement in Alley off Commercial 13th St. Sewer	4/29/75	Prov. Approval
Washington	USA(Sunset) - Valley Hills Subdn Sewers	4/29/75	Prov. Approval
Washington	USA (Beaverton) - New Horizons III Subdn Sewers	4/29/75	Prov. Approval
Marion	Salem (Willow Lake) - C.O. #1 STP Project	4/30/75	Approved
Douglas	Roseburg - Selmer Hutchins Prop. Sewer	4/30/75	Prov. Approval
Clackamas	Clackamas Co. S.D. #1-Milwaukie K-Mart & Clack. Ford Bldg. Sewers	4/30/75	Prov. Approval
Yamhill	McMinnville - H.W. Cozine San. Sewer	4/30/75	Prov. Approval
Multnomah	Portland - Addenda No. 1 & 2 Gertz-Schmeer Sewers	4/30/75	Approved

Plan Action Completed  
Industrial Waste Sources (8)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Status</u>
Polk	Dallas - Dallas Coop Whse. Scrubber Pond	4/2/75	Approved
Marion	Stayton - Stayton Canning Co. Odor Control Pond	4/2/75	Approved
Polk	Independence - Bakers Custom Meat Service Lagoon	4/3/75	Approved
Lane	Cottage Grove - Weyerhaeuser Cooling Tower	4/9/75	Approved
Clatsop	Astoria - N.W. Fur Breeders Coop. - Waste Water Screen	4/10/75	Approved
Lane	Florence - Sea Lion Caves Sanitary Wastes	4/18/75	Approved
Clackamas	Damascus - Damascus Sand and Gravel Water Recirculation	4/21/75	Approved
Multnomah	Portland - Albers Milling Waste Water Holding Tank	4/30/75	Approved

Municipal Sources (4 NPDES; 4 State\*)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Lane	Westfir - Edward Hines Lbr. Co. (Westfir Hemlock Addition)	4/26/75	NPDES Issued
Linn	City of Halsey	4/26/75	NPDES Issued
Linn	City of Lebanon	4/26/75	NPDES Issued
Clackamas	Clackamas - *Riverview Mobile Home Park	4/26/75	State Permit Issued
Douglas	Winston - *Bremner Hills Cooperative	4/26/75	State Permit Issued
Jefferson	*City of Madras	4/26/75	State Permit Issued
Lane	Eugene - *Lynnbrook, Inc.	4/26/75	State Permit Issued
Sherman	City of Moro	4/26/75	NPDES Issued

Industrial Sources (3 NPDES; 1 State)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Lincoln	Newport - Petersons Seafoods, Inc.	4/26/75	NPDES Issued
Lane	Eugene - Simpson Extruded	4/26/75	NPDES Issued
Multnomah	Portland - Chevron Asphalt Co.	4/26/75	NPDES Issued
Clackamas	Canby - Union Mills	4/26/75	State Permit Issued

Plan Actions Completed (15)

Air Quality Program

April, 1975

Direct Stationary Sources (14)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Coos	Coos Bay - Georgia Pacific - Sawdust truck dump facility.	4/9/75	Approved
Multnomah	Portland - Portland Willamette - Baghouse for brass melting furnace.	4/11/75	Approved
Clatsop	Wauna - Crown Zellerbach - Control of TRS emissions from pulp washer.	4/16/75	Approved
Multnomah	Portland - Pacific Carbide & Alloy-Ducting carbide crusher cyclone exhaust to new baghouse	4/16/75	Approved
Multnomah	Portland - Trumbull Asphalt-New burner package for #2 boiler.	4/16/75	Approved
Multnomah	Portland - W. R. Grace Co. - Baghouse for control of vermiculite dust.	4/21/75	Approved
Clackamas	Milwaukie - Milwaukie Plywood - Enlargement of sawdust storage bin.	4/21/75	Approved
Clackamas	Colton - Colton School District - New paint spray booth.	4/25/75	Approved
Marion	Salem - Boise Cascade - New digester to convert wood chips into pulp.	4/30/75	Approved
Clackamas	Milwaukie - Red, White and Blue Thrift Store - New fumigation chamber.	4/30/75	Approved
Clatsop	Wauna - Crown Zellerbach - Venting foam tank emissions to a new gas incinerator.	4/30/75	Approved

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Clatsop	Wauna - Crown Zellerbach - Venting emissions from the digester feeder to a new gas incinerator	4/30/75	Approved
Clatsop	Wauna - Crown Zellerbach - New noncondensable gas incinerator	4/30/75	Approved
Douglas	Dillard - Roseburg Lumber Co. - New sawdust truck dump facility.	4/30/75	Approved

Indirect Sources (1)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Multnomah	Portland - Pacific Northwest Bell - 302 space parking structure.	4/23/75	Approved plans for ventilation system.

Permit Actions Completed (47)

Air Quality Program

April, 1975

Direct Stationary Sources (40)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Clatsop	Warrenton - AMAX Aluminum New Aluminum Reduction Plant	4/18/75	Application Withdrawn
Columbia	Rainier - Cascade Energy, Inc. New Oil Refinery		Issued
Jackson	Medford - Eugene Burrill Lumber (14-0011) Sawmill	4/4/75	Permit Issued
Josephine	Grants Pass, Fourply (17-0002) Plywood Plant	4/4/75	Permit Modified and Issued
Hood River	Hood River, Hanel Lumber Co. (14-0006) Sawmill	4/24/75	Permit Modified and Issued
Klamath	Klamath Falls, Jeld-Wen (18-0006) Sawmill	4/2/75	Permit Modified and Issued
Klamath	Klamath Falls, Jeld-Wen (18-0059) Hardboard Plant	4/2/75	Permit Modified and Issued
Union	Elgin - Boise Cascade (31-0006) Plywood Plant	4/24/75	Permit Modified and Issued.
Portable	Portland - Babler Bros., Inc. - (37-0020) Asphalt Plant	4/17/75	Permit Issued
Multnomah	Portland - Kerr Grain Corp. (26-2003) Grain Elevator	4/16/75	Permit Issued
Tillamook	Tillamook - Publishers Paper Co. (29-0007) Sawmill	4/16/75	Permit Issued
Clackamas	Milwaukie - Milwaukie Plywood Corp. (03-1874) Plywood Mfg.	4/16/75	Permit Issued
Multnomah	Portland - Portland Bolt and Mfg. Co. (26-1884) Galvanizing	4/16/75	Permit Issued
Columbia	Rainier - Cascade Energy Inc. (05-2561) Petroleum Refinery	4/16/75	Permit Issued

Direct Stationary Sources (continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Washington	Forest Grove - Forest Fiber Products Co. (34-2143) Hardboard Mfg.	4/15/75	Permit Modified
Multnomah	Portland - Barker Mfg. Co.- (26-1878) Furniture Mfg.	4/16/75	Permit Modified
Clackamas	Lake Oswego - Lakeshore Concrete Co. (03-1924) Readimix Concrete	4/16/75	Permit Issued
Multnomah	Portland - Cobb Lumber Co., Inc. (26-2539) Sawmill	4/29/75	Permit Issued
Washington	Sherwood - Southwest Readymix Co. (34-2583) Ready-mix concrete	4/29/75	Permit Issued
Multnomah	Portland - Sterling Furniture Mfg., Inc. (26-2547) Furniture manufacturing.	4/29/75	Permit Issued
Clackamas	Portland - Alpine Veneers, Inc. (03-2065) Plywood Mfg.	4/29/75	Permit Issued
Multnomah	Portland - Supreme Perlite Co. (26-2390) Perlite expanding kiln	4/29/75	Permit Issued
Washington	Cornelius - C. C. Ruth Co. (34-2037) Animal Feeds	4/29/75	Permit Issued
Washington	Beaverton - Tualatin Valley Paving, Inc. (34-2581) Asphaltic Paving	4/29/75	Permit Issued
Tillamook	Tillamook - Trask River Gravel (29-0041) Rock Crusher	4/29/75	Permit Issued
Tillamook	Nehalem - Miami Shingle & Shake Co. (29-0017) Shake Mill	4/29/75	Permit Issued
Tillamook	Cloverdale - Kimber Log and Lumber Co. (29-0048) Sawmill	4/29/75	Permit Issued
Tillamook	Tillamook - Tillamook County Road Dept. (29-0051) Rock Crusher	4/29/75	Permit Issued
Clatsop	Astoria - Bumble Bee Seafoods (04-0036) Boiler	4/29/75	Permit Issued
Clatsop	Astoria - Bayview Transit Mix Inc. (04-0046) Ready Mix Concrete	4/29/75	Permit Issued



Direct Stationary Sources (Continued)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Clatsop	Gearhart - Bayview Transit Mix, Inc. (04-0045) Ready Mix Concrete	4/29/75	Permit Issued
Multnomah	Portland - ABC Foundry, Inc. (26-1848) Brass Foundry	4/29/75	Permit Issued
Clackamas	Molalla - Avison Lumber Co. (03-1772) Sawmill	4/29/75	Permit Issued
Multnomah	Portland - Great Northern Products, Inc. (26-2538) Sawmill	4/29/75	Permit Issued
Multnomah	Portland - Service Bronze and Brass (26-1855) Brass Foundry	4/29/75	Permit Issued
Multnomah	Portland - Galvanizers Co. (26-1885) Galvanizing	4/29/75	Permit Issued
Multnomah	Portland - Consolidated Metco, Inc. (26-1890) Aluminum Foundry	4/29/75	Permit Issued
Washington	Banks - Banks Lumber Co. (34-2565) Sawmill	4/29/75	Permit Issued
Multnomah	Portland - Colonial Mortuary Inc. (26-2803) Crematory	4/29/75	Permit Issued
Columbia	Mist - Olympic Forest Products Co. (05-1771) Sawmill	4/29/75	Permit Issued

Indirect Sources (7)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Status</u>
Multnomah	Rockwood Area - Sommerwood 588 space residential development.	4/21/75	Permit Issued
Washington	Beaverton - Hyland Hills 471 space shopping center	4/21/75	Permit Issued
Washington	Beaverton - Somerset West 149 space commercial center	4/21/75	Permit Issued
Multnomah	Portland - Tri-Met - 75 space bus parking facility	4/21/75	Permit Issued
Multnomah	Portland - Rivergate Area Columbia Independent Refinery 75 space parking facility	4/21/75	Permit Issued
Multnomah	Gresham - Fred Meyer 675 space shopping center	4/28/75	Permit Issued
Washington	Progress Area - Washington Square - 5000+ space shopping center	4/25/75	Permit amended with EQC approval, new transit conditions.

Plan Actions Completed (4)

Land Quality Program

April, 1975

General Refuse (Garbage) Projects (4)

<u>County</u>	<u>City and Project</u>	<u>Date of Action</u>	<u>Action</u>
Crook	Ochoco Lumber Co. Existing Landfill	4/7/75	Letter of authorization approval
Klamath	Lake Ewauna Landfill	4/9/75	Review and comment rejected by Klamath Falls City Planning Commission
Washington	Arden Danielson New site	4/17/75	Provisional approval
Douglas	Glide Transfer Station New Transfer Station.	4/21/75	Approval

Plan Actions Pending (7)

Land Quality Program

April, 1975

General Refuse (Garbage) Projects (6)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Deschutes	Southwest Landfill	10/10/74	More data requested
Umatilla	Pendleton Landfill	10/15/74	More data requested
Douglas	Myrtle Creek Transfer Station	1/6/75	More data requested
Baker	Baker Sanitary Landfill	1/31/75	More data requested
Douglas	Reedsport Landfill	2/18/75	More data requested
Douglas	Canyonville Landfill	3/18/75	More data requested

Industrial Solid Wastes Disposal Projects (1)

<u>County</u>	<u>City and Project</u>	<u>Date Received</u>	<u>Status</u>
Linn	Western Kraft Corporation	4/24/75	In Process Action 5/75.

Permit Actions Completed (14)

Land Quality Program

April, 1975

General Refuse (Garbage) Facilities (8)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Crook	Riverside Ranch Transfer Station - New Facility	4/16/75	Permit issued
Deschutes	LaPine Disposal Site Existing Facility	4/2/75	Permit issued
Jackson	Ashland Landfill Existing Facility	4/7/75	Permit issued (Renewal)
Jackson	South Stage Landfill Existing Facility	4/7/75	Permit issued (Renewal)
Jefferson	Culver Landfill Existing Facility Permanently closed.	4/2/75	Permit revoked
Josephine	Kerby Landfill Existing Facility	4/4/75	Permit amended
Lake	Adel Landfill Existing Facility	4/3/75	Permit amended
Washington	Arden Danielson New Facility	4/17/75	Letter authorization issued.

Demolition Solid Waste Disposal Facilities (1)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Washington	Hillsboro Landfill Existing Facility	4/1/75	Permit issued (Renewal)

Land Quality Program - Permit Actions Completed (continued)

Industrial Solid Waste Disposal Facilities (4)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Clatsop	Lewis & Clark Log Sorting Yard - New facility	4/21/75	Permit issued
Crook	Ochoco Lumber Co. Existing Facility	4/7/75	Letter authorization issued.
Douglas	Little River Box Co. Existing Facility	4/7/75	Permit issued
Hood River	U. S. Plywood, Dee Existing Facility	4/24/75	Permit issued

Sludge Disposal Facilities (1)

<u>County</u>	<u>City and Source</u>	<u>Date of Action</u>	<u>Action</u>
Linn	Nored Sludge Lagoon Existing Facility	4/11/75	Permit issued (Renewal)