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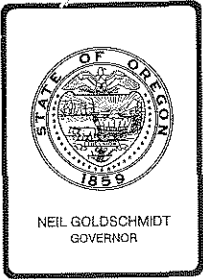
**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



State of Oregon
**Department of
Environmental
Quality**

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Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item K , December 11, 1987, EQC Meeting

Report on December 3, 1987 Emergency Board Meeting
Regarding Assessment Deferral Loan Program Revolving
Fund (Safety Net Loan Fund).

Background

The Department submitted to the Oregon Legislative Emergency Board an informational report on the proposed Assessment Deferral Loan Program Revolving Fund, as required in the enabling legislation for this new program. The E-Board met December 3, 1987 and reviewed the informational report.

Three issues were raised by Legislative fiscal staff, and discussed by the General Government Subcommittee of the E-Board. These issues included: 1) the interest rate the Department proposed to charge to public agencies; 2) whether or not the Department was compelled to spend the entire \$300,000 authorized in SB 878; and 3) what were to be the terms of the loans between the Department and the qualifying public agencies.

The concern regarding the interest rate was the potential cost to the general fund at some point in the future. The Department explained the potential range of cost to the general fund. The Department proposed a 5% rate be charged participating cities which is less than the 6% interest currently being earned by the Department on the \$300,000 proposed for the Safety Net fund. The discussion by subcommittee member McCracken supported the Department's interpretation that a slightly subsidized interest rate was appropriate for this program. No other committee members commented.

The second concern raised by Legislative fiscal staff was that the Department had written the rules so it was compelled to allocate the entire \$300,000 allowed, rather than having the flexibility to allocate a smaller amount. SB 878 specifies that the Department can use up to \$300,000, and Legislative fiscal staff's concern was that the proposed rules would require that the entire \$300,000 be used regardless of need or other circumstances. The Department testified we did not intend to allocate more than was necessary and would correct our proposed rules if necessary. The subcommittee members did not discuss this issue. The Commission may wish to review the Department's proposed language regarding this, which is presented in Section (4). This section states "All public agencies meeting the requirements of OAR 340-81-110(1) shall receive an allocation of available funds based on ...". To satisfy Legislative fiscal staff's concern, Department staff recommends substitution of alternative language, "All public agencies meeting the requirements of OAR 340-81-110(1) shall receive an allocation of up to the amount of [available] funds available based on ...".

The third concern raised by Legislative fiscal staff was the terms of the loans to be made to qualifying public agencies. Department staff explained that the terms would be included in the loan agreements; that they would be negotiated; and that a repayment schedule would be included. Subcommittee members did not express concern on this issue.

The informational report was accepted by the subcommittee and forwarded to the full Emergency Board Committee.

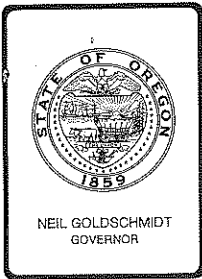
Director's Recommendation

The Director recommends that the Commission accept this informational report and adopt the proposed alternative rule language as a part of the proposed rules pertaining to ... Adoption of Rules Regarding Assessment Deferral Loan Program Revolving Fund (Safety Net Loan Fund)
-- OAR 340-81-110.



Fred Hansen

Barbara A. Burton:c
WC2805
229-5398
December 7, 1987



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item K , December 11, 1987, EQC Meeting

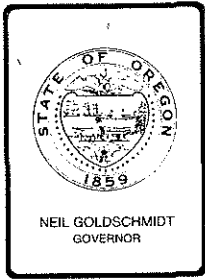
Adoption of Rules Regarding Assessment Deferral Loan
Program Revolving Fund (Safety Net Loan Fund) -
OAR 340-81-110

Background and Problem Statement

The 1987 Oregon Legislature passed SB 878, which directed the Department to set up the Assessment Deferral Loan Program Revolving Fund. This Fund, also known as the Safety Net Loan Fund, is to be used for the purpose of "providing assistance to property owners who will experience extreme financial hardship resulting from payment of assessed costs for the construction of treatment works required by a federal grant agreement or an order issued by a state commission or agency". Loans from this Fund would be available to any qualifying public agency in the State for this purpose.

Sewer assessments for sewers vary, but are typically in the range of \$2000 to \$4000 and may be more depending on the size of the property being served. These assessments are made, by the public agency providing the sewers, and are the property owners' share of the cost of the new neighborhood collector sewers. In addition, property owners pay a connection fee of up to \$1,500 for their share of existing pump stations, larger interceptor sewers, and the sewage treatment plant. Property owners are also required to pay for any plumbing changes and private conveyance lines from the structure to the property line, which can add another \$1,000 or more to the cost of connecting to public sewers.

Under this new program, public agencies will be able to apply to the Department for a loan and will in turn provide loans to individual property owners. The loans to property owners will be for the assessed costs of the collector sewers, and will be secured by liens against the property being sewerred. The loan plus interest is payable upon sale of the property. The Fund is to be capitalized initially with \$300,000 from the Pollution Control Bond Fund. The Department is authorized to loan up to \$300,000 from the Safety Net Loan Fund during the current biennium. Currently the only qualifying projects that are known to be interested in this biennium are mid-Multnomah County (cities of Portland and Gresham), and River Road/Santa Clara (Eugene area).



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item K , December 11, 1987, EQC Meeting

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Program Revolving Fund (Safety Net Loan Fund) -
OAR 340-81-110

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The Department is proposing that rules be adopted by the Commission to implement this new loan program. Authorization to hold public hearings was granted by the Commission at the August 28, 1987 meeting (see attachment 1 which includes the staff report supporting the request to hold public hearings, and the public notice publication). Public hearings were held on October 26, 1987 in Eugene and Portland.

SB 878 requires the Department to file an informational report describing the proposed Department program with the Emergency Board of the Oregon Legislature prior to issuing any loans from this new Fund. The Department will be presenting this staff report and proposed rule to the Emergency Board on December 3, during the regularly scheduled bi-monthly meeting. Their comments and response, if any, to the proposed program will be submitted to the Commission prior to the December 11th meeting in a special report to be prepared by the Department.

The "Statement of Need for Rulemaking" for the proposed rules is included as Attachment 3. The legal authority for the proposed rules is included in SB 878 and ORS 468.020, which allows the Commission to adopt rules necessary in performing the functions vested by law in the Commission. The applicable provisions of ORS 183.310 - 183.550 must be followed in Commission rule making.

Alternatives and Evaluation

Three major issues were identified during the rule drafting and public hearing process. These are: (1) the interest rate to be charged by the Department to qualifying public agencies, and when and how often this rate should be reviewed; (2) how to allocate available funds among competing public agencies; and (3) the household income level test to be used by the Department in reviewing applications from public agencies.

1. SB 878 does not specify what interest rate the Department should charge. Several levels of interest rates are possible.
 - a. No or low interest rate. A very low interest rate would be advantageous in that it would provide considerable financial relief to low income property owners. However, it would also amount to a substantial subsidy and cost to the State, and this does not appear to be the intent of the program. Installation of sewers results in a cost, but it ultimately also results in an increase in property value. A very low (subsidized) interest rate would result in a windfall to the property owner not available to non-qualifying property owners. In addition, a very low interest rate could result in financial relief to property owners who would not be faced with financial distress. For example, if an individual had savings sufficient to cover the cost of the assessment, this individual may decide to use the low interest loan option, not because of financial need but because it would be a more attractive financial alternative.

- b. Medium interest rate. A "medium" rate would be less than conventional loan rates and would approximate the rate of inflation. As with the no or low interest rate option, a disadvantage of this interest rate is that there would be a net cost to the State, since the State will be paying off Pollution Control Bond Fund bonds used to capitalize the Safety Net Fund. A medium interest rate, however, has the following advantages:
 - It offers significant relief relative to the other commonly available financing, Bancroft bonds (about 8%) and conventional loans (11%+); and
 - By approximating the rate of inflation the borrower receives neither a windfall nor a disadvantage and consequently this should help encourage its use by individuals truly needing help and thereby conserve scarce funds.
 - c. Pollution Control Bond Fund bond rate. If the interest rate were set at this level (8.8% as of November 1987), then the Safety Net Fund would be able to "pay back" the State for the cost of the initial sale of bonds to capitalize the Safety Net Fund. However, since loans from the sale of local Bancroft bonds are usually available to homeowners (at about the same interest rate), this would defeat the intent of this program to provide financial relief above what is already available.
2. Allocation of available funds could be made in several different ways, including the following:
 - a. Use the existing Construction Grants Priority list, which is based on environmental need. The top listed project that qualifies would get a full allotment based on financial need of homeowners, with the next listed project receiving a full allotment until Safety Net funds were exhausted. This would have the disadvantage of allocating funds to projects based on environmental, not financial need, with the likelihood of some homeowners with extreme financial need but in an area with lesser environmental priority not receiving assistance. This is inconsistent with the Department's interpretation of the intent of the Act.
 - b. Allocate funds among all qualifying public agencies based on the size of the project, either total project cost or number of households to be connected to sewers. This would be the easiest distribution formula, and would ensure that all qualifying projects would get some money. However, this distribution would not be based on the financial need of affected property owners in a particular area. High income areas would get the same proportion of funding as low income areas. This is inconsistent with the Department's interpretation of the intent of the Act.

- c. Allocate funds among all qualifying projects, based on the number of sewer connections to households meeting a set income criterion. This approach is recommended by the Department, as it most nearly meets the intent of targeting financial assistance to those most needing it.
3. The household income test to be used by the Department in allocating funds needs to be reasonably accurate for an area approximating the project area, without requiring the applicant public agency to conduct a house-to-house survey. The income level selected should also be readily available in existing census data. It should be set at a level for targeting for assistance needs. After reviewing several suggestions and available census data, the Department is recommending that a household income level which is at or below 200 percent of the federal poverty level (as published by the U.S. Bureau of the Census) be used. Census poverty information is readily available and can be applied on a small area basis.

Public Hearing Process

During the two public hearings for this proposed regulation and in the comment period, testimony was received from three individuals representing the cities of Eugene, Gresham, and Portland. No other testimony was received. One significant issue raised was the interest rate to be charged, and whether or not it should be set in the rules. The rule proposed for hearing contained no interest rate, but provided that the Commission would set the interest rate on a biennial basis. All three cities testified in favor of as low an interest rate as possible, but no higher than the rate of inflation. All three cities requested that the interest rate be set in the rule, rather than be subject to Commission action each two years. The City of Portland suggested no more than a once in five year review of the interest rate. The City of Eugene suggested tying the interest rate to the Pollution Control Bond Fund bond rate minus a specific percentage.

The Department is recommending that a 5% interest rate be set for the 1987-89 biennium for the reasons discussed in section (1) (b) above, but that the rate be subject to change by the Commission each two years. This will allow the interest rate to be changed to reflect changing inflation rates or other changing conditions.

Another significant issue raised during the hearing process was a request that the method for allocating funds between qualifying agencies be made more specific. Section (4)(c) will accomplish this by adding a formula to the rule that specifies the actual calculations for distributing the funds between those qualifying public agencies. The formula essentially allows the funding to be distributed among the public agencies proportional to the number of households with incomes at or below a level set at 200 percent of the federal poverty level. Consequently, all qualifying public agencies

will receive some funding presuming that at least one of their constituents has an income below 200 percent of the federal poverty level.

The third significant issue raised was to change the household income information to a form that is more realistic and more readily available to public agencies (Section (4)(b) of the proposed rule). The City of Portland suggested that the term "owner occupied households" should be changed to "households", since existing census data does not have any information on owner/renter status. The City of Eugene suggested that the household income level be changed to reflect an income level closer to that of homeowners likely to be targeted for assistance under this program.

The Department agrees with both comments above, and is proposing to change the rules as requested. As previously discussed, the household income level should be changed to 200 percent of federal poverty levels to more nearly approximate targeted households. The Department believes that 100 percent of the federal poverty level may only include the retiree and renter segment of the population and would exclude most of the low income non-retiree homeowner segment. The 200 percent level should better represent the property owner targeted by the intent of SB 878 as interpreted by the Department.

The City of Gresham suggested that priority of funding be given to public agencies with state-mandated sewer projects. The Department does not believe this is consistent with the conditions established in SB 878.

Several other minor changes in the draft rules were suggested. Revisions recommended by the Department for adoption are as follows:

1. Section (3)(a)(D) should be revised from "A schedule for sewer connections" to "A schedule for construction of collector sewers". The City of Portland testified that as part of their program they will be offering the option of delaying the actual physical connection to sewers for low income households, with connection required upon sale of the property. This proposed language change better reflects such circumstances.
2. Section (3)(b)(A) was changed to be more specific as to the evaluation criteria for reviewing an application submitted by a public agency.
3. Section (3)(b)(B) was deleted. The term "institutional and managerial ability to administer the program" was objected to as too vague. The Department agrees, and believes that concerns regarding this are adequately addressed in other sections of the proposed rules, particularly regarding required accounting practices that will be included in the State-public agency loan agreements.
4. Section (3)(b)(C) needs to be re-numbered to (3)(b)(B) because of the previously deleted paragraph.

The Proposed Rule

The proposed rules with recommended changes are included as Attachment 4. The major elements are as follows:

1. Loans from the Assessment Deferral Loan Program Revolving Fund may be made by the Department to qualifying public agencies.
2. The proposed rules have requirements for submitting applications to the Department, including a requirement that the public agency provide public review of its proposed sewer assessment deferral loan program.
3. The proposed rules include the criteria that the Department must use in evaluating each public agency's application and proposed program.
4. The proposed rules contain a method for allocating available funds to qualifying public agencies. Loans will be given to all qualifying public agencies based on the number of sewer connections to households with incomes at or below 200 percent of the federal poverty level.
5. The Department will submit to the Commission for approval or disapproval recommendations for allocation of funds, and the basis for acceptance or rejection of public agency applications and proposed local programs. Allocation of funds will be made once each biennium.
6. Upon approval of the Commission, the Department will offer loans to qualifying public agencies with certain specified terms and conditions necessary to maintain proper records and repayment of the loans to the Safety Net Fund. An interest rate of 5% will be charged for loans made in this biennium, with the interest rate for subsequent bienniums to be established by Administrative Rule.

The principal effect of these rules will be to assist property owners who will experience extreme financial hardship because of sewer assessments, and who otherwise might be forced to sell or abandon their homes. The form of this assistance will be an assessment deferral. The assessment plus interest will be due when the property is sold.

Summation

1. The 1987 Oregon Legislature enacted SB 878, which directed the Department to set up and administer an Assessment Deferral Loan Program Revolving Fund. The purpose of these funds is to "provide assistance to property owners who will experience extreme financial hardship resulting from payment of assessed costs for the construction of treatment works required by a federal grant agreement or an order issued by a state commission or agency."

2. The Department is proposing to adopt rules to implement and administer the program specified in SB 878.
3. Authorization to hold public hearings was granted by the Commission at the August 28, 1987 meeting. Public hearings were held in Portland and Eugene on October 26, 1987. Testimony from three respondents was received.
4. Based on comments received during the public hearing process and a review and evaluation of the proposed rules, the Department has recommended some changes in the draft rules. Most of these changes are minor clarifications. The most substantial change recommended is the setting of a 5% interest rate for the current biennium.
5. In the proposed regulation, interested public agencies will be required to submit an application and a description of their proposed program for administering sewer assessment deferrals to local property owners. The Department will review these applications and programs, and present recommendations for final approval or disapproval to the Commission.
6. Loans will be offered to all qualifying public agencies once each biennium, based on the number of sewer connections to households with incomes of at or below 200 percent of the federal poverty index as published by the U.S. Bureau of the Census.

Director's Recommendation

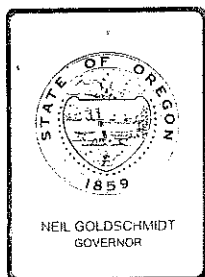
The Director recommends the Commission adopt the proposed rules, as revised and presented in Attachment 4.


Fred Hansen

Attachments: (4)

1. August 28, 1987 Staff Report
2. Hearing Officer's Report
3. Statement of Need for Rulemaking
4. Draft Rule (No. 340-81-110)

Barbara A. Burton:cl
WC2673
229-5398
November 23, 1987



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director *Jul*

SUBJECT: Assessment Deferral Loan Program Revolving Fund - Request For Authorization To Hold Public Hearings

Background

In April, 1986, pursuant to ORS 454.275 through 454.310, the Environmental Quality Commission declared a threat to drinking water in Mid-Multnomah County and ordered that sewers be installed to eliminate the use of cesspools. During the proceedings, the Commission became aware that sewerage costs could cause some of the people in the affected area to face extreme financial hardship and potentially lose their homes because of their inability to pay. As a result, the Commission requested that both Portland and Gresham provide a financial safety net to assure that no one would lose their home as a result of being unable to pay for the sewer.

In response to the Commission's concerns, the City of Portland asked the legislature to introduce Senate Bill 878 which establishes a fund, managed and capitalized by the State of Oregon, to finance municipally city-operated "safety net" programs. SB 878, passed by the legislature and signed into law by the Governor, is attached for your information.

The City of Portland, beginning in August of this year, has begun requesting property owners to connect to those interceptor sewers that have been installed. In anticipation that there may be people in need of financial help, the City has requested an immediate loan from the Department to finance their safety net program. However, before the Department can implement SB 878, rules must be adopted by the Commission and reviewed by the Legislative Emergency Board, as required by the Statute.

As an alternative to our normal rule-making process where the Commission formally authorizes draft rules for a hearing, the Department is requesting authority from the Commission at this meeting to begin the rule-making process without draft rules. If granted, rules could be drafted in September, hearings held in October, final rules reviewed by the Legislative Emergency Board and adopted and/or modified by the Commission in December, 1987. With this alternative scenario, financial relief could be provided via SB 878 much quicker than could be achieved if rule making authority must wait until proposed rules are drafted.

Director's Recommendation

The Director recommends that the Commission authorize the Department to proceed to rule-making for the purpose of implementing SB878.

Fred Hansen

Attachment 1. Senate Bill 878

Richard J. Nichols
WC2354
229-5324
August 21, 1987

B-Engrossed
Senate Bill 878

Ordered by the Senate June 25
Including Senate Amendments dated April 28 and June 25

Sponsored by Senator OTTO (at the request of City of Portland)

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.

Creates Assessment Deferral Loan Program Revolving Fund. Directs Department of Environmental Quality to administer program to grant loans to public agencies. **Authorizes department to loan up to \$300,000 to Assessment Deferral Loan Program Revolving Fund from Pollution Control Fund for biennium.**

Appropriates [for biennium] money.
Declares emergency, effective July 1, 1987.

A BILL FOR AN ACT

1
2 Relating to water pollution; creating new provisions; amending ORS 468.220; appropriating money;
3 and declaring an emergency.

4 **Be It Enacted by the People of the State of Oregon:**

5 **SECTION 1.** As used in sections 1 to 7 of this Act:

6 (1) "Commission" means the Environmental Quality Commission.

7 (2) "Department" means the Department of Environmental Quality.

8 (3) "Extreme financial hardship" has the meaning given within the assessment deferral programs
9 adopted by public agencies and approved by the Department of Environmental Quality.

10 (4) "Public agency" means any state agency, incorporated city, county, sanitary authority,
11 county service district, sanitary district, metropolitan service district or other special district au-
12 thorized to construct water pollution control facilities.

13 (5) "Treatment works" means a sewage collection system.

14 **SECTION 2.** It is declared to be the policy of this state:

15 (1) To provide assistance to property owners who will experience extreme financial hardship
16 resulting from payment of assessed costs for the construction of treatment works required by a
17 federal grant agreement or an order issued by a state commission or agency.

18 (2) To provide assistance through an interest loan program to defer all or part of property as-
19 sessments.

20 (3) To capitalize an assessment deferral loan program with moneys available in the Pollution
21 Control Fund, available federal funds or available local funds.

22 **SECTION 3.** (1) There is established the Assessment Deferral Loan Program Revolving Fund
23 separate and distinct from the General Fund in the State Treasury. The moneys in the Assessment
24 Deferral Loan Program Revolving Fund are appropriated continuously to the Department of Envi-
25 ronmental Quality to be used for the purposes described in section 4 of this Act.

26 (2) The Assessment Deferral Loan Program Revolving Fund may be capitalized from capitaliza-
27 tion grants or loans from the Pollution Control Fund in an amount sufficient to fund assessment

NOTE: Matter in bold face in an amended section is new; matter (*italic and bracketed*) is existing law to be omitted.

1 deferral loan programs provided for in section 4 of this Act.

2 (3) In addition to those funds used to capitalize the Assessment Deferral Loan Program Revolv-
3 ing Fund, the fund shall consist of:

4 (a) Any other revenues derived from gifts, grants or bequests pledged to the state for the pur-
5 pose of providing financial assistance to water pollution control projects;

6 (b) All repayments of money borrowed from the fund;

7 (c) All interest payments made by borrowers from the fund;

8 (d) Any other fee or charge levied in conjunction with administration of the fund; and

9 (e) Any available local funds.

10 (4) The State Treasurer may invest and reinvest moneys in the Assessment Deferral Loan Pro-
11 gram Revolving Fund in the manner provided by law. All earnings from such investment and rein-
12 vestment shall be credited to the Assessment Deferral Loan Program Revolving Fund.

13 **SECTION 4.** (1) The Department of Environmental Quality shall use the moneys in the Assess-
14 ment Deferral Loan Program Revolving Fund to provide funds for assessment deferral loan programs
15 administered by public agencies that meet all of the following conditions:

16 (a) The program demonstrates that assessments or charges in lieu of assessments levied against
17 benefited properties for construction of treatment works required by a federal grant agreement or
18 by an order issued by a state commission or agency will subject property owners to extreme finan-
19 cial hardship.

20 (b) The governing body has adopted a program and the department has approved the program.

21 (c) The treatment works meets the requirements of section 2, Article XI-H of the Oregon Con-
22 stitution concerning eligibility of pollution control bond funds.

23 (2) The department also may use the moneys in the Assessment Deferral Loan Program Re-
24 volving Fund to pay the expenses of the department in administering the Assessment Deferral Loan
25 Program Revolving Fund and to repay capitalization loans.

26 **SECTION 5.** In administering the Assessment Deferral Loan Program Revolving Fund, the de-
27 partment shall:

28 (1) Allocate funds to public agencies for assessment deferral loan programs in accordance with
29 a priority list adopted by the Environmental Quality Commission.

30 (2) Use accounting, audit and fiscal procedures that conform to generally accepted government
31 accounting standards.

32 (3) Prepare any reports required by the Federal Government as a condition to the award of
33 federal capitalization grants.

34 **SECTION 6.** Any public agency desiring funding of its assessment deferral loan program from
35 the Assessment Deferral Loan Program Revolving Fund may borrow from the Assessment Deferral
36 Loan Program Revolving Fund in accordance with the procedures contained in this Act. The public
37 agency shall submit an application to the department on a form provided by the department. After
38 final approval of the application, the department shall offer the public agency funds from the As-
39 sessment Deferral Loan Program Revolving Fund through a loan agreement with terms and condi-
40 tions that:

41 (1) Require the public agency to repay the loan with interest according to a repayment schedule
42 corresponding to provisions governing repayment of deferred assessments by property owners as
43 defined in the public agency's adopted assessment deferral loan program;

44 (2) Require the public agency to secure the loan with an assessment deferral loan program fi-

1 nancing lien as described in section 7 of this Act; and

2 (3) Limit the funds of the public agency that are obligated to repay the loan to proceeds from
3 repayment of deferred assessments by property owners participating in the assessment deferral loan
4 program adopted by the public agency.

5 **SECTION 7.** (1) Any public agency that pays all or part of a property owner's assessment
6 pursuant to the public agency's adopted assessment deferral loan program shall have a lien against
7 the assessed property for the amount of the public agency's payment and interest thereon as speci-
8 fied in the public agency's assessment deferral loan program.

9 (2) The public agency's auditor, clerk or other officer shall maintain a docket describing all
10 payments of assessments made by the public agency pursuant to its adopted assessment deferral loan
11 program. The liens created by such payments shall attach to each property for which payment is
12 made at the time the payment is entered in this docket. The liens recorded on this docket shall have
13 the same priority as a lien on the bond lien docket maintained pursuant to ORS 223.230. A lien shall
14 be discharged upon repayment to the public agency of all outstanding principal and interest in ac-
15 cordance with the requirements of the public agency's adopted assessment deferral loan program.

16 (3) The lien may be enforced by the public agency as provided by ORS 223.505 to 223.650. The
17 lien shall be delinquent if not paid according to the requirements of the public agency's adopted
18 assessment deferral loan program.

19 **SECTION 8.** The Department of Environmental Quality shall submit an informational report to
20 the Joint Committee on Ways and Means or, if during the interim between sessions of the Legisla-
21 tive Assembly, to the Emergency Board before awarding the first loan from the Assessment Deferral
22 Loan Program Revolving Fund. The report shall describe the assessment deferral loan program and
23 set forth in detail the operating procedures of the program.

24 **SECTION 9.** The Department of Environmental Quality may loan to the Assessment Deferral
25 Loan Program Revolving Fund, for the biennium beginning July 1, 1987, out of the Pollution Control
26 Fund, an amount not to exceed \$300,000. Such moneys may be used by the department only if other
27 funds are not sufficient for the purposes of funding loans provided during the biennium beginning
28 July 1, 1987.

29 **SECTION 10.** ORS 468.220 is amended to read:

30 468.220. (1) The department shall be the agency for the State of Oregon for the administration
31 of the Pollution Control Fund. The department is hereby authorized to use the Pollution Control
32 Fund for one or more of the following purposes:

33 (a) To grant funds not to exceed 30 percent of total project costs for eligible projects as defined
34 in ORS 454.505 or sewerage systems as defined in ORS 468.700.

35 (b) To acquire, by purchase, or otherwise, general obligation bonds or other obligations of any
36 municipal corporation, city, county, or agency of the State of Oregon, or combinations thereof, is-
37 sued or made for the purpose of paragraph (a) of this subsection in an amount not to exceed 100
38 percent of the total project costs for eligible projects.

39 (c) To acquire, by purchase, or otherwise, other obligations of any city that are authorized by
40 its charter in an amount not to exceed 100 percent of the total project costs for eligible projects.

41 (d) To grant funds not to exceed 30 percent of the total project costs for facilities for the dis-
42 posal of solid waste, including without being limited to, transfer and resource recovery facilities.

43 (e) To make loans or grants to any municipal corporation, city, county, or agency of the State
44 of Oregon, or combinations thereof, for planning of eligible projects as defined in ORS 454.505,

1 sewerage systems as defined by ORS 468.700 or facilities for the disposal of solid waste, including
2 without being limited to, transfer and resource recovery facilities. Grants made under this paragraph
3 shall be considered a part of any grant authorized by paragraph (a) or (d) of this subsection if the
4 project is approved.

5 (f) To acquire, by purchase, or otherwise, general obligation bonds or other obligations of any
6 municipal corporation, city, county, or agency of the State of Oregon, or combinations thereof, is-
7 sued or made for the purpose of paragraph (d) of this subsection in an amount not to exceed 100
8 percent of the total project costs.

9 (g) To advance funds by contract, loan or otherwise, to any municipal corporation, city, county
10 or agency of the State of Oregon, or combination thereof, for the purpose of paragraphs (a) and (d)
11 of this subsection in an amount not to exceed 100 percent of the total project costs.

12 (h) To pay compensation required by law to be paid by the state for the acquisition of real
13 property for the disposal by storage of environmentally hazardous wastes.

14 (i) To dispose of environmentally hazardous wastes by the Department of Environmental Quality
15 whenever the department finds that an emergency exists requiring such disposal.

16 (j) To acquire for the state real property and facilities for the disposal by landfill, storage or
17 otherwise of solid waste, including but not limited to, transfer and resource recovery facilities.

18 (k) To acquire for the state real property and facilities for the disposal by incineration or oth-
19 erwise of hazardous waste or PCB.

20 **(L) To provide funding for the Assessment Deferral Loan Program Revolving Fund es-**
21 **tablished in section 3 of this 1987 Act.**

22 (2) The facilities referred to in paragraphs (a) to (c) of subsection (1) of this section shall be only
23 such as conservatively appear to the department to be not less than 70 percent self-supporting and
24 self-liquidating from revenues, gifts, grants from the Federal Government, user charges, assessments
25 and other fees.

26 (3) The facilities referred to in paragraphs (d), (f) and (g) of subsection (1) of this section shall
27 be only such as conservatively appear to the department to be not less than 70 percent self-
28 supporting and self-liquidating from revenues, gifts, grants from the Federal Government, user
29 charges, assessments and other fees.

30 (4) The real property and facilities referred to in paragraphs (j) and (k) of subsection (1) of this
31 section shall be only such as conservatively appear to the department to be not less than 70 percent
32 self-supporting and self-liquidating from revenues, gifts, grants from the Federal Government, user
33 charges, assessments and other fees.

34 (5) The department may sell or pledge any bonds, notes or other obligations acquired under
35 paragraph (b) of subsection (1) of this section.

36 (6) Before making a loan or grant to or acquiring general obligation bonds or other obligations
37 of a municipal corporation, city, county or agency for facilities for the disposal of solid waste or
38 planning for such facilities, the department shall require the applicant to demonstrate that it has
39 adopted a solid waste management plan that has been approved by the department. The plan must
40 include a waste reduction program.

41 (7) Any grant authorized by this section shall be made only with the prior approval of the Joint
42 Committee on Ways and Means during the legislative sessions or the Emergency Board during the
43 interim period between sessions.

44 (8) The department may assess those entities to whom grants and loans are made under this

1 section to recover expenses incurred in administering this section.

2 **SECTION 11.** If Senate Bill 117 becomes law, section 3 of this Act is amended to read:

3 Sec. 3. (1) There is established the Assessment Deferral Loan Program Revolving Fund separate
4 and distinct from the General Fund in the State Treasury. The moneys in the Assessment Deferral
5 Loan Program Revolving Fund are appropriated continuously to the Department of Environmental
6 Quality to be used for the purposes described in section 4 of this 1987 Act.

7 (2) The Assessment Deferral Loan Program Revolving Fund may be capitalized from [*capitaliza-*
8 *tion grants or loans from the Pollution Control Fund*] any one or a combination of the following
9 sources of funds in an amount sufficient to fund assessment deferral loan programs provided for
10 in section 4 of this 1987 Act: [.]

11 (a) From the Water Pollution Control Revolving Fund.

12 (b) From capitalization grants or loans from the Pollution Control Fund.

13 (3) In addition to those funds used to capitalize the Assessment Deferral Loan Program Revolv-
14 ing Fund, the fund shall consist of:

15 (a) Any other revenues derived from gifts, grants or bequests pledged to the state for the pur-
16 pose of providing financial assistance to water pollution control projects;

17 (b) All repayments of money borrowed from the fund;

18 (c) All interest payments made by borrowers from the fund;

19 (d) Any other fee or charge levied in conjunction with administration of the fund; and

20 (e) Any available local funds.

21 (4) The State Treasurer may invest and reinvest moneys in the Assessment Deferral Loan Pro-
22 gram Revolving Fund in the manner provided by law. All earnings from such investment and rein-
23 vestment shall be credited to the Assessment Deferral Loan Program Revolving Fund.

24 **SECTION 12.** This Act being necessary for the immediate preservation of the public peace,
25 health and safety, an emergency is declared to exist, and this Act takes effect July 1, 1987.

26

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Proposed Rules To Implement Assessment Deferral Loan Program Revolving Fund

Date Prepared: 8-27-87
Hearing Date: 10-26-87
Comments Due: 10-28-87

**WHO IS
AFFECTED:**

Cities, special districts and counties under state Commission or agency order or federal grant agreement to construct a sewage collection system.

**WHAT IS
PROPOSED:**

Administrative rules necessary to implement the Assessment Deferral Loan Program Revolving Fund.

**WHAT ARE THE
HIGHLIGHTS:**

Affected communities may apply for loans to capitalize municipally-operated sewer assessment deferral programs. The individual programs would then make loans available to property owners suffering extreme financial hardship to defer property assessments for sewer construction. Rules are proposed to establish criteria for review and approval of community programs, criteria for establishing priority and allocation of funds, and criteria for establishing loan terms and conditions.

**FISCAL AND
ECONOMIC
IMPACT:**

The proposed rules will establish an equitable basis for distribution of a limited amount of loan funds to defer property assessments against property whose owners would suffer extreme financial hardship from construction of sewage collector systems. The program will be targeted to help financially-disadvantaged owners who would have extreme difficulty paying for sewer assessments. Without the program, some property owners may be compelled to sell or otherwise lose their properties because of an inability to pay the assessments. The program should reduce this problem and, consequently, the rules are viewed as having a positive fiscal and economic impact.

**LAND USE
CONSISTENCY:**

The proposed rules do not directly affect development or local land use programs. Land use consistency must be established prior to construction of sewage collection systems.



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

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

**HOW TO
COMMENT:**

Public Hearing

Monday, October 26, 1987

- 10:00 a.m., DEQ Office, Fourth Floor Conference Room
811 S.W. Sixth Avenue, Portland, Oregon

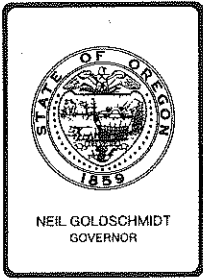
- 7:00 p.m., Harris Hall, Lane County Courthouse,
125 E. Eighth Avenue, Eugene, Oregon

Written comments should be sent to Barbara Burton by October 28, 1987.

**WHAT IS THE
NEXT STEP:**

Following the public hearings, Department of Environmental Quality staff will summarize and evaluate testimony and prepare administrative rules for Environmental Quality Commission consideration.

WC2387



Department of Environmental Quality

811 S.W. SIXTH AVENUE, PORTLAND, OREGON 97204 PHONE: (503) 229-5696

MEMORANDUM

ATTACHMENT 2

• TO: Environmental Quality Commission

FROM: Thomas J. Lucas, Hearings Officer

SUBJECT: Summary Of Public Comment -- Public Hearing On Proposed Rules 340-81-110 Regarding The Assessment Deferral Loan Program Revolving Fund

Public hearings on the referenced subject were held at the Department of Environmental Quality offices in Portland beginning at 10:00 a.m. and at Harris Hall in Eugene beginning at 7:00 p.m. on October 26, 1987. The hearings were preceded by public notice distributed to all interested parties on September 26, 1987. Publication was made in the Secretary of State's Bulletin on September 15, 1987.

1. A summary of the issues was presented by the Hearing Officer.
2. The Hearing Officer reminded those present that the hearing record will close at 5:00 p.m., October 28, 1987, and that the proposed rule is scheduled for action by the Environmental Quality Commission at the December 4, 1987 meeting.

Following, in the order received, are summaries of written and oral testimony, and the Department's response where appropriate. Copies of written testimony are available at the DEQ, Water Quality Division.

Responses to Oral and Written Testimony

1. Brad Higbee, City of Portland

Mr. Higbee presented testimony on behalf of the City of Portland, and submitted for the record a written copy of his oral testimony. After voicing general support for the proposed program and rule, he offered suggestions for several modifications as follows:

- a. Benefits of this program should be restricted to homeowners, not commercial property owners. Although SB 878, the bill establishing this program does use the term property owner and not homeowner, Mr. Higbee thinks it was legislative intent to benefit only homeowners, not all property owners.

Response: The Department thinks it prudent to remain with the exact language in the enabling legislation for this new program. Individual cities will have the option of targeting only homeowners in their loan programs.

- b. Section 3(a)(D) should be changed to read "A schedule for construction of collector sewers.", since some local programs (including Portland's) will be allowing delays in actual physical connections to sewers. The recommended language would better reflect such a situation.

Response: The Department agrees that the language should be changed as requested.

- c. Section 4(B) should be modified to reflect census data that is readily available to applying cities. This income data is not available broken down by home ownership versus renters, and cities would be required to do a door to door survey to get that information.

Response: The Department agrees that readily available census data should be used, and agrees that the required data should not include income data for owner occupied homes.

- d. Section 5(c) should be changed to establish an interest rate at approximately that of inflation, and that this rate not be subject to change by the Commission each two years.

Response: The Department agrees that an interest rate of approximately 5%, the current inflation rate, is appropriate at this time. It offers substantial relief for property owners, while assuring that the Fund will not diminish with time due to inflation. However, the Commission should retain the flexibility to change the interest rate each two years as economic conditions vary. The Department is therefore recommending that the interest rate for the 1987-1989 biennium be set at 5%, with review and possible change each two years after that.

2. Steve Peterson, City of Gresham

Mr. Peterson voiced general support for the program, but offered two suggestions.

- a. Section 4 should give priority to Commission mandated projects over other potentially eligible projects.

Response: The Department can see no justification for this in SB 878, or in terms of the purpose of the program--assisting low income property owners with sewer assessment costs.

- b. In Section 5(c), Mr. Peterson urged as low an interest rate as possible, preferably 0%, but not more than the inflation rate. He also believes it should be specified in the regulation.

Response: See response to 1 (d) above.

3. Terry Smith, City of Eugene

- a. Section 3(b)(A) and (B) are too broadly drawn, making it difficult for applying cities to determine what the project evaluation criteria are.

Response: The Department agrees. 3(b)(A) has been clarified, tying it back to the program purpose as specified in Section (1)(a) of the rule. 3(b)(B) was deleted.

- b. Section 4(b) should be changed to reflect an income level closer to property owners that are likely to participate in this program.

Response: The Department agrees. This section has been changed to income levels at or below 200% of federal poverty level as published by the U.S. Bureau of Census.

- c. The interest rate should be set in the regulation. Mr. Smith suggested tying the interest rate to the Water Pollution Control Fund bond rate, minus a set percentage (possibly 4%).

Response: See response to 1(d) above.

Agenda Item K , December 11, 1987 EQC Meeting

Statement of Need for Rulemaking

(1) Legal Authority

The Department was directed by the 1987 Oregon Legislature to establish an Assessment Deferral Loan Program Revolving Fund as specified in SB 878. In order to establish and administer this new program, rules must be adopted by the Commission. ORS 468.020 authorizes the Commission to adopt rules and standards in accordance with ORS Chapter 183.

(2) Need for the Rule

This rule is needed so that property owners experiencing extreme financial hardship because of sewer assessments can get loans immediately, i.e. at the time of sewer hook-up. This rule will allow the Department to receive and screen applications from public agencies, and grant loans to them within approximately two months.

(3) Principal Documents Relied On

The principal documents relied on in developing this draft rule are SB 878, ORS 183.335, OAR 340 Division 81, and testimony presented to the Legislature during hearings on SB 878.

Land Use Consistency

The Department has concluded that the proposal conforms with the Planning Goals and Guidelines.

Goal 6 (Water Quality): This rule is designed to improve and maintain water quality in the affected area and is consistent with the Goal because it will encourage timely sewer connections where failing on-site sewage disposal systems are creating a potential health hazard and/or groundwater pollution.

Goal 11 (Public Facilities and Services): This rule is designed to assure the timely provisions of sewage disposal facilities and is consistent with Goal 11 because it will allow property owners to hook up to available sewers quickly.

The rule does not appear to conflict with other Goals.

Public comment on any land use issue involved is welcome and be submitted in the same manner as indicated for testimony in this notice. It is requested that local, state, and federal agencies review the action and comment on possible conflicts with their programs affecting land use and with Statewide Planning goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any appropriate conflicts to our attention by local, state or federal authorities.

NOTE: Bracketed [] Materials Deleted from the Rules as Proposed Prior to Hearing

Underlined Materials New or Changed from Those Proposed Rules that Went to Hearing

Oregon Administrative Rules

Chapter 340, Division 81 - Department of Environmental Quality

Assessment Deferral Loan Program Revolving Fund

340-81-110 Purpose. The Department will establish and administer an Assessment Deferral Loan Program Revolving Fund for the purpose of providing assistance to property owners who will experience extreme financial hardship from payment of sewer assessments. Assessment deferrals will be made available to qualifying property owners from approved assessment deferral loan program administered by public agencies.

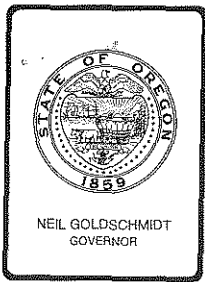
- (1) Loans from the Assessment Deferral Loan Program Revolving Fund may be made to provide funds for assessment deferral loan programs administered by public agencies that meet all of the following conditions:
 - (a) The public agency is required by federal grant agreement or by an order issued by the Commission or the Oregon Health Division to construct a sewage collection system, and sewer assessments or charges in lieu of assessments levied against some benefitted properties will subject property owners to extreme financial hardship;
 - (b) The public agency has adopted an assessment deferral loan program and the Commission has approved the program; and
 - (c) The sewage collection system meets the requirement of section 2 Article XI-H of the Oregon Constitution regarding eligibility of pollution control bond funds.
- (2) Any public agency requesting funding for its assessment deferral loan program from the Assessment deferral Loan Program Revolving Fund shall submit a proposed program and application to the Department on a form provided by the Department. Applications for loans and the proposed program shall be submitted by the following dates:
 - (a) By no later than February 1, 1988 for loans to be issued in the 1987-89 biennium;
 - (b) The subsequent bienniums, by no later than February 1 of odd numbered years preceding the biennium.

- (3) Any public agency administering funds from the Assessment Deferral Loan Program Revolving Fund shall have an assessment deferral loan program approved by the Department.
- (a) The proposed program submitted to the Department shall contain the following:
- (A) The number of sewer connections to be made as required by grant agreement or State order;
 - (B) An analysis of the income level and cost of sewer assessments for affected property owners;
 - (C) A description of how the public agency intends to allocate loan funds among potentially eligible property owners, including the following:
 - (i) Eligibility criteria;
 - (ii) Basis of choosing the eligibility criteria;
 - (iii) How funds will be distributed for assessment deferrals among eligible property owners.
 - (D) A schedule for [sewer connection] construction of collector sewers;
 - (E) A description of how the public agency intends to administer the assessment deferral program, including placing liens on property, repayment procedures, and accounting and record keeping procedures;
 - (F) Assurance that the public was afforded adequate opportunity for comment on the proposed program, and that public comments were considered prior to adoption of the proposed program by the public agency; and
 - (G) A resolution that the public agency has adopted the program.
- (b) The Department shall review proposed programs submitted by public agencies within 30 days of receipt. The Department shall use the following criteria in reviewing submitted programs:
- (A) The degree to which the public agency and it's proposed program will meet the intent of the Assessment Deferral Loan Program revolving Fund as specified in Section (1)(a) of this rule; and

- [(B) Whether the public agency has the institutional and managerial ability to administer the program; and]
- [C] (B) Whether the required sewers will be constructed and made available to affected property owners within the biennium for which funds are being requested.
- (c) The Department shall submit to the Commission recommendations for approval or disapproval of all submitted applications and proposed assessment deferral loan programs.
- (4) All public agencies meeting the requirements of OAR 340-81-110(1) shall receive an allocation of available funds based on the following criteria:
- (a) The number of sewer connections to be made, as described in the approved program;
- (b) The percentage of [owner occupied] households within the area described in the program that are at or below 200 percent of the federal poverty level as published by the U.S. Bureau of Census. [whose household incomes are at or below current U.S. Bureau of Census poverty levels.]
- (c) The allocation of available funds for qualifying public agencies shall be determined as follows:
- (A) Calculate the number of connections to low income households for each public agency:
- $$\frac{\text{(total number of)}}{\text{(sewer connections)}} \times \frac{\text{(% of households in project)}}{\text{(area where household income)}} \\ \frac{\text{(in project area)}}{\text{(is at or below 200 percent of)}} \frac{\text{(the federal poverty level.)}}{\text{(the federal poverty level.)}}$$
- = number of connections to low income households
- (B) Add the total number of connections to low income households for all qualifying public agencies;
- (C) Calculate a percentage of the total sewer connections to low income households for each qualifying agency (divide (A) above by (B) above);
- (D) Multiply the percentage calculated in (C) above by the total funds available.
- (5) Within 60 days of Commission approval of the application and allocation of loan funds, the Department shall offer the public

agency funds from the Assessment Deferral Loan Program Revolving fund through a loan agreement that includes terms and conditions that:

- (a) Require the public agency to secure the loan with assessment deferral loan program financing liens;
- (b) Require the public agency to maintain adequate records and follow accepted accounting procedures;
- (c) Contain a repayment program and schedule for the loan principal and simple annual interest. The interest rate shall be 5% for the 1987-1989 biennium, and shall be set by the Commission, by rule-making procedures for each subsequent biennium prior to allocation of available funds;
- (d) Require an annual status report from the public agency on the assessment deferral loan program; and
- (e) Conform with the terms and conditions listed in OAR 340-81-046.
- (f) Other conditions as deemed appropriate by the Commission.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item L, December 11, 1987, EQC Meeting

Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Division 100, 102 and 104.

Background and Problem Statement

This is the second in a series of proposed rulemakings which the Department has scheduled over the next two years. The Department is proposing the adoption, by reference, of a group of new federal hazardous waste management rules. The Department began this series with the adoption of another group of new federal rules on May 29, 1987. Attachment I is a tentative schedule for rulemaking.

The U.S. Environmental Protection Agency (EPA), under authority of the Resource Conservation and Recovery Act of 1976 (RCRA), has developed a national program for the management of hazardous waste. RCRA places the program within the federal province, but also includes provisions for EPA to authorize a state program to operate in lieu of the federal program. On January 31, 1986, EPA granted the State of Oregon Final Authorization to manage the base RCRA program (i.e., that part of the program in existence prior to the Hazardous and Solid Waste Amendments of 1984).

On November 8, 1984, the President signed into law a set of comprehensive amendments to RCRA, entitled the Hazardous and Solid Waste Amendments of 1984 (HSWA). These amendments require EPA to make extensive changes to the federal hazardous waste management rules, during the period from November 1984 through May 1990. States are required to make similar changes to their rules, to maintain authorization for the base RCRA program and to be eligible for additional authorization to implement HSWA-related regulations.

Pursuant to HSWA, EPA has promulgated and is continuing to promulgate a large number of new regulations and amendments to existing regulations. Also, EPA periodically makes amendments to the base RCRA program rules. The Department intends to propose the adoption of these new regulations and amendments in groups or "clusters", approximately once each six months. EPA is encouraging states to use this approach and has established regulatory deadlines by which states must adopt specific rule clusters. Attachment I lists these deadlines, as well as the Department's tentative schedule for rulemaking.

In accordance with these requirements, the Department is proposing the adoption of a group of these new federal rules, by reference, and the repeal of one existing state rule which conflicts with a new federal rule. A Statement of Need for Rulemaking is attached. The Commission is authorized to adopt hazardous waste management rules by ORS 466.020 and is authorized to take any action necessary to maintain Final Authorization for the RCRA program by Chapter 540, Oregon Laws 1987 (Senate Bill 116, 1987 Oregon Legislature).

On August 28, 1987, the Commission authorized the Department to conduct a hearing and solicit public comment on these proposed rule amendments. A hearing was held, in Portland, on October 2, 1987. Nineteen people attended, but no one testified. Four people submitted written testimony. All of the comments were in support of the proposed amendments, except that one person also suggested the adoption of a new more stringent state rule concerning the burning of hazardous waste in cement kilns. No other issues were raised.

Alternatives and Evaluation

The Department is proposing the adoption, by reference, of the HSWA Codification Rule, amendments to the federal rules concerning the listing of materials as hazardous waste, regulations concerning the burning of hazardous waste fuels and used oil fuel in boilers and industrial furnaces, and regulations concerning tanks used to store or treat hazardous wastes. Some of these federal rules have been amended by EPA (primarily corrections), since they were first promulgated. These amendments appear in later issues of the Federal Register. To be as up to date with the federal rules as possible and to not knowingly adopt new rules containing errors or omissions, the Department has included these amendments in this package of rules proposed to be adopted by reference.

The Department is also proposing to repeal OAR 340-104-191, concerning hazardous waste tanks and to amend OAR 340-102-034 which refers to 340-104-191. These existing state rules conflict with the new federal rules.

In order to maintain authorization for the RCRA program, the state must adopt all of these federal rules or equivalent rules, within specified timeframes ranging from July 1, 1988 to July 1, 1990. Most of these rules are HSWA requirements and, as explained below, are already in effect in Oregon, but currently administered and enforced by EPA. The Department believes this dual regulation is undesirable. For this reason and to better protect public health, safety and the environment, the Department believes that these federal rules should be adopted by the state as soon as possible. Each of the proposed new rules is discussed separately below. The title of the new federal rule or federal rule amendment and the date EPA published it in the Federal Register are underlined. A brief summary of each new rule or rule amendment follows. Those rules which contain, in whole or in part, amendments to the base RCRA program are specifically identified.

HSWA Codification Rule (Federal Register, July 15, 1985).

Prior to HSWA, a state with Final Authorization, such as Oregon, administered its hazardous waste program in lieu of the federal program. When new, more stringent federal requirements were promulgated, the state was obligated to enact equivalent requirements within specified time frames. However, the new federal requirements did not take effect in the authorized state until they were adopted by the state.

In contrast, new federal requirements and prohibitions, adopted pursuant to HSWA, take effect across the nation without regard to whether a state has an authorized RCRA program or not. States must still adopt HSWA provisions as state law to retain Final Authorization. However, EPA is directed to enforce these requirements until the state adopts them and EPA has granted authorization for the state to manage these new parts of the program.

One such set of HSWA regulations is the HSWA Codification Rule. This rule incorporates into the existing federal regulations those parts of the HSWA statute that are immediately effective (i.e., self-implementing provisions mandated by Congress). The rule covers a long list of provisions, including the following:

1. The ban on placement of bulk liquid hazardous waste and nonhazardous liquids in landfills;
2. The requirement for double liners and leachate collection systems at hazardous waste surface impoundments and landfills;
3. The requirement to institute corrective action (i.e., cleanup) at permitted facilities;
4. The ban on disposal of hazardous waste in certain salt dome formations, caves and underground mines;
5. The ban on the use of materials mixed with dioxins or other hazardous waste for dust suppression;
6. The authority to add conditions to a permit, beyond those specifically provided for in the regulations, as deemed necessary to protect public health and the environment;
7. The ban on burning of fuel containing hazardous waste in cement kilns located within the boundaries of any city with a population greater than 500,000; and
8. The requirement that generators, and owners or operators of treatment, storage and disposal facilities, certify that they have a waste minimization program.

The state has been delayed in adopting this rule by reference, because statutory authority for several of these provisions was lacking or unclear. With the passage of Senate Bill 116 by the 1987 Legislature, clear authority to adopt all of these provisions by rule now exists.

The Department received one comment concerning the HSWA codification Rule. Jean Meddaugh, representing the Oregon Environmental Council, asked the Department to consider adopting a state rule that would be more stringent than the federal rule, in regard to the burning of hazardous waste in cement kilns. The federal rule prohibits such burning, in cities with a population greater than 500,000, unless the cement kiln complies with the requirements for hazardous waste incinerators. Ms. Meddaugh suggests that the state restrict such burning in any city with a population greater than 4,000.

As indicated in Attachment III, the Response to Comment Summary, the Department has investigated the basis on which the federal rule was promulgated and the probable effects, in Oregon, of both the federal rule and a more stringent state rule. The Department has learned that:

1. This requirement was apparently included in HSWA to address a single proposed facility in Dallas, Texas;
2. There is no scientific data available to support restricting the burning of hazardous waste in cement kilns, based upon the population of the city in which the kiln is located;
3. There are currently no facilities in Oregon that would be affected by either the federal rule or a more-stringent state rule; and
4. EPA has recently proposed new, more comprehensive federal rules on this subject.

According to EPA staff in Washington, D.C., this provision of HSWA was introduced by Congressman Frost of Texas, in response to concerns about a cement kiln in Dallas (a city with a population greater than 500,000) that was proposing to burn hazardous waste. At that time, the facility would have been exempt from RCRA regulation. There was very little discussion of this provision by Congress and there is no evidence that the requirement was based upon any scientific data linked to population.

The Department's Air Quality Division reports that there is currently only one cement kiln operating in the state. It is located in Durkee, an unincorporated community in Baker County. Accordingly, neither the existing federal rule nor Ms. Meddaugh's proposed new state rule would affect this facility. Furthermore, it is the Department's understanding that the facility's owner/operator currently has no interest in burning hazardous waste.

On May 6, 1987, EPA proposed new, more stringent regulations for the burning of hazardous waste in boilers and industrial furnaces, including cement kilns. These rules would require all such devices to obtain a permit and meet standards similar to those for a hazardous waste incinerator, irrespective of the population of the community in which they are located. EPA staff expect to finalize this rulemaking by November 1988.

In view of all these facts, the Department is not persuaded that there is a compelling need to adopt a more stringent state rule on this subject. Accordingly, the Department recommends that the Commission adopt the existing federal rule by reference.

Correction to the HSWA Codification Rule Concerning the Paint Filter Liquids Test (Federal Register, May 28, 1986).

This federal rule makes a technical correction to the July 15, 1985 HSWA Codification Rule described above. EPA is correcting errors it made in the July 15, 1985 rule, by removing the designation of "reserved", from the paragraph of the regulation under which bulk hazardous and containerized liquid wastes are prohibited from disposal in a landfill. EPA states that the term "reserved" had been inadvertently used.

The correction also reinserts language, into the July 15, 1985 rule, requiring the use of the Paint Filter Liquids Test, to determine whether or not free liquids are present in a waste that will be landfilled. This requirement was originally promulgated by EPA on April 30, 1985 and has been in effect continuously since June 14, 1985. EPA's omission of this requirement from the HSWA Codification Rule was unintentional.

Technical Corrections to the HSWA Codification Rule (Federal Register, August 8, 1986).

This federal rule makes another amendment to the July 15, 1985 HSWA Codification Rule. The amendment concerns the waste minimization reporting requirement for generators of hazardous waste.

One of the provisions of HSWA requires generators of hazardous waste to include a description of their efforts to minimize the volume and toxicity of waste generated, on required periodic reports. However, in the July 15, 1985 HSWA Codification Rule, EPA inadvertently made the requirement applicable only to generators who ship their wastes off-site for treatment, storage or disposal. EPA is now correcting that rule by making the requirement also applicable to generators who manage their wastes on-site.

Burning of Hazardous Waste Fuel and Used Oil Fuel in Boilers and Industrial Furnaces (Federal Register, November 29, 1985).

These federal regulations prohibit the burning, in nonindustrial boilers, of both hazardous waste fuel and of used oil that does not meet specification levels for certain hazardous contaminants and flash point. They also provide administrative controls to keep track of marketing and burning activities. These controls include notification to the Department of waste-as-fuel activities, use of a manifest or, for used oil, an invoice system for shipments, and recordkeeping. Hazardous waste fuels, including processed or blended hazardous waste fuels, are also subject to storage requirements.

Currently, the Department does not regulate hazardous waste fuels or used oil fuels. Adoption of these federal regulations by reference has been delayed, because clear statutory authority was lacking. With the passage of Senate Bill 116, authority to adopt these regulations is now clear.

Technical Corrections to the November 29, 1985 Rules Concerning Burning of Hazardous Waste Fuel and Used Oil Fuel in Boilers and Industrial Furnaces (Federal Register, April 13, 1987).

These federal regulations clarify and make corrections to the November 29, 1985 federal rules described above. EPA is correcting several typographical errors and omissions and providing clarification on the following subjects:

1. Clarifies which producers, marketers and burners of hazardous waste fuel must notify the Department of their activity;
2. Clarifies which burners of used oil fuel must notify the Department;
3. Clarifies that tanks used to blend hazardous waste fuels, along with all other hazardous waste fuel storage tanks, are subject to the hazardous waste storage rules;
4. Clarifies the exemption of coke and coal tar produced from coal tar decanter sludge by the iron and steel industry; and
5. Clarifies the definition of the term "marketer" as used in these rules.

Additional Listed Hazardous Wastes (Federal Registers, October 23, 1985, February 13, 1986, and February 25, 1986).

EPA has determined that the wastes listed below may cause either carcinogenic, teratogenic, adverse reproductive or other chronic, toxic effects in laboratory animals or humans. Accordingly, these federal regulations add those wastes to the lists of materials designated as hazardous wastes, as follows:

1. Adds six wastes generated during the production of dinitrotoluene (DNT), toluenediamine (TDA), and toluene diisocyanate (TDI) to the "K" list in 40 CFR 261.32. Also, adds two compounds (o - and p - toluidine) to the list of commercial chemical products which are hazardous wastes when discarded (i.e., the "U" list in 40 CFR 261.33). (October 23, 1985 Federal Register);
2. Adds three wastes generated during the production of ethylene dibromide (EDB) to the "K" list in 40 CFR 261.32 (February 13, 1986 Federal Register); and
3. Adds four spent solvents and still bottoms from the recovery of these solvents to the "F" list in 40 CFR 261.31. The solvents are 1,1,2-trichloroethane; benzene; 2-ethoxyethanol and 2-nitropropane. Also, adds one of these solvents (2-ethoxyethanol) to the "U" list (i.e., discarded commercial chemical products) in 40 CFR 261.33. (February 25, 1986 Federal Register.)

ORS 466.005(6)(b) requires that before designating these wastes as "hazardous wastes", the Commission must find that these wastes may:

- A. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
- B. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

As noted above, EPA has evaluated each of these wastes and has made such findings. These findings are included on page 42937 of the attached October 23, 1985 Federal Register, page 5327 of the attached February 13, 1986 Federal Register and page 6537 of the attached February 25, 1986 Federal Register.

Ten Percent Solvent Mixtures (Federal Register, December 31, 1985).

These federal regulations redefine the listing of spent solvents as hazardous waste (EPA hazardous waste numbers F001 through F005), to include mixtures containing ten percent or more (by volume) of listed solvent. Previously, the federal rules covered only the technical grade, practical grade or pure form of the solvents. This was a major loophole in the federal regulations which potentially allowed waste mixtures containing substantial amounts of spent solvent to escape regulation. EPA is now attempting to close that loophole.

These federal regulations do not conflict with and will be a good complement to the existing state mixture rules in OAR 340-101-033. The state rules pertain to mixtures containing listed manufacturing process wastes or unused commercial chemical products ("P" or "U" - listed wastes in 40 CFR 261.33). The new federal regulations pertain to spent solvents ("F" - listed wastes in 40 CFR 261.31).

Since this rule adds to the list of materials designated as "hazardous waste", the Commission must make findings, as described above, before adopting it. Although, EPA has not developed health-based regulatory thresholds for all these listed solvents, EPA has data to demonstrate that, at ten percent concentrations, these solvents can cause substantial harm to human health. EPA's findings are included on page 53316 of the attached December 31, 1985 Federal Register.

Revised Standards for Hazardous Waste Storage and Treatment Tank Systems (Federal Register, July 14, 1986).

These new federal regulations contain a mixture of new HSWA requirements and amendments to the base RCRA program rules. EPA is significantly expanding the requirements to be met by persons who store or treat hazardous wastes in tanks. A summary of these new requirements is as follows:

1. Secondary containment systems and leak detection systems are mandated for new tank systems installed after January 12, 1987;
2. Secondary containment and leak detection are also required for existing tanks, in accordance with various compliance schedules, based upon the type of waste managed and the age of the tanks;
3. The term "new tank system" is defined to include not only newly manufactured tanks, but also existing tanks if reinstalled and used as replacements for existing hazardous waste tanks. The term also includes existing tanks which have not previously been used to store or treat hazardous waste, but which are converted to that use after the effective date of the regulations;
4. Periodic tank system integrity assessments are required for all tanks not equipped with secondary containment;
5. In the event a leak is detected, in any component of a tank system that is underground or that is not readily available for visible inspection, the new regulations require that the component be provided with secondary containment before the tank system is returned to service;
6. Design and installation standards for new tanks systems are established, as well as inspection, corrosion protection, operating and monitoring requirements for all tank system; and

7. Closure, post-closure and financial assurance requirements for tank systems are expanded.

There are several exemptions to these new rules, as follows:

1. The new requirements do not apply to small quantity generators (i.e., generators of between 100 and 1,000 kg/mo), as long as they store no more than 6,000 kg of waste or store any waste more than 180 days (270 days if the waste is ultimately to be shipped off-site for more than 200 miles). Instead, these generators must comply with the previous federal tank rules;
2. The new requirements do not apply to a wastewater treatment unit regulated under Section 402 of the federal Clear Water Act (i.e., a NPDES permit);
3. The requirements do not apply to tank systems that are integrally tied to reclamation operations that are considered part of a closed-loop reclamation process, provided that hazardous materials are not accumulated over 12 months without being reclaimed and that the reclamation process does not involve controlled flame combustion; and
4. The owner/operator of a tank system may petition for a variance from the secondary containment requirement, if he/she can demonstrate (a) that an alternative design or operating practice will provide equivalent protection; or (b) that if a release does occur, there will be no substantial threat to human health or the environment. Note: the second variance is not available for new underground tanks.

Oregon rules (OAR 340-104-191) currently require secondary containment, but not leak detection, for new tanks installed after January 1, 1985. Previously, this rule was more stringent than the federal requirements. Now, however, the federal rules have become more stringent and comprehensive. In order to maintain RCRA authorization, the state cannot retain regulations which are less stringent than the federal rules. Also, the Department believes that these more comprehensive federal regulations provide better protection of public health, safety and the environment than the current state rules. Accordingly, in addition to proposing the adoption of the new federal rules, the Department is also proposing the repeal of OAR 340-104-191 and the amendment of OAR 340-102-034 which refers to 340-104-191.

Corrections to the July 14, 1986 Regulations for Hazardous Waste Storage and Treatment Tanks (Federal Register, August 15, 1986).

This federal rule corrects typographical and other minor administrative errors which EPA made in the new federal tanks rules described above.

Amendments to the Rules Concerning Identification and Listing of Hazardous Waste (Federal Register, August 6, 1986).

These amendments by EPA correct typographical errors in 57 existing entries in the federal lists of commercial chemical products which are hazardous wastes when discarded (i.e., the "P" list and "U" list in 40 CFR 261.33), and in the list of hazardous constituents (i.e., Appendix VIII of 40 CFR, Part 261). The amendments also add Chemical Abstracts Service (CAS) registry numbers to all listings, as an identification aid. These are amendments to the base RCRA program rules.

Summation

1. The State of Oregon currently has final authorization to operate a comprehensive hazardous waste management program, in lieu of a federally-operated program.
2. In order to maintain final authorization, federal law requires that the state adopt new federal requirements and prohibitions, within specified time frames, and that the state not retain regulations that are less stringent than the new federal regulations.
3. EPA has recently promulgated a series of such new regulations. The Department is proposing to adopt a group of these new federal rules by reference. The Department is also proposing to repeal an existing state rule, which is less stringent than one of the new federal rules, and to amend another state rule which refers to the less stringent state rule.
4. A public hearing has been held, concerning this proposed rulemaking. Three people wrote in support of the amendments as proposed. One person generally supported the amendments, but proposed an additional more stringent state rule. The Department was not persuaded to endorse this change and requests adoption of the amendments as originally proposed.
5. The Department finds that the additional wastes designated by EPA as "hazardous waste", and proposed to be incorporated by reference into the Department rules, meet the requirements of ORS 466.005(6)(b) in that they may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
6. The Commission is authorized to adopt hazardous waste management rules by ORS 466.020 and is authorized to take any action necessary to maintain RCRA authorization by Chapter 540, Oregon Laws 1987 (Senate Bill 116, 1987 Oregon Legislature).

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission adopt these proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102 and 104.



Fred Hansen

- Attachment
- I. Tentative Schedule for Rulemaking
 - II. Statement of Need for Rulemaking
 - III. Hearing Officer's Report
 - IV. Response to Comment Summary
 - V. Draft Rules, OAR 340, Divisions 100, 102 and 104
 - VI. Federal Registers (Chronological Order)

Bill Dana:f
ZF2280
229-6015
October 27, 1987

Attachment I
 Agenda Item L
 12-11-87 EQC MEETING

STATE OF OREGON
 DEPARTMENT OF ENVIRONMENTAL QUALITY
 HAZARDOUS WASTE PROGRAM
 TENTATIVE SCHEDULE FOR RULEMAKING

October 1, 1987

<u>Rule Summary</u>	<u>Date Promulgated by EPA</u>	<u>Authority</u>	<u>Deadline for Adoption</u>	<u>Proposed Adoption</u>	<u>Committee Review</u>	<u>Hearing Authorization</u>	<u>Public Hearing</u>	<u>EPA Authorization</u>
1. Public availability of information. Section 3006(f) of RCRA.	Not applicable	HSWA	July '87	May '87	March '87	March '87	Apr. '87	July '87
2. Technical corrections to the definition of solid waste.	Aug. 20, '85	RCRA	July '87	May '87	March '87	March '87	Apr. '87	July '87
3. Small quantity generator rules.	March 24, '86	HSWA	July '89	May '87	March '87	March '87	Apr. '87	July '87
4. Amendments to closure, post-closure and financial responsibility requirements (AISI settlement).	May 2, '86	RCRA	July '87	May '87	March '87	March '87	Apr. '87	July '87
5. Clarification of the listing as hazardous waste of spent pickle liquor from steel finishing operations.	May 28, '86	RCRA	July '87	May '87	March '87	March '87	Apr. '87	July '87
6. Amendments allowing use of a corporate guarantee for liability coverage.	July 11, '86	RCRA	None	May '87	March '87	March '87	Apr. '87	July '87
7. Further clarification of the listing as hazardous waste of spent pickle liquor from steel finishing operations.	Sept. 22, '86	RCRA	July '88	May '87	March '87	March '87	Apr. '87	July '87

<u>Rule Summary</u>	<u>Date Promulgated by EPA</u>	<u>Authority</u>	<u>Deadline for Adoption</u>	<u>Proposed Adoption</u>	<u>Committee Review</u>	<u>Hearing Authorization</u>	<u>Public Hearing</u>	<u>EPA Authorization</u>
8. Fee increases.	Not applicable	ORS 466.165	July '87	July '87	Apr. '87	Apr. '87	June '87	N.A.
9. HSWA codification rules.	July 15, '85	HSWA	July 1, '90*	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
10. Burning of hazardous waste fuel and off-specification used oil.	Nov. 29, '85	HSWA	July 1, '90*	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
11. Adds six wastes generated during the production of DNT, TDA and TDI. (K- and U-listed wastes).	Oct. 23, '85	HSWA	July 1, '89	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
12. Adds 10% solvent mixtures. Clarifies the listing of "spent solvents". (F-listed wastes).	Dec. 31, '85	HSWA	July 1, '89	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
13. Adds three wastes generated during the production of EDB. (K-listed wastes).	Feb. 13, '86	HSWA	July 1, '89	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
14. Adds four spent solvents to F002 and F005 lists.	Feb. 25, '86	HSWA	July 1, '89	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
15. Corrections to the July 15, 1985 HSWA Codification rules concerning the Paint Filter Liquids Test.	May 28, '86	HSWA	July 1, '89	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
16. New standards for storage and treatment tanks.	July 14, '86	RCRA	July 1, '88	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88

*Statutory authority was missing or unclear, until SB 116 passed.

<u>Rule Summary</u>	<u>Date Promulgated by EPA</u>	<u>Authority</u>	<u>Deadline for Adoption</u>	<u>Proposed Adoption</u>	<u>Committee Review</u>	<u>Hearing Authorization</u>	<u>Public Hearing</u>	<u>EPA Authorization</u>
17. Corrects 57 existing entries on P and U lists. Adds Chemical Abstract Service registry numbers to all listings.	Aug. 6, '86	RCRA	July 1, '88	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
18. Exportation of hazardous wastes.	Aug. 8, '86	HSWA	July 1, '89	May '88	March '88	March '88	Apr. '88	July '88
19. Technical corrections to the July 15, 1985 HSWA codification rule.	Aug. 8, '86	HSWA	July 1, '90*	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
20. Corrections to the July 14, 1986 storage and treatment tank rules.	Aug. 15, '86	RCRA	July 1, '88	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
21. "Cleanup" of state permitting rules.	Not applicable	ORS 466.020	None	May '88	Sept.-Dec. '87	March '88	Apr. '88	July '88
22. Small quantity generators must certify waste minimization on manifests.	Oct. 1, '86	HSWA	July 1, '90*	May '88	March '88	March '88	Apr. '88	July '88
23. Adds four wastes generated during the production of EBDC (K123-K126).	Oct. 24, '86	HSWA	July 1, '89	May '88	March '88	March '88	Apr. '88	July '88
24. Land disposal ban for dioxins and solvents.	Nov. 7, '86	HSWA	July 1, '90*	May '88	March '88	March '88	Apr. '88	July '88
25. Clarifies listing for wastewater treatment sludge from electroplating wastes (FO06) (interpretative rule).	Dec. 2, '86	Unclear	Unclear	May '88	March '88	March '88	Apr. '88	July '88

*Statutory authority was missing or unclear, until SB 116 passed.

<u>Rule Summary</u>	<u>Date Promulgated by EPA</u>	<u>Authority</u>	<u>Deadline for Adoption</u>	<u>Proposed Adoption</u>	<u>Committee Review</u>	<u>Hearing Authorization</u>	<u>Public Hearing</u>	<u>EPA Authorization</u>
26. Interim status standards for closure and post-closure care of surface impoundments.	Mar. 19, '87	RCRA	July 1, '88	May '88	Mar. '88	Mar. '88	Apr. '88	July '88
27. Corrections to the Nov. 29, 1985 HW fuel & used oil rules.	Apr. 13, '87	HSWA	July 1, '89	Dec. '87	Sept. '87	Aug. '87	Oct. '87	July '88
28. Corrections to the Nov. 7, 1986 land disposal ban for dioxins & solvents.	June 4, '87	HSWA	July 1, '90*	May '88	Mar. '88	Mar. '88	Apr. '88	July '88
29. Technical corrections to the hazardous waste recycling rules.	June 5, '87	RCRA	July 1, '88	May '88	Mar. '88	Mar. '88	Apr. '88	July '88
30. Corrective action for hazardous waste land disposal facilities.	June 22, '87	RCRA	July 1, '89*	May '88	Mar. '88	Mar. '88	Apr. '88	July '88
31. Land disposal ban for "California list" wastes.	July 8, '87	HSWA	July 1, '91	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89
32. List (phase 1) of hazardous constituents for ground-water monitoring.	July 9, '87	RCRA	July 1, '89	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89
33. Technical corrections to the definition of solid waste.	July 10, '87	RCRA	July 1, '89	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89
34. Further clarification of the listing of spent pickle liquor from steel finishing operations.	Aug. 3, '87	RCRA	July 1, '89	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89

*Statutory authority was missing or unclear, until SB 116 passed.

<u>Rule Summary</u>	<u>Date Promulgated by EPA</u>	<u>Authority</u>	<u>Deadline for Adoption</u>	<u>Proposed Adoption</u>	<u>Committee Review</u>	<u>Hearing Authorization</u>	<u>Public Hearing</u>	<u>EPA Authorization</u>
35. Corrections to the June 22, 1987 corrective action regulations.	Sept. 9, '87	RCRA	July 1, '89	May '88	Mar. '88	Mar. '88	Apr. '88	July '88
36. Exception reporting for small quantity generators.	Sept. 23, '87	HSWA	July 1, '91	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89

ZB6484

The preceding list includes all the rules promulgated by EPA through September 30, 1987, except for the approval or denial of delisting petitions. For rules promulgated after October 1, 1987, the Department proposes the following tentative schedule:

<u>Rule Summary</u>	<u>Date Promulgated by EPA</u>	<u>Authority</u>	<u>Deadline for Adoption</u>	<u>Proposed Adoption</u>	<u>Committee Review</u>	<u>Hearing Authorization</u>	<u>Public Hearing</u>	<u>EPA Authorization</u>
1. Non-HSWA rules	July 1, '87 thru Dec. 31, '87	RCRA	July 1, '89	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89
2. HSWA rules	July 1, '87 thru Dec. 31, '87	HSWA	July 1, '91	Nov. '88	Aug. '88	Aug. '88	Oct. '88	July '89
3. Non-HSWA rules	Jan. 1, '88 thru June 30, '88	RCRA	July 1, '90	May '89	March '89	March '89	Apr. '89	July '89
4. HSWA rules	Jan. 1, '88 thru June 30, '88	HSWA	July 1, '91	May '89	March '89	March '89	Apr. '89	July '89

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

IN THE MATTER OF AMENDING) STATEMENT OF NEED FOR
OAR CHAPTER 340,) RULEMAKING
DIVISION 100, 102 and 104)

STATUTORY AUTHORITY:

ORS 466.020 requires the Commission to:

- (1) Adopt rules to establish minimum requirements for the treatment storage, and disposal of hazardous wastes, minimum requirements for operation, maintenance, monitoring, reporting and supervision of treatment, storage and disposal sites, and requirements and procedures for selection of such sites.
- (2) Classify as hazardous wastes those residues resulting from any process of industry, manufacturing, trade, business or government or from the development or recovery of any natural resources, which may, because of their quantity, concentration, or physical chemical or infectious characteristics:
 - (a) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
 - (b) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
- (3) Adopt rules pertaining to hearings, filing of reports, submission of plans and the issuance of licenses.
- (4) Adopt rules pertaining to generators, and to the transportation of hazardous waste by air and water.

NEED FOR THE RULES:

The State of Oregon is currently authorized, by the federal government, to manage the comprehensive hazardous waste management program mandated by Congress under the Resource Conservation and Recovery Act (RCRA). In order to maintain authorization, the state must adopt new federal rules and repeal any existing state rules which are less stringent, within specified time frames. Loss of authorization would result in a federally-operated program in the state. The Oregon Legislature supports state authorization and has granted the Department and the Commission authority to take any action necessary to maintain Oregon's authorization.

Attachement II
Agenda Item L
12/11/87 EQC Meeting
page 2

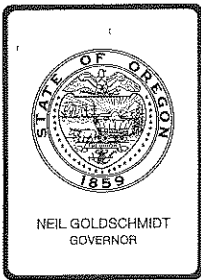
PRINCIPAL DOCUMENTS RELIED UPON:

New federal hazardous waste management rules published in the Federal Register on July 15, 1985; October 23, 1985; November 29, 1985; December 31, 1985; February 13, 1986; February 25, 1986; May 28, 1986; July 14, 1986; August 6, 1986; August 15, 1986; and April 13, 1987. Existing State rules, OAR Chapter 340, Divisions 100, 102 and 104.

FISCAL AND ECONOMIC IMPACT:

The new, more stringent federal regulations will increase the costs of hazardous waste management in this state, including costs to small businesses. However, any increased costs associated with these new standards will occur irrespective of the Department's proposed rule amendments. The new standards for hazardous waste generators, and for owners and operators of hazardous waste management facilities, have already been promulgated and are currently administered by the U.S. Environmental Protection Agency (EPA). In the event that the state does not also adopt these new standards, EPA will continue to enforce and administer them in Oregon.

ZF2280.1



Environmental Quality Commission

Attachment III
Agenda Item L
12/11/87 EQC Meeting

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: William H. Dana, Hearing Officer

Subject: Agenda Item , December 11, 1987, EQC Meeting

Hearing Officer's Report on Proposed Amendments to the
Hazardous Waste Management Rules, OAR Chapter 340, Divisions
100, 102 and 104.

Summary of Procedure:

Pursuant to public notice, a public hearing was convened at 9:00 a.m. on October 2, 1987, in the Department's offices at 811 S.W. Sixth Avenue in Portland. The purpose of the hearing was to receive testimony concerning proposed amendments to the hazardous waste management rules. Nineteen people attended the hearing, in addition to Department staff. An attendance list is attached. The hearing record officially closed on October 7, 1987, but two letters received after that date were also accepted.

Summary of Testimony:

No one wished to testify at the hearing. As a result, Department staff used the opportunity to answer questions and conduct an informal discussion about the proposed rule amendments.

Written testimony was received from four people. Copies of the written testimony are attached. A summary of the written testimony is as follows:

Jean C. Meddaugh, of the Oregon Environmental Council (OEC), states that OEC supports the proposed amendments, with one exception. OEC requests that the Department consider adopting a state rule that is more stringent than the federal rule, concerning the burning of hazardous waste fuel in cement kilns. The federal rule restricts such burning in cities with a population greater than 500,000. Ms. Meddaugh suggests that state restrict such burning in cities with a population greater than 4,000.

Douglas M. Richardson, of Great Western Chemical Company, states that Great Western supports the Department's proposed rule amendments. In addition, Great Western supports the Department's policy of being consistent with the federal program, except in those limited cases where protection of public health and the environment mandate a more stringent state program.

EQC Agenda Item L
December 11, 1987, EQC Meeting
Page 2

David D. Emery, of Western Compliance Services, Inc. (Wescomp), states that Wescomp supports the Department's proposed adoption of federal regulations. Wescomp also supports the Department's policy of being consistent with the federal program, except in those limited cases where protection of public health and the environment mandate a more stringent state program.

Douglas S. Morrison, of the Northwest Pulp and Paper Association (NWPPA), states that NWPPA supports the proposed amendments to the hazardous waste rules. In particular, NWPPA supports the incorporation by reference of the federal rules. NWPPA believes that consistency with the federal laws and regulation is very important.

Attachments: (1) Hearing Attendance List.
(2) Letter from Jean C. Meddaugh, not dated.
(3) Letter from David D. Emery, dated October 6, 1987.
(4) Letter from Douglas M. Richardson, dated October 7, 1987
(5) Letter from Douglas S. Morrison, dated October 12, 1987.

William H. Dana:f
229-6015
ZF2551
October 27, 1987

ATTENDANCE LIST

Date: 10-2-87

Hearing: Proposed Amendments to Hazard Management Rules - Hearings Ofc.: Bill Dama

NAME & ADDRESS

REPRESENTING

PAUL MURPHY

THE BOEING Co

Peter Ayala

Taylor Lbr & Trtg Inc

Gary McAnley

Sunset O.I. Co.

Don Spencer

Spencer Env. Svcs Inc

Doug Richardson

Great Western Chemical Co

Sandra Hart

N.W. Nat. Gas Co.

Jim Billings

CSSI

Theresa Walters

Kiedel Environmental Services

KIRK MILLS

3M

Jim McNeil

Sore Power Industries

Corinne P. Willison

NESCO

Kevin Curran

ESI

RICK LODESKI

HOWARD-CORPERS CORP

Jim Brown

Dogleg Conts.

Tom Donner

ASSOCIATED OREGON INDUSTRIES

Dan Miller

City of Portland, Environmental Svcs.

MARK KEISTER

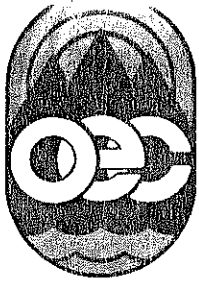
SAFCO ENVIRONMENTAL

William Weston

SAFECO ENVIRONMENTAL

Loei Hedden

Hedden Home Oil Recycling



OREGON ENVIRONMENTAL COUNCIL

2637 S.W. Water Avenue • Portland, Oregon 97201 • (503) 222-1970

Hazardous & Solid Waste Division
Department of Environmental Quality
RECEIVED
OCT 09 1987

COMMENTS SUBMITTED BY THE OREGON ENVIRONMENTAL COUNCIL

ON THE DEPARTMENT OF ENVIRONMENTAL QUALITY'S PROPOSED AMENDMENTS TO OAR CHAPTER 340, DIVISIONS 100,102,104 TO INCLUDE RECENTLY PROMULGATED FEDERAL REQUIREMENTS

All proposed rule amendments will provide greater protection for the health and safety of Oregonians, and will enhance environmental protection throughout the state. As such, OEC supports the proposed amendments. We do, however, suggest one change to make the proposed rules more appropriate to Oregon.

Under the proposed rules incorporating the HSWA Codification Rule, one proposes a ban on burning of fuel containing hazardous waste in cement kilns located within the boundaries of any city with a population greater than 500,000. Since there is no city in the state of Oregon to which this rule would presently apply, why not consider making that rule more stringent than the Federal rule, and have it apply to any city with a population greater than 4000? Four thousand is the cutoff number for the Opportunity to Recycle rules, so it would seem like an appropriate number to borrow here.

Thanking you for the opportunity to submit comments, I remain,

Sincerely yours,

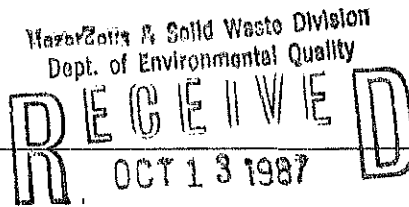
Jean C. Meddaugh
Jean C. Meddaugh
Associate Director

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 - Ethan Seltzer
 - Corinne Sherton
 - Paul Wilson

EXECUTIVE DIRECTOR
John A. Charles

24



"The Waste Management People"

October 6, 1987

Mr. Bill Dana
Department of Environmental Quality
Hazard & Solid Waste Division
811 S.W. Sixth
Portland, OR 97204

RE: OAR Chapter 340, Divisions 100, 102 and 104

Dear Mr. Dana,

Western Compliance Services, Inc., dba Wescomp, Inc., an Oregon corporation, wishes to thank the DEQ for providing an opportunity to comment on the proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102 and 104. Wescomp is a hazardous waste generator, a licensed hazardous waste transporter and an interim status RCRA storage facility. Wescomp operates in five western states and has 16 employees.

Wescomp supports the DEQ's adoption of these federal hazardous waste regulation changes and welcomes their inclusion within the DEQ's hazardous waste rules.

By amending the DEQ regulations to maintain consistency with the EPA regulations, the DEQ assists private industry in maintaining compliance with these complex regulatory provisions. Companies such as Wescomp, which operate in more than one state, have their compliance burdens lightened and are assisted in maintaining a uniform corporate-wide hazardous waste management program when state agencies, such as the DEQ, strive to maintain consistency with the federal EPA's program. Wescomp supports the DEQ's often stated position of maintaining consistency with the federal program, except in those limited cases where protection of the public health and the environment mandate a more stringent state program.

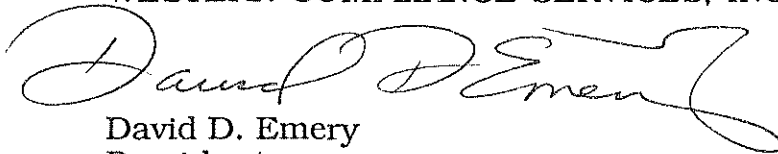
Page 2

In addition, Wescomp compliments the DEQ for the proposed repeal of OAR 340-104-191 and 340-102-034 now that the EPA's regulations include a more stringent hazardous waste tank program.

Thank you for this opportunity to comment.

Sincerely,

WESTERN COMPLIANCE SERVICES, INC.



David D. Emery
President

DE/lj



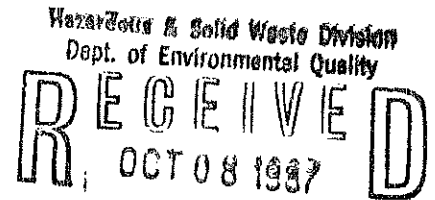
GREAT WESTERN CHEMICAL CO.

CORPORATE HEADQUARTERS

808 SOUTHWEST FIFTEENTH AVENUE PORTLAND, OREGON 97205 (503) 228-2600

October 7, 1987

Mr. Bill Dana
Department of Environmental Quality
Hazardous and Solid Waste Division
811 S.W. Sixth
Portland, OR 97204



RE: OAR Chapter 340, Divisions 100, 102, and 104

Dear Mr. Dana:

Great Western Chemical Company, a wholly-owned subsidiary of McCall Oil and Chemical Corporation, would like to thank the DEQ for providing the opportunity to comment on the proposed amendments to the hazardous waste management rules, OAR Chapter 340, Division 100, 102, and 104. Great Western Chemical Company is a hazardous waste generator with over 230 employees, operating in 10 western states.

Great Western Chemical supports the DEQ's adoption of these federal hazardous waste regulation changes and welcomes their inclusion within the DEQ's hazardous waste regulations.

By amending the DEQ regulations to maintain consistency with the EPA regulations, the DEQ assists private industry in maintaining compliance with these complex regulatory provisions. Companies such as Great Western Chemical, which operate in more than one state, have their regulatory burdens eased, and are assisted in maintaining a uniform corporate-wide hazardous waste management program when state agencies, such as the DEQ, strive to maintain consistency with the federal EPA program. Great Western Chemical supports the DEQ's often-stated position of maintaining consistency with the federal EPA program, except in those limited cases where protection of the public health and the environment mandate a more stringent state program.

In addition, Great Western Chemical compliments the DEQ for the proposed repeal of OAR 340-104-191 and 340-102-034 now that the federal regulations include a more stringent hazardous waste tank program.

Thank you for this opportunity to comment.

Sincerely,

Douglas M. Richardson
Environmental Compliance Manager

DMR:jw

Hazardous & Solid Waste Division
Dept. of Environmental Quality
RECEIVED
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**NORTHWEST
PULP & PAPER**

October 12, 1987

Mr. Bill Dana
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

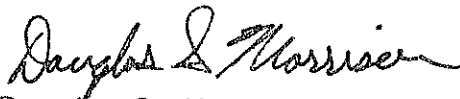
Dear Mr. Dana:

The Northwest Pulp and Paper Association (NWPPA), whose members include eight pulp and paper mills in Oregon, is pleased for the opportunity to comment upon the proposed amendments to DEQ's proposed hazardous waste regulations. Our industry generates wastes which can be considered hazardous and is therefore keenly interested in DEQ's regulation of this area.

NWPPA is pleased to comment that it supports the adoption of the proposed amendments to OAR 340, Divisions 100, 102, 104 as outlined in Agenda Item D of the August 28, 1987 EQC meeting. In particular, the incorporation by reference of the federal register notices containing EPA's regulations is very important. Direct reference and use of the federal regulations will ensure that Oregon's authorized hazardous waste program remains efficient and that Oregon industry will understand the regulations and its responsibilities under the law.

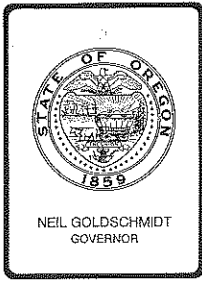
The leap-frogging dual jurisdiction created by the 1984 HSWA, though problematic, is something industry can accommodate. However, when a state attempts to deviate from the federal program the problems become overwhelming and compliance may suffer. Therefore, it is important to reserve state initiative for those areas of regulation which are truly and significantly unique to Oregon. The direction that your proposal is taking DEQ's hazardous waste program is the correct one: consistency with federal laws and regulations.

Sincerely,



Douglas S. Morrison
Legislative/Public Affairs Analyst

DM:sd



Environmental Quality Commission

Attachment IV
Agenda Item L
12/11/87 EQC Meeting

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: William H. Dana, Hearing Officer
Date: October 27, 1987
Subject: Response to Comment Summary

Comment

David Emery, Douglas Richardson, and Douglas Morrison all expressed strong support for the Department's proposal.

Department's Response

The Department appreciates this support and thanks these individuals for their comments.

Comment

Jean Meddaugh generally supports the Department's proposal, but requests that the Department consider a more stringent state rule concerning the burning of hazardous waste in cement kilns. The federal rule proposed for adoption restricts such burning in cities with a population greater than 500,000. Ms. Meddaugh suggests that such burning be restricted in cities with a population greater than 4,000.

Department's Response

The Department appreciates Ms. Meddaugh's support, but is not persuaded to recommend adoption of a more stringent state rule.

In order to evaluate Ms. Meddaugh's suggestion, the Department contacted EPA staff in Washington, D.C. who are most familiar with the cement kiln rule. The Department learned the following:

1. This requirement is a statutory requirement taken directly from HSWA. Accordingly, it was written by Congress, not by EPA staff. This requirement was introduced by Congressman Frost of Texas, to address concerns about a cement kiln in Dallas that was proposing to burn hazardous waste. At that time, the facility would have been exempt from RCRA regulation. Congressman Frost's provision requires the facility to comply with hazardous waste incinerator standards. There was apparently no health risk study or other scientific basis for

setting the limit at 500,000 rather than at some other population level. The 500,000 figure simply refers to the population of Dallas, Texas;

2. This requirement was intended to be an interim measure that would remain in effect only until EPA promulgated substantive standards for all cement kilns and other industrial furnaces and boilers. As noted above, aside from this one requirement, such facilities are currently exempt from RCRA hazardous waste regulations; and
3. EPA proposed such new regulations, for the burning of hazardous waste in boilers and industrial furnaces (including cement and lime kilns) on May 6, 1987. Under this proposal, all such devices, regardless of the population of the city in which they are located, would be required to obtain a RCRA permit and would be subject to standards similar to those for a hazardous waste incinerator. EPA expects to promulgate this rule in final form, by November 1988.

The Department's Air Quality Division reports that there is currently only one cement kiln operating in Oregon. It is located in Durkee, an unincorporated community in Baker County. Accordingly, it would not be affected by either the current federal rule or by Ms. Meddaugh's proposed more stringent state rule. Also, it is the Department's understanding that the facility's owner/operator currently has no interest in burning hazardous waste.

In view of all these facts, the Department finds no compelling reason to recommend the adoption of a more stringent state rule, concerning the burning of hazardous waste in cement kilns, at this time.

Attachment V
Agenda Item L
12/11/87 EQC Meeting

Before the Environmental Quality Commission of the State of Oregon

In the Matter of Amending) Proposed Amendments
OAR 340, Divisions 100, 102 AND 104)

Unless otherwise indicated, material enclosed in brackets [] is proposed to be deleted and material that is underlined is proposed to be added.

1. Rule 340-100-002 is proposed to be amended as follows:

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-100-002 (1) Except as otherwise modified or specified by OAR Chapter 340, Divisions 100 to 106, the rules and regulations governing the management of hazardous waste, including its generation, transportation by air or water, treatment, storage and disposal, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 260 to 266, 270 and Subpart A of 124, amendments thereto promulgated prior to [May 1, 1985] July 1, 1986, and amendments listed below in section (2) of this rule are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.005 to 466.080, and 466.090 to 466.215.

(2) In addition to the regulations and amendments promulgated prior to [May 1, 1985] July 1, 1986, as described in section (1) of this rule, the following amendments to Title 40 Code of Federal Regulations, Part 260 to 266, 270 and Subpart A of 124, as published in volumes [50 and] 51 and 52 of the Federal Register (FR), are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.005 to 466.080, and 466.090 to 466.215:

[(a) Technical corrections to the definition of solid waste, in 50 FR 33542-43 (August 20, 1985).]

[(b) Amendments applicable to generators of between 100 kg (220 lbs) and 1,000 kg (2,200 lbs) of hazardous waste in a calendar month, in 51 FR 10174-76 (March 24, 1986).]

[(c) Amendments pertaining to closure and post-closure care and financial responsibility for hazardous waste management facilities, in 51 FR 16443-59 (May 2, 1986).]

[(d) Amendments clarifying the listing for spent pickle liquor from steel finishing operations, in 51 FR 19322 (May 28, 1986) and 51 FR 33612 (September 22, 1986).]

(a) [(e)] Amendments pertaining to liability coverage for hazardous waste management facilities, in 51 FR 25354-56 (July 11, 1986).

(b) Revised standards for hazardous waste storage and treatment tank systems, in 51 FR 25470-86 (July 14, 1986).

(c) Amendments to the rules concerning identification and listing of hazardous waste, in 51 FR 28298-310 (August 6, 1986).

(d) Technical corrections to the HSWA final codification rule, in 51 FR 28556 (August 8, 1986).

(e) Corrections to the revised standards for hazardous waste storage and treatment tank systems, in 51 FR 29430-31 (August 15, 1986).

(f) Amendments clarifying the listing for spent pickle liquor from steel finishing operations, in 51 FR 33612 (September 22, 1986).

(g) Technical corrections to the rules concerning burning of hazardous waste fuel and used oil fuel in boilers and industrial furnaces, in 52 FR 11821-22 (April 13, 1987).

2. Rule 340-102-034 is proposed to be amended as follows:

Accumulation Time.

340-102-034 In addition to the requirements of 40 CFR 262.34, a generator may accumulate hazardous waste on-site for 90 days or less without a permit provided that[:] .

[(1)] If storing in excess of 100 containers, the waste is placed in a storage unit that meets the requirements of 40 CFR 264.175[; and] .

[(2)] If storing in tanks, the tank unit complies with rule 340-104-191.]

3. Rule 340-104-191 is proposed to be deleted as follows:

[Design of Tanks]

[340-104-191 (1) Owners and operators of facilities subject to the requirements of 40 CFR 264.191 shall also comply with the requirements of section (2) of this rule.

(2) For tanks installed after January 1, 1985 tanks and related appurtenances, including but not limited to pipes, valves, backflow prevention devices, gauges, or pumps within 5 feet of the tank, must have secondary containment that:

(a) Is sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed;

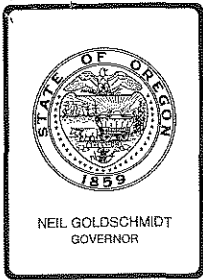
(b) Has sufficient capacity to hold the entire volume of the largest tank; and

(c) Prevents run-on into the containment system unless there is sufficient excess capacity in addition to that required by subsection (2)(b) of this rule to contain it.]

[(Comment: it is intended that the appurtenance containment return any leakage to the main tank containment.)]

ATTACHMENT VI IS TOO VOLUMINOUS TO REPRODUCE. COPIES ARE
AVAILABLE FOR INSPECTION AT DEQ OFFICE AROUND THE STATE.
CONTACT BILL DANA, AT 229-5913, IN PORTLAND OR AT 1-800-452-
4011 STATEWIDE, FOR FURTHER INFORMATION.

ZF2280.C



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item M, December 11, 1987 EQC Meeting

Request By The City of Joseph For An Increase In Mass Discharge Load.

Background and Policy Statement

The Wallowa Lake County Service District is proposing to construct a sewage collection system to serve existing and future development along the south and west shores of Wallowa Lake. Existing development in this area is presently served by on-site sewage disposal systems (septic tanks followed by drainfields or seepage pits). Effluent from these systems seeps into the ground where it reaches groundwater and eventually Wallowa Lake. These systems have long been suspected of adding pollutants to Wallowa Lake, which is both the City of Joseph's water supply and a recreational attraction. Any addition of pollutants threatens the exceptional clarity of the lake. Although water quality data has not been collected to conclusively show a pollution problem in the lake, the Department has encouraged the local governmental jurisdictions to plan for and construct sewers to prevent any sewage from reaching the lake. After many years of efforts, the Wallowa Lake County Service District has been formed, a plan has been developed, and funding has been secured to construct the needed collection system.

The Wallowa Lake County Service District proposes to contract with the City of Joseph for treatment of waste. To accommodate this waste load, and provide capacity for orderly future growth, the City of Joseph must expand and upgrade its existing lagoon treatment facility. The City is proposing an implementation program to accomplish the necessary expansion and upgrading consistent with the limited resources available.

The City, by letter dated October 27, 1987 has requested the EQC to approve an increase in permitted effluent mass load limitation (from 48 pounds per day Biochemical Oxygen Demand (BOD) to 94 pounds per day BOD).

The Water Quality Management Plan for the Grande Ronde Basin contains the following policies which are particularly pertinent to the City's request:

- a. OAR 340-41-026(2) which generally requires that growth and development be accommodated by increased waste treatment effectiveness so that mass discharge loadings from existing facilities is not increased (unless otherwise approved by the EQC).

- b. OAR 340-41-026(3) which generally requires that the EQC approve significant or large new source discharges and that alternatives other than direct discharge first be explored.
- c. OAR 340-41-735(1) which establishes minimum design criteria for new or modified sewage facilities in the Grande Ronde Basin as follows:
 - Periods of high stream flows: A minimum of secondary treatment or equivalent control.
(approx. Nov.1 - May 31)
 - Periods of low stream flows: BOD not to exceed 20 mg/l
(approx. June 1 - Oct. 31) Suspended Solids not to exceed 20 mg/l or equivalent control.
- d. OAR 340-41-034 which allows the EQC to approve phased implementation of programs which include temporary increased treatment loadings provided a minimum of secondary treatment is maintained and beneficial uses of the waterway are not impaired.

The overall intent of these policies is to assure protection of water quality while still accommodating orderly growth and development.

The City's Proposal For Waste Treatment & Discharge

The City of Joseph operates a 10 acre, 4-cell lagoon treatment system. Discharge is permitted year round to an adjacent ditch. Effluent limits are based on EPA approved secondary treatment criteria for lagoons. Direct discharge to surface waters seldom occurs, however; instead, discharge has occurred via the groundwater because the last two lagoon cells seep at an estimated rate of 1.15 inches per day. Although no groundwater impacts have been noted, the lagoon system exceeds the applicable criteria for leakage at existing facilities (1/4 inch per day) and the new criteria consistent with the groundwater protection policy which would apply to new and upgraded lagoon systems (1/8 inch per day) unless a study demonstrated no groundwater impacts would occur at a greater leakage rate.

Development in the Wallowa Lake area is currently served by on-site sewage disposal systems. The consulting engineers for the District estimate a subsurface loading via these systems to be approximately 47 lbs/day BOD. Although not documented, it is suspected that this load plus nitrogen and phosphorus associated with sewage waste seeps into the lake.

The City proposes to expand the lagoon system by adding a clarifier, aerating the lagoon system and, constructing disinfection facilities. The lagoons would also be sealed to meet leakage standards. Wallowa Lake County Service District would construct a septic tank effluent pumping system (STEP) consisting of on-site settling or septic tanks and a small diameter pressurized sewer to convey effluent to the City of Joseph for treatment. The proximity of existing development is shown on a map (Attachment B). The STEP system would initially collect 90,000 gallons per day of effluent and serve homes and cabins, a state park, church and scout camps (Attachment C).

The treatment and discharge alternatives that were considered by the City did not include disposal to groundwater. The City has presented a comparison of four alternatives. They are:

1. Expand the system design by providing a primary clarifier, aeration of the existing lagoons and discharge effluent directly to Prairie Creek. Exceptions to the EQC policy regarding mass load increases and the Grande Ronde River Basin design criteria would be needed to implement this alternative.
2. Expand the treatment system and discharge 50% of the effluent to Prairie Creek, with storage and irrigation of 50%.
3. Provide no-discharge facilities for winter holding and summer irrigation.
4. Construct a new mechanical plant upstream of the lagoons, with discharge to Prairie Creek.

The comparison prepared by the City's engineers appears as Attachment D.

Based on available resources, the City's request is to discharge an effluent containing 94 pounds/day of BOD and 94 pounds/day of Suspended solids at a concentration of 30 mg/l. A comparison of existing permitted limits and that which are requested are shown below. In addition, the requested limitations are compared to limits that would apply to the Wallowa Lake District if it were to apply for a separate discharge permit as a new facility.

	<u>CURRENTLY PERMITTED</u>	<u>REQUESTED</u>	<u>APPORTIONED TO WALLOWA LAKE SD</u>
1. <u>FLOWRATE</u>			
Influent	0.193 MGD	0.444 MGD	0.164
Evaporation	0.070 MGD	0.070 MGD	
Lagoon Seepage	Discharge to the ground water occurs at a rate of 1.15 inches/day	-0- <u>(Lagoons Sealed)</u>	
Effluent	0.193 to irrigation ditch	0.374 MGD to Prairie Creek	
2. <u>EFFLUENT CONCENTRATION</u>			
BOD	30 mg/l	30 mg/l	30 mg/l
SS	85 mg/l	30 mg/l	30 mg/l

	<u>CURRENTLY PERMITTED</u>	<u>REQUESTED</u>	<u>APPORTIONED TO WALLOWA LAKE SD</u>
3. <u>EFFLUENT MASS LOADING</u>			
BOD	48 lb/day	94 lb/day	41 lbs/day
SS	137 lb/day	94 lb/day	41 lbs/day or 27 lbs/day at 20/20

Project Funding and Financing Program

Grant funding has been sought to help implement the proposed improvements since formation of the Wallowa Lake Water and Sewer District. The District was formed in 1975, but efforts to obtain construction funding assistance through the Department and elsewhere over a 10-year period were not successful. To facilitate financing efforts, the 1975 District was absorbed in 1986 by the Wallowa Lake County Service District under the administrative authority of the Wallowa County Court in Enterprise. Limited grant funds have since been secured which would enable the District and City to implement their preferred alternative proposed in the 1987 Engineering Study by Anderson and Perry & Associates, engineers for the District and the City of Joseph.

The total cost of these improvements is estimated to be \$ 2.46 million. This estimate includes:

Collection System\$ 1,115,400.00
Sewage Pumping and Conveyance System. .	.\$ 714,600.00
Treatment Facility Expansion.\$ 630,000.00
	=====
Total	\$ 2,460,000.00

Detailed estimates presented in Tables 3 and 14 of the Engineering Study appear as Attachments E and F.

The sources of funding for the plan are summarized in Table 23 of the Engineering Study (Attachment G). There are three grants involved:

- o U.S. Economic Development Administration (EDA) 50% grant to a limit of \$1.65 million, contingent upon final design submittal to EDA by February 17, 1988. Of this amount, \$1.230 million is dedicated for sewerage improvements. This is the largest EDA grant offered in Oregon for over 5 years.
- o Oregon Department of Economic Development grant of \$0.4 million, of which \$100,000 would be used for the water system, and \$300,000 for sewers.

- o Private and corporate contributions totaling \$100,000.00. Such contributions to public works projects are extremely unusual.

The 1987 Engineering Study outlines a long-range financial plan for reserve accumulation through future connection fees and user charges. The long-range plan is based on an annual growth rate of 2%, a \$3,000.00 future connection fee for new development, and a 100% increase in Joseph's present sewer service charge to \$6.00 per month. An estimated \$500,000 would be available in 10 years for additional improvements to the treatment facility, or for purchase of irrigation sites for land disposal of effluent. Half of this sum would be generated from the District's connection fees, and half from Joseph's user charges.

This rate of capital accumulation could be used for treatment plant improvements that would provide for incremental reductions in mass discharge loadings and effluent concentrations, as may be required by the Commission. However, the scope of the Engineering Study did not include a definite schedule for phasing out or upgrading the lagoon facilities to reduce mass loadings or to comply with the 20 mg/l basin standards in the future.

Public Review

The City's requests are being brought before the Commission immediately following the public hearing and commentary period ending December 4, 1987. The hearing will be conducted in Joseph on December 2, 1987, and a summary of public and agency commentary will be completed and forwarded to the Commission on December 9, 1987.

Alternatives and Evaluations

Three alternatives have been identified as follows:

1. Approve the City's request for an increase in mass discharge load.

Though not explicitly requested by the City, the Commission's acceptance of this alternative would necessitate an exception to the Grande Ronde Basin treatment criteria for sewage wastes. The Department does not view an exception to this policy on a permanent basis to be approvable by the Commission unless the treatment criteria were modified by rule amendment. Although the Engineering Study submitted by the City presents stream flow data showing higher summer flows compared to winter flows, the Department believes other factors such as stream temperature must be thoroughly considered prior to considering a revision to these treatment criteria. A case demonstrating that these criteria are unreasonable and supporting justification for proposing a rule modification has not been presented by the City.

2. Approve the City's request for an increase in mass discharge loading, subject to submission of a plan and schedule for implementing the Grande Ronde Basin treatment criteria for sewage wastes.

Acceptance of this alternative has several advantages. First, it would enable sewerage the Wallowa Lake area to abate subsurface discharges to the Lake and would enable lagoon treatment system upgrading to eliminate discharges to the groundwater utilizing available grant monies. Because of existing financial constraints, imposing the current mass load and basin treatment criteria would likely delay these efforts to provide improved treatment facilities.

This alternative is also consistent with the policy which allows the Commission to defer requiring implementation of the treatment criteria provided secondary treatment is achieved and beneficial uses are not impacted (OAR 340-41-034).

The City has presented stream flow data showing that, at the proposed outfall location, the available dilution ratio would be a minimum of 50:1 in the winter. Prairie Creek is spring-fed, and its base groundwater flow is heavily augmented during the summer by irrigation seepage throughout its headwaters. In the summer, stream flows increase to rates between 80 to 110 cubic feet per second, raising the dilution ratio over 100:1. Flow measurement data for the creek appear as Attachment H. Water quality data for the creek appear as Attachment I.

The City has presented calculations (Attachment J) which indicate that the proposed effluent mass load would have negligible effects upon dissolved oxygen and turbidity in Prairie Creek. Unlike the effluent from conventional or mechanical secondary treatment plants, the solids would consist chiefly of lagoon algae and no identifiable waste materials would be discharged.

The creek contains trout, and at least one of its forks upstream from the proposed outfall contains significant spawning and rearing habitat for salmon and steelhead trout. It also serves as a drinking water supply for cattle and wild animals. Therefore, special conditions to address effluent chlorine residual, ammonia and bacterial water quality would be incorporated into the permit if this alternative was accepted. The Department would also establish a narrow, longitudinal mixing zone downstream from the proposed outfall. Placement and design of the outfall would be required so as to cause the zone of mixing to occur only along the west bank, reserving the deeper channel for fish passage and invertebrate migratory drift.

Acceptance of this alternative by the Commission would necessitate the City submitting alternatives, financing plans and schedules for providing treatment/disposal capability to achieve the 20 mg/l BOD and Suspended Solids or equivalent control. The City has indicated they are agreeable to this condition and would submit a plan and schedule by December 31, 1989 (Attachment K).

3. Deny the request for the increased mass load.

The Department does not view this alternative to be reasonable for several reasons. First, acceptance of this alternatives would suggest that the entire requested increase in mass discharge load is to accommodate an increase in growth and development. By comparison, a substantial portion of the proposed lagoon expansion is to accommodate treatment of existing discharges via on-site sewage disposal systems in the Wallowa Lake area. Secondly, if the Wallowa Lake District were to propose separate treatment facilities, after full consideration of alternatives, the Department could permit a new source permit for the District for at least half of the requested load increase.

The Department's current evaluation of the proposed receiving stream shows that no impact to beneficial uses should occur with discharges of the requested mass discharge loads to Prairie Creek.

SUMMATION

1. The City proposes to construct an expanded treatment system to serve Wallowa Lake County Service District. Present discharges to groundwater of treated city effluent and of Wallowa Lake County Service District septic tank effluents would be discontinued. The septic tank effluents are discharging approximately 47 lbs/day of BOD, in addition to nitrogen and phosphorus. These waste products potentially jeopardize the purity and clarity of Wallowa Lake.
2. The City of Joseph has requested an increase in permitted mass discharge load. The City's existing permitted discharge is 48 lbs/day (30 mg/l) BOD, and 137 lbs/day suspended solids (85 mg/l), with a flow limitation of 0.193 MGD. The City has requested to discharge 94 lbs/day BOD and 94 lb/day SS at a discharge rate of 0.374 MGD.
3. In conjunction with this request, a deferral of basin effluent concentration limits established for sewage treatment in the Grande Ronde Basin by OAR 340-41-735(1) would be needed. The basin treatment criteria call for an effluent quality of 20 mg/l BOD and 20 mg/l SS or equivalent control such as no discharge or spray irrigation during the summer season.
4. The City has evaluated the alternatives to their proposed discharge to Prairie Creek. The City could:
 - a. Have no discharge, by means of winter storage and summer irrigation.
 - b. Limit mass discharge to permitted loadings of 48 lbs/day through irrigation of the remainder.
 - c. Limit mass discharge to 48 lbs/day, through higher levels of treatment.

The City has presented cost estimates which show that the facilities necessary to implement these alternatives are beyond their present financial capabilities. However, their long-range financial plan would provide funding through future user fees and connection charges for the construction of upgraded facilities to achieve higher treatment levels.

5. The City's request is being brought before the Commission immediately after the public commentary period because of an impending EDA grant deadline. Issues raised during the commentary period, which ends on December 4, 1987, will be summarized and forwarded to the Commission on December 9, 1987.
6. Adequate stream flows exist to comply with the dilution requirements at a BOD concentration of 30 mg/l both during the summer and winter seasons. To protect downstream beneficial uses, the Department would require any effluent to undergo disinfection and would disallow an effluent chlorine residual or discharge of ammonia.
7. The Commission may allow an exception to OAR 340-41-026. The Department supports the request for an increase in discharge load because, 1) a large portion of load increase would accommodate treatment of existing development in the Wallowa Lake area, and 2) approval would allow the City an opportunity to provide facilities to abate discharges to the groundwater in an expeditious manner. To allow an exception to the Grand Ronde River Basin treatment criteria on temporary basis would require the City to submit a plan, schedule and financing arrangements for achieving 20 mg/l BOD and TSS (or equivalent). A schedule for fully meeting all requirements is proposed in a draft permit (Attachment K) and is amendable to the City of Joseph.

Directors Recommendation

A recommendation will be prepared and submitted to the Commission after the hearing. Pending our review of public input, the Department's findings would seem to support granting the requested mass loading increase and temporarily allowing a 30/30 effluent to be discharged year-round, subject to the conditions in the draft permit.

Fred Hansen
Fred Hansen *by RP*

Attachments (16)

- A. City of Joseph Resolution
- B. South and West Lake General Sewer System (Figure 4)
- C. Sewer Design Flows (Table 2)
- D. Comparison of Treatment Alternatives (Table 19)
- E. Estimated Cost - Wallowa Lake Basin Sewer System (Table 3)
- F. Estimated Cost - Treatment Alternative 1 (Table 14)
- G. Final Cost Distribution (Table 23)
- H. Prairie Creek Flows at Eggleston Corner (Table 11)
- I. 1986 Prairie Creek Testing (Table 12)
- J. Effect of Effluent on Prairie Creek (Table 13)
- K. Draft NPDES Permit

Response to Comments, November 1 - December 4, 1987 (to be attached)

CITY OF JOSEPH

Joseph, Oregon

RECEIVED
NOV 13 1987
CITY OF JOSEPH, OREGON

In The Matter of)
)
Sewage Treatment Facilities)
)
Increased Wasteload Discharges)
)

RESOLUTION

On the 3rd day of November, 1987, the City Council of Joseph met in regular session, and

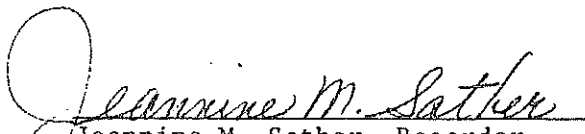
WHEREAS, the upgrading of the City's sewage treatment facility to handle the sewage flows from the Wallowa Lake Basin and the City of Joseph will require discharging additional wasteloads above that currently allowed by the City's NPDES permit and,

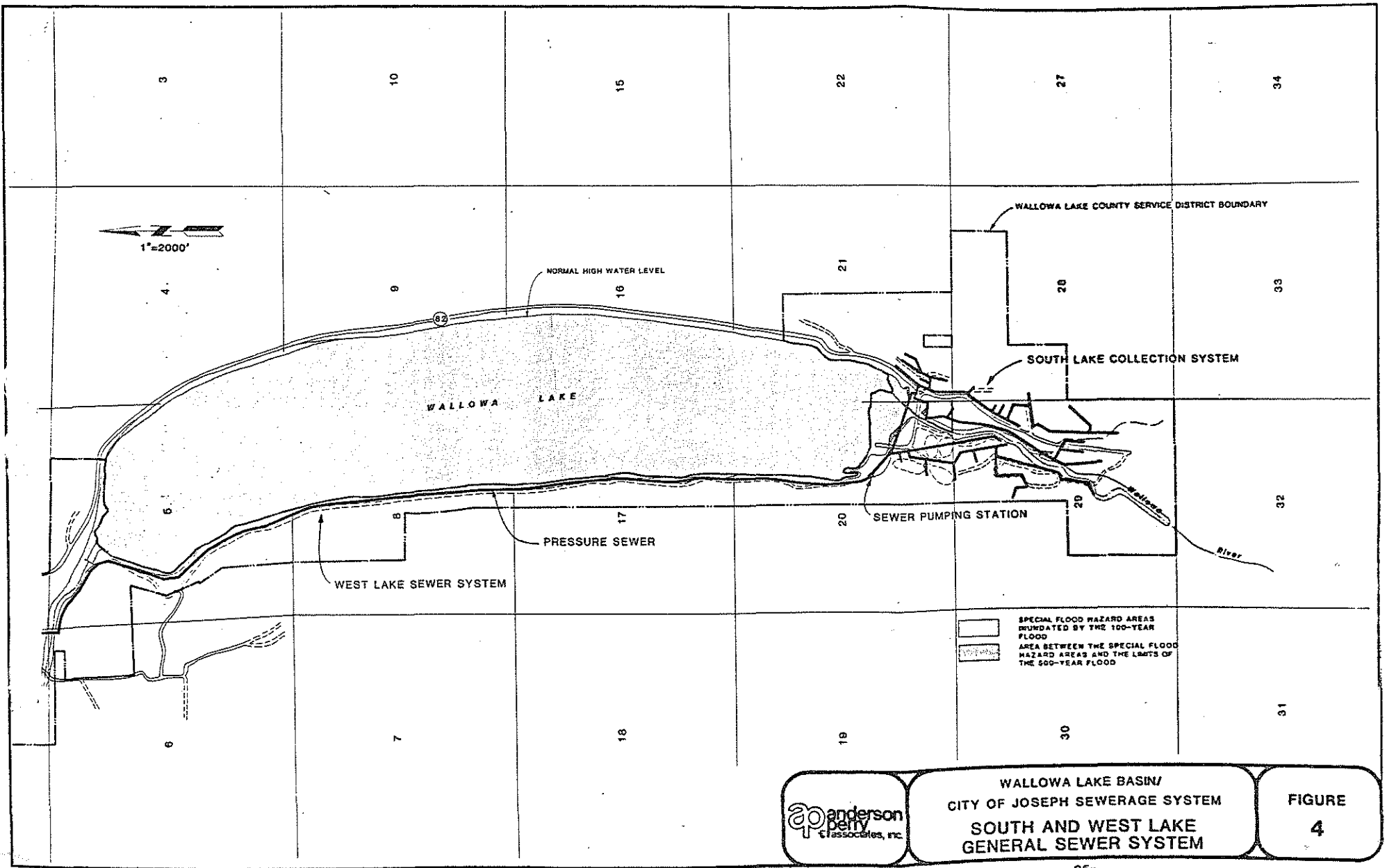
WHEREAS, such increases will require permission for the State of Oregon Environmental Quality Commission.

Now THEREFORE, BE IT RESOLVED: That the City Council of the City of Joseph does hereby make formal request to the State of Oregon Environmental Quality Commission to increase it's allowable discharge of Flow, BOD, and Suspended Solids from it's sewage treatment facility to accomodate flows from the Wallowa Lake Basin and the City of Joseph.

Dated at Joseph, Oregon this 3rd day of November, 1987.


Paul Castilleja, Mayor


Jeannine M. Sather, Recorder



WALLOWA LAKE BASIN/
CITY OF JOSEPH SEWERAGE SYSTEM
SOUTH AND WEST LAKE
GENERAL SEWER SYSTEM

FIGURE
4

SUMMARY WALLOWA LAKE BASIN

SEWER DESIGN FLOWS

SERVICES	ESTIMATED 1988 FLOWS Gallons/Day				ESTIMATED PROJECT DESIGN FLOWS Gallons/Day				ESTIMATED ULTIMATE FLOW Gallons/Day	
	Equivalent Users	Ave. Winter	Ave. Summer	Peak Summer	Equivalent Users	Ave. Winter	Ave. Summer	Peak Summer	Equivalent Users	Peak Summer
Commercial ¹	54	4,725	15,120	18,900	102	8,925	28,560	35,700	135	47,250
Public ²	20	2,450	5,600	7,000	60	7,350	16,800	21,000	80	28,000
Residences ³	67	23,450	23,450	23,450	113	39,550	39,550	39,550	300	105,000
Cabins ⁴	205	5,125	25,625	51,250	348	8,700	43,500	87,000	900	225,000
State Park ⁵	71	1,090	19,880	24,850	127	4,445	35,560	44,450	135	47,250
TOTAL	417	36,840	89,675	125,450	750	68,970	163,970	227,700	1,550	452,500

1 at 350 gpd

2 at 350 gpd

3 at 350 gpd

4 at 250 gpd

5 at 350 gpd



WALLOWA LAKE BASIN/
CITY OF JOSEPH SEWERAGE SYSTEM
**SUMMARY WALLOWA LAKE BASIN
SEWER DESIGN FLOWS**

TABLE

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COMPARISON OF TREATMENT ALTERNATIVES

	<u>Alternate 1</u>	<u>Alternate 2</u>	<u>Alternate 3</u>	<u>Alternate 4</u>
Costs	\$ 630,000	\$ 1,465,000	\$ 1,889,000	\$ 1,879,000
Impact on Receiving Stream	Minimal	Minimal	None	Minimal
Farmland Taken out of Production for Ponds	None	Moderate 30 Acres	High 60 Acres	None
Complexity and Flexibility of Operation	Low	Moderate	Moderate	High
Within Financial Ability of Service District and City of Joseph?	Yes	No	No	No
Ability of Governing Body to Implement	Excellent	Very Difficult	Very Difficult	Very Difficult
Public Acceptability	Good	Good	Good	Good
Treatment Reliability	Very Good	Very Good	Excellent	Very Good
Ranking	1st	2nd	3rd	4th

ESTIMATED COST
WALLOWA LAKE BASIN SEWER SYSTEM
SMALL DIAMETER SEWER OPTION

<u>Item</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total</u>
<u>I. Collection System South Lake Area</u>			
1. Mobilization	All Req'd	Lump Sum	\$ 60,000
2. 10" Sewer Lines	1,000 ft.	\$18.00/ft.	18,000
3. 8" Sewer Lines	1,800 ft.	14.00/ft.	25,200
4. 6" Sewer Lines	11,500 ft.	10.00/ft.	115,000
5. 4" Sewer Lines	17,150 ft.	8.00/ft.	137,200
6. Service Lines	8,600 ft.	6.00/ft.	51,600
7. D.I. Sewer Lines	300 ft.	50.00/ft.	15,000
8. Sewer Line Location Wire	35,000 ft.	0.25/ft.	8,750
9. Manholes	11 ea.	1,400/ea.	15,400
10. Cleanouts	100 ea.	275.00/ea.	27,500
11. Gravity Sewer Taps	230 ea.	50.00/ea.	11,500
12. Pressure Sewer Taps	30 ea.	150.00/ea.	4,500
13. Interceptor Tanks	200 ea.	200.00/ea.	40,000
14. Interceptor Tank Effluent Pump	20 ea.	800.00/ea.	16,000
15. Water Line Repair	100 ea.	150.00/ea.	15,000
16. Asphalt Street Restoration	2,200 yd ²	30.00/yd ²	66,000
17. Curb Restoration	300 ft.	8.00/ft.	2,400
18. Gravel Street Restoration	7,100 yd ²	3.00/yd ²	21,300
19. State Highway Crossings	4 ea.	2,000/ea.	8,000

SMALL DIAMETER SEWER OPTION (continued)

20. River Crossings	2 ea.	10,000/ea.	20,000
21. Television Inspection	1,500 ft.	1.40/ft.	2,100
22. Caution Signs	100 ea.	25.00/ea.	2,500
23. Sewage Combination Air/Vacuum Release Valves	2 ea.	1,500/ea.	3,000
24. Sewer Air Vents	12 ea.	500.00/ea.	6,000
25. Water-Sewer Crossings	10 ea.	400.00/ea.	4,000
26. Sewer Pumping Station	All Req'd	Lump Sum	120,000
27. Other Associated Cost			<u>299,450</u>
Subtotal - South Lake Collection System			\$1,115,400

II. Sewer Force Main and West Side Collection

1. Mobilization	All Req'd	Lump Sum	\$ 27,000
2. Forcemain	24,000 ft.	\$12.50/ft.	300,000
3. Manholes	4 ea.	1,500/ea.	6,000
4. Cleanouts	50 ea.	300/ea.	15,000
5. Sewage Combination Air/Vacuum Release Valves	15 ea.	1,500/ea.	22,500
6. Pressure Sewer Taps	80 ea.	150.00/ea.	12,000
7. Service Lines	1,600 ft.	6.00/ft.	9,600
8. Gravel Street Restoration	6,700 yd ²	3.00/yd ²	20,100
9. River Crossing	1 ea.	15,000/ea.	15,000
10. Caution Signs	50 ea.	25.00/ea.	1,250
11. Sewer Line Location Wire	24,000 ft.	0.25/ft.	6,000

SMALL DIAMETER SEWER OPTION (continued)

12. Clearing and Site Work	All Req'd	Lump Sum	4,000
13. Extra for D.I. Pipe and Hand Installation	2,000 ft.	3.00/ft.	6,000
14. Flow Metering Station	All Req'd	Lump Sum	8,000
15. Interceptor Tanks	56 ea.	200.00/ea.	11,200
16. Interceptor Tank Effluent Pump	56 ea.	800.00/ea.	61,600
17. Other Associated Costs			<u>189,350</u>
Subtotal - West Lake Collection System			\$ 714,600

ESTIMATED COSTTREATMENT ALTERNATIVE 1

Upgrade and Discharge 100%

1. Mobilization	\$ 22,000
2. Construct 9" Metering Flume, Meter and New Meter	10,000
3. Clarifier and Digester	110,000
4. Well, Pump, Tank, and Piping	7,000
5. Lagoon Piping Modifications	15,000
6. Operations Building	11,000
7. Clean Sludge from First Pond	5,000
8. Aerators for First Pond	40,000
9. Aerators for Final Pond	13,100
10. Chlorine Contact Basin and Meter	30,000
11. 3 Monitoring Wells	15,000
12. 10-inch Outfall Line, 9,500 ft.	150,000 —
13. I/I Corrective Work	40,000
14. Other Associated Costs	<u>161,900</u>
Total Estimated Cost	\$ 630,000

WALLOWA LAKE BASIN SEWERAGE SYSTEM

FINAL COST DISTRIBUTION

Total Estimated Project Cost	\$ 2,460,000
Less 50% EDA Grant	1,230,000
Less 75% of \$400,000 DED Grant	300,000
Less \$100,000 Private Funds	<u>100,000</u>
Local Funds Required	\$ 830,000
Less City of Joseph Share	<u>100,000</u>
Lake Basin Funds Required	\$ 730,000
Less State Park Share @ 17% of Flow	<u>124,100</u>
Lake Basin Private Users Funds Required	\$ 605,900
Less Hookups @ \$500.00/hookup	<u>172,000</u>
Lake Basin Private Users Bond Amount	\$ 433,900
Yearly Bond Repayment	\$ 42,575
Equivalent Monthly User Charge for Bond Repayment	\$ 10.31
Equivalent Monthly User Charge for Operation and Maintenance	\$ 8.03
Private Users Bond Amount Required	\$ 435,000

68% User Charges

\$12.50/Mo./User

32% Property Taxes

\$1.65+/Thousand Tax



Anderson
Perry
& Associates, Inc.

WALLOWA LAKE BASIN/
CITY OF JOSEPH SEWERAGE SYSTEM
WALLOWA LAKE BASIN
SEWERAGE SYSTEM
FINAL COST DISTRIBUTION

TABLE
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PRAIRIE CREEK FLOWSAT EGGLESON CORNER

4/20/86	65 CFS
6/3/86	106 CFS
7/9/86	100 CFS
7/23/86	83 CFS
8/11/86	89 CFS
8/28/86	83 CFS
10/30/86	65 CFS
3/4/87	40 CFS
5/15/87	45 CFS
6/2/87	89 CFS
9/2/87	89 CFS

See Appendix for method of flow measurement.

1986 PRAIRIE CREEK TESTING

	WATER QUALITY		
	No. 1	No. 2	No. 3
BOD	1.9	3.6	1.1
Hardness	100	107	82
Turbidity	3	3	
TS	162	180	153
Suspended Solids	10	12	12
pH	9.0	9.2	8.1
Alk	127	125	103
Cond	240	250	
NH3-N	0.02	0.02	
NO3	0.65	0.51	
TKN	0.4	0.4	0.4
OP04	0.049	0.034	0.052
T-P04	.103	.100	.07
COD	7	5	5
TOC	4	2	1
Enteroc	10	8	185
FC	150	23	150
TC	1100	93	
DO	10.5	10.3	9.5
SO4			8.9
Ca			25
			4.8

No. 1 sample at Eggleston Corner 4/9/86
 No. 2 sample at Enterprise City Limits 4/9/86
 No. 3 sample at Eggleston Corner 9/13/86

EFFECT OF EFFLUENT DISCHARGE
ON PRAIRIE CREEK WATER QUALITY

Parameter	Background Stream Quality (mg/l)	Effluent Quality (mg/l)	Water Quality after Mixing
			Discharge = 374,000 gpd = .58 cfs
			Stream Flow = 30 cfs Dilution Ratio = 52
BOD	1.5	30	2.04 mg/l
SS	12	50	12.72
DO	10	5	9.91
FC	150	200	150.95
			Stream Flow = 60 cfs Dilution Ratio = 104
BOD	1.5	30	1.77
SS	12	50	12.36
DO	10	5	9.95
FC	150	200	150.48
			Stream Flow = 90 cfs Dilution Ratio = 156
BOD	1.5	30	1.68
SS	12	50	12.24
DO	10	5	9.97
FC	150	200	150.32

WALLOWA LAKE BASIN/
CITY OF JOSEPH SEWERAGE SYSTEM
EFFECT OF EFF. DISCHARGE
ON PRAIRIE CREEK WATER QUALITY

TABLE
13

PRELIMINARY

Permit Number:
 Expiration Date:
 File Number: 44329
 Page 1 of 6 Pages

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**WASTE DISCHARGE PERMIT**

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

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

ISSUED TO:

City of Joseph
 P.O. Box 15
 Joseph, OR 97846

SOURCES COVERED BY THIS PERMIT:

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Domestic Sewage	001	Warn Dobbin Ditch
Domestic Sewage	002	Prairie Creek

PLANT TYPE AND LOCATION:

Lagoon
 Maple Street

RECEIVING SYSTEM INFORMATION:

Major Basin: Grande Ronde
 Minor Basin: Wallowa River
 Receiving Stream: Prairie Creek
 County: Wallowa
 Applicable Standards: OAR 30-41-725

EPA REFERENCE NO: OR-002060

Issued in response to Application No. 999103 received November 13, 1987.

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

 Fred Hansen, Director

 Date

PERMITTED ACTIVITIES

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

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

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

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

SCHEDULE A

(INTERIM LIMITATIONS)

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

Outfall Number 001.

Parameter	Average Effluent Concentrations		Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lbs
	Monthly	Weekly			
May 1 - October 31:*					
BOD	30 mg/1	45 mg/1	48	72	96
TSS	85 mg/1	140 mg/1	137	225	274
FC per 100 ml	200	400			
November 1 - April 30:					
BOD	30 mg/1	45 mg/1	48	72	96
TSS	85 mg/1	140 mg/1	137	225	274
FC per 100 ml	200	400			

Other Parameters (year-round)

Limitations

pH Shall be within the range 6.0-9.0

Average dry weather flow to the treatment facility 0.193 MGD

*Discharge shall be minimized as much as practicable.

2. Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted after permit issuance which will violate Water Quality Standards as adopted in OAR 340-41-725 except in the following defined mixing zone:

That portion of the Warn Dobbin Ditch within 100 feet of the point of discharge.

3. Waste Discharge Limitations not to be Exceeded Upon Expansion of the Treatment System and Prior to Attainment of Operational Level as Required by Schedule C of this Permit.

Outfall Number 002.

Parameter	Average Effluent Concentrations		Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lbs
	Monthly	Weekly			
BOD	30 mg/1	45 mg/1	94	141	188
TSS	30 mg/1	45 mg/1	94	141	188
FC per 100 ml	200	400			

Other Parameters

Limitations

pH	Shall be within the range 6.0-9.0
Average dry weather flow to the treatment facility	0.444 MGD
Effluent Chlorine Residual	None
Effluent Ammonia Nitrogen	None

The mass load limits are based on the approved design and water balance for the facility which assume an average discharge flow of 0.374 MGD and evaporation of 0.070 MGD.

4. Waste Discharge Limitations not to be Exceeded After Attainment of Operational Level as Required by Schedule C of this Permit.

Outfall Number 002.

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average 1b/day</u>	<u>Weekly Average 1b/day</u>	<u>Daily Maximum 1bs</u>
	<u>Monthly</u>	<u>Weekly</u>			

May 1 - October 31:

BOD	20 mg/1	30 mg/1	62	93	124
TSS	20 mg/1	30 mg/1	62	93	124
FC per 100 ml	200	400			

November 1 - April 30:

BOD	30 mg/1	45 mg/1	94	141	188
TSS	30 mg/1	45 mg/1	94	141	188
FC per 100 ml	200	400			

Other Parameters (year-round)

Limitations

pH	Shall be within the range 6.0-9.0
Effluent Chlorine Residual	None
Effluent Ammonia Nitrogen	None
Average dry weather flow to the treatment facility	0.444 MGD

The mass load limits are based on the approved design and water balance for the facility which assume an average discharge flow of 0.374 MGD and evaporation of 0.070 MGD.

5. Notwithstanding the effluent limitations established by Schedule A, Conditions 1 and 2 of this permit, and upon expansion of the treatment system and extension of the outfall to Prairie Creek, no wastes shall be discharged and no activities shall be conducted which will violate Water Quality Standards as adopted in OAR 340-41-725 except in the following defined mixing zone:

From the point of discharge downstream 300 feet and within 10 feet of the west bank of Prairie Creek.

SCHEDULE B

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

Outfall Number 001 and 002 (sewage treatment plant outfall)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Measurement
Quantity Chlorine Used	Daily	Measurement
Effluent Chlorine Residual	Daily	Grab
BOD-5 (influent)	Twice Monthly	Composite
BOD-5 (effluent)	Twice Monthly	Composite
TSS (influent)	Twice Monthly	Composite
TSS (effluent)	Twice Monthly	Composite
Ammonia (effluent from outfall 002)	Monthly	Composite
pH (influent and effluent)	Weekly	Grab
Fecal Coliform (effluent)	Weekly	Grab
Average Percent Removed (BOD & TSS)	Monthly	Calculation

Monitoring reports shall include a record of the location and method of disposal of all sludge and a record of all applicable equipment breakdowns and bypassing.

Reporting Procedures

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

SCHEDULE C

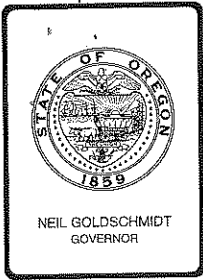
Compliance Conditions and Schedules

1. By no later than December 31, 1989, the permittee shall submit a proper and complete facility plan report (FPR), financing plan, and schedule for attaining compliance with Schedule A, Condition 4.
2. As soon as practicable, but not later than June 1, 1988, the permittee shall submit a sludge and septage management plan, developed in accordance with OAR Chapter 340, Division 50.
3. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

SCHEDULE D

Special Conditions

1. In the event that the permittee does not proceed with design and construction of the expanded facilities during the period of this permit, all prior approvals granted by the Department of Environmental Quality shall be considered void and no work shall be commenced until the Department has re-evaluated the proposed project in light of any changes in conditions or standards and has issued a new permit incorporating such additional or revised conditions as may be necessary.
2. Construction activities associated with on-site interceptor tank and collector piping installation, sewerage and conveyance facility installation, and treatment facility installation shall incorporate erosion control measures acceptable to and approved by the Department to minimize potential for sedimentation and contamination of surface waters.
3. Prior to constructing or modifying any wastewater control facilities, detailed plans and specifications shall be approved in writing by the Department.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Amendment to Item M, December 11, 1987, EQC Meeting

Request By The City of Joseph For An Increase In Mass Discharge Load

Purpose of Amendment

The purposes of this amendment are:

1. Incorporate a summary of the hearing held in Joseph, Oregon on December 2, 1987 concerning this issue. A response by the Department is also provided within the hearing summary.
2. Provide a Director's Recommendation, based on the original EQC staff report and the information developed at the hearing.

Director's Recommendation

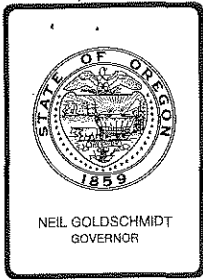
Based on the findings in the Summation and on public testimony, it is recommended that the City of Joseph be permitted to discharge increased mass loads and 30 mg/l BOD and solid concentrations, as described in Alternative 2 of the original EQC staff report. It is also recommended that the City's revised compliance schedule for facility planning requested during the public hearing be approved, to allow for sufficient plant operational data to be accumulated. As described in the Department's response to their public hearing testimony, their facility plan would be submitted one year after submittal of their performance evaluation report. Other concerns regarding soil stability and pipeline breakage that were raised at the hearing would be covered in the Department's review of the plans and specifications.

Fred Hansen

Attachment:

1. Hearings Officers Report: Summary of Testimony and Response to Comments.

David Mann:c
WC2811
229-6890
December 8, 1987



Environmental Quality Commission

ATTACHMENT 1

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Dick Nichols, Hearing Officer
Subject: Agenda Item No. M, December 11, 1987, EQC Meeting

Hearings Officer's Report: Summary Of Testimony and Response
To Comments At The Public Hearing Concerning The City Of
Joseph's Request For An Increase In Mass Discharge Load.

A public hearing on the City of Joseph's request was held in the Joseph Community Center on December 2, 1987, beginning at 2:00 p.m. The hearing had been advertised through notices in local newspapers, mailings to interested parties, and through the Secretary of State's Bulletin on November 15, 1987. Approximately 70 people attended.

1. The hearings officer summarized the issues, distributed informational copies of the EQC staff report, and answered questions from the public.
2. He reminded those present that the Hearing Record for oral and written testimony would close at 5:00 p.m. on December 4, 1987, and that the City's request is scheduled for action by the EQC at the December 11, 1987 meeting.
3. Oral testimony was given by 23 persons at the hearing.
4. During and after the hearing, written testimony was submitted by 6 persons.
5. Prior to the hearing, oral testimony was conveyed to the Department from the State Fish and Wildlife Department.

Following, in the order received, are summaries of oral and written testimony and the Department's response as appropriate. Copies of written testimony and an attendance list are available in the Water Quality Division.

Response to Oral and Written Testimony

1. Greg Robart, Water Quality Coordinator, Oregon Department of Fish and Wildlife, Portland.

Mr. Robart was unable to attend the hearing, but submitted testimony to the Department on December 1, 1987. He emphasized that the discharge to Prairie Creek must in no way impair existing

fisheries habitat, aquatic life, or anadromous fish spawning and passage. He stated that Prairie Creek is considered to be a rich and valuable fisheries resource which must not be degraded.

Response: The Department shares this concern. The draft NPDES permit would prohibit discharge of chlorine, monochloramine, and unionized ammonia which are toxic to aquatic life. At minimum stream flows, effluent BOD and Suspended Solids would be diluted over 30:1 after mixing with the base stream flow. These conditions should assure adequate protection of the creek.

2. Terry Edvalson, Director, Regional Services Institute, Eastern Oregon State College, La Grande.

Mr. Edvalson submitted a voluminous record of local public meetings and workshops conducted from July, 1985 to August, 1986. There were 141 meetings held on the proposed sewer system, which he said had presented the broadest possible opportunity for public input into all phases of the project. He also submitted a copy of the "Finding of Non-Significant Environmental Impact" (FONZI) prepared by the Economic Development Administration, U.S. Department of Commerce, dated January 17, 1986. This document reviewed the potential for adverse environmental, economic, and social impacts from the project. He stated that these activities and evaluations had resulted in the award of state and federal grant contributions totalling \$2.0 million.

3. Dean Mulenburg, Superintendent of Wallowa Lake State Park.

Mr. Mulenburg stated that he had participated in meetings on May 1 and 9, 1986 in which the Governor's Legislative Action Committee agreed with the objectives of the project, and called for the proportional state park contribution which was subsequently budgeted by the legislature.

4. Paul Castilleja, Mayor of Joseph

Mayor Castilleja expressed sympathy with individuals who may have difficulty paying for their costs of the sewer system, but emphasized that Commission approval is urgently needed to secure the grant awards. He does not believe that the proposed discharge of BOD would jeopardize Prairie Creek.

5. Curt Dreyer, Wallowa County Planner, Enterprise.

Mr. Dreyer, speaking for the Wallowa County Planning Commission, stated his support for the terms of the draft NPDES permit, and observed that the County's 1987 land use plan also requires that the proposed sewerage system be implemented to maintain water quality in Wallowa Lake.

6. Jim Chandler, Manager, Methodist Church Camp at Wallowa Lake.

Mr. Chandler demonstrated that the proposed discharge would have no tangible or visible effect on Prairie Creek. He presented one quart jar of lagoon effluent and two quarts of water from Prairie Creek. The lagoon effluent was distinctly green; the water from Prairie Creek was clear. Using a calibrated syringe, he injected 10 milliliters of lagoon effluent into one of the jars of water from Prairie Creek. This equaled a dilution of approximately 78:1. No color change or turbidity could be seen in the mixture. The mixture was practically indistinguishable from the unmixed sample.

In conclusion, Mr. Chandler emphasized his support for the sewerage system to protect the quality of Wallowa Lake.

7. De Vere Clarneau, Wallowa Lake Resident, Umatilla.

Mr. Clarneau expressed concern about the costs of the sewerage system to people on fixed incomes, yet is in favor of the system to protect the lake and to benefit the residents of Joseph.

8. Malcom Dawson, Joseph City Councilman.

Mr. Dawson stated that he has a home on Wallowa Lake and has also lived on a branch of Prairie Creek since 1954. He has noticed a gradual change in the water quality of Wallowa Lake. Twenty years ago, the irrigation canals which are fed by the lake still had clear, freestone beds, although they were dug in the 1920's. Now the canals are heavily infested with moss and algae, and algal growths are found along the lake-shore. The color of the lake has taken on a greenish hue. He reported that odors from failing septic systems were distinctly unpleasant during the August, 1986 Centennial Picnic held at Wallowa Lake. He considers the costs of the project a small price to pay, considering the value of preserving the quality of the lake for future generations.

9. Patricia Combes, Wallowa County Commissioner.

Mrs. Combes stated that EQC denial of the City's request would probably "kill the project". She also read a statement by Judge Le Roy Childers, Wallowa County Court, requesting that the City's request be approved to prevent further deterioration in the water quality in the lake.

10. Russ Ruonavaara, Joseph.

Mr. Ruonavaara stated that he has also observed increased moss in the lake and canals over the last 10 years and emphasized that this worsening condition must be brought to a halt by installing the proposed sewerage system.

11. D. Rahn Hostetter, Wallowa County District Attorney, Enterprise.

Mr. Hostetter asked that the EQC consider that the purpose of this project is to halt environmental pollution as well as to provide for economic growth, so that allowing an increase in mass loading has a justifiable basis. He recommended approval of the City's request.

12. Jack Kreizenbeck, Joseph.

Mr. Kreizenbeck, speaking on behalf of the four families who live closest to Joseph's existing lagoons, spoke in favor of upgrading the ponds and construction of an outfall to Prairie Creek.

13. Jerry Perren, Wallowa County Chamber of Commerce.

Mr. Perren spoke in favor of the project on environmental grounds, as well as economic.

14. Walter Hearne, Joseph.

Mr. Hearne stated that he had built Trout Haven Resort on the lake 30 years ago, and that a state study had shown no pollution of the lake, and that he has noticed none. He is opposed to implementating the project without further study, and stated that many lake property owners are also opposed to the project but could not vote in the 1986 bond elections because they are not registered as permanent residents. Mr. Hearne stated that the engineer's cost estimates are unrealistic and that cost overruns will occur for which property owners will be liable. He also stated that the additional development resulting from the project will harm the area's tourist industry. Mr. Hearne said that the proposed pipeline route along the west side of the lake would traverse unstable rock deposits and should be studied further before committing to the project.

Response: The Department recognizes that some property owners may be opposed to the project because of costs. Numerous hearings have been held on the issue of whether a sewer system to serve Wallowa Lake area should be constructed. Staff's review of the cost estimates presented in the Engineering Study did not disclose major omissions. The soil conditions reported by Mr. Hearne may

require that the pipeline be constructed of seamless polyethylene pipe, or a material of equivalent durability and strength. Soils investigations are routinely conducted during final design, and the Department agrees that particular attention should be given to the conditions described by Mr. Hearne. The Department's monitoring of Wallowa Lake water quality has not yet identified conditions of gross pollution. However, the widespread occurrence of septic tank failures adjacent to the lake in recent years indicates a trend towards increasing pollutant loadings.

15. Jerry Wheeler, Joseph.

Mr. Wheeler testified in favor of the project. He had also noticed increased moss in the canals over the last 10 years.

16. Larry Snook, Joseph.

Mr. Snook testified in favor of the proposal to remove the pollution from Wallowa Lake. He pointed out that the 92% vote passing the bond election in 1986 included only permanent residents who were registered to vote.

17. Michael Stertz, Joseph.

Mr. Stertz supported the proposal, and observed that City water from the lake has a "foul taste" in August, compared with its taste during the winter.

18. Joe Ehrler, Joseph.

Mr. Ehrler recalled that the lake was clean in 1965, but is now turning green. Its rate of flushing is slow because the outflow is small in relation to the lake volume. He supported the proposal to prevent further degradation of water quality.

19. La Velle Penland, Joseph.

Mrs. Penland was concerned about project costs to persons on fixed incomes, and requested more specific estimates from the engineers. She stated that she was not opposed to cleaning up the pollution in the lake.

Response: The Department considers that specific estimates which were presented in the Engineering Study could vary depending on installation conditions at each site. The costs presented by the engineering firm for Wallowa Lake property owners include:

1. Initial connection fee.....\$ 500.00
2. On-site STEP facilities.....\$1,500.00
3. Monthly service charge (equivalent).....\$ 18.34/month

The monthly user billing rate would be \$12.50. The remaining user charges would be collected through a property tax assessment of \$1.65 per year per thousand dollars assessed valuation. These fees are comparable to sewer user fees for other communities. However, the Department recognizes that connection, installation, and service costs may be extremely difficult for some property owners to pay. The City and the District are encouraged to work with these people to develop affordable financial arrangements.

20. Keith Waters, Joseph Public Works.

Mr. Waters who operates the City's treatment facilities, spoke in favor of the proposal for environmental reasons.

21. Mike Vaughn, Joseph.

Mr. Vaughn spoke in favor of the proposal for economic development, and also to avoid much higher costs later.

22. Ron Miller, Joseph.

While not stating a position in favor of or opposed to the proposal for increasing effluent loadings to Prairie Creek, Mr. Miller expressed concern regarding the effect of discharges to the creek. Having fished the creek for 18 years, he demanded assurance that the effluent would not harm the creek in any way.

Response: Water quality staff's view is that any potential degradation can be prevented as described above in Response No. 1. The City's lagoon system consists of four cells in series, with a detention time of approximately 25 days, providing stability and resistance to transient shocks of variable influent flows and loads. The design of the facilities and the operations manual must be reviewed and approved by the Department, under Oregon Administrative rules. The Department would require that the facilities be capable of providing the degree of protection which Mr. Miller requested.

23. Vergil Bentz, Joseph.

Mr. Bentz spoke in opposition to the project for reasons of cost, and also because of the potential for a major pollutional spill from the force main if routed adjacent to the lake. He advised that the force main be installed much further from the lake because of extremely unstable soils along the proposed route. He also suggested a 24-hour alarm system to alert maintenance personnel in case of pipe rupture. He pointed out that this alarm

might be connected to the Sheriff's office in Enterprise, which has a dispatcher on duty. He also suggested that the District explore the possibility of arranging with the power company for emergency pump station shut-down through its maintenance operator, who lives near the proposed pump station site.

Response: The Department agrees that unstable soils and potential pipe breakage are important engineering concerns. The technical and operational solutions proposed for these problems will be critically evaluated during the Department's review of the plans and specifications. The Department would recommend that Mr. Bentz's ideas for handling alarms and emergency shut downs be fully evaluated during design to minimize the potential for sewage to enter the lake under any circumstances.

24. James Boydston, P.E., Health Division, State Department of Human Resources.

Mr. Boydston wrote supporting the installation of sewers at Wallowa Lake for public health reasons, to protect the City water supply.

25. Marjorie De Boie, Lake Oswego.

Mrs. De Boie, who is a property owner at Wallowa Lake, wrote in opposition to the discharge of pollutants to Prairie Creek.

Response: The Department's response is as given in responses No. 1 and 19.

26. Frances Crow, Enterprise.

Mr. Crow wrote regarding the conduct of the meeting and lack of information available. Without declaring opposition to the project, he recommended that testimony on the issues be received in confidentiality by the Commission, and requested additional information on the project.

Response: Staff considers that open, public discussion of a controversial environmental issue is a better method to obtain information from interested and affected people for the Commission's consideration. However, it is unfortunate if Mr. Crow felt uncomfortable testifying at the hearing. The Hearings Officer tried to put people at ease during the hearing and did not sense that the crowd was threatening to people testifying against the project. An attempt was made to contact Mr. Crow by telephone, but the name was not listed in the phone directory.

27. Howard Perry, P.E., Anderson and Perry & Associates, La Grande.

Mr. Perry, the project engineer, wrote on behalf of the City and District with two suggestions:

1. Instead of being sealed, the lagoons should be left in their present condition and the Department should require that monitoring wells be installed to measure the impact of seepage on the groundwater resource. Only if monitoring demonstrates that groundwater quality is being degraded would the lagoons be sealed.
2. To change the compliance schedule outlined in Schedule C of the draft permit to allow for two years of operational data to be accumulated after start-up of the expanded treatment facilities, prior to planning and design of facilities to meet basin standards. Mr. Perry estimated that the ensuing facility planning effort would require one additional year.

Response: Staff supports both suggestions.

The current rate of surface or subsurface discharge from the lagoons has been estimated, but it has not been quantified, and its impact on groundwater has not been studied. The reason is that only the last two lagoon cells were designed to seep so that only treated wastes have been discharged. In recent years, the lagoons may have sealed themselves. The Department favors delaying the sealing effort for 12 months pending evaluation of groundwater monitoring data. A leak test, however, should be performed on the lagoons as part of construction activities. This issue will be addressed in the permit.

The accumulation of 2 years operational data is reasonable considering the additional expenditure which would be required to construct facilities capable of producing 20 mg/l effluent concentrations of BOD and suspended solids. Most treatment plant expansion projects have longer data histories. An allowance of one year for facility planning is also reasonable, considering that many technological alternatives are to be evaluated and compared, and that additional infiltration testing or reduction work may be warranted.

10

However, the Department would address this in the permit by scheduling a performance evaluation report to be submitted one year after startup of the expanded treatment system. If sufficient data is available then to project future performance, then that data should also afford a basis for planning facilities to attain re-compliance with basin standards, and the permit would require the plan to be submitted one year later. If more data is needed to complete the performance evaluation, then the Department would extend the deadline for the performance evaluation one more year, with the facility plan to be submitted one year afterwards.

In conversations with the Department since the Public Hearing, the City and the District have agreed to this flexible planning schedule. The Department would proposed to incorporate it into the permit, subject to authorization by the Environmental Quality Commission.

28. Nola Clarneau, Umatilla.

Mrs. Clarneau wrote in support of the project, stating that a lakeshore sewer system should have replaced the septic tanks many years ago, and that treatment is available to protect Prairie Creek water quality.

David Mann:c
WC2812a
229-6890
December 8, 1987

#N

A PROPOSAL for MANAGING OREGON'S WATER



The Water Resources Commission is proposing a new approach to water management and wants to know your views.

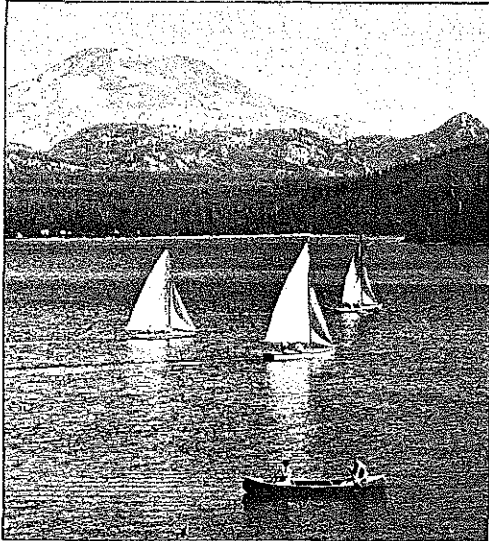
Several citizens and key agencies with responsibility for water management worked during the last year to develop this proposal. The Commission expects to approve a new planning process early in 1988 and would like to hear from you by December 1. Water decisions affect everyone either at home, leisure or business. That is why your views and participation are important.

WHY OREGON NEEDS A NEW APPROACH TO WATER MANAGEMENT

In Oregon, at least twelve natural resource agencies share responsibility for managing water uses or conserving and developing water resources. For example, Water Resources Department (WRD) issues water rights, Department of Environmental Quality controls pollution, Department of Fish and Wildlife protects fish resources and regulates fishing, Parks and Recreation manages state scenic waterways and recreation facilities and Department of Agriculture oversees agricultural practices and promotes soil and water conservation. The divided jurisdiction has resulted in confusion over goals for managing water, conflicting decisions and failure to get the most benefit from the resources available.

One of the roles of the Water Resources Commission (WRC) is to coordinate and integrate state water programs. The WRC used to carry out planning studies in one major stream basin at a time. These studies often took three to four years to complete and the entire state has taken decades. The traditional planning process has not allowed the WRC to react quickly to issues that have occurred across the state, like increased hydroelectric development or loss of flows needed for fish.

The Commission's proposal envisions a new partnership among agencies and the public to identify water issues and plan for water supply, water quality and water uses.



WHAT NEEDS TO BE ACCOMPLISHED

- Establish a single readable document describing all water policies
- Cover a full range of water topics - supply, quality, watersheds, stream habitats and uses like irrigation, boating and household needs
- Resolve the issues of greatest concern soonest
- Create ways to include the public in all stages of water management
- Involve all state water agencies in lead roles to set policies
- Produce plans that can turn into actions
- Coordinate agency schedules, programs and budgets to avoid duplication and conflict and make the best use of funds

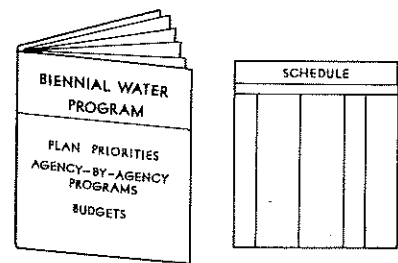
WHAT THE COMMISSION PROPOSES

The proposed new management program will be created through three separate but linked processes: two-year program scheduling, statewide issue planning and basin planning. Out of these processes will come two documents: a Biennial Water Program setting a course of action, and an Oregon Water Resources Management Program, containing state water policies, basin plans and proposals for improving water management.

TWO-YEAR WORK PROGRAM

A report called the Biennial Water Program will be submitted to the Legislature every two years. The report will:

- Include a schedule of topics and basins for planning in the next two years
- Set priorities for projects and other actions
- Include budget items for water-related activities submitted by state agencies
- Evaluate progress of the previous two years
- Provide a longer range schedule for basin planning and water management



Biennial Water Program

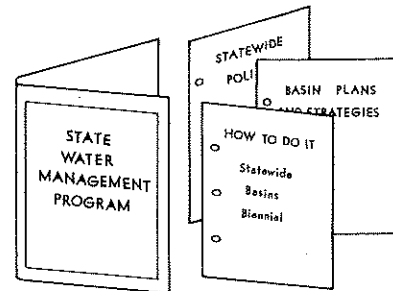
HOW THE TWO-YEAR PROGRAM WILL BE DEVELOPED

- WRC conducts a workshop with the public, Governor's Office, legislators and agencies
- Involved agencies hold public meetings statewide
- WRC and Strategic Water Management Group (a group of state natural resource agency directors) resolve conflicting programs and set priorities based on public comments received.
- Each major resource agency contributes a written section on its water-related programs and proposals for action
- WRC coordinates responses and produces the report

STATE WATER RESOURCES MANAGEMENT PROGRAM

The State Water Resources Management Program document will present the results of water planning activities. It will include a loose-leaf section for each statewide policy issue and each basin plan. Sections of the program will:

- Contain background information, policies, reasons for policies and future actions needed
- Be approved separately by the WRC
- Be revised as needed based on the Two-Year Work Program



State Water Management Program

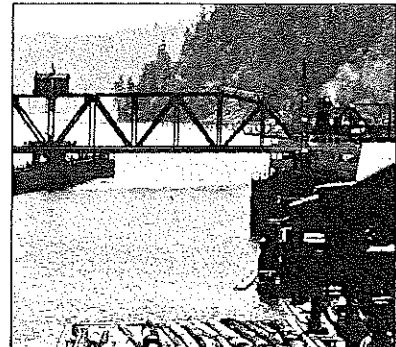
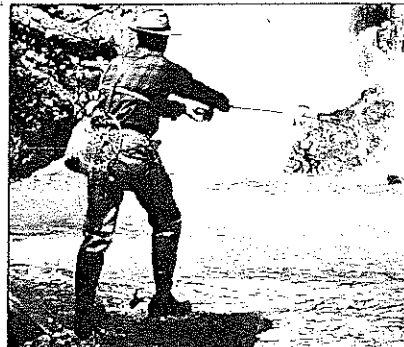
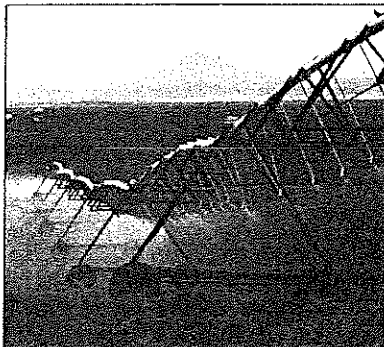
HOW THE STATE WATER MANAGEMENT PROGRAM WILL BE DEVELOPED

Statewide Issue Planning

- Lead agencies tackle the water problems agreed to in the two-year work program
- Lead agency writes a workplan showing ways to involve the public and agencies
- Participants gather information on the issue
- Participants identify possible policies and actions to resolve problems
- Lead agency and WRC hold public hearing on the recommended policy
- Lead agency and WRC jointly adopt policy statements
- Lead agency submits a section for the State Water Resources Management Program

Basin Planning

- Agencies prepare background information on their main concerns in the basin to meet the long-range planning schedule
- WRD establishes a network of agency participants
- WRD appoints a citizen advisory committee from the basin
- Agencies and advisory committee help decide which issues to resolve
- Participants identify within one year possible plans and actions to settle key issues
- WRC holds public hearings on the proposed plan
- WRC approves a basin plan section for the State Water Resources Management Program



HOW THE PUBLIC WILL BENEFIT

- Improved management of streams, reservoirs and groundwater
- Better guidance for developing new water supplies
- More opportunity to direct state attention to local concerns
- Greater ability to influence the state's water management
- New ways for the public and agencies to solve problems together

HOW AGENCIES WILL BENEFIT

- Improved communication and broader understanding of agency roles
- Greater support for budgets to carry out important water programs
- More integrated state agency positions on federal water actions
- Direct opportunity to participate in setting water policies
- Predictable scheduling of management activities
- Better atmosphere for resolving conflicts

WHAT HAPPENS NEXT

Early in 1988 the Water Resources Commission will review the responses it has received and will give formal approval to a new water management process. The approved procedures will guide, as much as possible, work that is presently underway. It will set the stage to prepare the first two-year work program for the next legislative session. The description of the water management program will begin as a guideline rather than as administrative rules. That will help maintain flexibility as experience is gained.

HOW YOU CAN INFLUENCE THE PROPOSAL

Everyone is a water user. You can help us plan a successful program. The Commission wants your ideas and response to this proposal. You can send written comments to the Commission or obtain more information by contacting Becky Kreag, Planning Coordinator, Water Resources Department, Phone: 378-3671. Please make comments by December 1, 1987.



William R. Blosser, Chairman
Oregon Water Resources Commission

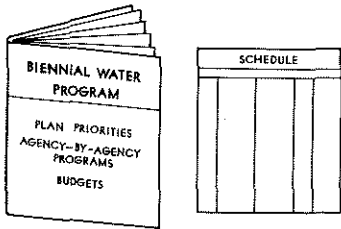
Check here if you wish to receive a copy of the proposal as adopted.

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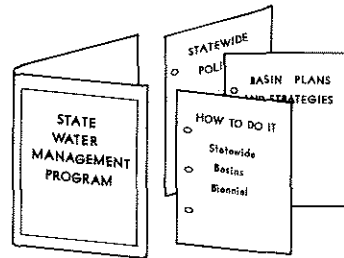
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BIENNIAL WATER PROGRAM



STATE WATER RESOURCES MANAGEMENT PROGRAM

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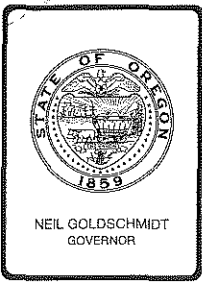
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WATER RESOURCES DEPARTMENT

3850 PORTLAND ROAD N.E.
SALEM, OREGON 97310

Attention: BECKY KREAG



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item 0, December 11, 1987 EQC Meeting

Informational Report: Review of Lists of Principal Recyclable Materials

Background

OAR 340-60-030 requires the Department to at least annually review the principal recyclable materials list for each wasteshed and to submit any proposed changes to these rules to the Commission. This report addresses the principal recyclable materials lists for all wastesheds, and for all recyclable material except yard debris. A separate staff report reviews yard debris recycling alternatives.

"Recyclable material" is defined as "any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material". As such, changes in the market price of materials and the cost of collection and disposal will each affect whether a material is recyclable.

Market Price for Recyclable Materials

The market price for most paper products, for glass, and for tin cans were all high during 1987, as shown in Attachment B. The base price for old newsprint is \$82.50 per ton - an all-time high that is \$25 per ton higher than the price a year ago. Cardboard prices are also high, at \$85 to \$90/ton base price. This price is \$5 more per ton than the price paid last year, but lower than the all-time highs of over \$100 per ton hit earlier in 1987. Owens Illinois currently pays \$40/ton for all colors of glass - as high a price as they have ever paid.

Oil prices, which fell sharply in 1986, have climbed back slightly in 1987. Most service stations are now getting their oil picked up for free, or are paying less than 5 cents per gallon. A year ago, service stations were paying an average of 15 cents per gallon to have their oil collected, whereas three years ago they were getting paid 25 cents per gallon for their oil.

The base price for tin cans paid in Seattle has climbed back to \$58/ton from \$54/ton. Certain other metal products have recovered from their recent lows of 1986. Most non-ferrous metal prices have risen more than 30 percent over the last year. For example, the price for carloads of aluminum beverage containers has risen from 38 cents to 56 cents per pound in the past year. Lead prices have also risen in the past year, but are still very low compared to prices of a decade ago. With the low lead prices and the closing of the Bergsøe battery-processing plant, car batteries have declined in value to the point where many metal companies will not accept them for recycling. Batteries that are recycled are either shipped to Los Angeles or overseas, with the cost of freight being almost as high as the value of the batteries at their destination.

Steel scrap processors have become much more selective about the materials they will purchase for recycling. Some are now refusing items such as oil-coated metal turnings, and are requiring that batteries, motors and other electrical components that may contain PCBs, catalytic converters, mufflers, and other potentially hazardous materials be removed from scrap before it will be accepted. The price paid for the scrap metal is higher than the price paid a year ago, having climbed from \$67/ton to \$85/ton in the past three months. With the increase preparation costs, however, the net value of some scrap steel items such as appliances has fallen considerably.

Cost of Disposal

The cost of disposal of materials as garbage has continued to increase in some wastesheds. For example, the tipping fee at the Clackamas Transfer and Recycling Station in Oregon City has risen from \$14.97/ton in 1983 to \$15.73 in 1984 and 1985, \$17.38 in 1986, and \$19.70 as of April, 1987. Disposal prices are expected to continue to climb, as the costs for closure of the St. Johns Landfill, increased shipping costs to more distant landfills, and the higher cost of energy recovery facilities are added in. Costs on the order of \$35 to \$50 per ton are expected within the next five years.

Evaluation

The Department does not recommend any changes in the lists of principal recyclable materials. With the higher prices for recyclable material and with increased disposal costs, some additional material, such as plastic or scrap paper, could be added to the lists and still have the group of material qualify as "recyclable material" under the Recycling Opportunity Act. However, some of the price increases may be just short-term fluctuations. The Department would like to concentrate its efforts on improving the existing collection programs, rather than work to add new materials only to delete these materials later when prices again drop.

Director's Recommendation

It is recommended that no changes be made at this time in OAR 340-60-030, the lists of principal recyclable materials. The Department feels that greater gains will be made by concentrating on improving the effectiveness of existing programs rather than spending considerable time adding new materials to the collection programs.



Fred Hansen

Attachment A: List of Principal Recyclable Materials for Each Wasteshed.

Attachment B: Market price for Recyclable Materials, 1975 to 1987.

Peter Spendelow
229-5253
November 19, 1987
\\WREP\SAMNA\PRIN-MAT.R7N

OAR 340-60-030

- (1) The following are identified as the principal recyclable materials in the wastesheds as described in Sections (4) through (8):
 - (a) Newspaper;
 - (b) Ferrous scrap metal;
 - (c) Non-ferrous scrap metal;
 - (d) Used motor oil;
 - (e) Corrugated cardboard and kraft paper;
 - (f) aluminum;
 - (g) container glass;
 - (h) Hi-grade office paper
 - (i) Tin cans
- (2) In addition to the principal recyclable materials listed in (1) above, other materials may be recyclable material at specific locations where the opportunity to recycle is required.
- (3) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material at a specific location where the opportunity to recycle is required.
- (4) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (i):
 - (a) Benton and Linn wasteshed
 - (b) Clackamas wasteshed
 - (c) Clatsop wasteshed
 - (d) Hood River wasteshed
 - (e) Lane wasteshed
 - (f) Lincoln wasteshed
 - (g) Marion wasteshed
 - (h) Multnomah wasteshed
 - (i) Polk wasteshed
 - (j) Portland wasteshed
 - (k) Umatilla wasteshed
 - (l) Union wasteshed
 - (m) Wasco wasteshed
 - (n) Washington wasteshed
 - (o) West Linn wasteshed
 - (p) Yamhill wasteshed

- (5) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (g):
 - (a) Baker wasteshed
 - (b) Crook wasteshed
 - (c) Jefferson wasteshed
 - (d) Klamath wasteshed
 - (e) Tillamook wasteshed

- (6) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (h):
 - (a) Coos wasteshed
 - (b) Deschutes wasteshed
 - (c) Douglas wasteshed
 - (d) Jackson wasteshed
 - (e) Josephine wasteshed

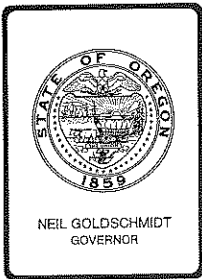
- (7) In the following wasteshed, the principal recyclable materials are those listed in Subsections (1)(a) through (f) of this rule:
 - (a) Malheur wasteshed

- (8) In the following wastesheds, the principal recyclable materials are those listed in Section 1(a) through (g) and (i):
 - (a) Columbia wasteshed
 - (b) Milton-Freewater wasteshed

- (9) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (e):
 - (a) Curry wasteshed
 - (b) Grant wasteshed
 - (c) Harney wasteshed
 - (d) Lake wasteshed

- (10) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (d):
 - (a) Morrow wasteshed
 - (b) Sherman wasteshed
 - (c) Wallowa wasteshed

- (11) In the following wastesheds, the principal recyclable materials are those listed in Subsections (1)(b) through (d) of this rule:
 - (a) Gilliam wasteshed
 - (b) Wheeler wasteshed



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Work Session, December 11, 1987, EQC Meeting
Work Session on Yard Debris Recycling in the
Portland Metropolitan Area.

Background

On October 9, 1987 the Commission instructed the Department to move forward with the issue of yard debris recycling in the five Portland metropolitan area wastesheds. The Department has been working with this issue for a number of years. There are very strong feelings among a variety of affected persons on this issue and there has been extensive debate over the need for and potential impact of recycling yard debris. After further discussion with the Commission it was determined that rather than bring forward the proposed rule, a work session including a panel discussion on a full range of yard debris recycling options would be the most appropriate for discussion of this issue.

The Oregon Recycling Opportunity Act has provided a mechanism for the development of a yard debris recycling program in the Portland area. However, efforts to link yard debris recycling with the opportunity to recycle have created strong opposition from the solid waste collection and recycling industry. At the same time local governments have been concerned that yard debris recycling programs will result in unacceptable costs to the public. There has been an equally strong reaction from the environmental community pressing for the inclusion of yard debris into the recycling program created by the Opportunity to Recycle Act. A copy of the statute and rules are attached to this staff report. (Attachments I and II)

In 1985 the Department developed a draft rule which added yard debris to the list of principal recyclable materials in the five Portland area wastesheds.

After several public hearings in 1986 and 1987 the Department concluded that the identification of yard debris as a principal recyclable material would not result in a substantial increase in yard debris recycling and might have a significant negative impact on the yard debris processing industry and local government recycling efforts.

The following materials have been attached to provide a background on the results of the public hearings and the Department's considerations.

"Status Report on Yard Debris Recycling in the Portland Metropolitan Area, Agenda Item I, October 9, 1987, EQC Meeting". (Attachment III)

Background Report and Hearings Officer's Report on Yard Debris Recycling in the Portland Metropolitan Area." (Attachment IV & V).

Proposed Rule and Supporting Documents. (Attachments VI through IX)

In consideration of the range and strength of opinions on the issue of yard debris recycling, the Department is proposing a range of yard debris recycling concepts for discussion.

DISCUSSION CONCEPT 1

Yard debris recycling as an element of the Opportunity to Recycle:

This concept is based upon the Commission identifying yard debris as a principal recyclable material (as it has identified glass, tin, newspaper, aluminum, etc.). After that action is taken, local governments and other affected persons would have a period of time to either provide the opportunity to recycle yard debris or determine that yard debris is not a recyclable material for specific situations where the opportunity to recycle was required. The Department would provide a set of criteria for this determination.

When local government and other affected persons have determined whether yard debris is a recyclable material, local governments will provide for on-route collection or an acceptable alternative method of providing the opportunity to recycle yard debris. Under this concept the Department would provide a description of the acceptable alternative methods for providing the opportunity to recycle.

Disposal sites would be required to either divert source separated yard debris to processing centers or provide a separate area for collection of yard debris. Full implementation of this concept would include the establishment of additional yard debris processors and a set of performance standards for all yard debris processors.

These yard debris recycling programs would be monitored and evaluated for effectiveness. Reporting on yard debris recycling would occur on an annual basis with other opportunity to recycle status reports.

This concept could be implemented as soon as January 1988. It would take about one year for the local governments to make their determinations of whether yard debris was a recyclable material and to design and gain approval of alternative methods. It would also take about one year to have on-route collection programs in full operation.

There is a potential to develop some variations to this concept. Yard debris could be identified as a principal recyclable material only in a single watershed. The Commission could make a determination at which specific location yard debris was a recyclable material. Or, the Commission could make a determination of what activities would be an acceptable alternative to on-route collection. All of these variations would reduce the burden on local governments but would also take away a portion of their discretion in this matter.

While this concept is the most direct and quickest to implement it will have the greatest opposition from the solid waste collection and recycling industry and local governments. This concept may not be compatible with Metro's present waste reduction planning efforts. And, if this concept is immediately successful it might create more source separated yard debris than present markets and processors would be able to handle.

Three Specific variations of this concept are compared in the attached "Concept Comparison Chart" and are as follows:
(Attachment X)

- 1a) The Commission identifies yard debris as a principal recyclable material. Local governments determine if yard debris is or is not a recyclable material in each jurisdiction. Local governments provide for on-route or an alternative method for collection of source separated yard debris.

- 1b) The Commission identifies yard debris as a principal recyclable material. The Department determines if source separated yard debris is a recyclable material at disposal sites and processors. Assuming that the Department determines yard debris is recyclable at disposal sites and processing centers then the, Commission would need to make the determination that yard debris is not a recyclable material and thereby eliminate the need for on-route collection.
- 1c) The Commission identifies yard debris as a principal recyclable material. Local governments determine if yard debris is or is not a recyclable material in each jurisdiction. The Department develops a list of approved alternative methods for each jurisdiction where on-route collection might be required.

DISCUSSION CONCEPT 2

Yard debris recycling as a new program using a local government planning process and phased-in implementation of local government preferred programs:

This concept is based on the Commission adopting new rules which would outline the different phases of a yard debris recycling program. The rules would set yard debris recycling planning and implementation requirements for local government.

In essence, this option would have the Commission require local government to come up with some plan to handle yard debris recycling. After implementation the programs would be allowed to operate for some period of time, say 2 to 5 years, at which time the Commission would evaluate them. At that point, on-route collection or another more effective program would be required if the local government preferred program failed to meet its goal.

The initial planning process would include identification of local government preferred programs, development of evaluation criteria, identification of goal setting procedures and commitment to goals.

The major measure for program success to be identified in the goals, will be the amount or percentage of yard debris recovered or diverted from disposal.

Before a local government preferred program would be accepted as an alternative to on-route collection, the program would have to meet a set of minimum standards for public service. Some examples of these standards could be as follows:

- 1) Program sponsored or regulated by a local or regional government.

- 2) Program service accessible to all residents of the jurisdiction.
- 3) Program must result in a recovery of source separated yard debris.
- 4) Program is promoted to all resident of the jurisdiction.
- 5) Program has a measurable goal.
- 6) Any charge, to the residents, for program services must be less than the cost of disposal of the same material as solid waste.
- 7) Program should provide at least twice yearly opportunity to participate.

After a local government preferred program has been accepted the local government will implement the program. These yard debris recycling programs would be monitored and evaluated for effectiveness. Reporting on yard debris recycling would occur on an annual basis. An evaluation of the effectiveness of the local government preferred programs would be made after they had been in operation for at least two years.

This concept could be implemented as soon as new rules could be drafted. Local governments could start their planning process in late 1988. New programs could be implemented as early as 1989. It would take about one year to have new programs in full operation. Program evaluation could begin taking place two years after the new programs were in full swing.

Under this concept disposal sites would be required to either divert source separated yard debris to processing centers or provide a separate area for collection of yard debris. Full implementation of this concept would include the establishment of additional yard debris processors and a set of performance standards for all yard debris processors.

There is a potential to develop some variations to this concept. One major alternative would be to have Metro do the planning. Metro could also use its functional planning authority to require local governments to provide yard debris recycling programs. This concept could be implemented without the potential substitution of on-route collection for ineffective yard debris recycling programs. One other variation would be to implement this option only after yard debris has been identified as a principal recyclable material or only after local government has determined that yard debris was a recyclable material in their jurisdiction.

This concept provides a great deal of local decision making and control. There will be a long time period before most of the yard debris recycling programs will be in full operation. Because of the longer timeline, this concept leaves more time for yard debris processors and markets to grow.

Three specific variations of this concept which are compared on the attached "Concepts Comparison Chart" and are as follows:

- 2a) Local government would choose their preferred program for recycling yard debris. Local government would set program goals. The Department would set minimum criteria for local government preferred programs. The Department, with Commission direction, or regional government would evaluate the local program for effectiveness.
- 2b) Local government would choose their preferred program for recycling yard debris. The Department, with Commission direction, would set program goals. The Department would set minimum criteria for local government preferred programs. The Department or regional government would evaluate the local programs for effectiveness.
- 2c) Local government would choose their preferred program for recycling yard debris. Local Government would set program goals. There would be no minimum criteria for local government preferred programs. The Department, with Commission direction, or regional government would evaluate the local programs for effectiveness.

DISCUSSION CONCEPT 3

Yard debris recycling through continued incremental growth without government requirements for collection:

This concept is based on the Commission not identifying yard debris as a principal recyclable material. The present yard debris collection and recycling system would be allowed to continue to grow "on its own". Local government would not provide the opportunity to recycle yard debris as is required for other recyclable materials. Local governments would continue to provide yard debris recycling programs as they felt necessary to meet public need or demand. Private yard debris recycling and collection programs would be developed based on the demand for the composted products or the savings from diversion from disposal.

Under this concept disposal sites could still be required to either divert source separated yard debris to processing centers or provide a separate area for collection of yard debris.

However, the Department could not use the opportunity to recycle rules as the authority for these requirements. Full implementation of this concept might eventually lead to establishment of additional yard debris processors. The Department, with Commission direction, could still develop a set of performance standards for all yard debris processors.

This concept could be implemented immediately. The growth rate of yard debris recycling would be monitored by the Department and would be reported back to the Commission after some period of time, say three years. At that time the Commission could reconsider its regulatory options.

This concept has the least government involvement in yard debris recycling. It might result in a slower development of yard debris recycling programs and lower recovery rates. Under this concept there is less chance that yard debris recycling will interfere with other recycling efforts. This concept may not be consistent with Metro's waste reduction goals or efforts.

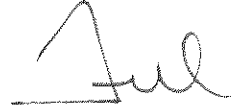
Three specific variations of this concept which are compared on the attached "Concepts Comparison Chart" are as follows:

- 3a) The private sector would provide collection and processing of source separated yard debris without any government regulation.
- 3b) The private sector would provide collection of source separated yard debris without any government regulation. Regional or local government would regulate or franchise processing of yard debris.
- 3c) The private sector would provide collection and processing of source separated yard debris without any government regulation. State and regional government would provide major marketing assistance to processors.

DEPARTMENT RECOMMENDATION

The three concepts discussed above each have their strengths and weaknesses and may or may not result in a consensus of the parties involved. The Department feels that it is imperative to develop, as much as is possible, a consensus approach to recycling yard debris. Therefore, it is recommended that the Commission discuss these and other concepts with the panel and attempt to reach an agreement on a conceptual yard debris recycling program for the Portland metropolitan area.

After the Commission has had an opportunity to hear the public discussion of these three concepts, the Department can, with Commission direction, develop the specific rules necessary for implementation. Any such new rules would be subject to the full rule-making requirements including public notice and public hearing.



Fred Hansen

- Attachments:
- I. ORS 459.165 to 195
 - II. OAR 340-60-005 to 085
 - III. Status Report
 - IV. Background Report
 - V. Hearings Officer's Report
 - VI. Proposed Rule
 - VII. Rule Making Statements
 - VIII. Public Notice
 - IX. Proposed Guidance Amendment
 - X. Concepts Comparison Chart

William R. Bree
229-6975
November 23, 1987

(2) Contracts and other agreements authorized under subsection (1) of this section may be for terms not longer than 20 years. [1981 c.386 §2]

459.130 [1969 c.509 §3; 1971 c.330 §1; 1971 c.648 §30; 1979 c.190 §421; repealed by 1981 c.81 §3]

459.135 Marion County authority over private facility in county. Subject to ORS 459.145 and the requirements of ORS 459.005 to 459.335, a public or private disposal, transfer or resource recovery site or facility shall not be established, modified or extended in Marion County without the prior approval of the board of county commissioners. The board may deny an application for the establishment, modification or extension of a site or facility if pursuant to its solid waste management plan the county has either:

(1) Entered into contracts obligating the county to supply or direct minimum quantities of solid wastes to sites or facilities designated in the contract in order that those sites or facilities will operate economically and generate sufficient revenues to liquidate any bonded or other indebtedness incurred by reason of those sites or facilities; or

(2) Adopted a franchise system for the disposal of solid or liquid wastes. [1981 c.386 §3]

459.140 [1969 c.509 §4; 1975 c.239 §5; repealed by 1981 c.81 §3]

459.145 Limits on Marion County authority. ORS 459.125 and 459.135 do not apply to, or grant to Marion County any authority over:

(1) Material kept separate from waste material for the purpose of recycling or reuse by persons who generate solid waste and which is handled separately from waste material.

(2) Resource recovery involving the collection, storage, processing or use of materials kept separate from waste material for the purpose of recycling or reuse by persons who generate solid waste. [1981 c.386 §4]

459.150 [1969 c.509 §5; 1975 c.239 §6; repealed by 1981 c.81 §3]

459.153 Intent not to discourage recycling. It is not the intent of the Legislative Assembly that Marion County, under ORS 459.125 and 459.135, take any action that would hinder or discourage recycling activities in the county. [1981 c.386 §5]

459.155 [1975 c.239 §8; 1979 c.772 §23; repealed by 1981 c.81 §3]

459.160 [1969 c.509 §7; repealed by 1971 c.648 §33]

(Recycling)

459.165 Definitions for ORS 459.165 to 459.200 and 459.250. (1) As used in ORS 459.015, 459.165 to 459.200 and 459.250, the "opportunity to recycle" means at least:

(a) A place for collecting source separated recyclable material located either at a disposal site or at another location more convenient to the population being served and, if a city has a population of 4,000 or more, collection at least once a month of source separated recyclable material from collection service customers within the city's urban growth boundary or, where applicable, within the urban growth boundary established by a metropolitan service district; or

(b) An alternative method which complies with rules of the commission.

(2) The "opportunity to recycle" defined in subsection (1) of this section also includes a public education and promotion program that:

(a) Gives notice to each person of the opportunity to recycle; and

(b) Encourages source separation of recyclable material. [1983 c.729 §2]

459.168 Commission duties. The commission shall:

(1) Amend the state solid waste management plan to conform to the requirements of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(2) Review department reports on compliance with and implementation of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(3) Submit a report to each regular session of the Legislative Assembly regarding compliance with and implementation of the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995. [1983 c.729 §9]

459.170 Commission to adopt rules regarding waste disposal and recycling. (1) By January 1, 1985, and according to the requirements of ORS 183.310 to 183.550, the commission shall adopt rules and guidelines necessary to carry out the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995, including but not limited to:

(a) Acceptable alternative methods for providing the opportunity to recycle;

(b) Education, promotion and notice requirements, which requirements may be different for disposal sites and collection systems;

(c) Identification of the wastesheds within the state;

(d) Identification of the principal recyclable material in each wasteshed;

(e) Guidelines for local governments and other persons responsible for implementing the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995;

(f) Standards for the joint submission of the recycling report required under ORS 459.180 (1); and

(g) Subject to prior approval of the appropriate legislative agency, the amount of an annual or permit fee or both under ORS 459.235, 459.245 and 468.065 necessary to carry out the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(2) In adopting rules or guidelines under this section, the commission shall consider:

(a) The purposes and policy stated in ORS 459.015.

(b) Systems and techniques available for recycling, including but not limited to existing recycling programs.

(c) Availability of markets for recyclable material.

(d) Costs of collecting, storing, transporting and marketing recyclable material.

(e) Avoided costs of disposal.

(f) Density and characteristics of the population to be served.

(g) Composition and quantity of solid waste generated and potential recyclable material found in each wasteshed. [1983 c.729 §3]

459.175 Notice to affected person in wasteshed; appeal; request for modification or variance. (1) After the commission identifies a wasteshed, the department shall notify each affected person to the extent such affected persons are known to the department, of the following:

(a) That the affected person is within the wasteshed; and

(b) The recyclable material for which affected persons within the wasteshed must provide the opportunity to recycle in all or part of that wasteshed.

(2) Any affected person may:

(a) Appeal to the commission the inclusion of all or part of a city, county or local government unit in a wasteshed;

(b) Request the commission to modify the recyclable material for which the commission determines the opportunity to recycle must be provided; or

(c) Request a variance under ORS 459.185 (8). [1983 c.729 §5]

459.180 Recycling report; implementation of opportunity to recycle. (1) Upon final determination of the wasteshed and identification of recyclable material and any variance, the cities and counties within the wasteshed shall coordinate with all other affected persons in the wasteshed to jointly develop a recycling report to submit to the department. The report to the department shall explain how the affected persons within the wasteshed are implementing the opportunity to recycle.

(2) Unless extended by the commission upon application under ORS 459.185 after the affected persons show good cause for an extension, the affected persons within the wasteshed shall implement the opportunity to recycle and submit the recycling report to the department not later than July 1, 1986. [1983 c.729 §6]

459.185 Approval, disapproval of recycling report; effect of disapproval. (1) The department shall review a recycling report submitted under ORS 459.180 to determine whether the opportunity to recycle is being provided within all of the affected portion of the wasteshed.

(2) The department shall notify the affected persons who participated in preparing the report of acceptance or disapproval of the recycling report based on written findings.

(3) If the department disapproves a recycling report:

(a) An affected person may:

(A) Request a meeting with the department to review the department's findings, which meeting may include all or some of the affected persons who prepared the report; or

(B) Correct the deficiencies that the department found in the report.

(b) The department may grant a reasonable extension of time for the affected persons to correct deficiencies in the recycling report.

(c) The affected persons submitting the report shall notify the department of any action taken to correct a cited deficiency.

(4) In the event of disapproval and after a reasonable extension of time to correct deficiencies in the opportunity to recycle, the director of the department shall notify the commission that the affected persons within a wasteshed have failed to implement the opportunity or submit a recycling report.

(5) Upon notification under subsection (4) of this section, the commission shall hold a public hearing within the affected area of the wasteshed.

(6) If, after the public hearing and based on the department's findings on review of the recycling report and the hearing record, the commission determines that all or part of the opportunity to recycle is not being provided, the commission shall by order require the opportunity to recycle to be provided. The commission order may include, but need not be limited to:

- (a) The materials which are recyclable;
- (b) The manner in which recyclable material is to be collected;
- (c) The responsibility of each person in the solid waste collection and disposal process for providing the opportunity to recycle;
- (d) A timetable for development or implementation of the opportunity to recycle;
- (e) Methods for providing the public education and promotion program;
- (f) A requirement that as part of the recycling program a city or county franchise to provide for collection service; and
- (g) Minimum standards for the mandatory franchising.

(7) If a recycling program is ordered under this section, the department shall work with affected persons and designate the responsibilities of each of them.

(8)(a) Upon written application by an affected person, the commission may, to accommodate special conditions in the wasteshed or a portion thereof, grant a variance from specific requirements of the rules or guidelines adopted under ORS 459.170 or a recycling program ordered by the commission under subsection (6) of this section.

(b) The commission may grant all or part of a variance under this section.

(c) Upon granting a variance, the commission may attach any condition the commission considers necessary to carry out the provisions of ORS 459.015, 459.165 to 459.200 and 459.250.

(d) In granting a variance, the commission must find that:

(A) Conditions exist that are beyond the control of the applicant;

(B) Special conditons exist that render compliance unreasonable or impractical; or

(C) Compliance may result in a reduction in recycling.

(9) An affected person may apply to the commission to extend the time permitted under ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 for providing for all or a part of the opportunity to recycle or submitting a recycling report to the department. The commission may:

(a) Grant an extension upon a showing of good cause;

(b) Impose any necessary conditions on the extension; or

(c) Deny the application in whole or in part. [1983 c.729 §7]

459.188 Mandatory participation in recycling. (1) Upon findings made under subsection (3) of this section, the commission may require one or more classes of solid waste generators within all or part of a wasteshed to source separate identified recyclable material from other solid waste and make the material available for recycling.

(2) In determining which materials are recyclable for purposes of mandatory participation, the cost of recycling from commercial or industrial sources shall include the generator's cost of source separating and making the material available for recycling or reuse.

(3) Before requiring solid waste generators to participate in recycling under this section, the commission must find, after a public hearing, that:

(a) The opportunity to recycle has been provided for a reasonable period of time and the level of participation by generators does not fulfill the purposes of ORS 459.015;

(b) The mandatory participation program is economically feasible within the affected wasteshed or portion of the wasteshed; and

(c) The mandatory participation program is the only practical alternative to carry out the purposes of ORS 459.015.

(4) After a mandatory participation program is established for a class of generators of solid waste, no person within the identified class of generators shall put solid waste out to be collected nor dispose of solid waste at a disposal site unless the person has separated the identified recyclable material according to the requirements of the mandatory participation program and made the recyclable material available for recycling. [1983 c.729 §8]

459.190 Limitation on amount charged person who source separates recyclable material. A collection service or disposal site

may charge a person who source separates recyclable material and makes it available for reuse or recycling less, but not more, for collection and disposal of solid waste and collection of recyclable material than the collection service charges a person who does not source separate recyclable material. [1983 c.729 §11]

459.192 Exemptions. Nothing in ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 applies to recyclable material which is:

- (1) Source separated by the generator; and
- (2) Purchased from or exchanged by the generator for fair market value for recycling or reuse. [1983 c.729 §12]

459.195 Prohibitions against removing or mixing recyclable material. A person may not:

(1) Without the permission of the owner or generator of recyclable material, take recyclable material set out to be collected by a person authorized by a city or county to provide collection service for that recyclable material.

(2) Remove any recyclable material from a container, box, collection vehicle, depot or other receptacle for the accumulation or storage of recyclable material without permission of the owner of the receptacle.

(3) Mix source separated recyclable material with solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal. [1983 c.729 §13]

459.200 City, county authority to issue collection service franchises; opportunity to recycle; rates. (1) The Legislative Assembly finds that providing for collection service including but not limited to the collection of recyclable material as part of the opportunity to recycle is a matter of state-wide concern.

(2) The exercise of the authority granted by this section is subject to ORS 221.735 and 459.085 (3).

(3) It is the intent of the Legislative Assembly that a city or county may displace competition with a system of regulated collection service by issuing franchises which may be exclusive if service areas are allocated. The city or county may recognize an existing collection service. A city or county may award or renew a franchise for collection service with or without bids or requests for proposals.

(4) In carrying out the authority granted by this section, a city or county acts for and on behalf of the State of Oregon to carry out:

(a) The purposes of ORS 459.015;

(b) The requirements of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995;

(c) Waste reduction programs; and

(d) The state solid waste management plan.

(5) After October 15, 1983, a city or a county may continue, extend or renew an existing franchise or grant a new franchise for collection service. If a city or county, in furtherance of ORS 459.005 to 459.335, has granted a collection service franchise before October 15, 1983, it may treat the franchise as if adopted under this section.

(6)(a) If a collection service franchise is continued, extended, renewed or granted on or after October 15, 1983, the opportunity to recycle shall be provided to a franchise holder's customers no later than July 1, 1986. This subsection does not apply to that portion of the opportunity to recycle provided at or in connection with a disposal site under ORS 459.250.

(b) The opportunity to recycle may be provided by:

(A) The person holding the franchise;

(B) Another person who provides the opportunity to recycle to the franchise holder's customers; or

(C) A person who is granted a separate franchise from the city or county solely for the purpose of providing the opportunity to recycle.

(c) In determining who shall provide the opportunity to recycle, a city or county shall first give due consideration to any person lawfully providing recycling or collection service on June 1, 1983, if the person continues to provide the service until the date the determination is made and the person has not discontinued the service for a period of 90 days or more between June 1, 1983, and the date the city or county makes the determination.

(7) In granting a collection service franchise, the city or county may:

(a) Prescribe the quality and character of and rates for collection service and the minimum requirements to guarantee maintenance of service, determine level of service, select persons to provide collection service and establish a system to pay for collection service.

(b) Divide the regulated area into service areas, grant franchises to persons for collection service within the service areas and collect fees from persons holding such franchises.

(8) The rates established under this section shall be just and reasonable and adequate to

ENVIRONMENTAL QUALITY COMMISSION
POLICY GUIDANCE
FOR
OREGON OPPORTUNITY TO RECYCLE ACT

The following statements are intended to guide state agencies, local governments, industries, the public and the Department of Environmental Quality in their efforts to implement the rules and the provisions of Oregon's Recycling Opportunity Act. This guidance document states the policy and intent of the Environmental Quality Commission in adoption of the rules OAR 340-60-005 through 340-60-085. Implementors of this Act should look to those rules for direction in implementation of the Act.

(1) COMMISSION POLICY

(a) The rules OAR 340-60-005 through 340-60-085 give local governments and persons involved in the solid waste collection service process or in recycling activities guidance to carry out new statutory requirements of Oregon's Recycling Opportunity Act.

(b) Priorities for solid waste management in Oregon are: (1) reduce the amount of solid waste generated, (2) reuse materials, (3) recycle materials, (4) recover energy from solid waste that cannot be reused or recycled and (5) dispose of the remaining solid waste that cannot be reused, recycled, or from which energy cannot be recovered. Increased emphasis is placed on recycling as a solid waste management method.

(c) Every person in Oregon should have the opportunity to recycle. Any material which can be collected and received and sold for recycling for a cost less than or equal to the cost associated with collection and disposal of that material should be recycled.

(d) It is a higher and better use of resources to reuse or recycle materials rather than dispose of them.

(e) The number of people who make source-separated recyclable material available for recycling and the types and amounts of material which are recycled should be increased.

(f) The primary focus in providing the opportunity to recycle should be on improving existing and adding new systems for residential recycling. Improving existing and adding new systems for nonresidential recycling should be a secondary focus in providing the opportunity to recycle.

(g) Regulatory intervention in recycling systems should be kept to the minimum necessary to accomplish the purposes of the Act.

(h) It is the intent of the Act and rules to increase the level of recycling and to reduce the amount of material going to disposal. In addition, it is the intent of the rules to require provision of the opportunity to recycle to all areas of the state and for all recyclable material.

(2) IMPLEMENTATION OF THE ACT

(a) The Oregon Recycling Opportunity Act envisions a cooperative effort by local governments (cities and counties), solid waste collection and disposal services, recyclers, and the public in implementing the Oregon Recycling Opportunity Act. Because the Act does not designate who shall provide the "opportunity to recycle," local government leaders, in conjunction with other affected persons, should decide who in their community can best make available the recycling collection and promotion required by the Act.

(b) The key to success of the Act will be the cooperative efforts of the local governments and other affected persons in providing the opportunity. Successful implementation will also depend on the cooperation of the local governments and affected persons with the Department.

(3) LOCAL GOVERNMENT ROLE

(a) Local government will maintain primary responsibility for solid waste management and will be a major factor in both providing for the opportunity to recycle and in preparing the recycling report.

(b) The role of local government in solid waste management has been increased by the new Recycling Opportunity Act. The Act clarified local government's authority to regulate both solid waste and recyclable material collection service. This authority should be used with discretion. The final result of local government action should be to provide for effective recycling systems and to maximize the recovery of recyclable material with a minimal dislocation of existing recycling systems.

(c) Local government is also directed by this Act to give due consideration to persons who have lawfully provided recycling or collection service before the passage of the Act.

(4) RECYCLING DEPOTS

Recycling depots and drop-off locations that provide the public with a place to deliver recyclable material should not be regulated as collection service.

(5) WASTESHED DESIGNATION

(a) By choosing existing local government boundaries as wasteshed boundaries, continued emphasis is placed on the local governments and their role in solid waste management.

(b) Wasteshed designations do not supplant any existing regulatory structure in the area or require any local government to take on responsibilities beyond its jurisdiction.

(c) The Department does not intend to deal with the wasteshed as a new form of local government. The wastesheds as designated in OAR 340-60-025 should be used only for the purposes of the recycling act.

(6) WASTESHED REPRESENTATIVE

Because it will be difficult to communicate with every person in the wasteshed on formal issues which arise relating to the recycling report, each wasteshed should identify a representative to deal with the Department in matters relating to the recycling report. The representative should act on behalf of and represent to the Department the diverse views of all affected persons in the wasteshed.

(7) RECYCLING REPORT

(a) The Recycling Report is a communication from the people in the wasteshed to the Department stating how they will be or are implementing the opportunity to recycle within their wasteshed. It should be viewed as a progress report and not a complex planning document.

(b) Review of the report is the method by which the Department will determine the wasteshed's compliance with the law.

(c) The Department should keep reporting requirements to a minimum. Forms for the submittal of the report should be provided by the Department well in advance of the report deadline.

(d) To develop the information which will go into the report, the affected persons should provide complete and accurate information about how the opportunity to recycle is being provided.

(8) RECYCLABLE MATERIAL

(a) The opportunity to recycle is to be provided for all recyclable material.

(b) To determine whether a material is recyclable at a specific location, the economic criteria in the Act should be applied. These criteria compare the net cost of collection or receipt and sale for recycling to the net cost of collection and disposal for the material as solid waste.

(c) Whether material meets the definition of recyclable material will depend in part upon the method that is used to collect and market a material. It will also depend on both the costs associated with what is charged or levied as taxes to dispose of solid waste and the costs necessary to provide for environmentally acceptable disposal.

(d) In some cases, the cost of collection of recyclable material is not going to be on a profitable or break-even basis if based solely on the income from sales to markets. In these cases the material is still "recyclable material" if it meets the statutory criteria.

(e) The cost of providing the opportunity to recycle was addressed in the legislation. In situations involving franchised collection service, the additional costs of providing the opportunity to recycle may be recovered in rates established under franchises.

(f) Grouping of materials from residential sources is critical to providing multi-material residential recycling collection service and is one justification for regulatory intervention through franchising.

A similar grouping of materials is not appropriate from non-residential sources if individual materials are most effectively handled by specialized recyclers, systems, methods or equipment.

(9) GROUPING RESIDENTIAL RECYCLABLE MATERIAL

(a) The Recycling Opportunity Act provides a vehicle for increasing the level of recovery of source-separated recyclable material from residential sources.

(b) Emphasis on providing the opportunity to recycle under the Act should be placed on residential sources. When considered as a class, these sources have the potential to generate a large amount of source-separated recyclable material.

(c) Residential sources generally generate a common group of recyclable material which can be collected at the same time with some economy over collection of each material separately.

(d) The grouping of individual materials in a group identified as a "recyclable material" is appropriate and necessary so that the opportunity to recycle is economically feasible for the greatest number of types and the greatest amounts of material from residential sources.

(e) The value of one material in a group identified as "recyclable material" may make the recycling of the whole group economically feasible. The collection of that valuable material separately from residential sources would then undermine the economics of a system developed to provide the opportunity to recycle for a group of materials which included that material.

(f) If it will increase the overall level of participation in recycling or the level of recovery of recyclable material, material generated by residential sources should be grouped and identified as recyclable material.

(10) PRINCIPAL RECYCLABLE MATERIAL

(a) The watershed's list of principal recyclable material is a list of the most common materials which are "recyclable material" at some place in the watershed. Some of the materials on the principal recyclable material list will be generated primarily from residential sources; other material will come primarily from commercial or industrial sources. The lists of principal recyclable material should be used as a starting point for determining the recyclable material at each location where the opportunity to recycle is required.

(b) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material that should be included in a program to provide the opportunity to recycle.

(c) As programs to provide the opportunity to recycle are developed, the affected persons in a watershed may wish to identify recyclable material by type of source, type of recycling service or location in the watershed.

(d) Economic, demographic and geographic factors will allow a specific material to be a recyclable material in one portion of a watershed and not a recyclable material in another.

(e) Between the time of the identification of the principal recyclable material in Commission rules and the submittal of the recycling reports, the Department should:

(A) Work with the affected persons in every watershed to assist in identifying materials for which the opportunity to recycle must be provided as required by OAR 340-60-030(2).

(B) Work with the affected persons in every watershed to assist in identifying materials for which the opportunity to recycle does not have to be provided as required by OAR 340-60-030(9)(b).

(C) For each watershed or group of watersheds, provide its best estimate of the amount of the principal recyclable material which is currently recycled and the amount which is still available for recycling.

(D) Seek the advice of the people involved in recycling in each watershed in determining what materials meet the definition of recyclable material at each specific location where the opportunity to recycle is required.

(f) The Department shall at least annually review the principal recyclable material lists and submit any proposed changes to these rules to the Commission.

(11) EXISTING RECYCLING PROGRAMS

(a) The Commission is aware that many areas of the state presently have recycling programs which meet or exceed the requirements envisioned in these rules. Existing recycling systems, especially the diverse types serving commercial and industrial sources of recyclable material, should be encouraged and assisted.

(b) Early implementation of the opportunity to recycle will benefit all of the parties involved. Local governments are encouraged to provide special consideration to ongoing programs which provide the opportunity to recycle as required by the Act and these rules.

(12) EDUCATION, PROMOTION AND NOTIFICATION

(a) Education, promotion and notification are key elements of successful recycling programs. Unless people know about the recycling opportunities that are available and the importance of their participation in recycling, even the most efficient programs will not succeed. Recognizing this, the "opportunity to recycle" as defined in the Act includes a public education and promotion program that gives notice to each person of the opportunity to recycle and encourages source separation of recyclable material.

(b) The education and promotion rule outlines the elements of education and promotion programs. Although it contains some specifics, the rule is intended to allow for creativity and flexibility. Collection service customers and people who utilize disposal sites should be the primary targets of education and promotion efforts. Information should also be made available to the general public.

(c) Contact should be through written materials, meetings, presentations, articles, press releases, photos and/or public service announcements. Contact should be made frequently so that the recycling effort in the community is seen as an on-going concern.

(d) The content of the information should include information about:

(A) specific recycling opportunities available in the community,

(B) the benefits of recycling, and

(C) the success of area recycling programs including the amount of materials being recycled and the number of people participating.

(e) People involved in the coordination of the education program should utilize the skills and resources of a variety of groups, including collectors, recyclers, professional educators, public relations specialists, and citizens groups. Citizen involvement will be essential, both for keeping the costs of programs down and for ensuring credibility.

(13) PURCHASE OR EXCHANGE FOR FAIR MARKET VALUE

(a) The Act clarified local government authority to regulate collection service for recyclable material. And it also provided that any material which is source separated by the generator and purchased or exchanged from the generator for fair market value is exempt from the provisions of the Act.

(b) This exemption should be used for recyclable material which is generated from commercial and industrial sources.

(c) Recyclable material which is generated as a group should be exempted only if the purchase or exchange for fair market value is for all of the materials collected as a group.

(14) COMMERCIAL AND INDUSTRIAL RECYCLING

(a) Commercial and industrial generators should be provided with the opportunity to recycle. When it is possible, this opportunity should be provided through the use of existing recycling programs.

(b) There are extensive systems for the collection of large amounts of recyclable material from commercial and industrial generators in many areas of the state. As much as possible, these systems should be utilized to provide the opportunity to recycle to the generators whom they presently serve.

(c) As much as possible, existing recycling systems should be used to provide the opportunity to recycle to all commercial and industrial generators. Because of the diversity of size and business activities, commercial sources tend to generate large amounts of a single recyclable material. Recyclable material generated from industrial and commercial sources should not be grouped together if the individual materials are most effectively handled by specialized recyclers, systems, methods or equipment.

(d) Regulatory intervention in recycling systems for commercial and industrial sources should be kept to a minimum.

(9) GROUPING RESIDENTIAL RECYCLABLE MATERIAL

(a) The Recycling Opportunity Act provides a vehicle for increasing the level of recovery of source-separated recyclable material from residential sources.

(b) Emphasis on providing the opportunity to recycle under the Act should be placed on residential sources. When considered as a class, these sources have the potential to generate a large amount of source-separated recyclable material.

(c) Residential sources generally generate a common group of recyclable material which can be collected at the same time with some economy over collection of each material separately.

(d) The grouping of individual materials in a group identified as a "recyclable material" is appropriate and necessary so that the opportunity to recycle is economically feasible for the greatest number of types and the greatest amounts of material from residential sources.

(e) The value of one material in a group identified as "recyclable material" may make the recycling of the whole group economically feasible. The collection of that valuable material separately from residential sources would then undermine the economics of a system developed to provide the opportunity to recycle for a group of materials which included that material.

(f) If it will increase the overall level of participation in recycling or the level of recovery of recyclable material, material generated by residential sources should be grouped and identified as recyclable material.

(10) PRINCIPAL RECYCLABLE MATERIAL

(a) The wasteshed's list of principal recyclable material is a list of the most common materials which are "recyclable material" at some place in the wasteshed. Some of the materials on the principal recyclable material list will be generated primarily from residential sources; other material will come primarily from commercial or industrial sources. The lists of principal recyclable material should be used as a starting point for determining the recyclable material at each location where the opportunity to recycle is required.

(b) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material that should be included in a program to provide the opportunity to recycle.

(c) As programs to provide the opportunity to recycle are developed, the affected persons in a wasteshed may wish to identify recyclable material by type of source, type of recycling service or location in the wasteshed.

(d) Economic, demographic and geographic factors will allow a specific material to be a recyclable material in one portion of a wasteshed and not a recyclable material in another.

(e) Between the time of the identification of the principal recyclable material in Commission rules and the submittal of the recycling reports, the Department should:

(A) Work with the affected persons in every wasteshed to assist in identifying materials for which the opportunity to recycle must be provided as required by OAR 340-60-030(2).

(B) Work with the affected persons in every wasteshed to assist in identifying materials for which the opportunity to recycle does not have to be provided as required by OAR 340-60-030(9)(b).

(C) For each wasteshed or group of wastesheds, provide its best estimate of the amount of the principal recyclable material which is currently recycled and the amount which is still available for recycling.

(D) Seek the advice of the people involved in recycling in each wasteshed in determining what materials meet the definition of recyclable material at each specific location where the opportunity to recycle is required.

(F) The Department shall at least annually review the principal recyclable material lists and submit any proposed changes to these rules to the Commission.

(11) EXISTING RECYCLING PROGRAMS

(a) The Commission is aware that many areas of the state presently have recycling programs which meet or exceed the requirements envisioned in these rules. Existing recycling systems, especially the diverse types serving commercial and industrial sources of recyclable material, should be encouraged and assisted.

(b) Early implementation of the opportunity to recycle will benefit all of the parties involved. Local governments are encouraged to provide special consideration to ongoing programs which provide the opportunity to recycle as required by the Act and these rules.

(12) EDUCATION, PROMOTION AND NOTIFICATION

(a) Education, promotion and notification are key elements of successful recycling programs. Unless people know about the recycling opportunities that are available and the importance of their participation in recycling, even the most efficient programs will not succeed. Recognizing this, the "opportunity to recycle" as defined in the Act includes a public education and promotion program that gives notice to each person of the opportunity to recycle and encourages source separation of recyclable material.

(b) The education and promotion rule outlines the elements of education and promotion programs. Although it contains some specifics, the rule is intended to allow for creativity and flexibility. Collection service customers and people who utilize disposal sites should be the primary targets of education and promotion efforts. Information should also be made available to the general public.

(c) Contact should be through written materials, meetings, presentations, articles, press releases, photos and/or public service announcements. Contact should be made frequently so that the recycling effort in the community is seen as an on-going concern.

(d) The content of the information should include information about:

(A) specific recycling opportunities available in the community,

(B) the benefits of recycling, and

(C) the success of area recycling programs including the amount of materials being recycled and the number of people participating.

(e) People involved in the coordination of the education program should utilize the skills and resources of a variety of groups, including collectors, recyclers, professional educators, public relations specialists, and citizens groups. Citizen involvement will be essential, both for keeping the costs of programs down and for ensuring credibility.

(13) PURCHASE OR EXCHANGE FOR FAIR MARKET VALUE

(a) The Act clarified local government authority to regulate collection service for recyclable material. And it also provided that any material which is source separated by the generator and purchased or exchanged from the generator for fair market value is exempt from the provisions of the Act.

(b) This exemption should be used for recyclable material which is generated from commercial and industrial sources.

(c) Recyclable material which is generated as a group should be exempted only if the purchase or exchange for fair market value is for all of the materials collected as a group.

(14) COMMERCIAL AND INDUSTRIAL RECYCLING

(a) Commercial and industrial generators should be provided with the opportunity to recycle. When it is possible, this opportunity should be provided through the use of existing recycling programs.

(b) There are extensive systems for the collection of large amounts of recyclable material from commercial and industrial generators in many areas of the state. As much as possible, these systems should be utilized to provide the opportunity to recycle to the generators whom they presently serve.

(c) As much as possible, existing recycling systems should be used to provide the opportunity to recycle to all commercial and industrial generators. Because of the diversity of size and business activities, commercial sources tend to generate large amounts of a single recyclable material. Recyclable material generated from industrial and commercial sources should not be grouped together if the individual materials are most effectively handled by specialized recyclers, systems, methods or equipment.

(d) Regulatory intervention in recycling systems for commercial and industrial sources should be kept to a minimum.

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DIVISION 60

RECYCLING AND WASTE REDUCTION

Purpose

340-60-005 The purpose of these rules is to prescribe requirements, limitations and procedures for planning, development and operation of waste reduction and recycling programs and for providing the opportunity to recycle.

Stat. Auth.: ORS Ch. 459

Hist.: DEQ 26-1984, f. & ef. 12-26-84

Definitions

* **340-60-010** As used in these rules unless otherwise specified:

(1) "Affected person" means a person or entity involved in the solid waste collection service process including but not limited to a recycling collection service, disposal site permittee or owner, city, county and metropolitan service district. For the purposes of these rules "Affected person" also means a person involved in operation of a place to which persons not residing on or occupying the property may deliver source separated recyclable material.

(2) "Area of the state" means any city or county or combination or portion thereof or other geographical area of the state as may be designated by the Commission.

(3) "Collection franchise" means a franchise, certificate, contract or license issued by a city or county authorizing a person to provide collection service.

(4) "Collection service" means a service that provides for collection of solid waste or recyclable material or both. "Collection service" of recyclable materials does not include a place to which persons not residing on or occupying the property may deliver source separated recyclable material.

(5) "Collector" means the person who provides collection service.

(6) "Commission" means the Environmental Quality Commission.

(7) "Department" means the Department of Environmental Quality.

(8) "Depot" means a place for receiving source separated recyclable material.

(9) "Director" means the Director of the Department of Environmental Quality.

(10) "Disposal site" means land and facilities used for the disposal, handling or transfer of or resource recovery from solid wastes, including but not limited to dumps, landfills, sludge lagoons, sludge treatment facilities, disposal sites for septic tank pumping or cesspool cleaning service, transfer stations, resource recovery facilities, incinerators for solid waste delivered by the public or by a solid waste collection service, composting plants and land and facilities previously used for solid waste disposal at a land disposal site; but the term does not include a facility subject to the permit requirements of ORS 468.740; a landfill site which is used by the owner or person in control of the premises to dispose of soil, rock concrete or other similar nondecomposable material, unless the site is used by the public either directly or through a solid waste collection service; or a site licensed pursuant to ORS 481.345.

(11) "Generator" means a person who last uses a material and makes it available for disposal or recycling.

(12) "Land disposal site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(13) "Metropolitan service district" means a district organized under ORS Chapter 268 and exercising solid waste authority granted to such district under ORS Chapters 268 and 459.

(14) "On-route collection" means pick up of source separated recyclable material from the generator at the place of generation.

(15) "Opportunity to recycle" means those activities described in OAR 340-60-020.

(16) "Permit" means a document issued by the Department, bearing the signature of the Director or the Director's authorized representative which by its conditions may authorize the permittee to construct, install, modify or operate a disposal site in accordance with specified limitations.

(17) "Person" means the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(18) "Principal recyclable material" means material which is a recyclable material at some place where the opportunity to recycle is required in a watershed and is identified by the Commission in OAR 340-60-030.

(19) "Recyclable material" means any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material.

(20) "Resource recovery" means the process of obtaining useful material or energy resources from solid waste and includes:

(a) "Energy recovery", which means recovery in which all or a part of the solid waste materials are processed to utilize the heat content, or other forms of energy, of or from the material;

(b) "Material recovery", which means any process of obtaining from solid waste, by presegregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose;

(c) "Recycling", which means any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity;

(d) "Reuse", which means the return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.

(21) "Solid waste collection service" or "service" means the collection, transportation or disposal of or resource recovery from solid wastes but does not include that part of a business licensed under ORS 481.345.

(22) "Solid waste" means all putrescible and nonputrescible wastes, including but not limited to garbage, rubbish, refuse, ashes, waste paper and cardboard; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction wastes; discarded or abandoned vehicles or parts thereof; discarded home and industrial appliances; manure, vegetable or animal solid and semisolid wastes, dead animals and other wastes; but the term does not include:

(a) Hazardous wastes as defined in ORS 459.410;

** See attached amendments to these sections*

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(b) Materials used for fertilizer or for other productive purposes or which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.

(23) "Solid waste management" means prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; or resource recovery from solid waste; and facilities necessary or convenient to such activities.

(24) "Source separate" means that the person who last uses recyclable material separates the recyclable material from solid waste.

(25) "Waste" means useless or discarded materials.

(26) "Wasteshed" means an area of the state having a common solid waste disposal system or designated by the commission as an appropriate area of the state within which to develop a common recycling program.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Policy Statement

340-60-015

NOTE: Concurrent with the adoption of the Recycling Rules OAR 340-60-005 through 340-60-085, the Environmental Quality Commission adopted policy guidance for implementation. This guidance is a statement of the Commission's intent and should be used by all implementors of these rules and the Opportunity to Recycle Act (SB 405 - 1983 legislative session). Copies of the Environmental Quality Commission Policy Guidance for the Opportunity to Recycle Act is available from the Department of Environmental Quality, Hazardous and Solid Waste Division.

Whereas inadequate solid waste collection, storage, transportation, recycling and disposal practices waste energy and natural resources and cause nuisance conditions, potential hazards to public health and pollution of air, water and land environment, it is hereby declared to be the policy of the Commission:

(1) To require effective and efficient waste reduction and recycling service to both rural and urban areas.

(2) To promote and support comprehensive local or regional government solid waste and recyclable material management:

(a) Utilizing progressive waste reduction and recycling techniques;

(b) Emphasizing recovery and reuse of solid waste; and

(c) Providing the opportunity to recycle to every person in Oregon through best practicable methods.

(3) To establish a comprehensive statewide program of solid waste management which will, after consideration of technical and economic feasibility, establish the following priority in methods of managing solid waste:

(a) First, to reduce the amount of solid waste generated;

(b) Second, to reuse material for the purpose for which it was originally intended;

(c) Third, to recycle material which cannot be reused;

(d) Fourth, to recover energy from solid waste that cannot be reused or recycled so long as the energy recovery facility preserves the quality of air, water and land resources; and

(e) To dispose of solid waste that cannot be reused, recycled, or from which energy cannot be recovered by landfilling or other methods approved by the Department.

(4) To retain primary responsibility for management of adequate solid waste programs with local government units.

(5) To encourage maximum participation of all affected persons and generators in the planning and development of required recycling programs.

(6) To place primary emphasis on the provision of the opportunity to recycle to residential generators of source separated recyclable materials.

(7) To encourage local government to develop programs to provide the opportunity to recycle which cause only minimum dislocation of:

(a) Recycling efforts, especially the activities of charitable, fraternal, and civic groups; and

(b) Existing recycling collection from commercial and industrial sources.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Opportunity to Recycle

340-60-020 As used in these rules the opportunity to recycle means at least:

(1)(a) A place for receiving source separated recyclable material located either at a disposal site or at another location more convenient to the population being served and, if a city has a population of 4,000 or more, on-route collection at least once a month of source separated recyclable material from collection service customers within the city's urban growth boundary or, where applicable, within the urban growth boundary established by a metropolitan service district; or

(b) An alternative method approved by the Department which complies with OAR 340-60-035.

(2) The "opportunity to recycle" defined in section (1) of this rule also includes a public education and promotion program that:

(a) Gives notice to each person of the opportunity to recycle; and

(b) Encourages source separation of recyclable material.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Wasteshed Designation

340-60-025 (1) The following areas are designated wastesheds within the state of Oregon:

(a) Baker wasteshed is all of the area within Baker County;

(b) Benton and Linn wasteshed is all of the area within Linn and Benton Counties excluding the area within:

(A) The city of Gates,

(B) The city of Idanha,

(C) The city of Mill City;

(c) Clackamas wasteshed is all of the area within Clackamas County and all of the area within the cities of Lake Oswego, Wilsonville, and Rivergrove excluding the area within:

(A) The city of Portland,

(B) The city of Tualatin;

(d) Clatsop wasteshed is all of the area within Clatsop County;

(e) Columbia wasteshed is all of the area within Columbia County;

(f) Coos wasteshed is all of the area within Coos County;

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(b) Materials used for fertilizer or for other productive purposes or which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.

(23) "Solid waste management" means prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; or resource recovery from solid waste; and facilities necessary or convenient to such activities.

(24) "Source separate" means that the person who last uses recyclable material separates the recyclable material from solid waste.

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(2) To promote and support comprehensive local or regional government solid waste and recyclable material management:

(a) Utilizing progressive waste reduction and recycling techniques;

(b) Emphasizing recovery and reuse of solid waste; and

(c) Providing the opportunity to recycle to every person in Oregon through best practicable methods.

(3) To establish a comprehensive statewide program of solid waste management which will, after consideration of technical and economic feasibility, establish the following priority in methods of managing solid waste:

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(b) Second, to reuse material for the purpose for which it was originally intended;

(c) Third, to recycle material which cannot be reused;

(d) Fourth, to recover energy from solid waste that cannot be reused or recycled so long as the energy recovery facility preserves the quality of air, water and land resources; and

(e) To dispose of solid waste that cannot be reused, recycled, or from which energy cannot be recovered by landfilling or other methods approved by the Department.

(4) To retain primary responsibility for management of adequate solid waste programs with local government units.

(5) To encourage maximum participation of all affected persons and generators in the planning and development of required recycling programs.

(6) To place primary emphasis on the provision of the opportunity to recycle to residential generators of source separated recyclable materials.

(7) To encourage local government to develop programs to provide the opportunity to recycle which cause only minimum dislocation of:

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(1)(a) A place for receiving source separated recyclable material located either at a disposal site or at another location more convenient to the population being served and, if a city has a population of 4,000 or more, on-route collection at least once a month of source separated recyclable material from collection service customers within the city's urban growth boundary or, where applicable, within the urban growth boundary established by a metropolitan service district; or

(b) An alternative method approved by the Department which complies with OAR 340-60-035.

(2) The "opportunity to recycle" defined in section (1) of this rule also includes a public education and promotion program that:

(a) Gives notice to each person of the opportunity to recycle; and

(b) Encourages source separation of recyclable material.

Stat. Auth.: ORS Ch. 459
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340-60-025 (1) The following areas are designated wastesheds within the state of Oregon:

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(b) Benton and Linn wasteshed is all of the area within Linn and Benton Counties excluding the area within:

(A) The city of Gates,

(B) The city of Idanha,

(C) The city of Mill City;

(c) Clackamas wasteshed is all of the area within Clackamas County and all of the area within the cities of Lake Oswego, Wilsonville, and Rivergrove excluding the area within:

(A) The city of Portland,

(B) The city of Tualatin;

(d) Clatsop wasteshed is all of the area within Clatsop County;

(e) Columbia wasteshed is all of the area within Columbia County;

(f) Coos wasteshed is all of the area within Coos County;

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- (g) Crook wasteshed is all of the area within Crook County;
- (h) Curry wasteshed is all of the area within Curry County;
- (i) Deschutes wasteshed is all of the area within Deschutes County;
- (j) Douglas wasteshed is all of the area within Douglas County;
- (k) Gilliam wasteshed is all of the area within Gilliam County;
- (l) Grant wasteshed is all of the area within Grant County;
- (m) Harney wasteshed is all of the area within Harney County;
- (n) Hood River wasteshed is all of the area within Hood River County;
- (o) Jackson wasteshed is all of the area within Jackson County;
- (p) Jefferson wasteshed is all of the area within Jefferson County;
- (q) Josephine wasteshed is all of the area within Josephine County;
- (r) Klamath wasteshed is all of the area within Klamath County;
- (s) Lake wasteshed is all of the area within Lake County;
- (t) Lane wasteshed is all of the area within Lane County;
- (u) Lincoln wasteshed is all of the area within Lincoln County;
- (v) Malheur wasteshed is all of the area within Malheur County;
- (w) Marion wasteshed is all of the area within Marion County and all of the area within the cities of Gates, Idanha, Mill City and the urban growth boundary of the city of Salem;
- (x) Milton-Freewater wasteshed is all the area within the urban growth boundary of the city of Milton-Freewater;
- (y) Morrow wasteshed is all of the area within Morrow County;
- (z) Multnomah wasteshed is all the area within Multnomah County excluding the area within:
 - (A) The city of Maywood Park,
 - (B) The city of Portland and that area within the city of Portland's urban service boundary,
 - (C) The city of Lake Oswego;
- (aa) Polk wasteshed is all the area within Polk County excluding area within:
 - (A) The urban growth boundary of the city of Salem,
 - (B) The city of Willamina;
- (bb) Portland wasteshed is all of the area within the city of Maywood Park, the city of Portland, and that area within the city of Portland's urban service boundary;
- (cc) Sherman wasteshed is all of the area within Sherman County;
- (dd) Tillamook wasteshed is all of the area within Tillamook County;
- (ee) Umatilla wasteshed is all of the area within Umatilla County excluding the area within: the urban growth boundary of the city of Milton-Freewater;
- (ff) Union wasteshed is all of the area within Union County;
- (gg) Wallowa wasteshed is all of the area within Wallowa County;
- (hh) Wasco wasteshed is all of the area in Wasco County;

- (ii) Washington wasteshed is all of the area in Washington County and all of the area in the city of Tualatin excluding the area within:
 - (A) The city of Portland,
 - (B) The city of Lake Oswego,
 - (C) The city of Wilsonville,
 - (D) The city of Rivergrove;
 - (j) Wheeler wasteshed is all of the area within Wheeler County;
 - (kk) Yamhill wasteshed is all of the area within Yamhill County and all of the area within the city of Willamina.
- (2) Any affected person may appeal to the Commission for the inclusion of all or part of a city, county, or local government unit in a wasteshed.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Principal Recyclable Material

340-60-030 (1) The following are identified as the principal recyclable materials in the wastesheds as described in sections (4) through (8) of this rule:

- (a) Newspaper;
- (b) Ferrous scrap metal;
- (c) Non-ferrous scrap metal;
- (d) Used motor oil;
- (e) Corrugated cardboard and kraft paper;
- (f) Container glass;
- (g) Aluminum;
- (h) Hi-grade office paper;
- (i) Tin cans.

(2) In addition to the principal recyclable materials listed in section (1) of this rule, other materials may be recyclable materials at specific locations where the opportunity to recycle is required.

(3) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material at a specific location where the opportunity to recycle is required.

(4) In the following wastesheds, the principal recyclable materials are those listed in subsections (1)(a) through (i) of this rule:

- (a) Benton and Linn wasteshed;
- (b) Clackamas wasteshed;
- (c) Clatsop wasteshed;
- (d) Columbia wasteshed;
- (e) Hood River wasteshed;
- (f) Lane wasteshed;
- (g) Lincoln wasteshed;
- (h) Marion wasteshed;
- (i) Milton-Freewater wasteshed;
- (j) Multnomah wasteshed;
- (k) Polk wasteshed;
- (l) Portland wasteshed;
- (m) Umatilla wasteshed;
- (n) Union wasteshed;
- (o) Wasco wasteshed;
- (p) Washington wasteshed;
- (q) Yamhill wasteshed.

(5) In the following wastesheds, the principal recyclable materials are those listed in subsection (1)(a) through (g) of this rule:

- (a) Baker wasteshed;

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- (b) Crook watershed;
- (c) Jefferson watershed;
- (d) Klamath watershed;
- (e) Tillamook watershed.

(6) In the following watersheds, the principal recyclable materials are those listed in subsection (1)(a) through (h) of this rule:

- (a) Coos watershed;
- (b) Deschutes watershed;
- (c) Douglas watershed;
- (d) Jackson watershed;
- (e) Josephine watershed.

(7) In the following watersheds, the principal recyclable materials are those listed in subsection (1)(a) through (e) of this rule:

- (a) Curry watershed;
- (b) Grant watershed;
- (c) Harney watershed;
- (d) Lake watershed;
- (e) Malheur watershed;
- (f) Morrow watershed;
- (g) Wallowa watershed.

(8) In the following watersheds, the principal recyclable materials are those listed in subsection (1)(a) through (d) of this rule:

- (a) Gilliam watershed;
- (b) Sherman watershed;
- (c) Wheeler watershed.

(9)(a) The opportunity to recycle shall be provided for each of the principal recyclable materials listed in sections (4) through (8) of this rule and for other materials which meet the statutory definition of recyclable material at specific locations where the opportunity to recycle is required;

(b) The opportunity to recycle is not required for any material which a recycling report, approved by the Department, demonstrates does not meet the definition of recyclable material for the specific location where the opportunity to recycle is required.

(10) Between the time of the identification of the principal recyclable materials in these rules and the submittal of the recycling reports, the Department will work with affected persons in every watershed to assist in identifying materials contained on the principal recyclable material list which do not meet the statutory definition of recyclable material at some locations in the watershed where the opportunity to recycle is required.

(11) Any affected person may request the commission modify the list of principal recyclable material identified by the Commission or may request a variance under ORS 459.185.

(12) The Department will at least annually review the principal recyclable material lists and will submit any proposed changes to the Commission.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Acceptable, Alternative Methods for Providing the Opportunity to Recycle

340-60-035 (1) Any affected person in a watershed may propose to the Department an alternative method for providing the opportunity to recycle. All proposals for alternative methods shall be submitted to the Department for

approval of adequacy prior to implementation as part of the opportunity to recycle. Each submittal shall include a description of the proposed alternative method and a discussion of the reason for using this method rather than the general method set forth in OAR 340-60-020(1)(a).

(2) The Department will review these proposals as they are received. Each proposed alternative method will be approved, approved with conditions, or rejected based on consideration of the following criteria:

(a) The alternative will increase recycling opportunities at least to the level anticipated from the general method set forth in OAR 340-60-020 for providing the opportunity to recycle;

(b) The conditions and factors which make the alternative method necessary;

(c) The alternative method is convenient to the people using or receiving the service;

(d) The alternative method is as effective in recovering recyclable materials from solid waste as the general method set forth in OAR 340-60-020 for providing the opportunity to recycle.

(3) The affected persons in a watershed may propose as provided in section (1) of this rule an alternative method to providing on-route collection as part of the opportunity to recycle for low density population area within the urban growth boundaries of a city with a population over 4,000 or, where applicable, the urban growth boundaries established by a metropolitan district.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Education, Promotion and Notification

340-60-040 (1) Affected persons in each watershed shall design, commit resources and implement an education and promotion program that provides:

(a) A written or more effective notice or combination of both that is reasonably designed to reach each person who generates recyclable materials in the watershed, and that clearly explains why people should recycle, the recycling opportunities available to the recipient, the materials that can be recycled and the proper preparation of those materials:

(A) The notice used for persons within the urban growth boundaries of cities with more than 4,000 people or within the urban growth boundary established by a metropolitan service district shall include:

(i) Reasons why people should recycle; and

(ii) The name, address and phone number of the person providing on-route collection; and

(iii) A listing of depots for recyclable materials at all disposal sites serving the area, including the materials accepted and hours of operation; and

(iv) A listing of depots for recyclable material at locations designated as more convenient to the public being served, including the materials accepted and hours of operation; or

(v) Instead of paragraphs (iii) and (iv) a phone number to call for all such information about depot locations.

(B) The notice used for persons not within the urban growth boundary of cities with more than 4,000 people or within the urban growth boundary established by a metropolitan service district, shall include:

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- (b) Crook watershed;
- (c) Jefferson watershed;
- (d) Klamath watershed;
- (e) Tillamook watershed.

(6) In the following watersheds, the principal recyclable materials are those listed in subsection (1)(a) through (h) of this rule:

- (a) Coos watershed;
- (b) Deschutes watershed;
- (c) Douglas watershed;
- (d) Jackson watershed;
- (e) Josephine watershed.

(7) In the following watersheds, the principal recyclable materials are those listed in subsection (1)(a) through (e) of this rule:

- (a) Curry watershed;
- (b) Grant watershed;
- (c) Harney watershed;
- (d) Lake watershed;
- (e) Malheur watershed;
- (f) Morrow watershed;
- (g) Wallowa watershed.

(8) In the following watersheds, the principal recyclable materials are those listed in subsection (1)(a) through (d) of this rule:

- (a) Gilliam watershed;
- (b) Sherman watershed;
- (c) Wheeler watershed.

(9)(a) The opportunity to recycle shall be provided for each of the principal recyclable materials listed in sections (4) through (8) of this rule and for other materials which meet the statutory definition of recyclable material at specific locations where the opportunity to recycle is required;

(b) The opportunity to recycle is not required for any material which a recycling report, approved by the Department, demonstrates does not meet the definition of recyclable material for the specific location where the opportunity to recycle is required.

(10) Between the time of the identification of the principal recyclable materials in these rules and the submittal of the recycling reports, the Department will work with affected persons in every watershed to assist in identifying materials contained on the principal recyclable material list which do not meet the statutory definition of recyclable material at some locations in the watershed where the opportunity to recycle is required.

(11) Any affected person may request the commission modify the list of principal recyclable material identified by the Commission or may request a variance under ORS 459.185.

(12) The Department will at least annually review the principal recyclable material lists and will submit any proposed changes to the Commission.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

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340-60-035 (1) Any affected person in a watershed may propose to the Department an alternative method for providing the opportunity to recycle. All proposals for alternative methods shall be submitted to the Department for

approval of adequacy prior to implementation as part of the opportunity to recycle. Each submittal shall include a description of the proposed alternative method and a discussion of the reason for using this method rather than the general method set forth in OAR 340-60-020(1)(a).

(2) The Department will review these proposals as they are received. Each proposed alternative method will be approved, approved with conditions, or rejected based on consideration of the following criteria:

(a) The alternative will increase recycling opportunities at least to the level anticipated from the general method set forth in OAR 340-60-020 for providing the opportunity to recycle;

(b) The conditions and factors which make the alternative method necessary;

(c) The alternative method is convenient to the people using or receiving the service;

(d) The alternative method is as effective in recovering recyclable materials from solid waste as the general method set forth in OAR 340-60-020 for providing the opportunity to recycle.

(3) The affected persons in a watershed may propose as provided in section (1) of this rule an alternative method to providing on-route collection as part of the opportunity to recycle for low density population area within the urban growth boundaries of a city with a population over 4,000 or, where applicable, the urban growth boundaries established by a metropolitan district.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Education, Promotion and Notification

340-60-040 (1) Affected persons in each watershed shall design, commit resources and implement an education and promotion program that provides:

(a) A written or more effective notice or combination of both that is reasonably designed to reach each person who generates recyclable materials in the watershed, and that clearly explains why people should recycle, the recycling opportunities available to the recipient, the materials that can be recycled and the proper preparation of those materials:

(A) The notice used for persons within the urban growth boundaries of cities with more than 4,000 people or within the urban growth boundary established by a metropolitan service district shall include:

(i) Reasons why people should recycle; and

(ii) The name, address and phone number of the person providing on-route collection; and

(iii) A listing of depots for recyclable materials at all disposal sites serving the area, including the materials accepted and hours of operation; and

(iv) A listing of depots for recyclable material at locations designated as more convenient to the public being served, including the materials accepted and hours of operation; or

(v) Instead of paragraphs (iii) and (iv) a phone number to call for all such information about depot locations.

(B) The notice used for persons not within the urban growth boundary of cities with more than 4,000 people or within the urban growth boundary established by a metropolitan service district, shall include:

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- (i) Reason why people should recycle; and
- (ii) A listing of depots for recyclable materials at all disposal sites serving the area, including the materials accepted and hours of operation; and
- (iii) A listing of depots for recyclable materials at locations designated as the more convenient to the public being served, including what materials are accepted and hours of operation; or
- (iv) Instead of paragraphs (ii) and (iii) a phone number to call for all such information about depot locations and collection service.

(b) A written reminder, a more effective notice or combination of both about the on-route recycling collection program that is reasonably designed to reach all solid waste collection service customers every six (6) months.

(c) Written information to be distributed to disposal site users at all disposal sites with attendants and where it is otherwise practical:

- (A) This written material shall include:
 - (i) Reasons why people should recycle; and
 - (ii) A list of materials that can be recycled; and
 - (iii) Instruction for the proper preparation of recyclable materials; and
 - (iv) A list of the recycling opportunities available at the disposal site or designated "more convenient location".

(B) At sites without attendants, a sign indicating the availability of recycling at the site or at the "more convenient location" shall be prominently displayed. The sign shall indicate the materials accepted and hours of operation.

(d) Recycling information (written materials, displays and/or presentations) to community groups and the general public.

(2) The affected persons in the wasteshed shall identify a procedure for citizen involvement in the development and implementation of the wasteshed's education and promotion program.

(3) The affected persons in each wasteshed shall provide notification and education materials to local media and other groups that maintain regular contact with the public, including local newspapers, local television and radio stations, community groups, neighborhood associations.

(4) Affected persons in each wasteshed should identify a person as the education and promotion representative for that wasteshed to be the official contact between the persons in that wasteshed and the Department in matters relating to recycling education and promotion.

(5) Information about the education and promotion program shall be included in the Recycling Report as outlined in OAR 340-60-045(2).

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

***Standards for Recycling Reports**

340-60-045 (1) The recycling report shall be submitted to the Department not later than July 1, 1986 on forms supplied by the Department.

(2) The recycling report shall include the following information:

(a) The materials which are recyclable at each disposal site and within the urban growth boundary of each city of 4,000 or more population or within the urban growth boundary established by a metropolitan service district;

(b) The manner in which recyclable material is to be collected or received;

(c) Proposed and approved alternative methods for the opportunity to recycle which are to be used in the wasteshed and justification for the alternative method;

(d) Proposed methods for providing the public education and promotion program; and

(e) Other information necessary to describe the proposed programs for providing the opportunity to recycle.

(3) The recycling report shall include attachments including but not limited to the following materials related to the opportunity to recycle:

(a) Copies of materials that are being used in the wasteshed as part of education and promotion;

(b) A copy of any city or county collection service franchise, including rates under the franchise; and

(c) Other attachments which demonstrate the proposed programs for providing the opportunity to recycle.

(4)(a) The cities and counties and other affected persons in each wasteshed should before July 1, 1985:

(A) Jointly identify a person as representative for that wasteshed to act as a contact between the affected persons in that wasteshed and the Department in matters relating to the recycling report;

(B) Inform the Department of the choice of a representative.

(b) The cities and counties and other affected persons in a wasteshed shall gather information from the affected persons in the wasteshed and compile that information into the recycling report.

(5)(a) Prior to submitting the recycling report, it shall be made available to all cities and counties and other affected persons in the wasteshed for review.

(b) The recycling report shall include a certification from each county and city with a population of over 4,000 that it has reviewed the report.

(c) The recycling report shall be made available for public review and comment prior to submittal to the Department. Any public comments shall be submitted to the Department with the report.

(6) The Department shall review the recycling report to determine whether the opportunity to recycle will be provided to all persons in the wasteshed. The Department shall approve the recycling report if it determines that the wasteshed will:

(a) Provide the opportunity to recycle, as defined in OAR 340-60-020, for:

(A) Each material identified on the list of principal recyclable material for the wasteshed, as specified in OAR 340-60-030, or has demonstrated that at a specific location in the wasteshed a material on the list of the principal recyclable material is not a recyclable material for that specific location; and

(B) Other materials which are recyclable material at specific locations where the opportunity to recycle is required.

(b) Have an effective public education and promotion program which meets the requirements of OAR 340-60-040.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Fair Market Value Exemption

340-60-050 (1) To qualify for exemption under ORS 459.192 a source separated recyclable material must be:

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(a) Source separated by the generator; and
(b) Purchased from or exchanged by the generator for fair market value for recycling or reuse.

(2) If, as part of the opportunity to recycle, a city or county requires by franchise that residential collection service of recyclable material be provided and identifies a group of two or more materials as the recyclable material for which the residential collection service must be provided, then:

(a) "Fair market value" of any material within the identified group shall include the provision of collection service for all the material in the identified group; and

(b) "Recyclable material" means the group identified by the city or county.

(3) Local government may designate classes of residential dwellings to which specific types or levels of collection service is to be provided.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Recyclable Material

340-60-055 In determining what materials are recyclable materials:

(1) The cost of collection and sale of a recyclable material shall be calculated by considering the collector's costs from the time the material is source separated and leaves the use of the generator until it is first sold or transferred to the person who recycles it. All costs and savings associated with collection of a recyclable material shall be considered in the calculation.

(2) Any measurable savings to the collector resulting from making a material available for recycling as opposed to disposal shall be considered the same as income from sale.

(3) The cost of collection and disposal of material as solid waste shall be calculated by using the total costs of collection and disposal. Costs shall include fees charged, taxes levied or subsidy to collect and to dispose of solid waste. Costs shall also include but are not limited to the costs to comply with applicable statutes, rules, permit conditions and insurance requirements.

(4) The amount and value of any source separated material that is collected or received as part of a recycling requirement of a permit or a city or county franchise may be used in determining whether remaining material meets the definition of recyclable material.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

More Convenient Location

340-60-060 Any disposal site that identifies a more convenient location for the collection of recyclable materials as part of providing the opportunity to recycle shall provide information to users of the disposal site about the location of the recycling collection site, what recyclable materials are accepted and hours of operation.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Exemption

340-60-065 Any disposal site that does not receive source separated recyclable material or solid waste contain-

ing recyclable material is not required to provide a place for collecting source separated recyclable material.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Small Rural Sites

340-60-070 Any disposal site from which marketing of recyclable material is impracticable due to the amount or type of recyclable material received or geographic location shall provide information to the users of the disposal site about the opportunity to recycle at another location serving the watershed. Such information shall include the location of the recycling opportunity, what recyclable materials are accepted, and hours of operation.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Reasonable Specifications for Recyclable Materials

340-60-075 No person providing the opportunity to recycle shall be required to collect or receive source separated recyclable material which has not been correctly prepared to reasonable specifications which are related to marketing, transportation or storage requirements and which have been publicized as part of an education and promotion program.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Prohibition

340-60-080 In addition to the provisions set forth in ORS 459.195, no person shall dispose of source separated recyclable material which has been collected or received from the generator by any method other than reuse or recycling.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Due Consideration

340-60-085 (1) In determining who shall provide the opportunity to recycle, a city or county shall first give due consideration to any person lawfully providing recycling or collection service on June 1, 1983, if the person continues to provide the service until the date the determination is made and the person has not discontinued the service for a period of 90 days or more between June 1, 1983, and the date the city or county makes the determination.

(2) "Due consideration" includes at a minimum:

(a) A general notice announcing that the city or county intends to franchise recycling collection service and describing the requirements for the franchise;

(b) A timely written notice announcing that the city or county intends to franchise recycling collection service and describing the requirements for the franchise sent to persons entitled by ORS 459.200(6)(c) to due consideration where such persons are known to the city or county or where such person has filed a timely written request for such notices with the city or county;

(c) An opportunity for public comment on the proposed franchise; and

(d) Consideration of, and response to, a timely application for a recycling collection franchise from a person entitled to "due consideration" and response.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

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- (a) Source separated by the generator; and
- (b) Purchased from or exchanged by the generator for fair market value for recycling or reuse.

(2) If, as part of the opportunity to recycle, a city or county requires by franchise that residential collection service of recyclable material be provided and identifies a group of two or more materials as the recyclable material for which the residential collection service must be provided, then:

(a) "Fair market value" of any material within the identified group shall include the provision of collection service for all the material in the identified group; and

(b) "Recyclable material" means the group identified by the city or county.

(3) Local government may designate classes of residential dwellings to which specific types or levels of collection service is to be provided.

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(1) The cost of collection and sale of a recyclable material shall be calculated by considering the collector's costs from the time the material is source separated and leaves the use of the generator until it is first sold or transferred to the person who recycles it. All costs and savings associated with collection of a recyclable material shall be considered in the calculation.

(2) Any measurable savings to the collector resulting from making a material available for recycling as opposed to disposal shall be considered the same as income from sale.

(3) The cost of collection and disposal of material as solid waste shall be calculated by using the total costs of collection and disposal. Costs shall include fees charged, taxes levied or subsidy to collect and to dispose of solid waste. Costs shall also include but are not limited to the costs to comply with applicable statutes, rules, permit conditions and insurance requirements.

(4) The amount and value of any source separated material that is collected or received as part of a recycling requirement of a permit or a city or county franchise may be used in determining whether remaining material meets the definition of recyclable material.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

More Convenient Location

340-60-060 Any disposal site that identifies a more convenient location for the collection of recyclable materials as part of providing the opportunity to recycle shall provide information to users of the disposal site about the location of the recycling collection site, what recyclable materials are accepted and hours of operation.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

Exemption

340-60-065 Any disposal site that does not receive source separated recyclable material or solid waste contain-

ing recyclable material is not required to provide a place for collecting source separated recyclable material.

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Hist.: DEQ 26-1984, f. & ef. 12-26-84

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Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

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(2) "Due consideration" includes at a minimum:

(a) A general notice announcing that the city or county intends to franchise recycling collection service and describing the requirements for the franchise;

(b) A timely written notice announcing that the city or county intends to franchise recycling collection service and describing the requirements for the franchise sent to persons entitled by ORS 459.200(6)(c) to due consideration where such persons are known to the city or county or where such person has filed a timely written request for such notices with the city or county;

(c) An opportunity for public comment on the proposed franchise; and

(d) Consideration of, and response to, a timely application for a recycling collection franchise from a person entitled to "due consideration" and response.

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

OAR 340-60-010 is ~~proposed~~ to be amended as follows:

340-60-010 As used in these rules unless otherwise specified:

- (1) "Affected person" means a person or entity involved in the solid waste collection service process including but not limited to a recycling collection service, disposal site permittee or owner, city, county and metropolitan service district. For the purposes of these rules "Affected person" also means a person involved in operation of a place to which persons not residing on or occupying the property may deliver source separated recyclable material.
- (2) "Area of the state" means any city or county or combination or portion thereof or other geographical area of the state as may be designated by the Commission.
- (3) "Collection franchise" means a franchise, certificate, contract or license issued by a city or county authorizing a person to provide collection service.
- (4) "Collection service" means a service that provides for collection of solid waste or recyclable material or both. "Collection service" of recyclable materials does not include a place to which persons not residing on or occupying the property may deliver source separated recyclable material.
- (5) "Collector" means the person who provides collection service.
- (6) "Commission" means the Environmental Quality Commission.
- (7) "Department" means the Department of Environmental Quality.
- (8) "Depot" means a place for receiving source separated recyclable material.
- (9) "Director" means the Director of the Department of Environmental Quality.
- (10) "Disposal site" means land and facilities used for the disposal, handling or transfer of or resource recovery from solid wastes, including but not limited to dumps, landfills, sludge lagoons, sludge treatment facilities, disposal sites for septic tank pumping or cesspool cleaning service, transfer stations, resource recovery facilities, incinerators for solid waste delivered by the public or by a solid waste collection service, composting

plants and land and facilities previously used for solid waste disposal at a land disposal site; but the term does not include a facility subject to the permit requirements of ORS 468.740; a landfill site which is used by the owner or person in control of the premises to dispose of soil, rock concrete or other similar nondecomposable material, unless the site is used by the public either directly or through a solid waste collection service; or a site licensed pursuant to ORS 481.345.

- (11) "Generator" means a person who last uses a material and makes it available for disposal or recycling.
- (12) "Land disposal site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.
- (13) "Metropolitan service district" means a district organized under ORS Chapter 268 and exercising solid waste authority granted to such district under ORS chapters 268 and 459.
- (14) "On-route collection" means pick up of source separated recyclable material from the generator at the place of generation.
- (15) "Opportunity to recycle" means those activities described in OAR 340-60-020:
- (16) "Permit" means a document issued by the Department, bearing the signature of the Director or the Director's authorized representative which by its conditions may authorize the permittee to construct, install, modify or operate a disposal site in accordance with specified limitations.
- (17) "Person" means the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.
- (18) "Principal recyclable material" means material which is a recyclable material at some place where the opportunity to recycle is required in a wasteshed and is identified by the Commission in OAR 340-60-030.
- (19) "Recyclable material" means any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material.
- (20) "Recycling setout" means any amount of source-separated recyclable material set out at or near a residential dwelling for collection by the recycling collection service provider.

plants and land and facilities previously used for solid waste disposal at a land disposal site; but the term does not include a facility subject to the permit requirements of ORS 468.740; a landfill site which is used by the owner or person in control of the premises to dispose of soil, rock concrete or other similar nondecomposable material, unless the site is used by the public either directly or through a solid waste collection service; or a site licensed pursuant to ORS 481.345.

- (11) "Generator" means a person who last uses a material and makes it available for disposal or recycling.
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- (13) "Metropolitan service district" means a district organized under ORS Chapter 268 and exercising solid waste authority granted to such district under ORS chapters 268 and 459.
- (14) "On-route collection" means pick up of source separated recyclable material from the generator at the place of generation.
- (15) "Opportunity to recycle" means those activities described in OAR 340-60-020:
- (16) "Permit" means a document issued by the Department, bearing the signature of the Director or the Director's authorized representative which by its conditions may authorize the permittee to construct, install, modify or operate a disposal site in accordance with specified limitations.
- (17) "Person" means the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.
- (18) "Principal recyclable material" means material which is a recyclable material at some place where the opportunity to recycle is required in a watershed and is identified by the Commission in OAR 340-60-030.
- (19) "Recyclable material" means any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material.
- (20) "Recycling setout" means any amount of source-separated recyclable material set out at or near a residential dwelling for collection by the recycling collection service provider.

- [(20)] (21) "Resource recovery" means the process of obtaining useful material or energy resources from solid waste and includes:
- (a) "Energy recovery," which means recovery in which all or a part of the solid waste materials are processed to utilize the heat content, or other forms of energy, of or from the material.
 - (b) "Material recovery," which means any process of obtaining from solid waste, by presegregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose;
 - (c) "Recycling," which means any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity.
 - (d) "Reuse," which means the return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.
- [(21)] (22) "Solid waste collection service" or "service" means the collection, transportation or disposal of or resource recovery from solid wastes but does not include that part of a business licensed under ORS 481.345.
- [(22)] (23) "Solid waste" means all putrescible and nonputrescible wastes, including but not limited to garbage, rubbish, refuse, ashes, waste paper and cardboard; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction wastes; discarded or abandoned vehicles or parts thereof; discarded home and industrial appliances; manure, vegetable or animal solid and semisolid wastes, dead animals and other wastes; but the term does not include:
- (a) Hazardous wastes as defined in ORS 459.410
 - (b) Materials used for fertilizer or for other productive purposes or which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.
- [(23)] (24) "Solid waste management" means prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; or resource recovery from solid waste; and facilities necessary or convenient to such activities.

- [(24)] (25) "Source separate" means that the person who last uses recyclable material separates the recyclable material from solid waste.
- [(25)] (26) "Waste" means useless or discarded materials.
- [(26)] (27) "Wasteshed" means an area of the state having a common solid waste disposal system or designated by the commission as an appropriate area of the state within which to develop a common recycling program.

OAR 340-60-030 is ~~proposed~~ to be amended as follows:

340-60-030

- (1) The following are identified as the principal recyclable materials in the wastesheds as described in Sections (4) through (8):
- (a) Newspaper;
 - (b) Ferrous scrap metal;
 - (c) Non-ferrous scrap metal;
 - (d) Used motor oil;
 - (e) Corrugated cardboard and kraft paper;
 - (f) [Container glass] aluminum;
 - (g) [Aluminum] container glass;
 - (h) Hi-grade office paper
 - (i) Tin cans
- (2) In addition to the principal recyclable materials listed in (1) above, other materials may be recyclable material at specific locations where the opportunity to recycle is required.
- (3) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material at a specific location where the opportunity to recycle is required.
- (4) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (i):
- (a) Benton and Linn wasteshed
 - (b) Clackamas wasteshed
 - (c) Clatsop wasteshed
 - [(d)] (d) Columbia wasteshed
 - [(e)] (d) Hood River wasteshed
 - [(f)] (e) Lane wasteshed
 - [(g)] (f) Lincoln wasteshed
 - [(h)] (g) Marion wasteshed
 - [(i)] (g) Milton-Freewater wasteshed
 - [(j)] (h) Multnomah wasteshed

- [(24)] (25) "Source separate" means that the person who last uses recyclable material separates the recyclable material from solid waste.
- [(25)] (26) "Waste" means useless or discarded materials.
- [(26)] (27) "Wasteshed" means an area of the state having a common solid waste disposal system or designated by the commission as an appropriate area of the state within which to develop a common recycling program.

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 - (b) Ferrous scrap metal;
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 - (b) Clackamas wasteshed
 - (c) Clatsop wasteshed
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 - [(e)] (d) Hood River wasteshed
 - [(f)] (e) Lane wasteshed
 - [(g)] (f) Lincoln wasteshed
 - [(h)] (g) Marion wasteshed
 - [(i)] (g) Milton-Freewater wasteshed
 - [(j)] (h) Multnomah wasteshed

- [(k)] (i) Polk wasteshed
- [(l)] (j) Portland wasteshed
- [(m)] (k) Umatilla wasteshed
- [(n)] (l) Union wasteshed
- [(o)] (m) Wasco wasteshed
- [(p)] (n) Washington wasteshed
- [(q)] (o) West Linn wasteshed
- [(r)] (p) Yamhill wasteshed

- (5) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (g):
- (a) Baker wasteshed
 - (b) Crook wasteshed
 - (c) Jefferson wasteshed
 - (d) Klamath wasteshed
 - (e) Tillamook wasteshed

- (6) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (h):
- (a) Coos wasteshed
 - (b) Deschutes wasteshed
 - (c) Douglas wasteshed
 - (d) Jackson wasteshed
 - (e) Josephine wasteshed

- (7) In the following wasteshed, the principal recyclable materials are those listed in Subsections (1)(a) through (f) of this rule:

- (a) Malheur wasteshed

- (8) In the following wastesheds, the principal recyclable materials are those listed in Section 1(a) through (g) and (i):

- (a) Columbia wasteshed
- (b) Milton-Freewater wasteshed

- [(7)] (9) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (e):

- (a) Curry wasteshed
- (b) Grant wasteshed
- (c) Harney wasteshed
- (d) Lake wasteshed
- [(e)] Malheur wasteshed
- [(f)] Morrow wasteshed
- [(g)] Wallowa wasteshed

- [(8)] (10) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (d):

- (a) [Gilliam wasteshed] Morrow wasteshed
- (b) Sherman wasteshed
- (c) [Wheeler wasteshed] Wallowa wasteshed

(11) In the following wastesheds, the principal recyclable materials are those listed in Subsections (1)(b) through (d) of this rule:

- (a) Gilliam wasteshed
- (b) Wheeler wasteshed

[[9]] (12) (a) The opportunity to recycle shall be provided for each of the principal recyclable materials listed in (4) through [(8)] (11) of this rule and for other materials which meet the statutory definition of recyclable material at specific locations where the opportunity to recycle is required.

(b) The opportunity to recycle is not required for any material which a recycling report, approved by the Department, demonstrates does not meet the definition of recyclable material for the specific location where the opportunity to recycle is required.

[[10]] (13) Between the time of the identification of the principal recyclable materials in these rules and the submittal of the recycling reports, the Department will work with affected persons in every wasteshed to assist in identifying materials contained on the principal recyclable material list which do not meet the statutory definition of recyclable material at some locations in the wasteshed where the opportunity to recycle is required.

[[11]] (14) Any affected person may request the Commission modify the list of principal recyclable material identified by the Commission or may request a variance under ORS 459.185.

[[12]] (15) The Department will at least annually review the principal recyclable material lists and will submit any proposed changes to the Commission.

OAR 340-60-045 is ~~proposed~~ to be amended as follows:

Standards for Recycling Reports

340-60-045

- (1) The first recycling report shall be submitted to the Department not later than July 1, 1986 on forms supplied by the Department. Subsequent recycling reports shall be submitted to the Department not later than February 15 each year, beginning in 1988, on forms supplied by the Department.

(11) In the following wastesheds, the principal recyclable materials are those listed in Subsections (1)(b) through (d) of this rule:

- (a) Gilliam wasteshed
- (b) Wheeler wasteshed

- [(9)] (12) (a) The opportunity to recycle shall be provided for each of the principal recyclable materials listed in (4) through [(8)] (11) of this rule and for other materials which meet the statutory definition of recyclable material at specific locations where the opportunity to recycle is required.
- (b) The opportunity to recycle is not required for any material which a recycling report, approved by the Department, demonstrates does not meet the definition of recyclable material for the specific location where the opportunity to recycle is required.
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- [(11)] (14) Any affected person may request the Commission modify the list of principal recyclable material identified by the Commission or may request a variance under ORS 459.185.
- [(12)] (15) The Department will at least annually review the principal recyclable material lists and will submit any proposed changes to the Commission.

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Standards for Recycling Reports

340-60-045

- (1) The first recycling report shall be submitted to the Department not later than July 1, 1986 on forms supplied by the Department. Subsequent recycling reports shall be submitted to the Department not later than February 15 each year, beginning in 1988, on forms supplied by the Department.

- (2) The recycling report shall include the following information:
- (a) The materials which are recyclable at each disposal site and within the urban growth boundary of each city of 4,000 or more population or within the urban growth boundary established by a metropolitan service district, if there has been a change from the previous year;
 - (b) The manner in which recyclable material is [to be] collected or received, if there has been a change from the previous year;
 - (c) Proposed and approved alternative methods for the opportunity to recycle which are to be used in the watershed and justification for the alternative method, if there has been a change from the previous year;
 - (d) [Proposed Methods for providing the] Public education and promotion [program; and] activities in the preceding calendar year; and
 - (e) Other information necessary to describe changes from the preceding calendar year in the [proposed] programs for providing the opportunity to recycle.
 - (f) The number of recycling set-outs collected by each on-route collection program required by OAR 340-60-020 in January, April, July and October of the preceding calendar year.
 - (g) The amount of materials recycled in the preceding calendar year at each disposal site or more convenient location, by type of material collected.
 - (h) The amount of materials recycled in the previous calendar year by each on-route collection program required by OAR 340-60-020, or by an approved alternative method, by type of material collected.
 - (i) If a recycling program required by OAR 340-60-020 collects materials both on-route and at disposal sites or other recycling depots in such a way that it is impractical to separately report the amount of material recycled as required in (2)(g) and (h) above, then the total amount of material recycled and estimates of the amount of material recycled by the on-route collection program and at each disposal site or more convenient location shall be reported.

- (3) The recycling report shall include attachments including but not limited to the following materials related to the opportunity to recycle:
- (a) Copies of materials that are being used in the wasteshed as part of education and promotion,
 - (b) A copy of any new city or county collection service franchise, or any new amendment to a franchise, including rates under the franchise, which relates to recycling in areas required by OAR 340-60-020 to provide on-route collection of source separated recyclable materials, and
 - (c) Other attachments which demonstrate the [proposed] programs for providing the opportunity to recycle.
- (4) (a) The cities and counties and other affected persons in each wasteshed should [before July 1, 1985]:
- (A) Jointly identify a person as representative for that wasteshed to act as a contact between the affected persons in that wasteshed and the Department in matters relating to the recycling report.
 - (B) Inform the Department of the choice of a representative.
- (b) The cities and counties and other affected persons in a wasteshed shall gather information from the affected persons in the wasteshed and compile that information into the recycling report.
- [(5) (a) Prior to submitting the recycling report, it shall be made available to all cities and counties and other affected persons in the wasteshed for review.
- (b) The recycling report shall include a certification from each county and city with a population of over 4,000 that it has reviewed the report.
- (c) The recycling report shall be made available for public review and comment prior to submittal to the Department. Any public comments shall be submitted to the Department with the report.]
- [(6)] (5) The Department shall review the recycling report to determine whether the opportunity to recycle [will be] is being provided to all persons in the wasteshed. The Department shall approve the recycling report if it determines that the report contains all the information required under this rule and the wasteshed [will]:

- (3) The recycling report shall include attachments including but not limited to the following materials related to the opportunity to recycle:
- (a) Copies of materials that are being used in the wasteshed as part of education and promotion,
 - (b) A copy of any new city or county collection service franchise, or any new amendment to a franchise, including rates under the franchise, which relates to recycling in areas required by OAR 340-60-020 to provide on-route collection of source separated recyclable materials, and
 - (c) Other attachments which demonstrate the [proposed] programs for providing the opportunity to recycle.
- (4) (a) The cities and counties and other affected persons in each wasteshed should [before July 1, 1985]:
- (A) Jointly identify a person as representative for that wasteshed to act as a contact between the affected persons in that wasteshed and the Department in matters relating to the recycling report.
 - (B) Inform the Department of the choice of a representative.
- (b) The cities and counties and other affected persons in a wasteshed shall gather information from the affected persons in the wasteshed and compile that information into the recycling report.
- [(5) (a) Prior to submitting the recycling report, it shall be made available to all cities and counties and other affected persons in the wasteshed for review.
- (b) The recycling report shall include a certification from each county and city with a population of over 4,000 that it has reviewed the report.
- (c) The recycling report shall be made available for public review and comment prior to submittal to the Department. Any public comments shall be submitted to the Department with the report.]
- [(6)] (5) The Department shall review the recycling report to determine whether the opportunity to recycle [will be] is being provided to all persons in the wasteshed. The Department shall approve the recycling report if it determines that the report contains all the information required under this rule and the wasteshed [will]:

- (a) [Provide] Is providing the opportunity to recycle, as defined in OAR 340-60-020, for:
- (A) each material identified on the list of principal recyclable material for the wasteshed, as specified in OAR 340-60-030, or has demonstrated that at a specific location in the wasteshed a material on the list of the principal recyclable material is not a recyclable material for that specific location; and
 - (B) other materials which are recyclable material at specific locations where the opportunity to recycle is required;
- (b) [Have] Has an effective public education and promotion program which meets the requirements of OAR 340-60-040.

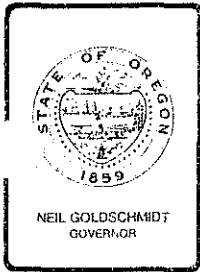
OAR 340-61-062 is ~~proposed~~ to be amended as follows:

340-61-062 USED OIL RECYCLING SIGNS.

- (1) Retail sellers of more than 500 gallons of lubrication or other oil annually in containers for use off premises shall post and maintain durable and legible signs, of design and content approved by the Department, at the point of sale or display. The sign shall contain information on the importance of proper collection and disposal of used oil, and the name, location and hours of a conveniently located used oil recycling depot.
- (2) Signs will be provided upon request by the Department['s Recycling Information Office].
- (3) Retail sellers wishing to print their own signs are required to provide the following for their signs:
 - (a) Oil Recycling logo;
 - (b) Information on the energy and environmental benefits gained by recycling used motor oil;
 - (c) [The Recycling Switchboard and the toll-free statewide number 1-800-452-7813;]
 - A telephone number where people can call to obtain more information on oil recycling depots and other oil recycling opportunities;
 - (d) Information on how to recycle used oil;

- (e) Information on at least one conveniently located used oil recycling depot, or other oil recycling opportunity, i.e., name, location and hours of operation.
- (f) Sign size which shall be no smaller than 11 inches in width and 14 inches in height.
- (4) Above information is also available from the Department['s Recycling Information Office].
- (5) The Department suggests that the following appear on the sign, "Conserve Energy - Recycle Used Motor Oil," in at least inch-high letters.

- (e) Information on at least one conveniently located used oil recycling depot, or other oil recycling opportunity, i.e., name, location and hours of operation.
- (f) Sign size which shall be no smaller than 11 inches in width and 14 inches in height.
- (4) Above information is also available from the Department['s Recycling Information Office].
- (5) The Department suggests that the following appear on the sign, "Conserve Energy - Recycle Used Motor Oil," in at least inch-high letters.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item I, October 9, 1987, EQC Meeting

Status Report on Yard Debris Recycling in the Portland Metropolitan Area

BACKGROUND

The Department became involved with yard debris recycling in 1980 when it was proposed as one of several alternatives to backyard burning in the Portland metropolitan area. When the Commission restricted backyard burning in 1983, it identified yard debris recycling as one of several available alternative disposal methods. Since that time, the Department has been working with local government and private industry to assist in the development of yard debris collection and processing programs.

In December of 1984, the Commission discussed the issue of whether, as a part of implementation of the Opportunity to Recycle Act, yard debris should be designated as a principal recyclable material in the Portland Wasteshed. At that time, the Commission found that there was not adequate information to justify adding yard debris to the list of principal recyclable materials.

The Department held a series of information gathering meetings and returned to the Commission in January, 1986. The Department requested authority to hold public hearings on a proposed rule which would identify yard debris as a principal recyclable material in all five Portland area wastesheds. The Department held hearings on March 3, 4, 5 and 6, 1986 and on January 28, 1987.

When yard debris was first proposed as a recyclable material a large number of issues were raised. Over time, many of these issues have been resolved. However, even after the considerable effort by the Department and local government over the past seven years, several of the major issues are still not completely resolved.

ISSUES

The following major issues were brought forth at the Commission meetings and public hearings:

- 1) Can yard debris be recycled into a marketable product?
- 2) How large is the market for recycled yard debris products?
- 3) Will the public source separate yard debris and deliver it to a processor or put it out for separate collection?
- 4) What is the cost of collection and processing of yard debris?
- 5) How much will the public be willing to pay for yard debris collection or processing service?
- 6) Can and will the solid waste collection industry provide collection service for source separated yard debris?
- 7) Will local government provide the opportunity to recycle for yard debris?
- 8) What are acceptable alternatives to on-route collection of source separated yard debris?

STATUS

- 1) Source separated yard debris can be recycled into a marketable product. In 1983, 6,000 cubic yards; in 1984, 7,000 cubic yards; in 1985, 16,500 cubic yards; and in 1986, 26,600 cubic yards of recycled yard debris products were marketed. It is estimated that in 1987, 45,000 cubic yards of recycled yard debris products will be marketed.
- 2) The potential market for recycled yard debris products is estimated to be more than ten times the total theoretical supply of recycled yard debris products and one hundred times the present supply. The penetration of recycled yard debris into existing soil amendment, ground cover and nursery growing medium markets is progressing without major resistance.
- 3) The public is presently delivering source separated yard debris to six collection or processing sites. Over the last five years the growth rate of public delivery to these sites has been approximately 25% per year. The public is making source separated yard debris available for collection when such service is available. On-call yard debris chipping services are also experiencing a steady growth in business.

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- 3) The public is presently delivering source separated yard debris to six collection or processing sites. Over the last five years the growth rate of public delivery to these sites has been approximately 25% per year. The public is making source separated yard debris available for collection when such service is available. On-call yard debris chipping services are also experiencing a steady growth in business.

- 4) The cost of recycling yard debris is less than the cost of disposal of the same material. The public is charged less to deliver yard debris to a recycling site than to a disposal site. It also costs less to have a large quantity of yard debris chipped on-site than to hire a solid waste collector to haul the same material to a disposal site. In direct comparison, it is less expensive to provide separate collection of source separated yard debris than it is to provide collection of garbage. A collection system model designed by Metro demonstrates that a separate collection system for yard debris would be less expensive than a solid waste collection system. Participation is highest in those cities which have weekly yard debris collection service which is funded through the local tax base.
- 5) The public has demonstrated that they are willing to pay the present cost for delivery of yard debris to recycling sites. The public has supported yard debris collection service as a tax base funded program. Oregon City recently passed a three year serial levy to fund weekly collection of yard debris. The public pays for yard debris chipping service and, where it is available, separated yard debris collection service. Because most communities do not have separate yard debris collection service available, we do not have experience to tell us how much a separate collection program for yard debris costs and how much it saves the public in extra garbage collection costs. It appears that the public is willing to pay a reasonable price for this service if it is convenient and if there is some associated savings in normal garbage collection costs.
- 6) The solid waste collection industry is providing successful weekly on-route collection service for source separated yard debris in two Portland area cities. Some members of the collection industry have indicated that they would provide weekly or monthly yard debris service if they were paid sufficient collection fees. However, for the most part, the solid waste collection industry has not shown interest in providing this type of service.
- 7) With the exception of the cities of West Linn, Oregon City and Gladstone, where yard debris collection service is provided, local governments oppose providing the opportunity to recycle yard debris. Local government views yard debris collection as an additional level of service and is not willing to incorporate the cost of this service into the present solid waste collection system.
- 8) Because of the seasonal nature of yard debris generation and the types of collection service already available, alternative methods (other than on-route collection) for providing collection or recycling of yard debris may be justified in some communities. Alternative methods of providing collection of yard debris must be as effective in recovery of yard debris as scheduled monthly collection and be convenient to the public served. Seasonal collection service that meets this criteria

would be an acceptable alternative. Scheduled on-site chipping service might also meet these criteria.

DISCUSSION

There is an accumulation of unprocessed yard debris at several of the yard debris recycling facilities. As long as this material remains unprocessed, the collection industry and local governments question whether there is an adequate market for recycled yard debris. While some yard debris processors are significantly reducing their backlog, others are just starting to develop markets for their material. By the end of 1987, there should be a dramatic reduction in the total amount of material held in backlog.

If yard debris collection systems were implemented, it might produce new large quantities of yard debris. There is a concern that an increase in the amount of material delivered to yard debris recyclers would overload their processing capacity and would "flood the market" for recycled yard debris products.

The collection industry has indicated that cost increases will occur if they are required to collect yard debris as a separate recyclable material. Most local governments which regulate solid waste collection do not want to add the cost of a separate yard debris collection system to the present solid waste collection rate structure.

Metro has been a major actor in the development of processing and marketing recycled yard debris. Metro is still active in expanding the market for yard debris products. They are also starting to update their regional solid waste management plan. That plan will include an economic analysis of yard debris collection and may include functional planning for yard debris collection and recycling. As part of the planning process, Metro may also be assisting local governments in deciding how they will deal with yard debris as a recyclable material.

DEPARTMENT RECOMMENDATION

In their July 17, 1987 letter to Chairman Petersen, the Oregon Environmental Council has requested that the Commission direct the Department to bring the proposed amendments to OAR 340-60-010 and 030, identifying yard debris as a principal recyclable material in the Clackamas, Multnomah, Portland, Washington and West Linn Wastesheds, back to the Commission for a final ruling: (Attachment I). Several significant issues related to yard debris recycling and collection were raised in the public hearings on these proposed rules. As discussed above, some of these issues still remain to be resolved. The Department has not returned to the Commission with the proposed rules while we are seeking resolution of these issues. The

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Department would prefer to continue to work with the affected persons in these five wastesheds until all of the major issues are resolved before recommending that the Commission formalize the position of yard debris as a principal recyclable material.

The Department feels that identification of yard debris as a principal recyclable material at this time will not result in a substantial increase in yard debris recycling and might have a significant negative impact on the yard debris processing industry and local government recycling efforts. The Department would like to continue to work with Metro, other local governments and yard debris processors to improve the conditions for long-term yard debris recycling before yard debris is added to the list of principal recyclable materials.

Specific activities which need to continue include the following:

- o Elimination of the backlog of unprocessed yard debris.
- o Increasing utilization of recycled yard debris products by the Department of Transportation, local parks departments, Port of Portland and other large institutional users of ground cover and soil conditioner.
- o Evaluation of yard debris collection programs.
- o Identification of the role of local government in yard debris collection through the regional solid waste management and functional planning process.
- o Identification and evaluation of acceptable alternative methods of collecting source separated yard debris.

If the Commission wishes to take a final action on the proposed rules, the Department suggests that the issue be scheduled for a meeting in Portland so that all interested persons would have an opportunity to address the Commission. In the meantime, the Department will continue to work on the issues and activities identified in this staff report, unless the Commission directs otherwise.



Fred Hansen

Attachments: I. July 17, 1987 OEC Letter
II. Other correspondence

William R. Bree
229-6975
October 9, 1987
YB7022

OREGON ENVIRONMENTAL COUNCIL

2637 S.W. Water Avenue, Portland, Oregon 97201

Phone: 503/222-1963

James Petersen
Chairman
Environmental Quality Commission
835 N.W. Bond
Bend, Oregon 97701

Hazardous & Solid Waste Division
Dept. of Environmental Quality

RECEIVED
JUL 22 1987

July 17, 1987

Re: Definition of
Yard Debris as a
Principal Recyclable
Material

Dear Chairman Petersen,

In 1983 the Oregon Legislature recognized the sound economic and social policy behind the utilization of recycling as a tool for solid waste management. Accordingly, the legislature enacted the Opportunity for Recycling Act. The goals of the act provide that:

- a) the opportunity to recycle should be provided for every person in Oregon;
- b) there is a shortage of appropriate sites for landfills in Oregon, and
- c) it is in the best interests of the people of Oregon to extend the useful life of existing solid waste disposal sites by encouraging the recycling and reuse of materials whenever recycling is economically feasible. ORS 459.015 et seq.

The Act instructed the Commission to implement these goals. Specifically, the Commission was instructed to identify the principal recyclable materials in each watershed. ORS 459.175.

The Commission adopted rules pursuant to these instructions on December 14, 1984. At that time the Commission did not identify yard debris as a principal recyclable material, but rather directed the Department of Environmental Quality to return to the Commission within one year with a recommendation regarding yard debris.

On November 25, 1985 the Department received additional instructions from the Commission to meet with affected parties regarding the comparative costs of processing versus the disposal of yard debris in the Portland, Washington, Multnomah, Clackamas, and West Linn watersheds. In a January, 1986 report to

the Commission the Department stated that yard debris should be identified as a principal recyclable material. The Department recommended that the Commission authorize public hearings to discuss the proposed rule change and identification of yard debris as a principal recyclable material, effective July 1, 1987, in the five Portland metropolitan wastesheds.

Public hearings were held in March 1986. On April 25, 1986 the Department stated in a memorandum to the Commission that "[i]t remains the Department's opinion that source separated yard debris is a principal recyclable material in all five of the Portland metropolitan wastesheds." The Department requested additional time to hold further meetings and stated that they would present a proposed rule to the Commission at its July 25, 1986 meeting. One additional public hearing was held on January 28, 1987.

It has now been four years since the Legislature first acted; three years since the Commission first instructed the Department to investigate yard debris as a principal recyclable material; over a year since the Department first forwarded their opinion to the Commission that yard debris could be identified as a principal recyclable material in the Portland metropolitan area wastesheds; and a year since the Department stated that they would make a recommendation to the Commission regarding yard debris. No action, however, has been taken to identify yard debris as a principal recyclable material. The Department has yet to forward a proposed rule to the Commission. The process appears to be deadlocked with no indication of future progress.

This delay and lack of direction comes at a time when the St. Johns landfill is rapidly nearing capacity and yard debris at conservative estimates represents 13.4% of the material being deposited. Currently yard debris represents the largest single component of the solid waste stream in the Portland metropolitan area. This posture calls into question compliance with statutory duties and departmental rules which recognize the necessity of recycling to extend the life of existing landfills and call for the identification of principal recyclable materials. The Department's reluctance or refusal to present a proposed rule and recommendations to the Commission effectively usurps the Commission's decision making authority.

The data submitted by the Department to the Commission in their January 1986 report indicated that yard debris met the test for inclusion as a principal recyclable material. This report included a white paper by Metro which also identified yard debris

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The data submitted by the Department to the Commission in their January 1986 report indicated that yard debris met the test for inclusion as a principal recyclable material. This report included a white paper by Metro which also identified yard debris

as a principal recyclable material. Concerns have been voiced by local governments, local haulers, and more recently Metro, that adequate markets and processing plants do not exist to deal with an increase in the collection of yard debris. However, no direct evidence has been presented to support these concerns or dispute the original conclusions formulated by the Department and Metro.

The two major processors, Grimm's Fuel Co. and McFarlane's Bark, indicate that their processing capacity is greater than their current intake. The volume of yard debris processed by these two companies has increased at an approximate rate of 25% each year since 1983. In fact, Grimm's Fuel Co. recently contracted with Metro to process yard debris currently deposited at St. Johns. Although it is arguable whether a recycling program would result in the collection of all yard debris, assuming that it did, this collection would only represent 20% of the existing market for the material.


Undocumented claims regarding the lack of markets should not prevent regulatory action by the Commission. The evidence in the Rule-making record proves that yard debris meets the definition of a principal recyclable material. The policy behind the Opportunity to Recycle Act argues that the burden should not be on the public but rather on the individuals who contest this evidence to demonstrate that yard debris is not a principal recyclable material. Opponents of the Department's original proposed rule have not met this burden.

OEC believes that the Commission should adopt a rule which identifies yard debris as a principal recyclable material in the Portland, Clackamas, Washington and West Linn wastesheds. Defining yard debris as such will not leave affected individuals who oppose this action without remedy. Affected individuals may demonstrate that yard debris does not meet the definition at a specific site, OAR 340.060.030(9)(b)(10) and need not be recycled; or they may request a variance, OAR 340.60.030(11), and propose alternative methods of recycling. OAR 340.60.035.

At the very least, the Commission should direct the Department to bring this matter back to the Commission for a final ruling one way or the other. By failing to bring the issue back to the EQC pursuant to the instructions adopted by the Commission at its January, 1986 meeting, the Director has, in effect, substituted his judgment for that of the Commission. Since all rulemaking authority resides with the Commission, not the Department, this is clearly inappropriate.

During the next several months the public in Portland will be educated regarding the opportunities for recycling various materials. There is no reason why yard debris cannot be among these materials. In the Department's January 1986 report, the Department stated "[t]he major factor limiting the processing of yard debris is the lack of a large scale collection and delivery system." Identifying yard debris as a principal recyclable material addresses this problem and prevents further unnecessary use of much needed landfill space.


Sincerely


John A. Charles
Executive Director

cc: Commissioners Bishop, Brill, Buist, Denecke
Fred Hansen
Mike Downs
Lorie Parker
Bill Bree ✓
Michael Huston

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Background Report on Yard Debris Recycling in the
Portland Metropolitan Area

On January 31, 1986, the Environmental Quality Commission authorized the Department to hold public hearings on proposed rule changes identifying yard debris as a principal recyclable material in the Portland, Washington, Multnomah, Clackamas and West Linn wastesheds.

In March 1986, the Department held five public hearings on the proposed rule changes. Forty-one people submitted oral or written testimony. On April 25, 1986, the Department requested additional time to do the following: meet with local governments and other affected persons to define acceptable alternative methods for providing the opportunity to recycle yard debris; identify those specific locations within each wasteshed where yard debris does not meet the definition of recyclable material; do further analysis of area processing capacity; and develop market assistance strategies for compost products.

On January 28, 1987, the Department held an additional public hearing. Eight people submitted oral or written testimony. The new testimony did not indicate any change in the general support for yard debris recycling but specific opposition to identification of yard debris as a principal recyclable material. There remains strong opposition from the collection industry and local government to any action which might lead to on-route collection programs for yard debris.

Problem Statement

Yard debris is approximately 50% leaves and grass and 50% woody material. It can be processed into hog fuel, ground cover, soil amendment and nursery potting material. Yard debris represents the largest single component of the total solid waste stream. Metro's November 1986 waste composition study found that yard debris represents 14.7% of the material going into the Portland area landfills.

ORS 459.170(d) requires the Commission to adopt rules which identify the principal recyclable materials in each wasteshed. The administrative rules adopted by the Commission in 1984, OAR 340-60-010 define a principal recyclable material as a material which is a recyclable material at some place where the opportunity to recycle is required in a wasteshed.

Public Hearings and Response

Most of the testimony at the hearing was in opposition to the proposed rule changes.

There is strong opposition from the solid waste collection industry and local governments to the identification of yard debris as a principal recyclable material and to the collection of yard debris as a recyclable material. They want further assurance that yard debris processing sites and markets for composted products can accommodate the amount of yard debris which would be delivered to processors if the opportunity to recycle yard debris were provided. They do not want to provide collection of source separated yard debris if there will be a net cost to the collector or they will have to charge the generator for this service. If the proposed rule amendment is adopted, they may put their efforts into proving that yard debris is not a recyclable material at many locations in area wastesheds rather than developing programs to collect and recycle it.

The major areas of concern are discussed below:

(1) Yard Debris as a Principal Recyclable Material

There is a great deal of confusion as to the difference between a principal recyclable material and a recyclable material. Oregon Administrative Rule 340-60-030 identifies the principal recyclable materials in each wasteshed. A principal recyclable material is a material which is a "recyclable material" at some place where the opportunity to recycle is required in a wasteshed. Identification of a material as a principal recyclable material shifts the burden of proof of whether a material is recyclable to the local governments and affected parties.

A recyclable material is defined by ORS 459.005(15) as any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material. The definition of recyclable material is based on an economic test and is site or situation specific. Oregon Administrative Rules 340-60-055(2) further define recyclable material by stating that any measurable savings to the collector resulting from making the material available for recycling as opposed to disposal shall be considered the same as income from sale.

In application, whenever source separated yard debris can be collected and processed at a net cost equal to or less than the cost of collection and disposal of the same material in at least one place in a wasteshed where the opportunity to recycle is required, then it meets the definition of a principal recyclable material for that wasteshed. For each of the Portland metropolitan area wastesheds, if there is at least one situation where yard debris is a recyclable material, then yard debris can be identified by the Commission as a principal recyclable material for that wasteshed. The fact that yard debris fails to meet the definition of a recyclable material at other locations in the wasteshed does not preclude it from being identified as a principal recyclable material.

There was no evidence presented to specifically show that yard debris did not meet the definition of a principal recyclable material in each of the five area wastesheds, though there were claims that it was not a recyclable material if it were required to be collected at curbside. Yard debris meets the definition of a recyclable material for at least one location in the Clackamas, Portland, Washington and West Linn Wastesheds. The Department could not identify a location in the Multnomah Wasteshed where yard debris was a recyclable material.

(2) Cost of Collection of Yard Debris

Most of the testimony at the hearings addressed particular locations where yard debris might not meet the statutory definition of a recyclable material because of the cost of collection or charge for delivery.

Source separated yard debris is a recyclable material in four of the five Portland metropolitan area wastesheds when it is delivered by the generator to a processing facility. The cost to the self-hauling generator for landfill disposal of an average 2 1/2 cubic yard load is \$3.90 per cubic yard. If the same load were delivered to one of the area processors, the cost would range from \$2.00 to \$3.50 per cubic yard.

In the case of large quantities of source separated yard debris, the situation is slightly different. Because some area disposal sites charge fees for loads based on weight, while yard debris processors charge for loads based on volume, the density of the load will determine whether it is less expensive to take it to a disposal site or to a yard debris processing facility. In general, when material is collected and hauled in a compactor truck, it will be less expensive to deliver to a yard debris processor. When material is collected and hauled uncompacted in an open dropbox, it will usually be less expensive to haul to a disposal site which measures and charges by weight. See Table 1 for examples.

Table 1. Example: Cost of Disposal vs. Cost of Recycling

	Vol. Loose Yd. ³	Wt. Tons	Disposed as Solid Waste		Processed for Recycling	
			Total Chg.	\$/Loose yd. ³	Total Chg.	\$/loose yd. ³
2 bags self-haul	0.3	.03 (60 lbs.)	9.75	32.50	3.00	9.00
1 yd. (6 bags) self-haul	1.0	.1 (200 lbs.)	9.75	9.75	3.00	3.00
2 1/2 yd. self haul	2.5	.25 (500 lbs.)	9.75	3.90	7.50	3.00
10 yds. Landscape Truck	10.0	1.0	19.70	1.97	30.00	3.00
20 yds. Commercial Drop Box	20.0	2.0	39.40	1.97	60.00	3.00
14 yd. Compactor Truck 1-1 Compaction	14.0	1.4	27.58	1.97	42.00	3.00
14 yd. Compactor Truck 1-2 Compaction	28.0	2.8	55.16	1.97	42.00	1.50
14 yd. Compactor Truck 1-3 Compaction	42.0	4.2	82.74	1.97	42.00	1.00
14 yd. Compactor	56.0	5.6	110.32	1.97	42.00	.75

Based on cubic yards (yd.³) of yard debris delivered to Clackamas Transfer and Recycling Center or McFarlane's Bark.

Yard debris differs significantly in physical characteristics from other recyclable materials. If yard debris is collected on-route, it would have to be collected separately from garbage and other recyclable materials. The total system cost for separate collection of yard debris may be more expensive than collection of yard debris mixed with garbage.

Even with a more expensive total system, yard debris can still meet the definition of a recyclable material. This is so because statute and rules define recyclable material based on a comparison of unit costs, not on a comparison of total system costs. The definition is based on the assumption that, over time, costs of the additional collection system will be balanced out by savings in the rest of the system.

Where source separated yard debris collection systems have been established, the cost of collection and delivery of the yard debris to a processing facility is less than the cost of collection and disposal as solid waste.

On-route collection and recycling of yard debris can also be provided at a cost less than collection and disposal as solid waste. The cost of collection and disposal of solid waste from residential customers ranged from about \$7.25 to \$11.60 per cubic yard. In a January 1986 white paper, "Economics of On-Route Collection of Yard Debris," Metro indicates that the costs of on-route collection and recycling of source separated yard debris ranges from less than \$2 to as high as \$8.50 per cubic yard, depending on the type and efficiency of the service provided. An established and reasonably efficient collection program costs between \$1.50 and \$2.50 per yard for collection and recycling of yard debris.

More recently, Metro has developed a yard debris collection system model. This model shows yard debris collection and recycling costs to be in the range of \$5 to \$12 per cubic yard when collected with a system equivalent to that for solid waste collection. The model takes operational factors into consideration and makes initial assumptions on funding and design options. Some results generated from this model are shown in Table 2. Two important factors which will modify the costs shown in these results are frequency of service and method of charging for service. These figures assume weekly service. Less frequent service would increase costs by reducing the level of participation. It could also result in cleanliness problem as material sits on the curb for a longer period of time. This model assumes some sort of tax base funding for a yard debris collection program. If a fee for service funding system were used, the participation rates would fall below the 25% level and costs would increase.

Table 2
Cost of Collection and Recycling¹
vs.
Cost of Collection and Disposal²

	Beaverton	Oregon City
Population	33,950	14,500
Number of residential dwelling structures	13,338	5,766
75% of yard debris generated	3,333 yd. ³ /month	1,225/yd. ³ /month
Cost of collection and recycling	\$16,672	\$7,640
Cost/Dwelling	\$ 1.25	\$ 1.32
Cost/yd. ³	\$ 5.00	\$ 6.24
Cost of collection and disposal cost/yd. ³	\$ 11.60	\$ 11.60

¹Based on weekly collection of 75% of the total yard debris generated.

²Based on weekly collection of one can with a monthly charge of \$8.00.

Sunflower Recycling, a Portland collection company, indicated that their yard debris collection/recycling system was less expensive than their garbage collection/disposal service to the same customers. Sunflower charges \$5.00/yard for yard debris collection and double that amount per yard for regular garbage collection service. The average cost per yard for weekly one-can garbage service in Portland is over \$11.00

In a now defunct Lake Oswego program, prepaid, on-call yard debris collection and recycling cost \$3.50 per cubic yard. In Gladstone, weekly collection is available, with an estimated 93% participation rate. The tax base supported yard debris collection system in Gladstone is less expensive to the customers than the fee based garbage collection system. Metro has calculated the cost for the Gladstone program to be between \$2.50 and \$1.50 per yard depending whether the material is delivered to the disposal site or the yard debris processor.

Several area cities have set up community drop-off locations where the material is either processed or collected for transfer to a processing facility. Some are operated with volunteer labor, so the costs vary greatly, from \$.50 to \$5.00 per cubic yard. The costs in all of these programs are substantially less than the \$7.25-\$11.60 per cubic yard cost of collection and disposal of the same material as solid waste.

The funding, design and operation of source separated yard debris collection systems will determine how the costs compare with solid waste collection systems. The success of a yard debris collection system is dependent on local government regulators, solid waste and recycling collectors and the generators of the source separated yard debris working together cooperatively.

(3) Alternative Methods for Recycling Yard Debris

Some of the testimony indicated that it was not feasible to provide on-route collection of source separated yard debris in specific parts of the wastesheds. The statute and rules allow for the use of an alternative to on-route collection. Factors which might justify an alternative to an on-route collection system include the seasonal nature of the yard debris generation and the type of the collection service already available. Alternative methods of providing collection of yard debris must be as effective in recovery of yard debris as scheduled monthly collection and be convenient to the public served. Seasonal collection service that meets this criteria would be an acceptable alternative.

(4) Effective Date of Rule Amendments

The hearing testimony showed a general concern that more time than is allowed in the proposed rules will be needed before collection systems could be set up. With more time, processors could be prepared to handle the increase in volume of material, and the processed materials could be successfully marketed. The proposed rule has an effective date of July 1, 1987.

(5) Processing Yard Debris

The biggest concern at the March 1986 hearings was that the companies which process yard debris need more time to increase their processing capacity and develop markets for yard debris products. Yard debris processing capabilities in the region have increased substantially in the last few years. The two major yard debris processing facilities are Grimm's Fuel, located in Washington County near Sherwood, and McFarlane's Bark, located in Clackamas County near Clackamas. For both companies, yard debris processing is a supplementary business activity. The volume of yard debris received by these two processors has grown approximately 25% each year since 1983. See Table 3. Both major processors stated that they have the capacity to process several times what they presently receive. United Chippers, a coalition of five chipping service companies with mobile chipping machines, processed 100,000 cubic yards of material in 1986. Their stated capacity is five times this amount.

Table 3. Yard Debris Generated and Processed
(thousand cubic yards)

	1983	1984	1985	1986	(estimated) (1987)
Yard Debris Generated (yd. ³)	1,270	1,270	1,270	1,790 ¹	1,790
Yard Debris - Burned	85	50	5	5	5
Yard Debris - Home Compost	235	245	260	260	265
Yard Debris - Landfilled	800	784	782	1,256 ¹	1,130
Yard Debris - Received for Recycling at St. Johns	35	50	50	50	70
Yard Debris Received for Recycling at Processors	115	141	173	219	260
Yard Debris Processed at Processors	60	70	165	266	335 ²

¹These larger numbers are the result of using the 1986 Metro composition survey as the base.

²This number is based on a conversion ration of 7:1. Previous totals were based on a conversion ration of 10:1. At the 10:1 ration, this estimate would be 470.

Metro has been receiving and stockpiling source separated yard debris at the St. Johns Landfill for several years. In March of 1986, the Metropolitan Service District assured the Department that Metro would establish a new processing facility at the St. John's Landfill to be in full operation by July 1987 and to handle 200,000 cubic yards of source separated yard debris. This capacity would be twice the primary production of either of the two private facilities. Metro has

not provided this new facility. However, in March 1987, Metro contracted with Grimm's Fuel to remove all of the accumulated yard debris which was clean enough to be processed and all of the new yard debris received after that date. This source separated yard debris was transferred to Grimm's processing facility.

In August 1987, Metro contracted with McFarlane's to deliver approximately 7,000 yards of processed yard debris product to the St. Johns Landfill. This material will be used as a supplement to final cover as the site is closed. This contract will utilize an amount of processed material equivalent to 70,000 yards of loose yard debris.

The Unified Sewerage Agency of Washington County has started to receive source separated yard debris from the public, for a fee. They will process this material into a bulking agent for the composting of their sewage sludge.

United Chippers, a consortium of private mobile chipping companies, has established a receiving area and now accepts source separated yard debris from the public, for a fee. The material which they receive will be processed with their mobile chipping machines.

The city of West Linn has moved and expanded its yard debris composting project. However, West Linn still only accepts material from city residents.

East County Recycling has established a yard debris processing facility in northeast Portland. They have chipped source separated yard debris but have not marketed any of their ground material. The Department cannot make an estimate of the processing capacity or market impact of this operation until they have developed some processing and marketing history.

(6) Marketing Compost Product

Most people who testified said that there should be strong markets for compost products before yard debris is identified as a principal recyclable material. Both of the area's existing processors are actively developing markets for sale of their yard debris compost products. In 1986, Metro assisted the processors in promotion of their compost products. Metro also contracted with Northwest Economic Associates for a market analysis for yard debris products and a marketing plan for yard debris compost.

The market analysis of Portland metropolitan area yard debris identified two high priority and two lower priority market outlets for yard debris products. Landscape ground cover and soil amendments and nursery planting mediums were the two high priority uses. Hog fuel and compressed fireplace logs were the lower priority uses. The analysis indicated a potential for a large demand for yard debris products in the high priority group.

The two major processing facilities now receive about 200,000 cubic yards of material annually, approximately 11% of the total yard debris generated in the area. The material received in 1986 was processed to produce about 25,000 cubic yards of marketable products. If all of the yard debris generated in the area were processed, about 180,000 cubic yards of fuel, soil amendments and ground cover would be produced annually. This represents less than 20% of the present market demand for these materials.

Processed yard debris is sold to already existing fuel, agricultural and horticultural markets. Similar "waste" products from forestry and agriculture activities have been processed and sold to these markets for years. Processed yard debris will partially replace peat moss, mushroom compost, barkdust and rotted sawdust in the landscaping and soil amendment markets. Peat moss comes from Canada and Washington while mushroom compost and wood products come from Oregon. Processed yard debris usually incorporates some percentage of these materials in its feed stock.

The final composted yard debris product has its own unique characteristics which will affect its use in different markets. The material is darker in color than barkdust, which may cause some consumer resistance to use as an aesthetic ground cover, but has higher moisture retention, which makes it a better soil amendment. In general, the fine processed yard debris is a replacement for fine barkdust, rotted sawdust and mushroom compost. The coarse processed yard debris can be used in the same applications as coarse barkdust, including for ground cover and soil stabilization. A blend of fine processed yard debris and soil can be used as a nursery planting medium.

The Metro Marketing Plan for yard debris compost is a marketing plan to sell at least 75% of the yard debris generated in the Portland area by 1991. This will mean an increase of almost 60,000 yards of product in addition to the 25,000 yards presently being marketed. The plan describes a Metro yard debris program that will provide cost effective technical and market assistance to private sector processors so that strong demand is created for initial and repeat sales of yard debris compost. It is the intent of the plan that Metro will undertake activities that complement and encourage private sector development of new products using yard debris. It is further proposed that Metro assist private firms to develop markets so that the private operations are profitable and the firms are motivated to undertake significant promotion and advertising programs for these products. The marketing plan spans six years and identifies specific activities to be carried out over that period of time.

(7) Unprocessed Yard Debris

There is concern about large quantities of unprocessed yard debris at St. Johns Landfill and McFarlane Bark. One local official has recommended that yard debris collection not be required until all backlogged material is processed and all new material is marketed within one year after it is received.

McFarlane's Bark reports that they are processing at least as much material as they are bringing in. An accumulation of unprocessed inventory remains from previous years. Metro has stockpiled source separated yard debris at St. Johns for several years, but has not processed any of it. The Department will begin to monitor all yard debris collection sites to ensure that all material is processed and sold. Sites that do not process and distribute product will be regulated at disposal sites.

The Department is now proposing to require the removal and disposal of all unprocessable yard debris accumulated at the St. Johns Landfill. The Department is also proposing a processing schedule which will restrict the amount of material accepted at McFarlane's until the back log has been eliminated and all new material is processed and sold in a timely manner.

(8) Metro's Role in Yard Debris Recycling

There was considerable discussion about Metro's role in yard debris collection and recycling, and suggestions that Metro should regulate yard debris under its waste reduction program instead of DEQ regulation. Metro has been involved with yard debris since 1981 when they received an air pollution control program grant to demonstrate acceptable alternatives to backyard burning. The Metro funded demonstration projects dealt with both collection and processing.

Metro demonstrated that yard debris collection and processing was a viable alternative to backyard burning.

In 1985 Metro made yard debris processing a special project in their "Solid Waste Management Plan Update 85". This plan identified five specific regional yard debris recycling options. They were:

- 1) develop an additional large scale collection/processing site at St. Johns Landfill,
- 2) develop more regional yard debris collection sites,
- 3) stimulate processing through diversion credits and material purchasing,
- 4) supply assistance to the processors, and
- 5) provide information, education and promotion services for the processors.

In March of 1986, in testimony at the yard debris hearing, Metro indicated that they would do the following: 1) establish a processing facility at the St. Johns Landfill, 2) provide markets and processing capacity for up to 200,000 cubic yards of yard debris on a permanent basis by July 1987, and 3) procure and subsidize markets for additional amounts of yard debris produced by curbside collection.

In April 1986, the Metro Council confirmed Metro's commitment to yard debris recycling by adopting the Metro Waste Reduction Plan. In the Plan, Metro committed to using incentives and certification programs to remove yard debris from the waste stream. They also committed to develop a yard debris processing facility at the St. Johns Landfill by 1987 and to ban yard debris from disposal sites by 1989.

It now appears that Metro is changing its yard debris programs. In January 1987, Rena Cusma, Metro submitted further testimony to the EQC hearing on yard debris. She indicated that "Metro does not support action to place yard debris on the list of recyclable materials." She further stated, "Requiring that yard debris be "recycled" under SB 405 appears to Metro to be an inappropriate and unproductive usage on an important waste reduction statute." Metro is reassessing its commitment to using rate incentives and a certification program to establish a region-wide collection system. The new testimony indicated that Metro would address "the feasibility" of using a certification system to establish a region-wide collection system.

Metro's new comprehensive solid waste management planning program will address yard debris collection and recycling as one component of the planning process. However, it is too early in this planning process to determine what emphasis will be placed on yard debris. In the mean time, Metro has resumed their yard debris recycling promotion and market development programs.

Summation:

1. Yard debris comprises the largest single component of the solid waste stream in the Portland metropolitan area. Most of the yard debris goes into area landfills.
2. It is cheaper for the public to take source separated yard debris to a processor for recycling rather than a disposal site for landfilling.
3. Two private firms, Grimms Fuel and McFarlane's Bark, have facilities which process source separated yard debris into marketable products. Two other firms, United Chippers and East County Recycling, also shred yard debris and produce an uncomposted product. The Unified Sewerage Agency, City of West Linn and St. Johns Landfill also accept yard debris from the public.
8. Yard debris chipping services are available to all five of the Portland area wastesheds. These services provide on-site processing of yard debris, and if requested, removal of the processed material.

Processed material from these chipper services is either delivered to one of the major processors or directly to an agricultural user. For quantities of more than two yards, it is less expensive to have a mobile chipper come and process source separated yard debris than to have the same material collected and disposed of as solid waste.

9. Three cities, Oregon City, West Linn and Gladstone, presently provide systematic collection of source separated yard debris. Collection service is also available in part of Southeast Portland.

Attachment V
EQC Work Session
December 11, 1987 EQC Meeting

MEMORANDUM

To: Environmental Quality Commission

From: Lorie Parker, Hearings Officer

Subject: Report on the Public Hearing on March 3, 4, 5 and 6, 1986 and January 28, 1987 Concerning Proposed Rule Amendments to OAR 340-60-010 and -030 to Identify Yard Debris as a Principal Recyclable Material in the Clackamas, Multnomah, Portland, Washington and West Linn Wastesheds.

Summary of Procedures:

Public hearings were held at the following times and locations:

March 3, 1986, 3:00 p.m. and 7:00 p.m., Portland

March 4, 1986, 7:00 p.m., Beaverton

March 5, 1986, 7:00 p.m., Gresham

March 6, 1986, 7:00 p.m., Oregon City

January 28, 1987, 3:00 p.m. and 7:00 p.m., Portland

The purpose of these hearings was to receive testimony on proposed rule changes which would identify yard debris as a principal recyclable material in the five Portland area wastesheds. Public notice was provided prior to the two sets of hearings. Oral and written testimony were accepted at the hearings. Written testimony was also received at the Department's offices prior to specific deadlines. An informal discussion of the effects of the proposed rule change was allowed at the hearings after all formal testimony had been received.

Yard Debris Recycling - Hearings Officer's Report
Page 2

List of Witnesses:

March 3, 1986 Portland 3:00 p.m.

Marvel Leonnig, Citizen of Southwest Portland
*Jeanne Roy
*Estle Harlan, OSSI
*Gaylen Kiltow, PASSO
*Carl Miller, Refuse Handling Inc.
*Bob Kuhlken, Multnomah County
*Joe W. Cancilla, Jr., PASSO
Rod Grimm, Grimm's Fuel

March 3, 1986 Portland 7:00 p.m.

Floyd K. Dees, Dee's Debris
Daryl E. Foster, Dee's Debris
Stan Kahn, Sunflower Recycling
Kathy Cancilla, PRROS

March 4, 1986 Beaverton 7:00 p.m.

*John Drew, Association of Oregon Recyclers
*John Drew, Far West Fibers
Ron Hohnstein, Valley Garbage Service
Tom Miller, Miller's Sanitary Service
Forrest C. Soth, City of Beaverton Recycling Task Force
Patricia Graham, Hillsboro City Council
John Walker, Walker Garbage Service
*Louise Weidlich, Neighborhoods Protective Association
Tim Erwert, City of Hillsboro

March 5, 1986 Portland 10.00 a.m.

John Trout, Teamsters Local 281
Michael Borg, Oak Grove Disposal

March 5, 1986 Gresham 7:00 p.m.

Dick Flury, Columbia Sanitary Service
Ronald Burbach, Twelve Mile Disposal

March 6, 1986 Oregon City 7:00 p.m.

*Brian Brophy, C.R. Brophy Machine Works
*Dave Phillips, Clackamas County, DTD
*John McFarlane (Kathleen Keene), McFarlane Bark
Richard Bloom, Gladstone Disposal
Stephen Schwab, Sunset Garbage Collection
*Joan Brentano, United Disposal Services
Jack Deines, Deines Bros. Sanitary Service, Inc.
Nathan Lawrence, Organic Debris Chipping Service

*Written testimony also submitted.

Yard Debris Recycling - Hearings Officer's Report
Page 2

List of Witnesses:

March 3, 1986 Portland 3:00 p.m.

Marvel Leonnig, Citizen of Southwest Portland
*Jeanne Roy
*Estle Harlan, OSSI
*Gaylen Kiltow, PASSO
*Carl Miller, Refuse Handling Inc.
*Bob Kuhlken, Multnomah County
*Joe W. Cancilla, Jr., PASSO
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Hearings Officer's Notes on Oral Testimony

Portland

March 3, 1986

3.00 p.m.

Marvel Leonnig, citizen of southwest Portland, is concerned about the costs to people to have their yard debris hauled away, especially the elderly people with oversized lots in her area.

Jeanne Roy,* citizen of southwest Portland, supports the Department's proposal in the Portland wasteshed, although she is not familiar with the other wastesheds. Her first concern is the volume of material. She wants to keep it out of the landfills. Her second concern is whether it fits the definition of a recyclable material, and her third concern is that the city won't take action unless yard debris is on the list of principal recyclable materials. She agrees with the implementation date of July 1, 1987. She feels that it should be given attention with the collection of other recyclable materials. She wants to keep pressure on the city to act. She recommends collection be seasonal, i.e., one Saturday in the spring, one Saturday in the fall, or drop-off sites like the West Linn program, located within 15 minutes of the residence, which would be open on Saturdays. She feels that drop-off sites would be less costly than weekly or monthly collection. She does not like an on-call program because it can't be required of the hauler, and it would be easy to set up a system so that it doesn't work.

Estle Harlan,* Oregon Sanitary Service Institute (OSSI), feels that yard

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debris does not meet the definition of a recyclable material. First, it needs two collection systems (a separate truck and driver), which would be a hardship on small collection firms. Second, regarding the rule which requires proper preparation of materials, the collector would need to open the bag to check for contaminants, but that is a health hazard. She feels that you can't trust citizens to keep their yard debris clean. Third, in Gladstone the taxes pay for the program, in Oregon City the city pays for the program, but if the haulers were paying for the program, it would require a substantial rate increase. The processors would need at least 5 years to prepare for the increased volume. With curbside piles, the wind blows them away. Piles would be a fire hazard and unsightly in the neighborhood. She is concerned that neighborhood piles would become neighborhood dump sites. She is concerned about marketability of yard debris and stockpiles occurring at the processors. She feels that drop-box loads or greater are the only volumes that could be economically diverted from the landfill.

Gaylen Kiltow,* Portland Area Sanitary Service Operators (PASSO), feels that DEQ data is incorrect. He feels that DEQ has ignored some issues. First, before recycling service can be initiated, a hauler needs: 1) truck for wet garbage, 2) high-grade paper trucks, 3) a recycling truck, and 4) a yard-debris truck. This affects the cost-effectiveness of the hauler's collection program. It also adds more traffic to the streets and adds to customer confusion. He feels that processing facilities can't handle the volume of materials which would be collected. DEQ should not be hasty in

*Written testimony also submitted.

its decision to make yard debris a recyclable material. He cited collection costs and compared the cost of disposal with the cost of recycling and concluded that yard debris was not a recyclable material. Customers want their yard debris picked up immediately. The material becomes unsightly if it sits for long periods of time. If the material is bagged, the bags would have to be opened by the hauler and inevitably people mix garbage in with their yard debris. He read a statement about a pilot program in southeast Portland which was done on an open-box truck, charging \$.75 to \$1.50 per bag. Gaylen's operation is in Eastmoreland which has a city sponsored leaf cleanup program, but people still want their garbage hauler to take leaves away.

Carl Miller,* Refuse Handling, Inc., showed slides of an area in Miami, Florida which had established a yard debris collection system, where debris was piled in front of people's homes and approximately every 4-6 weeks it was picked up using a clam shovel with a gondola compactor truck. Two workers with brooms swept up after the material was picked up. The slides showed a lot of garbage mixed in with the yard debris piles in the neighborhoods. The material was taken to the landfill. Mr. Miller feels that this proposal does not fit well with "environmental quality." It does not make sense that you have to pay for disposal when it costs money to collect the material. He feels you need restrictions, controls, or a policing system to enforce it.

Bob Kuhlken,* Multnomah County, is concerned that Metro's economic

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justification is based on the economy of scale of a franchise. With an unfranchised system, such as that in east Multnomah County, it would be too costly to establish a yard debris collection program. His second concern is processing capabilities. Since the current two processors have a backlog of materials, he is concerned whether there is market for the materials. He suggested that a disposal ban at the landfill could be required. A ban on disposal would force the material to be processed at appropriate sites. His fourth concern is about community appearance, such as brush piles stacked at the curb side. His fifth concern is that a collection system would be a disincentive to home composting. He would prefer home composting over a yard debris collection system. He feels that the collection system should be financed through a user fee, not worked under the principle of grouping with other recyclable materials. His sixth concern is that alternative methods should be allowed. He suggested DEQ change wording to "will allow" rather than "will consider allowing" alternative methods because of the seasonal nature of the material. He said DEQ should study the markets and the processing of yard debris and pursue a ban at the landfill, but he does not support putting yard debris on the list of principal recyclable materials.

Rod Grimm,* yard debris processor, did not take a position for or against the Department's proposal. He is concerned about a market for the yard debris material. He feels that there could be a market because the material is better than barkdust, sawdust, and peat moss. He is only concerned that DEQ is moving too fast and it needs to educate the people to

*Written testimony also submitted.

purchase the product. He said there are no weed seeds in his product. The yard debris must be processed properly through the composting process to produce a good material. He said that yard debris has a value as a soil amendment and groundcover and can also replace bark which can then be used as hog fuel for energy. His firm can handle 700,000 tons per year of yard debris. He can process that material but must build the market to purchase the product. He is concerned that other processors might destroy the market by not processing properly. He does seminars for home composting and feels that DEQ and Metro should be more involved in composting education. He suggested that perhaps there could be a maximum amount that the landfill would accept to keep out large volumes of yard debris. He feels that markets needed about 5 to 7 years to develop. Yard debris material will only replace 25-30% of the existing barkdust markets. DEQ should educate people on composting and should have flexibility in the system which is developed. After being questioned by Joe Cancilla on what the processor will pay the hauler for his material, Mr. Grimm said he will charge less than the landfill charges for disposal. Mr. Grimm felt it would take at least 10 years before he could pay his customers for their material.

Joe Cancilla, PASSO, said DEQ should wait until the market is established and there is no charge to dispose of the material or the processors will pay him, the hauler, for the material, before yard debris is classified as a recyclable material. The proposed system puts too much burden on the hauler.

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Portland

March 3, 1986

7.00 p.m.

Floyd Dees, Dee's Debris, is concerned about the market being able to absorb the volumes of material which would be collected. He feels the public needs to know that the commodity is there and that it is worthwhile. Yard debris as a recyclable material may generate a huge volume of material which would keep the price low and, therefore, the program may not be economical. He described the yard debris processing business which he has developed. He has a chipper which can chip 8 inch logs or less. He goes to a customer's house, grinds the debris, and leaves the mulch for the customer or hauls it away for free. He has been in business for one year, his business is growing and many of his customers are repeat customers or have heard of it from other customers. He feels the public is not aware of the many alternatives for yard debris. He built his business by charging less than the disposal charges at the landfill and feels that if the disposal charges are reduced, as proposed in Metro's plan, this would hurt his profit margin by increasing the number of self-haulers and taking away his business. He said his company is not at full capacity yet. He feels DEQ and Metro should do more promotion to make people aware of alternatives from landfill disposal for yard debris. After he chips the people's yard debris, approximately 25% of the people keep the material and the remaining 75% of his customers' material he delivers for free to local farms. He makes an occasional sale to customers who need mulch and charges approximately \$10 for 10 yards of material. He said he does not handle

*Written testimony also submitted.

non-woody debris. His main concern is that if yard debris is a principal recyclable material, it might flood the market.

Daryl Foster, Dee's Debris, feels that if a collection system was established and the material was mulched and redispersed throughout the communities then there would be a market as a soil conditioner or mulch. He said Dee's Debris minimum price is \$19.50. Daryl agreed with Floyd that there was a lack of general knowledge regarding alternatives to disposal of yard debris.

Stan Kahn, Sunflower Recycling, provides an on-call curbside collection program for all kinds of yard debris (leaves, grass and sod). He uses a rear-loader truck and takes the material to McFarlane's. If DEQ and Metro are serious about reducing materials going to the landfill, then they must have yard debris on the list of principal recyclable materials. He feels that the July, 1987 deadline was enough time to let the people know that it is available. He feels that processed yard debris is at least equal to barkdust in quality if people will get used to the color. His company believes that the cost of collection of yard debris is equal to or less than the cost of collection of garbage. It requires the same amount of work (labor and truck) but the material is lighter for the same volume. If the city wants to contract its recycling, it is just as easy to contract for yard debris collection services. If a garbage company is too small, then that company could get together with another company who is collecting yard debris. In the last year and one-half since he has offered this

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service, he has notified all of his garbage customers and most of his recycling customers. He feels this represents one-fifth of the city of Portland's population. He collects yard debris once a month and seasonally two times a month from about April through October and feels that if his program was well publicized, he may need to collect on more days. He said that sometimes people are impatient to have their material collected, but as long as collection is consistent, people can plan for when it will be collected. He also has a drop site where people can bring their yard debris if they are impatient. He takes all compostable material and charges extra for sod. He charges by the cubic yard. One person drives a 16-yard compactor truck which holds 60-65 yards of material (4:1 compaction). One person can handle 30 yards. An average pickup is one and a half to two yards, but during his busy season, they may do 30-40 pickups in an 8 hour day, approximately 80-100 yards of material. He feels that markets are not a problem. He feels that collection is easy, easier than garbage, and that processing is simple and that the material should be on the list of recyclable materials. He also makes compost from household garbage. He has two cement mixers to compost his material and has been able to sell it or his employees take it home with them.

Kathy Cancilla, PRROS, favors yard debris recycling but is not convinced that it meets the criteria in the definition of a recyclable material. Until you can sell the material for recycling, then it is not a recyclable material. She felt DEQ should delay the date of implementation and do more education and promotion. Yard debris can be a useful end product. Create

*Written testimony also submitted.

demand first, then set up the supply system. Work to develop the collection system first and when the demand is there, private enterprise will be there to collect the material.

Beaverton

March 4, 1986

7.00 p.m.

John Drew,* Association of Oregon Recyclers (AOR), commends DEQ and Metro for seeking methods to capture and reuse yard debris rather than landfilling it. However, AOR does not support the strategy of adding yard debris to the list of principal recyclable materials. First, the public will be confused because yard debris is not a traditional material and this will hurt the recycling of traditional materials. Second, yard debris collection requires a totally separate system. The seasonal volumes of the material will make collection difficult and more complex than collection of other materials under Senate Bill 405. Third, serious yard debris collection and marketing problems exist. He is concerned that Oregonians will not prepare their materials properly and that it will be difficult to gear up collection systems. He feels that there is insufficient capacity for the existing processing industry to absorb new volumes. He is concerned that an overly ambitious program that is not tied to supply and demand may destroy the existing market. He also feels that the deadline of July 1, 1987 is not achievable. In response to a question, he indicated that he could not identify a new site for collection of yard debris.

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John Drew,* Far West Fibers, describes his company as a recycler of mostly paper products. In cooperation with the Washington County Haulers Association, they provide a free recycling depot for the public to use for traditional recyclable materials. They also provide a service for the haulers to do joint marketing of materials to markets. He said that if yard debris is a recyclable material, it would be treated together with other recyclable materials and his company does not want and is not able to accept yard debris as a recyclable material. Yard debris is a putrescible material and he is concerned it will become foul, malodorous, and rotten by its very nature. Yard debris is a solid waste problem. It is not a recyclable. He concluded that while he commends DEQ's efforts to reduce waste, he is strongly opposed to adding yard debris to the list of principal recyclable materials.

Ron Hohnstein, Valley Garbage Service, Beaverton, opposes the proposal to make yard debris a recyclable material. He feels yard debris does not fit the definition and supports Estle Harlan's previous testimony. He suggests as an alternative that a recycling drop-off be placed at each transfer station within Metro's boundaries. He feels there could be adequate facilities at the proposed Washington Transfer and Recycling Center (WTRC), and an area could be made available at Clackamas Transfer and Recycling Center (CTRC). His company operates in the northeast Beaverton and unincorporated areas of Washington County and participates in the city of Beaverton's spring/fall cleanup program.

*Written testimony also submitted.

He feels that there should be an area where people and landscapers can take their yard debris. He feels that a yard debris collection program would cost the city and the haulers money. What is needed is public education to keep the loads of yard debris free from contamination. He has participated in Beaverton's Clean Sweep Week and contamination has been a substantial problem with the program. The workers have tried to direct people to proper trucks, but it is very difficult and needs a lot of watchfulness. He said that since other recyclables aren't paying for themselves and yard debris is even less marketable, he would prefer a drop-off site with a nominal charge for the collection of yard debris.

Tom Miller, Miller's Sanitary Service, Beaverton, agreed with the testimony of John Drew. Miller's Sanitary Service participates in the Beaverton Clean Sweep Program. Out of 27 loads of material, 1 load of yard debris ended up at the processor, but it was unacceptable. He cited several problems with the proposed rule. First, his concern is who will regulate the types of materials being set out. It will be difficult to avoid contamination of the materials. Also, he is concerned that with a monthly program, yard debris will become a permanent fixture in neighborhood front yards. He is primarily concerned about the cost of the program and felt DEQ should notify the public about the potential cost of this system. Recycling connotes that material is worth something, but yard debris cannot be sold. Are we willing to pay the price of a clean environment? Collection of yard debris would require a separate collection system which would mean additional cost for truck, driver, and labor. Current revenues do not support the system.

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Forrest Soth, citizen and member of Beaverton's Recycling Task Force, has participated in Beaverton's Clean Sweep Program and has been active in Beaverton's recycling program for several years. The current recycling program in Beaverton has not been self-supporting and he is concerned that adding yard debris to the materials being recycled will add a tremendous expense to the haulers and a substantial rate increase for the customers to support the program. He suggests instead investigating separation of yard debris during a clean sweep week or providing an attended drop-off site to ensure clean loads. He feels that a lot of public education would be needed before the program could be implemented.

Patricia Graham, citizen and member of the Hillsboro City Council, is concerned about the recycling of yard debris. She agrees with John Drew's testimony that yard debris is not in the same category as other recyclable materials. She does not feel that people will be willing to let the debris pile for a month waiting for the collection system. Handling of yard debris is more costly than handling the other materials and one year is not enough time to prepare for implementation. She feels that waste reduction is important, but that plastics is a much bigger problem in the wastestream than yard debris is.

John Walker, Walker Garbage Service, is also a member of the Washington County Solid Waste Advisory Committee. He agrees with John Drew's testimony. He feels that the date of implementation is unrealistic and is

*Written testimony also submitted.

against curbside collection of yard debris. He feels that many dropbox loads could be diverted if neighbors would go together and rent a box. He is afraid that people will think collection will be a freebie but that is not true. We must look at the labor cost and the cost of the hauler. He feels that small loads, i.e., a garbage can of grass, would be too impractical to separate out. He concluded that he is opposed to the addition of yard debris as a recyclable material. He recommends against using the Hillsboro Landfill as a permanent yard debris site because of neighborhood opposition.

Louise Weidlich,* Neighborhood Protective Association, is trying to protect property rights and protect the people against government search and seizure. She supports backyard burning and would like to see backyard burning reinstated. She is concerned that the proposal will raise garbage rates. She is also concerned that the proposal will restrict people's freedom and lead to world government.

Tim Erwert, citizen, and Assistant City Manager of Hillsboro. Hillsboro does a free spring cleanup program due to the fear of neighborhood accumulation of yard debris. When the city publicizes its spring cleanup program, piles continue to appear and seem to accumulate as quickly as they can be collected. An on-route program became unmanageable. Recently the city began doing a leaf cleanup program in the fall. This program has been more manageable and they have been able to give the material away, although there is no market for them to sell the material. This program is done at

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a cost to the city, but it keeps the storm drains clean. They do a cooperative spring cleanup at two drop-off sites. A large percentage of the material is yard debris. Approximately 20-30 dropboxes and several compactor trucks are filled because the public is allowed to dispose of their materials for free. Either of the two sites is available for a permanent yard debris collection site. He stated that Hillsboro residents can now burn it, haul it to the landfill, compost it, chip it, or use it for firewood.

He considers yard debris a problem different from other recyclables and it should be treated differently. He does not support adding yard debris to the list of recyclable materials because of the lack of markets and the difficulty in disposing of the material. He is concerned that free curbside service would increase the volumes of materials the collectors would have to deal with. He feels DEQ should do more studies to determine the size of the problem and whether a collection program is feasible and to see whether markets exist and can deal with the tremendous amount and fluctuation in volumes.

Portland

March 5, 1986

10:00 a.m.

John Trout, Secretary-Treasurer of Teamsters Local 281, is concerned about the economic impact of putting yard debris on the list of principal recyclable materials. He said the cost of implementing the program with

*Written testimony also submitted.

additional equipment and personnel could put small garbage companies out of business. He feels that, while large quantities may be recyclable, it does not make sense to separate and collect less than five yards of material. The net system cost for collection of yard debris is greater and therefore the material does not meet the economic standards in the law. He is concerned about whether the processors could process the material and market the increased volumes of material. Mr. Trout also said that the compaction ratio is not what was stated in the Metro paper. It would be a 2:1 compaction with a rear-loader truck, but only a 1:1 ratio with a sideloader truck, because the material is springy. He feels that the cost analysis he provided to Metro is accurate.

When Lorie Parker asked him about the possibility of yard debris collection as part of reorganizing the collection system in Portland, Mr. Trout said that while a franchise system would be more efficient and equipment would probably be available, he still believes that small quantities of yard debris would not be practical to collect source separated. He stated that the public wants their material taken away immediately rather than waiting for a collection date once a month.

He said that the survey results in the Metro report were misleading. While people claim they are willing to pay more for recycling service and will participate, he feels that even with free recycling only 15-18% of the people will participate in the program. He said the cost of establishing the program would be significant and the public should be aware of this

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fact. He does not feel that it will be any cost savings to the consumer. He said contaminants are a problem in collecting yard debris in a drop box. Some companies are willing to provide small containers to their customers. He charges \$20 for rental of a 2-yard container, based on \$5 delivery charge and \$15 dump fee.

Michael Borg, Oak Grove Disposal Company, a franchised hauler in Clackamas County, stated that all Clackamas County haulers offer some kind of yard debris collection services; small bundles are collected on-route while large piles are collected through the drop-box service. Contamination in the loads is a problem and there is a need to educate the public. It is more costly to take a dropbox load of yard debris to a processor than to a landfill. It may be less costly if collected in a compactor. It is hard to get more than a 1 1/2:1 compaction. He is charged \$1.80 a yard for a drop-box load at McFarlane's and \$2.25 a yard in a compactor truck. Therefore, it is cheaper to go to CTRC for \$17.38 a ton for the same amount of material. He charges approximately \$18 - \$20 to deliver a drop box for 48 hours. He feels that the extra labor and equipment will be costly because of union contracts and participation will be low. He disagrees with Metro's statement that yard debris is 13-20% of the waste in the Portland area. For a 20-yard drop box, he charges \$60/day service plus disposal costs which amount to \$77.38 at CTRC and \$96 at McFarlane's. He also questioned the inefficiency and unsightliness of having a packer truck sit in a parking lot half full of yard debris, awaiting the next collection date. He will continue to divert as much material as is economically

*Written testimony also submitted.

feasible, but he asks DEQ not to create a burden on the hauler before we can come up with final solutions.

Gresham

March 5, 1986

7:00 p.m.

Dick Flury, Columbia Sanitary Service, Gresham, opposed DEQ's proposal concerning yard debris as a recyclable material. This proposal would require a special trip, meaning an extra truck, extra labor and an extra driver. Since yard debris decomposes in six months and it becomes just dirt, he doesn't feel it is a problem. He feels DEQ should look at other problems such as dog manure and cat litter in the garbage. He participates in the spring/fall cleanup program in Gresham and Fairview and feels that these programs are very expensive for the haulers. He takes his material to the St. Johns Landfill and rarely gets clean loads of yard debris. He feels that his customers have very little brush on the route and that, if he used his garbage truck to collect yard debris, there would not be enough of a load to go to a processor. Therefore, the material would sit in the truck and it would not be economical.

Ron Burbach, 12-Mile Disposal Service, which serves Fairview, east Multnomah County and some of Gresham, contested the figure in the Metro report which claimed that 13-20% of the material in the landfill is brush. He does not haul that much yard debris, especially since the people in his service area can burn yard debris. He participates in Fairview's

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spring/fall cleanup program and finds very little brush in his garbage. If monthly yard debris collection service was available, he feels that burning will stop and it will become extremely costly for the hauler. His company does provide dropbox service and he finds very few loads which are all brush. The only yard debris he encounters is grass, not brush. He feels that people have taken care of their own brush, not the garbage man. He uses the Killingsworth disposal site for his dropboxes because it is too far to go to St. Johns or CTCR.

Oregon City

March 6, 1986

7:00 p.m.

Brian Brophy,* C. R. Brophy Machine Works, is concerned about how processors would handle increased volumes of yard debris. He feels the present system is inadequate and facilities are not adequate to process the material. His business is across from McFarlane's, and he is concerned about the mountain of yard debris and does not want any more material added to it.

Dave Phillips,* Solid Waste Director, Clackamas County Department of Transportation and Development, supports the concept of recycling as much yard debris as practical, but is opposed to the listing of yard debris as a principal recyclable material. The first and foremost reason is the lack of marketing of the processed materials. In the past several years, McFarlane's has processed and marketed very little material. The pile has

*Written testimony also submitted.

become very large. The mountain of yard debris has raised concern regarding development on adjacent properties. The problem was addressed at a meeting of the Clackamas County Economic Development Commission where McFarlane's stated that it would take approximately 5 years to reduce the pile to a point where only one year's worth of material remained. Mr. Phillips questioned whether they could process and market the additional material delivered as a result of the proposed rule change. He asked that we not overload the current system with additional material. The current 25% per year growth rate is healthy, and if you speed it up, it would make the system fail. Also, McFarlane's current space is limited and expansion would meet with public opposition. His second concern regarded the cost of providing a second collection program for yard debris which would be very expensive to the industry. He suggests several things that need to be done that would result in more material being diverted without placing yard debris on the list of principal recyclable materials. First, in accordance with the Metro Waste Reduction Plan, require a processing area at the St. Johns Landfill. Second, require that both dropbox and public loads of pure yard debris be diverted to processing stations. Third, Metro and DEQ should assist with the installation of scales at processing centers to help offset the rate disparity between truck and dropbox loads. Fourth, seek an executive order from the Governor to require the Oregon Department of Transportation to specify yard debris compost in all Highway Division projects, especially those in the Portland area. Fifth, DEQ and Metro should sponsor composting seminars targeted at landscape architects and maintenance companies. Do not place yard debris on the list of principal

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recyclable materials until after there are three processors in the area and all of these processors are processing and marketing more material than they receive in a one-year period. When supply exceeds demand, then allow nine months to implement a program for separate collection of yard debris. Make yard debris a recyclable material only within the Metro boundary, not the watershed boundaries.

Kathleen Keene,* McFarlane Bark, testified that her family does not like government infringement such as forced recycling and the burning ban, but realizes that the burning ban was necessary. Since the cost of landfilling is a problem, they realize it is necessary to recycle all recyclables, including yard debris. Let DEQ decide if the time is right for making yard debris a recyclable material. McFarlane's hosts home composting seminars with the help of Jerry Herrmann. DEQ and Metro should help advertise these seminars. McFarlane's is currently doing a cost analysis study of yard debris as a marketable product. Regarding the markets, yard debris like barkdust is seasonal; March through September is their biggest season. Yard debris replaces old sawdust, which is no longer available, and also peat moss, mushroom compost, barkdust and sawdust. There is a market for the fine compost, purchased by landscapers, nurseries, government and homeowners as an inexpensive alternative soil amendment. The coarser product is sold for mud control. Several alternatives exist for hauling yard debris. Landscapers and private haulers could operate at a lower fee than refuse haulers. In response to questions about the pile, Kathleen gave several reasons why the pile is so large. First, they

*Written testimony also submitted.

accepted yard debris for over 4 years, but only purchased a grinder 1 1/2 years after they started accepting material and only have been processing in earnest for the last year. Second, old sawdust was mixed with yard debris but old sawdust is not available now. Now fine compost is a replacement for it and is just as good. Third, processing of yard debris did not begin fast enough so they lost customers which would have been a potential market. In response to a question regarding the number of years needed to remove the pile, Kathleen responded that at the rate they are selling (processing) it now, according to DEQ estimates, with a 25% growth rate, they still could reduce the pile within 2 years. The pile has already started getting smaller and has taken on a different shape and they are now hauling out more than they haul in. Kathleen also discussed a recent State Highway Department bid specification where ODOT specified both the fine and medium compost as alternatives to mushroom compost. It may be used in a highway project on the St. Helens Highway.

Rick Bloom, Oregon City, Mollalla, and Gladstone Disposal Companies, discussed his company's programs to collect yard debris. In Gladstone, they have been collecting yard debris since 1969 as a tax-funded program. Until March 1984, the yard debris was mixed in with the garbage. When his company began doing the collection service in March 1984, yard debris was kept separate but was brought to CTRC. One month ago they began taking the yard debris to McFarlane's for processing. In 1984 they collected 970 tons of yard debris, and in 1985 they collected 1,089 tons of yard debris. The cost is \$2.18 per cubic yard at CTRC and \$2.25 per cubic yard at

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McFarlane's. In the last month, McFarlane's has been manually extracting plastic bags for an increased cost. There is a machine for removing bags, but it costs \$14,000-16,000 and the lack of market makes it hard to justify a machine this expensive. Removing bags manually is labor intensive and his material is 80% bagged during the peak season. The Gladstone program services 3,466 homes at a cost of \$10.58 per household. He tried bag removal on-route in Gladstone, but labor costs doubled. Another problem is where to put the bag after it is removed. Mr. Bloom feels that July 1987 is premature, that 3-5 years at a minimum are needed to develop and expand current programs. In 1986, he began operating the Oregon City program which serves 3,800 tax lots at a cost of \$15.84 per house. It is economical because the tax base makes the program easy to budget for. He feels that if the program were not tax funded, it would cost at least \$2.50 direct charge for pickup in bags. A brush stop would cost even more. A problem he has encountered in Oregon City is historically low participation rates. Bad debts and the extra charges are hard to recover. He asks that DEQ not make Oregon City and Gladstone model programs because they are tax based. Other programs which are not tax based would encounter higher costs. He also feels the proposed boundaries are unfair. He said that it took the Gladstone yard debris program 3 years, and the Oregon City recycling program 4 years to test all the alternatives and see if the programs were cost effective. He feels that industry and collectors can handle yard debris efficiently and successfully but they need time to experiment to develop programs just as they have with the recycling programs. He recommends that we take one project at a time and do it well rather than take on too much and

*Written testimony also submitted.

have them all fail. Another problem he discussed was the lack of education by the public. Contamination of yard debris is a serious problem which needs monitoring. He feels that there is not enough time between now and July 1987 to educate the people. The Oregon City program in the past was allowed to have community piles which led to high contamination. His program has eliminated these piles because he is consistent and collects the material weekly, same day as garbage, to both customers and non-customers alike.

Steve Schwab, Sunset Garbage Collection Company, has participated in recycling for over 7 years. He feels that people cannot handle recycling now with low participation and poor preparation of materials, and he feels that people will not be able to separate out their yard debris. The public will think that recycling yard debris is a free service, when in reality it is not because of the tremendous amount of man hours to handle the material. He is not sure if yard debris disposal savings will offset the additional labor and truck costs. Therefore, he does not think it will meet the economic definition of a recyclable material. He has participated in a community cleanup program where Mt. Scott uses 30-yard dropboxes for yard debris. He felt this was a good idea but must be policed well to avoid contamination. Since the community pays the bill, the program works.

Joan Brentano,* United Disposal Service, testified that her company participates in several cities' cleanup programs and they do have a contamination problem. The hauler bears the disposal cost, not the city.

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They have provided separate areas for the collection of yard debris and appliances. The program is costly to attend and they still have contamination problems. United Disposal Company opposes the placement of yard debris on the list of principal recyclable materials for the following reasons: first, the cost of providing collection service is prohibitive (she cited specific costs); second, collectors are having a hard enough time collecting current recyclables weekly, and many of those programs are operating at a loss; third, it is difficult to find a market for this quantity and grade of material and often landfilling is less expensive; fourth, it is hard to bill numerous accounts, the system would work better with a tax base, and fifth, yard debris varies so labor costs can increase if a pile isn't stacked properly.

Jack Deines, Deines Brothers Sanitary Service, Inc., collects garbage in Clackamas and Multnomah County. Mr. Deines stressed that DEQ should not avoid the landfill issue. Despite recycling, waste reduction and resource recovery, DEQ still has to find a landfill. He feels the public will be deceived because they don't know they will be charged for the pickup of this recyclable material. Recycling of yard debris is not taking toxic materials out of the landfill. He feels that toxics are much more of a problem than the woody waste. He is concerned about not conserving energy; how many trips does DEQ want the hauler to make down the street? Siting a landfill is difficult politically and diversion keeps the issue down the road, but the problem won't go away. We need adequate landfill space.

*Written testimony also submitted.

Nathan Lawrence, Organic Debris Chipping Service, has been chipping yard debris since the backyard burning was banned. He has a mobile chipper which processes the yard debris into chips in people's yards. He serves both residential and commercial customers. 75% of the people keep the chips. He has a waiting list of people who will accept the remaining chips. He is neither for nor against the inclusion of yard debris as a principal recyclable material although he wants minimal government intervention. He turns debris into a usable material and feels that his is a better solution to the problem than hauling. Places like Grimms and McFarlane's provide a good service, but a lot of his customers either cannot haul the material away or cannot afford to have it hauled away. His prices depend on amount of material and the job, averaging about \$30 an hour. An average 4-5 yard pickup truck would translate into approximately \$15 to \$25 per truckload depending on the type of debris. His average charge is \$20 for a 5-yard pickup load. His rates are kept cheaper than the landfill charges. He calls his company "Organic Debris" so there is no question about contaminants. He sent information about his company to haulers so that if a customer has a large pile of yard debris, he can be called to chip it, but he has not received much response from the haulers.

Portland

January 28, 1987

3:00 p.m.

Richard Matz, Dees' Debris, does not support the listing of yard debris as a principal recyclable material. He feels that a company such as Dees' could

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handle the yard debris recycling in the city for the haulers.

Estle Harlan,* OSSSI, feels that yard debris does not meet the definition of a principal recyclable material for the following reasons: first, the Recycling Opportunity Act applies statewide whereas the proposed rule change only applies to the Portland metropolitan area, so yard debris makes more sense to be handled under the Metro Waste Reduction Program; second, there may be a problem in collecting the material curbside, that it could become a hazard to the citizens' safety and possibly a fire hazard and nuisance in the community; third, the cost of collection and recycling exceeds the cost of collection and disposal; fourth, if a fee for service is needed for the collection of yard debris, it would not agree with the generally accepted method of providing recycling collection service for free; fifth, McFarlane's and the St. Johns Landfill cannot handle the additional volume of yard debris which would be generated; and sixth, yard debris cannot be included in any grouping of recyclable materials.

Dave Phillips, Clackamas County, resubmitted his testimony of March 6, 1986. He commented that only one item in his testimony, yard debris composting seminars, has been aggressively pursued to date. He is concerned that McFarlane's can't handle the additional volume of materials, and submitted two photos as evidence of the existing mountain of debris. He recommends that the Department deal with yard debris through Metro's Waste Reduction Program.

*Written testimony also submitted.

Rod Grimm, Grimm's Fuel, testified as one of the major processors of yard debris in the Portland metropolitan area. His program accepts source separated yard debris for a \$2 per cubic yard disposal cost and has the capacity to process 3,000 cubic yards per day or three-quarters of a million cubic yards per year. He processes the material into a leaf mulch product, which he sells, and he is concerned that we must maintain the quality of the final product to sustain the markets. Rod supported the Metropolitan Service District's plan for yard debris and felt that the timing in the plan would assure good quality control. He is concerned that if you create a shortage or an over supply in the marketplace, you would jeopardize the quality of the final product and, therefore, the availability of markets for the product.

Grimms' Fuel produces seven products from processed yard debris. These products are marketed to homeowners, landscapers, Oregon Department of Transportation projects and nurseries. Nurseries represent a very large new market where composted and blended yard debris is used as a substitute for Canadian and Washington peat moss.

Rod Grimm stated a special concern about the accumulation of unprocessed yard debris at St. Johns. He stated that when Metro dropped their fee and began accumulating greater quantities of material, it had a negative impact on his business. He has offered to take the clean material which has accumulated at St. Johns and sell Metro processed yard debris for landfill cover. He submitted into the record a copy of a letter to Metro.

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Ed Druback, City of West Linn, described the yard debris recycling program in West Linn. The city had a concern about the economic feasibility of various yard debris recycling programs and has set up what it considers to be its most cost-effective program. They operate a drop-off site one day per week, charge a fee to residents for disposal, and use public works staff, corrections persons, and volunteer labor to process the material to one grade of mulch. They also use public works trucks two days per year to help those who are unable to haul their own material to the processing site. On-call collection is available to citizens through the garbage collector. At this time, the program does not pay for itself, but it does not lose too much money either. He suggests that either the Department define acceptable alternative methods in the rules to make it easier for communities to comply with the law, or deal with yard debris through Metro's Waste Reduction Program rather than Senate Bill 405.

Floyd Dees, Dees' Debris, described the yard debris recycling program done by his company. He has six chippers and six dump trucks with a capacity of 100 yards per chipper per hour. Although his current volume is 100,000 yards, at present time his company is only processing 20-30% of capacity. He is willing to expand his operations and work cooperatively with others to operate a yard debris collection and processing program. The prices he charges for his service compete with landfill disposal costs. Metro's recent price reduction for source-separated yard debris hurt his business. He has found a large market willing to accept his chipped material for

*Written testimony also submitted.

free, but these markets are not willing to pay for the material. Mr. Dees believes that yard debris is a recyclable material but classifying it as a principal recyclable material is wrong because of the costs involved. He feels you must charge the customer to cover your processing costs, and the end generators must be responsible for the costs involved.

Informal Discussion

An informal discussion among the attendees at the hearing took place following submission of formal, oral testimony. Several people felt that private enterprise should be allowed to handle the yard debris processing rather than having a government mandated program. Several people discussed the merits of collecting yard debris and disposing of it versus chipping it through a mobile chipper or bringing it to a volume chipping and composting program. Garbage collectors handle mostly grassy material. The mobile chippers prefer to handle the woody material and use the chips for ground cover. Mr. Grimm estimates that 30% of his volume is grass and leaves and that he combines the grass, leaves and woody chips and mulches them into his final product. Another issue was whether yard debris would have to be collected without a direct charge to the generators as with collection of other recyclable materials. Lorie Parker responded that under a recycling franchise, costs must be reimbursed to the collector, but a person must consider avoided costs when calculating the cost of the program. You could charge the public up to the cost of garbage collection for collecting a recyclable material. Several persons felt that the lack of franchise

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regulation in Portland could hurt the haulers because a yard debris collection program would be less economical and more difficult to recover the costs.

January 28, 1987 Portland 7:00 p.m.

Forrest Soth,* Beaverton City Councilor and Chair of Beaverton's Recycling Task Force, described the recycling programs in Beaverton. In September 1984 Beaverton began its curbside program and has achieved 15% participation among single-family dwellings. Beaverton holds a Clean-Sweep Week including a Yard Cleanup Day twice per year for its residents. Collection areas are available in two locations in the city where residents may bring their trash and yard debris. Compactor trucks collect the yard debris and bring the material to Grimm's for processing and recycling. The city charges \$1 per car and \$2 per pickup and subsidizes any additional costs. In December 1986, the city and West Beaverton Sanitary Service began a monthly yard debris recycling collection program. The city locates a yard debris collection drop-box at a location in the city and charges \$3 per car or \$3 minimum plus \$2 per additional cubic yard for pickups and trailers, and \$1 per Christmas tree, for collection of yard debris. The goal of this new yard debris recycling program is to eliminate one of the city's cleanup days. The city of Beaverton believes that a yard debris recycling program can be successful because it produces a valuable end-product and saves valuable landfill space. However, the city does not support the addition of yard debris to the list of principal

*Written testimony also submitted.

recyclable materials for the following reasons: first, yard debris is a loosely defined term and the materials you collect are not uniform; second, there is concern about cluttering the streets with debris with a curbside collection program; and third, collection of yard debris through a curbside program would be a duplication of the current recycling and solid waste collection systems.

Beaverton feels that any yard debris programs should be voluntary and not mandatory. He suggests that if yard debris collection and recycling programs are proposed, that the programs consider the following: first, include the recycling and solid waste collectors in the planning phase; second, provide a strong public education program; third, don't expect the haulers to subsidize the program; fourth, people seem to be willing to participate in a convenient, reliable drop-off program; and fifth, consider whether to set up a seasonal or a year-round program.

Dick Flury, Moreland and Columbia Sanitary Service, stated that a recent yard debris clean-up program in Gresham cost the haulers \$3,000 to conduct. He is afraid that a yard debris collection program will be very costly to his company.

Lorie Parker

*Written testimony also submitted.

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Lorie Parker

*Written testimony also submitted.

Yard Debris Recycling - Hearings Officer's Report
Page 35

Lorie Parker:b

YB6447

229-5826

February 11, 1987

*Written testimony also submitted.

OAR 340-60-010 is proposed to be amended as follows:

340-60-010 As used in these rules unless otherwise specified:

(1) "Affected person" means a person or entity involved in the solid waste collection service process including but not limited to a recycling collection service, disposal site permittee or owner, city, county and metropolitan service district. For the purposes of these rules "Affected person" also means a person involved in operation of a place to which persons not residing on or occupying the property may deliver source separated recyclable material.

(2) "Area of the state" means any city or county or combination or portion thereof or other geographical area of the state as may be designated by the Commission.

(3) "Collection franchise" means a franchise, certificate, contract or license issued by a city or county authorizing a person to provide collection service.

(4) "Collection service" means a service that provides for collection of solid waste or recyclable material or both. "Collection service" of recyclable materials does not include a place to which persons not residing on or occupying the property may deliver source separated recyclable material.

(5) "Collector" means the person who provides collection service.

(6) "Commission" means the Environmental Quality Commission.

(7) "Department" means the Department of Environmental Quality.

(8) "Depot" means a place for receiving source separated recyclable material.

(9) "Director" means the Director of the Department of Environmental Quality.

(10) "Disposal site" means land and facilities used for the disposal, handling or transfer of or resource recovery from solid wastes, including but not limited to dumps, landfills, sludge lagoons, sludge treatment facilities, disposal sites for septic tank pumping or cesspool cleaning service, transfer stations, resource recovery facilities, incinerators for solid waste delivered by the public or by a solid waste collection service, composting plants and land and facilities previously used for solid waste disposal at a land disposal site; but the term does not include a facility subject to the permit requirements of ORS 468.740; a landfill site which is used by the owner or person in control of the premises to dispose of soil, rock concrete or other similar nondecomposable material, unless the site is used by the public either directly or through a solid waste collection service; or a site licensed pursuant to ORS-481.345.

(11) "Generator" means a person who last uses a material and makes it available for disposal or recycling.

(12) "Land disposal site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(13) "Metropolitan service district" means a district organized under ORS Chapter 268 and exercising solid waste authority granted to such district under ORS Chapters 268 and 459.

(8) "Depot" means a place for receiving source separated recyclable material.

(9) "Director" means the Director of the Department of Environmental Quality.

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(12) "Land disposal site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(13) "Metropolitan service district" means a district organized under ORS Chapter 268 and exercising solid waste authority granted to such district under ORS Chapters 268 and 459.

(14) "On-route collection" means pick up of source separated, recyclable material from the generator at the place of generation.

(15) "Opportunity to recycle" means those activities described in OAR 340-60-020.

(16) "Permit" means a document issued by the Department, bearing the signature of the Director or the Director's authorized representative which by its conditions may authorize the permittee to construct, install, modify or operate a disposal site in accordance with specified limitations.

(17) "Person" means the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(18) "Principal recyclable material" means material which is a recyclable material at some place where the opportunity to recycle is required in a watershed and is identified by the Commission in OAR 340-60-030.

(19) "Recyclable material" means any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material.

(20) "Resource recovery" means the process of obtaining useful material or energy resources from solid waste and includes:

(a) "Energy recovery", which means recovery in which all or a part of the solid waste materials are processed to utilize the heat content, or other forms of energy, of or from the material;

(b) "Material recovery", which means any process of obtaining from solid waste, by presegregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose;

(c) "Recycling", which means any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity;

(d) "Reuse", which means the return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.

(21) "Solid waste collection service" or "service" means the collection, transportation or disposal of or resource recovery from solid wastes but does not include that part of a business licensed under ORS 481.345.

(22) "Solid waste" means all putrescible and nonputrescible wastes, including but not limited to garbage, rubbish, refuse, ashes, waste paper and cardboard; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction wastes; discarded or abandoned vehicles or parts thereof; discarded home and industrial appliances; manure, vegetable or animal solid and semisolid wastes, dead animals and other wastes; but the term does not include:

(a) Hazardous waste as defined in ORS 459.410;

(b) Materials used for fertilizer or for other productive purposes or which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.

(23) "Solid waste management" means prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; or resource recovery from solid waste; and facilities necessary or convenient to such activities.

(c) "Recycling", which means any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity;

(d) "Reuse", which means the return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.

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(a) Hazardous waste as defined in ORS 459.410;

(b) Materials used for fertilizer or for other productive purposes or which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.

(23) "Solid waste management" means prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; or resource recovery from solid waste; and facilities necessary or convenient to such activities.

(24) "Source separate" means that the person who last uses recyclable material separates the recyclable material from solid waste.

(25) "Waste" means useless or discarded materials.

(26) "Wasteshed" means an area of the state having a common solid waste disposal system or designated by the commission as an appropriate area of the state within which to develop a common recycling program.

(27) "Yard debris" means vegetative and woody material generated from residential property or from commercial landscaping activities.

OAR 340-60-030 is proposed to be amended as follows:

340-60-030

(1) The following are identified as the principal recyclable materials in the wastesheds as described in Sections (4) through

[(8)] (9):

- (a) newspaper
- (b) ferrous scrap metal
- (c) non-ferrous scrap metal
- (d) used motor oil
- (e) corrugated cardboard and kraft paper
- (f) container glass
- (g) aluminum
- (h) hi-grade office paper
- (i) tin cans
- (j) yard debris, effective July 1, 1987

(2) In addition to the principal recyclable materials listed in (1) above, other materials may be recyclable material at specific locations where the opportunity to recycle is required.

(3) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material at a specific location where the opportunity to recycle is required.

(4) In the following wastesheds, the principal recyclable materials are those listed in Section 1(a) through (j):

(a) Clackamas wasteshed

(b) Multnomah wasteshed

(c) Portland wasteshed

(d) Washington wasteshed

(e) West Linn wasteshed

[(4)] (5) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (i):

(a) Benton and Linn wasteshed

[(b) Clackamas wasteshed]

[(c)] (b) Clatsop wasteshed

[(d)] (c) Columbia wasteshed

[(e)] (d) Hood River wasteshed

[(f)] (e) Lane wasteshed

[(g)] (f) Lincoln wasteshed

[(h)] (g) Marion wasteshed

[(i)] (h) Milton-Freewater wasteshed

[(j) Multnomah wasteshed]

[(k)] (i) Polk wasteshed

[(l) Portland wasteshed]

[(m)] (j) Umatilla wasteshed

[(n)] (k) Union wasteshed

(3) The statutory definition of "recyclable material" (ORS 459.005(15)) determines whether a material is a recyclable material at a specific location where the opportunity to recycle is required.

(4) In the following wastesheds, the principal recyclable materials are those listed in Section 1(a) through (j):

(a) Clackamas wasteshed

(b) Multnomah wasteshed

(c) Portland wasteshed

(d) Washington wasteshed

(e) West Linn wasteshed

[(4)] (5) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (i):

(a) Benton and Linn wasteshed

[(b)] (b) Clackamas wasteshed]

[(c)] (b) Clatsop wasteshed

[(d)] (c) Columbia wasteshed

[(e)] (d) Hood River wasteshed

[(f)] (e) Lane wasteshed

[(g)] (f) Lincoln wasteshed

[(h)] (g) Marion wasteshed

[(i)] (h) Milton-Freewater wasteshed

[(j)] Multnomah wasteshed]

[(k)] (i) Polk wasteshed

[(l)] Portland wasteshed]

[(m)] (j) Umatilla wasteshed

[(n)] (k) Union wasteshed

[(o)] (l) Wasco wasteshed

[(p) Washington wasteshed]

[(q)] (m) Yamhill wasteshed

[(5)] (6) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (g):

- (a) Baker wasteshed
- (b) Crook wasteshed
- (c) Jefferson wasteshed
- (d) Klamath wasteshed
- (e) Tillamook wasteshed

[(6)] (7) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (h):

- (a) Coos wasteshed
- (b) Deschutes wasteshed
- (c) Douglas wasteshed
- (d) Jackson wasteshed
- (e) Josephine wasteshed

[(7)] (8) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (e):

- (a) Curry wasteshed
- (b) Grant wasteshed
- (c) Harney wasteshed
- (d) Lake wasteshed
- (e) Malheur wasteshed
- (f) Morrow wasteshed
- (g) Wallowa wasteshed

[(8)] (9) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (d):

- (a) Gilliam wasteshed
- (b) Sherman wasteshed
- (c) Wheeler wasteshed

[(9)] (10) (a) The opportunity to recycle shall be provided for each of the principal recyclable materials listed in (4) through [(8)] (9) above and for other materials which meet the statutory definition of recyclable material at specific locations where the opportunity to recycle is required.

(b) The opportunity to recycle is not required for any material which a recycling report, approved by the Department, demonstrates does not meet the definition of recyclable material for the specific location where the opportunity to recycle is required.

[(10)] (11) Between the time of the identification of the principal recyclable materials in these rules and the submittal of the recycling reports, the Department will work with affected persons in every wasteshed to assist in identifying materials contained on the principal recyclable material list which do not meet the statutory definition of recyclable material at some locations in the wasteshed where the opportunity to recycle is required.

[(11)] (12) Any affected person may request the Commission modify the list of principal recyclable material identified by the Commission or may request a variance under ORS 459.185.

[(8)] (9) In the following wastesheds, the principal recyclable materials are those listed in Section 1 (a) through (d):

- (a) Gilliam wasteshed
- (b) Sherman wasteshed
- (c) Wheeler wasteshed

[(9)] (10) (a) The opportunity to recycle shall be provided for each of the principal recyclable materials listed in (4) through [(8)] (9) above and for other materials which meet the statutory definition of recyclable material at specific locations where the opportunity to recycle is required.

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[(11)] (12) Any affected person may request the Commission modify the list of principal recyclable material identified by the Commission or may request a variance under ORS 459.185.

[(12)] (13) The Department will at least annually review the principal recyclable material lists and will submit any proposed changes to the Commission.

RULEMAKING STATEMENTS
for

Amendments to the Rules Pertaining to the Opportunity to Recycle

OAR Chapter 340, Division 60, Sections 010 and 030

Pursuant to ORS 183.335, these statements provide information on the intended action to amend a rule.

STATEMENT OF NEED:

Legal Authority

ORS 459.170 requires the Commission to adopt rules and guidelines necessary to carry out the provisions of ORS 459.165 to 459.200. The principal recyclable materials in each watershed are identified by rule under these provisions (OAR 340-60-030). The Commission may amend that rule as necessary to carry out the provisions of the Act. The Department is required to make an annual review of the principal recyclable materials lists and submit any proposed changes to the Commission (OAR 340-60-030(12)).

Need for the Rule

Yard debris represents a significant portion of the solid waste stream presently going to disposal in the Portland metropolitan area. This area is faced with a necessity to reduce the waste entering land disposal sites. A principal recyclable material is a material which, at some place where the opportunity to recycle is required in a watershed, can be collected and sold for recycling at a cost equal to or less than the cost of collection and disposal of the same material. Identification of yard debris as a principal recyclable material would cause systems for the collection and recycling of source separated yard debris to be established within the designated watersheds. This would result in a significant reduction in waste disposal at land disposal sites.

Principal Documents Relied Upon

- a. Oregon Revised Statutes, Chapter 459.
- b. Oregon Administrative Rules, Chapter 340, Division 60.
- c. Portland Metropolitan Area Waste Reduction Program, Metropolitan Service District, December 1985.
- d. "Economics of On-Route Collection of Yard Debris," Metropolitan Service District, December 1985.
- e. "A Demonstration Project for Recycling Yard Debris," Metropolitan Service District, March 1983.

FISCAL AND ECONOMIC IMPACT STATEMENT:

This action will have no significant fiscal impact on the Department. It will have an economic impact on local government, private businesses and the public.

Amendments to Rules - Opportunity to Recycle
Agenda Item
3/13/87, EQC Meeting

Separate systems for the collection of source separated yard debris will have costs associated with them. These costs will have to be paid by the yard debris generator or the appropriate local government. The amount of cost will vary depending on the system of collection and the type of regulation and rate control exercised by local government. Ultimately, the public will pay any additional costs of new yard debris collection systems.

In many cases the collection and recycling of yard debris can be provided at less cost to the generator of that material than collection and disposal of the same material as solid waste. These savings over the cost of disposal should be experienced by the public in lower solid waste collection and disposal costs.

Small businesses will also be affected by any change in the collection system for yard debris. Competition between small businesses for this new level of service will cause some companies to benefit, potentially at the expense of others. There should be a significant net increase in business activity in the collection of yard debris.

Yard debris processors should also benefit from the increased levels of material recovery. Finally, there should be an increase in the availability of processed yard debris products. This may result in a price reduction on this material to the public.

LAND USE CONSISTENCY STATEMENT:

The proposed rules appear to affect land use and appear to be consistent with statewide planning goals.

With regard to Goal 6 (air, water and land resources quality), the rules provide for recycling of solid waste in a manner that encourages the reduction, recovery and recycling of material which would otherwise be solid waste, and thereby provide protection for air, water and land resource quality.

With regard to Goal 11 (public facilities and services), the rules provide for solid waste disposal needs by promoting waste reduction at the point of generation, through beneficial use and recycling. The rules also intend to assure that current and long-range waste disposal needs will be reduced by the provision of the opportunity to recycle.

The rules do not appear to conflict with other goals.

Public comment on any land use issue involved is invited and may be submitted in the manner described in the accompanying NOTICE OF PUBLIC HEARING.

It is requested that local, state and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts brought to our attention by local, state or federal authorities.

WRB:b
YB5173.R
12/31/85

Amendments to Rules - Opportunity to Recycle
Agenda Item
3/13/87, EQC Meeting

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The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts brought to our attention by local, state or federal authorities.

WRB:b
YB5173.R
12/31/85

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

**Proposed Rules to Identify Yard Debris as a Principal Recyclable Material
in the Portland, Multnomah, Washington, Clackamas and West Linn Wastesheds**

Date Prepared: 12/24/85
Hearing Date: 3/3/86
Comments Due: 3/4/86

WHO IS AFFECTED: Owners and operators of solid waste collection and disposal businesses. Operators of yard maintenance services. Operators of yard debris processing facilities. Local governments. The public who generate yard debris. Individuals involved in the implementation of the Oregon Recycling Opportunity Act (ORS 459.005 to 459.285) within Washington, Clackamas, and Multnomah Counties.

WHAT IS PROPOSED: The Department proposes to amend OAR 340-60-010 and 030 to identify yard debris as a principal recyclable material, initiating a process for the collection of source separated yard debris from generators. Implementation would begin July 1, 1987.

WHAT ARE THE HIGHLIGHTS: If yard debris is identified as a principal recyclable material, then it would have to be given consideration as to whether it meets the definition of "Recyclable Material" at each location where the opportunity to recycle is required. Each disposal site in the affected wastesheds would have to provide a place for collecting source separated yard debris or show that it does not meet the definition of "Recyclable Material" at that location. On-route collection programs for source separated yard debris would have to be developed within the urban growth boundary of Canby and the urban growth boundary set by the Metropolitan Service District unless it can be shown that yard debris does not meet the definition of "Recyclable Material." An alternative method for providing the opportunity to recycle yard debris could be proposed. It would be at the discretion of local governments as to who would provide the collection service and how costs or saving would be allocated.

HOW TO COMMENT: Public hearings will be held before a hearings officer at:

3:00 p.m. and 7:00 p.m.
Monday, March 3, 1986
Hearing Room - 2nd Floor
Portland Building
1120 S.W. 5th Street
Portland, Oregon

(over)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

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

Written or oral comments can be presented at the hearing. Written comments can also be sent to the Department of Environmental Quality, Hazardous and Solid Waste Division, P.O. Box 1760, Portland, OR 97207, but must be received no later than 5:00 p.m., Tuesday, March 4, 1986.

Copies of the complete proposed rule package may be obtained from the DEQ Hazardous and Solid Waste Division in Portland (522 S.W. Fifth Avenue). For further information contact Bill Bree at 229-6975.

**WHAT IS THE
NEXT STEP:**

The Environmental Quality Commission may adopt rule amendments identical to the ones proposed, adopt modified amendments as a result of testimony received or may decline to amend the rule. The Commission will consider the proposed rule amendments at its meeting on April 25, 1986.

YB5173.P

Written or oral comments can be presented at the hearing. Written comments can also be sent to the Department of Environmental Quality, Hazardous and Solid Waste Division, P.O. Box 1760, Portland, OR 97207, but must be received no later than 5:00 p.m., Tuesday, March 4, 1986.

Copies of the complete proposed rule package may be obtained from the DEQ Hazardous and Solid Waste Division in Portland (522 S.W. Fifth Avenue). For further information contact Bill Bree at 229-6975.

**WHAT IS THE
NEXT STEP:**

The Environmental Quality Commission may adopt rule amendments identical to the ones proposed, adopt modified amendments as a result of testimony received or may decline to amend the rule. The Commission will consider the proposed rule amendments at its meeting on April 25, 1986.

YB5173.P

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Proposed Rules to Identify Yard Debris as a Principal Recyclable Material in the Portland, Multnomah, Washington, Clackamas and West Linn Wastesheds

Date Prepared: 12/5/86

Hearing Dates: 1/28/87

Comments Due: 1/30/87

**WHO IS
AFFECTED:**

Individuals involved in the implementation of the Oregon Recycling Opportunity Act (ORS 459.005 to 459.285) within Washington, Clackamas, and Multnomah Counties, including: Owners and operators of solid waste collection and disposal businesses; yard maintenance services, and yard debris processing facilities; local governments and the public who generate yard debris.

**WHAT IS
PROPOSED:**

The Department proposes to amend OAR 340-60-010 and 030 to identify yard debris as a principal recyclable material, initiating a process for the collection of source separated yard debris from generators.

**WHAT ARE THE
HIGHLIGHTS:**

If source separated yard debris is identified as a principal recyclable material, then each disposal site in the affected wastesheds would have to provide a place for receiving it and, where they are required, on-route collection programs would have to collect it. Alternative methods for providing the opportunity to recycle yard debris could be proposed.

**HOW TO
COMMENT:**

A public hearing will be held before a hearings officer at:

3:00 p.m. and 7:00 p.m.
Wednesday, January 28, 1987
Hearing Room - 2nd Floor
Portland Building
1120 S.W. 5th Street
Portland, Oregon

Written or oral comments can be presented at the hearing. Written comments can also be sent to Bill Bree, Hazardous and Solid Waste Division, Department of Environmental Quality, 811 S.W. 6th Portland, OR 97204, but must be received no later than 5:00 p.m., Friday, January 30, 1987.

Copies of the proposed rule may be obtained from the DEQ Hazardous and Solid Waste Division in Portland (811 S.W. 6th). For further information contact Bill Bree at 229-6975.

**WHAT IS THE
NEXT STEP:**

The Environmental Quality Commission may adopt rule amendments identical to the ones proposed, adopt modified amendments as a result of testimony received or may decline to amend the rule. The Commission's deliberation should occur on March 13, 1987 as part of the agenda of a regularly scheduled Commission meeting.



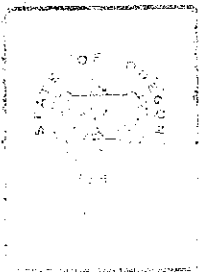
811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

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FOR FURTHER INFORMATION:

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



Department of Environmental Quality

811 S. W. SIXTH AVENUE, PORTLAND, OREGON 97204 PHO (503) 229-5851

In January, 1986, the Department of Environmental Quality proposed amendments to OAR 340-60-010 and 030 to identify yard debris as a principal recyclable material in the Washington, Clackamas, Multnomah, Portland and West Linn wastesheds. Another hearing has been scheduled on January 28, 1987 (see attached public notice). You are encouraged to attend and testify or to submit written testimony. The Department is specifically seeking your comments on the following issues:

1) The originally proposed amendments call for yard debris to be identified as a principal recyclable material effective July 1, 1987. The Department is recommending that the effective date be changed to January 1, 1988.

2) Source separated yard debris may not meet the definition of a "recyclable material" at all locations in the five wastesheds. The Department is recommending that: a) source separated yard debris be considered a recyclable material at only the following disposal sites: St. Johns, Clackamas Transfer and Recycling Center, Killingsworth Fast Disposal, Grabhorn, and Hillsboro; and b) source separated yard debris be considered a recyclable material and collected on-route only within the Metro urban growth boundary (UGB).

3) The Recycling Opportunity Act requires at least monthly collection of recyclable materials within the Metro UGB. There have been a variety of methods proposed for the collection of source separated yard debris as a recyclable material. The Department is recommending that weekly or monthly scheduled on-route collection be provided. Alternative methods of providing collection of yard debris may be proposed. They should be as effective in recovery of yard debris as scheduled monthly collection and should be convenient to the public served. Seasonal collection service that meets this criteria would be an acceptable alternative and would not require an application for alternative method.

For more information, contact William Bree, Hazardous and Solid Waste Division, Oregon Department of Environmental Quality, 811 S. W. Sixth, Portland, Oregon (phone 229-6975).

Department of Environmental Quality

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PROPOSED AMENDMENT TO THE ENVIRONMENTAL QUALITY COMMISSION POLICY GUIDANCE

(15) SOURCE SEPARATED YARD DEBRIS

(a) Yard debris is the single largest component of residential solid waste.

(b) Because of the amounts generated and its physical characteristics, source separated yard debris may need to be collected in a separate vehicle from other recyclable material. It is, therefore, not appropriate to group source separated yard debris with other recyclable materials for the purpose of determining whether yard debris is a recyclable material. When source separated yard debris is evaluated as a recyclable material, the cost of a separate system for collection and recycling of yard debris from residential customers should be compared to the cost of collection and disposal of solid waste from the same sources.

(c) Home composting of yard debris is an appropriate form of recycling and should be encouraged.

(d) Recycling should be given priority over energy recovery as a method of resource management of yard debris. Yard debris should be considered to have been recycled when it has been processed and sold or put to a productive use other than energy recovery. The processing of source separated yard debris without the product being sold or put to a productive use should not be considered recycling.

(e) Programs for collection and recycling of yard debris are dependent upon careful source separation by the generator. Yard debris collection programs should be designed to be easily understood and convenient to the generator.

(f) Accumulation of yard debris at the source presents a potential safety and aesthetic problem. Yard debris collection programs should be designed to reduce long-term storage of yard debris at the point of generation.

(g) Some types of yard debris are generated in large quantities and on a seasonal basis. It is appropriate to design yard debris collection programs to provide increased service on a seasonal basis.

(h) When a local or regional government does not provide for the collection and recycling of source separated yard debris, it should not restrict private individuals from providing such service.

(f) Accumulation of yard debris at the source presents a potential safety and aesthetic problem. Yard debris collection programs should be designed to reduce long-term storage of yard debris at the point of generation.

(g) Some types of yard debris are generated in large quantities and on a seasonal basis. It is appropriate to design yard debris collection programs to provide increased service on a seasonal basis.

(h) When a local or regional government does not provide for the collection and recycling of source separated yard debris, it should not restrict private individuals from providing such service.

YARD DEBRIS RECYCLING CONCEPTS FOR COMPARISON

- 1a. The Commission identifies yard debris as a principal recyclable material. Local governments determine if yard debris is or is not a recyclable material in each jurisdiction. Local governments provide for on-route or an alternative method for collection of source separated yard debris.
- 1b. The Commission identifies yard debris as a principal recyclable material. The Department determines if source separated yard debris is a recyclable material at disposal sites and processors. The Commission makes the determination that yard debris is not a recyclable material in each jurisdiction where on-route collection would have been required.
- 1c. The Commission identifies yard debris as a principal recyclable material. Local governments determine if yard debris is or is not a recyclable material in each jurisdiction. The Department would develop a list of approved alternative methods for each jurisdiction where on-route collection might be required.
- 2a. Local government would choose their preferred program for recycling yard debris. Local government would set program goals. The Department would set minimum criteria for local government preferred programs. The Department or regional government would evaluate the local program for effectiveness.
- 2b. Local government would choose their preferred program for recycling yard debris. The Department would set program goals. The Department would set minimum criteria for local government preferred programs. The Department or regional government would evaluate the local programs for effectiveness.
- 2c. Local government would choose their preferred program for recycling yard debris. Local government would set program goals. There would be no minimum criteria for local government preferred programs. The Department or regional government would evaluate the local programs for effectiveness.
- 3a. The private sector would provide collection and processing of source separated yard debris without any government regulation.
- 3b. The private sector would provide collection of source separated yard debris without any government regulation. Regional or local government would regulate or franchise processing of yard debris.
- 3c. The private sector would provide collection and processing of source separated yard debris without any government regulation. State and regional government would provide major marketing assistance to processors.

CONCEPT COMPARISON CHART

ACTIVITY	CONCEPTS								
	1a	1b	1c	2a	2b	2c	3a	3b	3c
EQC Identifies Yard Debris as Principal Recyclable Material	X	X	X						
Local Government Determines if Yard Debris is a Recyclable Material	X		X						
DEQ Determines if Yard Debris is a Recyclable Material		X							
On-route Collection Required	X		X						
Alternative Methods Proposed by Local Gov.	X		X						
Alternative Methods Proposed by DEQ			X						
Local Government Preferred Programs w/Min. standards				X	X				
Local Government Preferred Programs w/o Min. Standards						X			
Yard Debris a Recyclable at Disposal Sites	X	X	X	X	X	X		X	
Processors Regulated	X	X	X	X	X	X			
Market Assistance	X	X	X	X	X	X	X	X	X

Summation:

1. Yard debris comprises the largest single component of the solid waste stream in the Portland metropolitan area. Most of the yard debris goes into area landfills.
2. It is cheaper for the public to take source separated yard debris to a processor for recycling rather than to a disposal site for landfilling.
3. Two private firms, Grimms Fuel and McFarlane's Bark, have facilities which process source separated yard debris into marketable products. Two other firms, United Chippers and East County Recycling, also shred yard debris but do not produce a composted product.
4. McFarlane's Bark is as convenient and less expensive than the nearest disposal site for the public in a portion of the Clackamas, Portland and West Linn wastesheds. Grimms Fuel is as convenient and less expensive than the nearest disposal site for the public in a portion of the Portland, Clackamas and Washington wastesheds. There is no significant area in the Multnomah wasteshed from which it is as convenient and less expensive for the public to take source separated yard debris to a processor than to a disposal site.
5. Markets are available for processed yard debris. Yard debris replaces peat moss from Canada in some cases and competes with existing processed waste materials in other cases.
6. It is less expensive to have source separated yard debris collected and delivered to a processing facility than to have yard debris collected and disposed of at a landfill.
7. The potential for successful on-route collection of source separated yard debris as a recyclable material will vary substantially in different parts of area wastesheds. This is a result of proximity to processing sites and availability of a cooperative collector.
8. Yard debris chipping services are available to all five of the Portland area wastesheds. These services provide on-site processing of yard debris and, if requested, removal of the processed material.

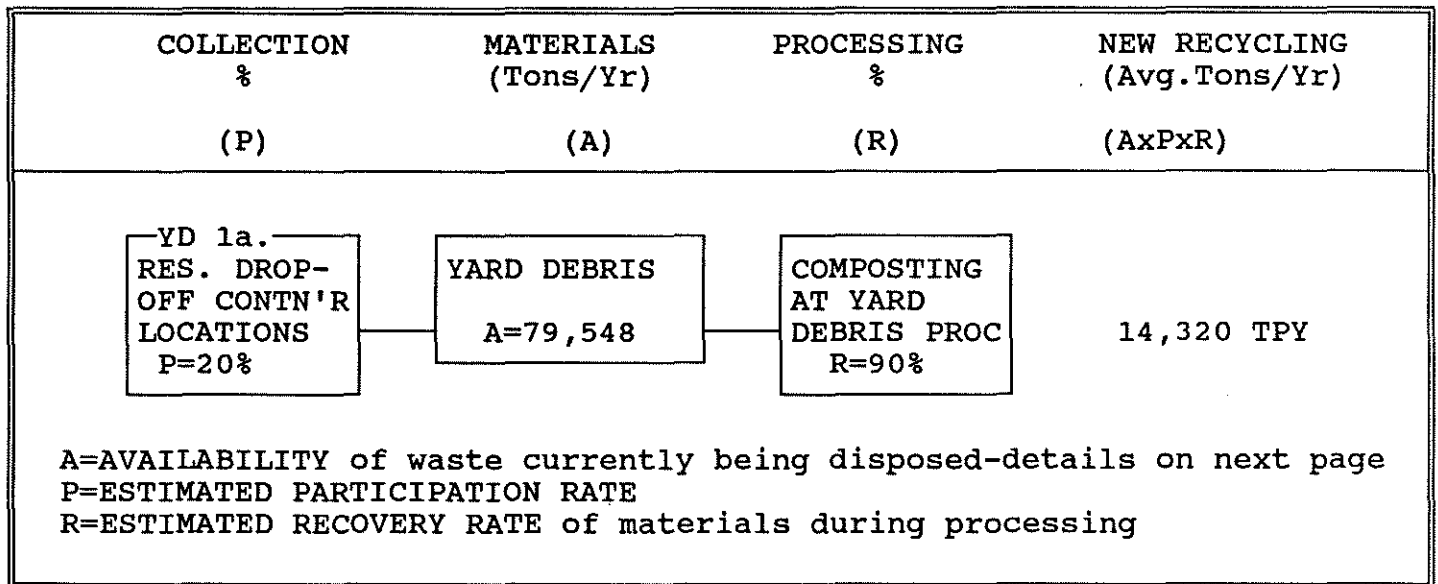
Processed material from these chipper services is either delivered to one of the major processors or directly to an agricultural user. For quantities of more than two yards, it is less expensive to have a mobile chipper come and process source separated yard debris than to have the same material collected and disposed of as solid waste.

9. Three cities, Oregon City, West Linn and Gladstone, presently provide systematic collection of source separated yard debris. Collection service is also available in part of Southeast Portland.

**PROGRAM: YARD DEBRIS 1a. RESIDENTIAL DROPOFF
AT DROPBOX LOCATIONS**

DESCRIPTION: This program would require the municipalities to provide yard debris drop off locations for residents. It is proposed that a drop-off center be provided for every 50,000 residents (12 in all). Access to the drop-off locations would be available every weekend for 8 months of the year when generation is highest, and two weekends a month for the remaining 4 months. The drop-off centers would be staffed by attendents.

PROGRAM DIAGRAM



PROGRAM DIAGRAM DETAILS AND DERIVATIONS

TARGET: RESIDENTIAL WASTE STREAM

IMPACT ON EXISTING PROGRAMS: Supplements

IMPACT ON EXISTING LEGISLATION: Local jurisdictions may need funding and ordinances to place and staff locations.

ESTIMATED PARTICIPATION RATE: A qualitative judgement based on the impact of the rate savings and discussion of Goals Subcommittee estimated a probable participation rate of about 20%. This takes into account the experience of the Oregon City and Gladstone yard debris collection programs.

PROGRAM DIAGRAM DETAILS AND DERIVATIONS (cont.)

MATERIAL AVAILABLE:

MATERIAL	RESIDENTIAL AVAILABILITY (Currently Landfilled) Tons/Yr
Yard Debris	79,548

ESTIMATED PROCESSING RECOVERY: Source separation of yard debris historically yields high quality, uncontaminated material for processing into yard debris compost. 90% is based on discussion by the Goals Committee.

ASSUMPTIONS:

- 1) 12 one acre parcels of fenced in property for placing drop boxes.
- 2) Small low-cost "gatehouse" and portable toilet
- 3) 20 % participation, 90% processing recovery.
- 4) Those who participate will recycle 100% of their recyclable materials.

PROGRAM GOALS CALCULATIONS

PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE:	1.1% (14,320 TPY)
TOTAL TONS CURRENTLY REQUIRING LANDFILL DISPOSAL (from overall wastestream):	966,630 TPY
NEW TOTAL TONS REQUIRING LANDFILL DISPOSAL (after new program is in effect):	952,310 TPY

SUMMARY OF PROGRAM EFFECTS

CURRENT OVERALL RECYCLING RATE (1987): 23.7% (300,710 TPY)
PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE: 1.1% (14,320 TPY)

WITH ONLY THIS PROGRAM IN EFFECT,
NEW TOTAL RECYCLING RATE FOR THE REGION: 24.8% (315,030 TPY)

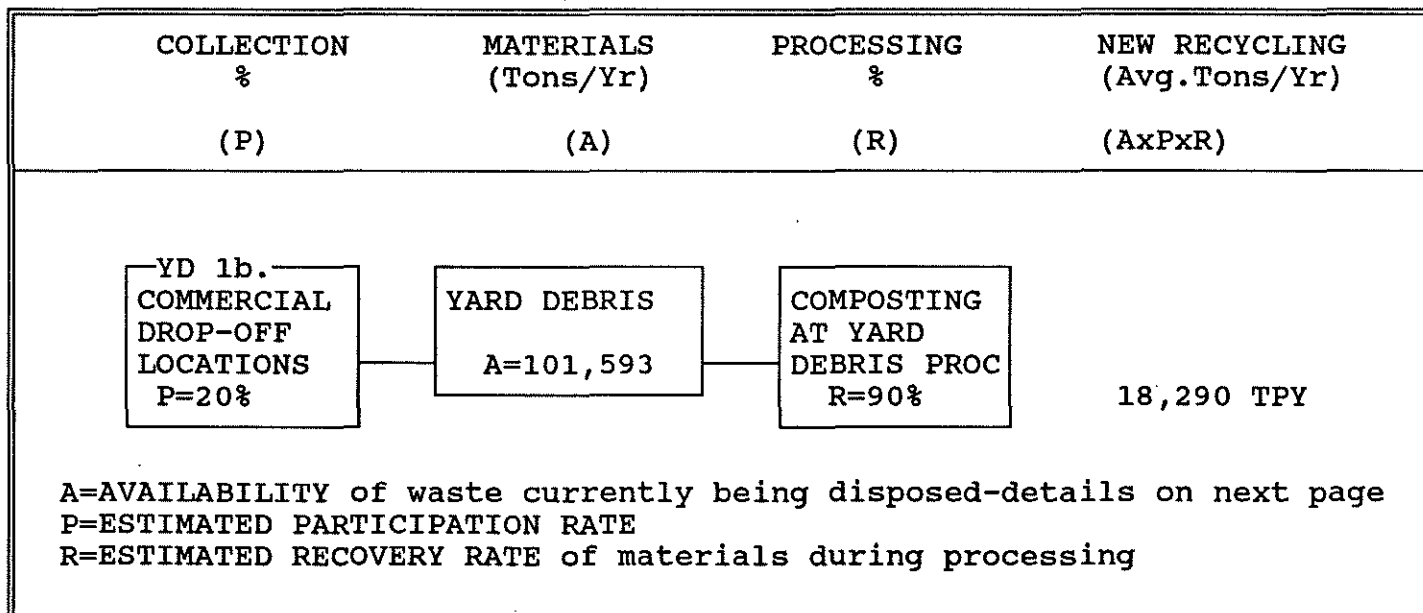
PROGRAM COSTING

TOTAL PROGRAM COST: \$ 23,034,400
COST PER TON (Program): \$ 55.40
COST PER TON (System): \$ 0.80

PROGRAM: YARD DEBRIS 1b. YARD DEBRIS DROP OFF CENTERS AT NEW AND EXISTING SOLID WASTE FACILITIES

DESCRIPTION: This program would incorporate commercial yard debris drop off capacity at all new and existing solid waste facilities including limited purpose landfills, transfer stations, and full service landfills.

PROGRAM DIAGRAM



PROGRAM DIAGRAM DETAILS AND DERIVATIONS

TARGET: RESIDENTIAL AND COMMERCIAL WASTE STREAM

IMPACT ON EXISTING PROGRAMS: Supplements

IMPACT ON EXISTING LEGISLATION: None

ESTIMATED PARTICIPATION RATE: A qualitative judgement based on the impact of the rate savings and discussion of Goals Subcommittee estimated a probable participation rate of about 20 percent.

PROGRAM DIAGRAM DETAILS AND DERIVATIONS (cont.)

MATERIAL AVAILABLE:

MATERIAL	RESIDENTIAL & COMMERCIAL AVAILABILITY (Currently Landfilled) Tons/Yr
Yard Debris	101,593

ESTIMATED PROCESSING RECOVERY: Source separation of yard debris historically yields high quality, uncontaminated material for processing into yard debris compost. 90% is based on discussion by the Goals committee

ASSUMPTIONS:

- 1) Addition of collection boxes at existing facilities.
- 2) Participation 20%, processing recovery 90%.
- 3) Those who participate will recycle 100% of their recyclable materials.

PROGRAM GOALS CALCULATIONS

PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE:	1.4% (18,290 TPY)
TOTAL TONS CURRENTLY REQUIRING LANDFILL DISPOSAL (from overall wastestream):	966,630 TPY
NEW TOTAL TONS REQUIRING LANDFILL DISPOSAL (after new program is in effect):	948,340 TPY

SUMMARY OF PROGRAM EFFECTS

CURRENT OVERALL RECYCLING RATE (1987): 23.7% (300,710 TPY)
PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE: 1.4% (18,290 TPY)
WITH ONLY THIS PROGRAM IN EFFECT,
THE NEW TOTAL RECYCLING RATE FOR THE REGION: 25.2% (319,000 TPY)

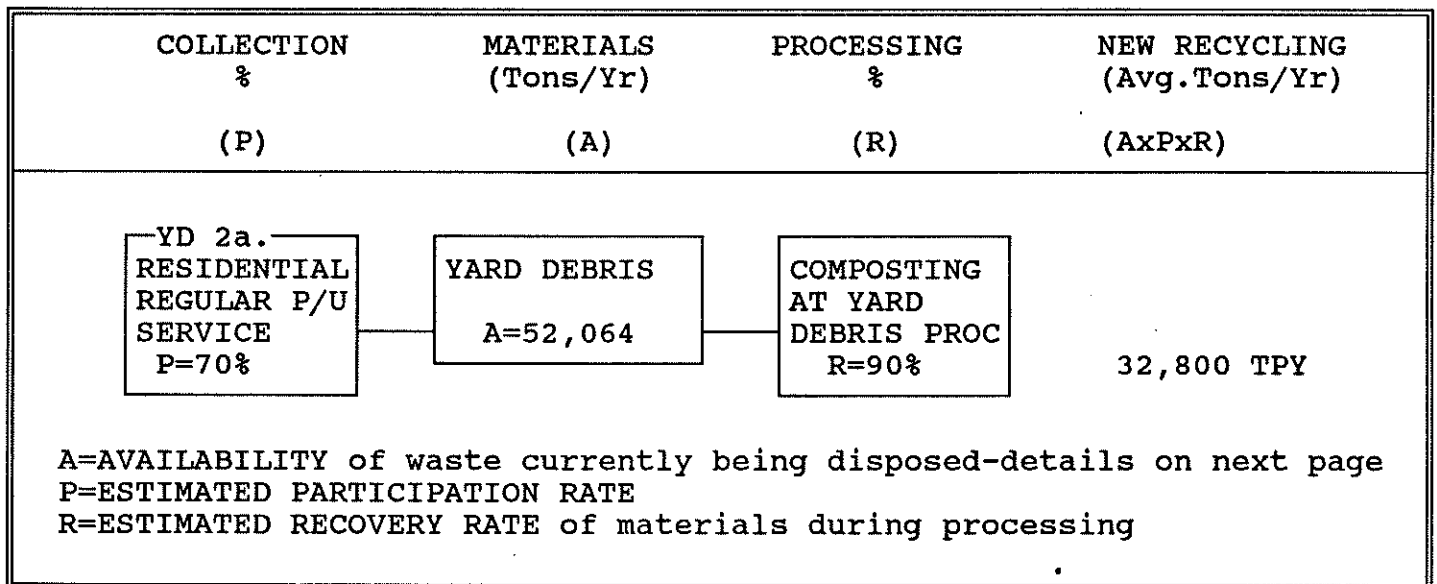
PROGRAM COSTING

TOTAL PROGRAM COST: \$ 18,749,368
COST PER TON (Program): \$ 35.30
COST PER TON (System): \$ 0.70

**PROGRAM: YARD DEBRIS 2a. RESIDENTIAL YARD DEBRIS COLLECTION
WITH REGULARLY SCHEDULED PICK/UPS**

DESCRIPTION: All residences serviced by garbage collection would have scheduled yard debris pick up service from their garbage hauler. Yard debris will be picked up twice a month during the high generation months (May, June, July and August) and once a month the remaining months of the year.

PROGRAM DIAGRAM



PROGRAM DIAGRAM DETAILS AND DERIVATIONS

TARGET: RESIDENTIAL WASTE STREAM

IMPACT ON EXISTING PROGRAMS: Supplements

IMPACT ON EXISTING LEGISLATION: Addition of yard debris to principle recycling list

ESTIMATED PARTICIPATION RATE: Upper limit of range discussed by Goals Subcommittee (50-70)

PROGRAM DIAGRAM DETAILS AND DERIVATIONS (cont.)

MATERIAL AVAILABLE:

MATERIAL	AVAILABILITY (Currently Landfilled) Tons/Yr
Yard Debris	79,548 ¹

ESTIMATED PROCESSING RECOVERY: Source separation of yard debris historically yields high quality, uncontaminated material for processing into yard debris compost. 90% based upon goals Subcommittee discussion

ASSUMPTIONS:

- 1) Participation rate 70%, recovery efficiency 90%
- 2) Multiple family dwellings typically do not participate in curbside programs and are excluded from the residential availability.
- 3) Availability is based on 85% residents having collection service.
- 4) Those who participate will recycle 100% of their recyclable materials.

PROGRAM GOALS CALCULATIONS

PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE:	2.6% (32,800 TPY)
TOTAL TONS CURRENTLY REQUIRING LANDFILL DISPOSAL (from overall wastestream):	966,630 TPY
NEW TOTAL TONS REQUIRING LANDFILL DISPOSAL (after new program is in effect):	933,830 TPY

SUMMARY OF PROGRAM EFFECTS

CURRENT OVERALL RECYCLING RATE (1987): 23.7% (300,710 TPY)
PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE: 2.6% (32,800 TPY)
WITH ONLY THIS PROGRAM IN EFFECT,
THE NEW TOTAL RECYCLING RATE FOR THE REGION: 26.3% (333,520 TPY)

PROGRAM COSTING

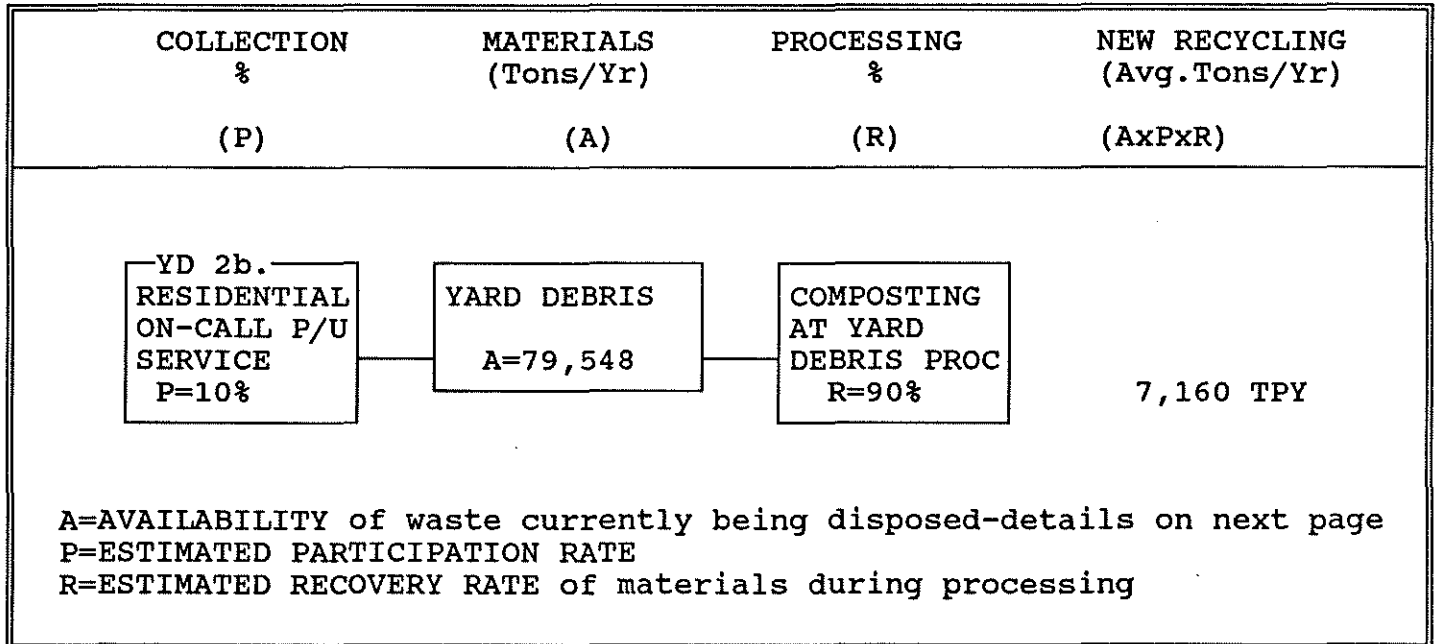
TOTAL PROGRAM COST: \$ 129,340,001
COST PER TON (Program): \$ 135.80
COST PER TON (System): \$ 4.60

¹ Residential Availability (Currently Landfilled): 79,548 X 85% (proportion of people with collection) X 77% (Proportion of people not living in multi-family dwellings -see assumptions) = 52,064 TPY.

**PROGRAM: YARD DEBRIS 2b. RESIDENTIAL YARD DEBRIS COLLECTION
WITH EXPANDED ON-CALL PICK-UP OR CHIPPING SERVICE**

DESCRIPTION: Currently, residents have the option to call a chipper or pick-up service to handle their yard debris removal. Expansion would involve a targeted increase in education/publicity to increase participation.

PROGRAM DIAGRAM



PROGRAM DIAGRAM DETAILS AND DERIVATIONS

TARGET: RESIDENTIAL AND COMMERCIAL WASTE STREAMS

IMPACT ON EXISTING PROGRAMS: Supplements

IMPACT ON EXISTING LEGISLATION: Addition of yard debris to principle recycling list

ESTIMATED PARTICIPATION RATE: Discussion of Goals Subcommittee determined the participation rate to be in the range of 10%.

PROGRAM DIAGRAM DETAILS AND DERIVATIONS (cont.)

MATERIAL AVAILABLE:

MATERIAL	AVAILABILITY (Currently Landfilled) Tons/Yr
Yard Debris	79,548

ESTIMATED RECOVERY EFFICIENCY: Source separation of yard debris historically yields high quality, uncontaminated material for processing into yard debris compost. 90% based on Goals Subcommittee discussion

ASSUMPTIONS:

- 1) 10 percent, 90 percent processing recovery.
- 2) Those who participate will recycle 100% of their recyclable materials.

PROGRAM GOALS CALCULATIONS

PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE:	0.6% (7,160 TPY)
TOTAL TONS CURRENTLY REQUIRING LANDFILL DISPOSAL (from overall wastestream):	966,630 TPY
NEW TOTAL TONS REQUIRING LANDFILL DISPOSAL (after new program is in effect):	959,470 TPY

SUMMARY OF PROGRAM EFFECTS

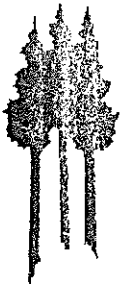
CURRENT OVERALL RECYCLING RATE (1987):	23.7% (300,710 TPY)
PROGRAM'S CONTRIBUTION TO OVERALL RECYCLING RATE:	0.6% (7,160 TPY)
WITH ONLY THIS PROGRAM IN EFFECT, THE NEW TOTAL RECYCLING RATE FOR THE REGION:	24.3% (307,870 TPY)

PROGRAM COSTING

TOTAL PROGRAM COST: \$ 7,380,948

COST PER TON (Program): \$ 35.50

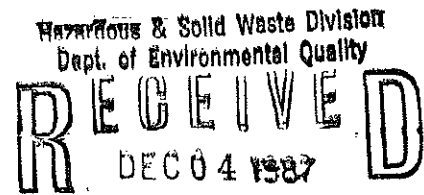
COST PER TON (System): \$ 0.30



FAR WEST FIBERS, INC.

December 4, 1987

Department of Environmental Quality
Attn: Mr. William R. Bree
811 S.W. Sixth Avenue
Portland, Oregon 97204



Subject: Testimony on Yard Debris Recycling

Dear Sirs:

Yard Debris should not be treated as a source separated recyclable material under the provision of the Opportunity to Recycle Act (SB 405). The best way to provide Yard Debris Recycling is through the development of unregulated private collectors and processors.

Far West Fibers is an unregulated, private recycler located in Washington County. E.Z. Recycling is a recycler located in Multnomah County and is a division of Far West Fibers. Together, we purchase and process through our plants, over 40,000 tons per year of wastepaper for recycling. We support the State of Oregon concept and law incorporated in The Opportunity to Recycle Act.

The demand for recyclable materials should dictate whether or not they are removed from the solid waste stream and diverted to the marketplace. It is cost effective and economically feasible to recycle the bulk of used paper products. This is why old newspapers and used cardboard boxes should be recycled and be treated as principal recyclable materials under SB 405.

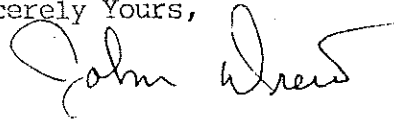
Yard Debris, even when properly source separated, collected, processed and marketed, has less potential than other solid waste substreams to be successfully recycled and marketed. Yet, there is a sound, if somewhat limited, market which has been developed by small private businesses in the Portland Metropolitan area. These businesses exist because of their efforts to develop and promote the commercial uses of yard debris. These markets were not created by the EQC, DEQ or the State of Oregon.

Mr. William R. Bree
Page 2
December 4, 1987

It would be unwise to think that by treating yard debris as a principal recyclable material we will solve the problem which resulted from legislating against backyard burning. Yard debris is a new solid waste issue and it can be addressed by private industry. The State should assist business by helping to develop new markets, by promoting yard debris recycling and by educating the populace of the need to compost and recycle yard debris.

Yard Debris should not be treated as a Principal Recyclable Material.

Sincerely Yours,



John G. Drew

cc: Environmental Quality Commission
Association of Oregon Recyclers

1987. 91,000 accept returned
30,000 for STJ - sum Aug 87
8,000 " du lts "

137,000

**PORTLAND METROPOLITAN SERVICE DISTRICT
WASTE CHARACTERIZATION STUDY
FINAL REPORT**

October, 1987

SECTION 1

EXECUTIVE SUMMARY

1.1 Background

This Waste Characterization Study is one part of the "System Measurement" portion of Portland Metropolitan Service District's Solid Waste Reduction Program. The waste reduction program being under taken by Metro to "substantially reduce the volume of solid waste that would otherwise be disposed of in land disposal sites." The purpose of the Waste Characterization Study is to establish a system, based on analyses of waste compositions, for determining which programs and projects will obtain maximum economically and technically feasible waste reduction through each level of the hierarchy. The State Legislature established the hierarchy in ORS 459.015 as reuse, reduce, recycle, energy recovery and land disposal in descending order of importance. The state hierarchy, and the Metro Waste Reduction Program, specifies that waste which is technically and economically feasible to reduce (dispose of) by a higher method on the list shall not be disposed of by a lower.

The System Measurement program as envisioned has four objectives identified below:

- 1. To provide an information base to set specific performance goals for waste reduction by which the success of the program will be measured.**
- 2. To determine the types, sizes, and locations of material recovery facilities which would be economically feasible based on the recoverability of materials from waste substreams.**
- 3. To determine the projected composition of waste which will be allocated to alternative technologies.**
- 4. To maintain an ongoing measurement of success of the program in reducing waste being landfilled.**

These objectives are to be achieved through four action elements;

- A. Waste Substream Composition Study,
- B. Substream Resource Recovery Study,
- C. Set Waste Reduction Performance Goals, and
- D. Establish Ongoing measurement of System Performance.

This report, Waste Characterization Study, fulfills the four task requirements to be performed as part of action element A, Waste Substream Composition Study. The final task, Task 3 - Waste Reduction Goals, is currently underway as part of action element C, Set Waste Reduction Performance Goals and is not a part of this report. This report presents the findings and conclusions of the work completed to date and includes the following:

- Task 1, Waste composition study results,
- Task 1, Waste composition data base management system,
- Task 1, Energy content data summary,
- Task 2, High Grade Waste Analysis results,

Task 1 Waste Composition Study

The project involved four seasonal waste stream assessments at three separate waste disposal facilities. Each seasonal assessment was conducted for five days at each facility. The facilities are Clackamas Transfer and Recycling Center (CTRC), St. Johns Landfill (St. Johns), And the Killingsworth Fast Disposal Limited Purpose Landfill (KFD). Cooperation by Metro and the operators at CTRC, St. Johns, and KFD was invaluable during the course of the waste assessments.

Waste composition information was developed by manually sorting samples of refuse into several categories and weighing each category. Samples were randomly selected and the procedures followed were as described in guide book developed by SCS Engineers for the EPA entitled Solid Waste Stream Assessment. Special attention was paid to recyclable beverage containers, wine coolers, hazardous wastes, and potentially reusable materials. In addition, during the first seasonal sort, five residential and five commercial waste samples were analyzed for BTU energy content, moisture content, ash content, and chemical composition of the ash.

Draftiminary results of the quantity and composition efforts are tabulated and summarized. Tables were prepared to report these results and some comparisons are being made with data from other, similar assessments. The entire waste composition survey data, calculations, and summarizing tables has been provided to Metro in the form of computer disks for use on R Base System V. Appendix A.

1.2 Findings

1. There are significant amounts of recoverable materials in the waste being disposed in the Metro region.
2. During the entire survey a total of 2040 returnable beverage containers were found for an average of three containers per sample. However only 432 wine coolers were found, less than one per sample.
3. Diapers do not make up a significant portion of the waste stream and account for approximately 1.5 percent of the municipal waste stream and were not found at limited purpose landfills.
4. The amount of household hazardous waste and small quantity generator waste being disposed of at Metro region landfills is quite low representing 0.03 percent of the municipal solid waste disposed and 0.61 percent of the waste being disposed at limited purpose landfills.
5. There are large fluctuations in the amount of yard waste being disposed throughout the year, with the largest amount being disposed in the spring and fall approximately 14 percent of the entire waste stream , while the winter sort indicated a low of less than 3 percent.
6. The municipal solid waste disposed is composed of 83.8 percent combustible materials and only 68.6 percent of the waste being disposed at limited purpose landfills is combustible.
7. Five samples of residential waste yielded an average energy content of 6131 BTU per pound at 34.1 percent moisture content. Five samples of residential waste yielded an average energy content of 7319 BTU per pound at 11.7 percent moisture content.

1.3 Conclusions

- 1. There are significant amounts of recoverable materials in the waste being disposed in the Metro region. Therefore, further planning for recycling goals and programs should be undertaken.**
- 2. The bottle bill is having a distinct impact on the amount of waste glass being disposed, the Portland Metro region showing a significantly lower amount of glass in its waste stream as compared to areas not having a bottle bill.**
- 3. The waste characterization study and energy content of the samples analyzed provide some data related to the amount and energy value of the waste in the Portland Metro Region. Any decision regarding a waste-to-energy facility or warranties of energy value should be supported by further sampling and analysis and not based solely on the results of the samples taken.**

Portland Waste Composition

COMPONENT	Municipal Waste Disposed Percent	Confidence Limits 95% Range (+/-)	Metro Region Disposed Percent	Confidence Limits 95% Range (+/-)
Combustibles	83.37%	3.4%	79.61%	3.0%
1 Paper	34.84%	4.3%	29.37%	3.3%
Corrugated Board/Kraft Paper	9.98%	2.7%	8.95%	2.1%
Newspaper	4.29%	1.8%	3.43%	1.3%
Office Paper	4.68%	1.9%	3.93%	1.4%
Other Paper	15.89%	3.3%	13.06%	2.4%
2 Plastics	7.87%	2.4%	7.21%	1.9%
Milk Jugs	0.36%	0.5%	0.27%	0.4%
Containers	0.89%	0.8%	0.75%	0.6%
Durable Plastics	0.81%	0.7%	0.94%	0.7%
Other Plastics	5.81%	2.1%	5.25%	1.6%
3 Yard Debris	9.99%	2.7%	10.51%	2.3%
Prunings	2.97%	1.5%	4.10%	1.5%
Leaves/Grass Clippings	7.02%	2.3%	6.41%	1.8%
4 Wood	8.03%	2.4%	12.85%	2.6%
5 Textiles	3.76%	1.7%	3.67%	1.4%
6 Food Waste	8.75%	2.6%	6.56%	1.8%
7 Diapers	1.46%	1.1%	1.09%	0.7%
8 Fines	1.97%	1.3%	1.52%	0.9%
9 Miscellaneous Organics	6.70%	2.3%	6.83%	1.9%
Non-Combustibles	16.15%	3.3%	19.63%	0.3%
10 Recyclable Glass	3.61%	1.7%	2.75%	1.2%
Beverage	2.06%	1.3%	1.59%	0.9%
Other Recyclable Glass	1.55%	1.1%	1.16%	0.8%
11 Aluminum	0.90%	0.9%	0.98%	0.7%
Food Containers	0.29%	0.5%	0.23%	0.3%
Other Aluminum	0.61%	0.7%	0.75%	0.7%
12 Ferrous Metal	5.98%	2.1%	7.19%	1.9%
Food Containers	2.08%	1.3%	1.58%	0.9%
Other Ferrous Metal	3.90%	1.7%	5.61%	1.8%
13 Other Non-Ferrous Metals	0.21%	0.4%	0.38%	0.5%
14 Miscellaneous Inorganics	5.45%	2.1%	8.33%	2.1%
Other	0.48%	0.6%	0.76%	0.7%
15 Reusable	0.37%	0.5%	0.42%	0.5%
16 Hazardous Waste	0.03%	0.1%	0.17%	0.3%
17 Other	0.08%	0.3%	0.17%	0.3%
Total	100.00%		100.00%	
Counts				
1 Returnables (Count)	1,921		2,040	
2 Wine Coolers (Count)	430		432	
3 Milk Jugs	1,765		1,819	

Portland Waste Composition

COMPONENT	Municipal Waste Disposed Tons	Metro Region Disposed Tons
Combustibles	574,609	769,537
1 Paper	240,127	283,900
Corrugated Board/Kraft Paper	68,785	86,514
Newspaper	29,568	33,156
Office Paper	32,256	37,980
Other Paper	109,518	126,242
2 Plastics	54,242	69,694
Milk Jugs	2,481	2,610
Containers	6,134	7,250
Durable Plastics	5,583	9,086
Other Plastics	40,044	50,748
3 Yard Debris	68,854	101,593
Prunings	20,470	39,632
Leaves/Grass Clippings	48,384	61,961
4 Wood	55,345	124,212
5 Textiles	25,915	35,475
6 Food Waste	60,307	63,411
7 Diapers	10,063	10,536
8 Fines	13,578	14,693
9 Miscellaneous Organics	46,178	66,021
Non-Combustibles	111,310	189,750
10 Recyclable Glass	24,881	26,582
Beverage	14,198	15,369
Other Recyclable Glass	10,683	11,213
11 Aluminum	6,203	9,473
Food Containers	1,999	2,223
Other Aluminum	4,204	7,250
12 Ferrous Metal	41,216	69,501
Food Containers	14,336	15,273
Other Ferrous Metal	26,880	54,228
13 Other Non-Ferrous Metals	1,447	3,673
14 Miscellaneous Inorganics	37,563	80,521
Other	3,308	7,346
15 Reusable	2,550	4,060
16 Hazardous Waste	207	1,643
17 Other	551	1,643
Total	689,228	966,633
Counts		
1 Returnables (Count)	1,921	2,040
2 Wine Coolers (Count)	430	432
3 Milk Jugs	1,765	1,819

GRIMM'S AND MCFARLANE'S
YARD DEBRIS FLOW
(CUBIC YARDS)

<u>YEAR</u>	<u>PROCESSOR</u>	<u>YARD DEBRIS INPUT</u>	<u>% INC- DEC</u>	<u>OUTPUT CONVERTED TO INPUT*</u>	<u>ACTUAL COMPOST SOLD</u>	<u>% INC- DEC</u>
1981	GRIMM'S	0	0	0	0	0
	MCFARLANE'S	<u>79,191</u>	0	<u>7,557</u>	<u>1,080</u>	0
	TOTAL	79,191	0	7,557	1,080	0
1982	GRIMM'S	0	0	0	0	0
	MCFARLANE'S	<u>39,881</u>	-50	<u>14,625</u>	<u>2,089</u>	94
	TOTAL	39,881	-50	14,625	2,089	94
1983	GRIMM'S	20,704	0	0	0	0
	MCFARLANE'S	<u>72,312</u>	81	<u>16,089</u>	<u>2,298</u>	10
	TOTAL	93,016	133	16,089	2,298	10
1984	GRIMM'S	49,066	137	5,594	799	0
	MCFARLANE'S	<u>96,280</u>	33	<u>8,061</u>	<u>1,152</u>	-50
	TOTAL	145,346	56	13,655	1,951	-15
1985	GRIMM'S	60,119	23	50,868	7,267	809
	MCFARLANE'S	<u>115,178</u>	20	<u>42,124</u>	<u>6,018</u>	423
	TOTAL	175,297	21	92,992	13,285	581
1986	GRIMM'S	68,178	13	105,157	15,022	107
	MCFARLANE'S	<u>147,156</u>	28	<u>78,256</u>	<u>11,179</u>	86
	TOTAL	215,334	23	183,413	26,201	97
1987	GRIMM'S (PROJECTED)	95,000	40	178,000	25,000	70
	MCFARLANE'S (PROJECTED)	<u>164,000</u>	12	<u>157,000</u>	<u>22,000</u>	101
	TOTAL	259,000	20	335,000	47,000	84

*QUANTITIES ASSUME A COMPACTION FROM PROCESSED TO UNPROCESSED STATE BY A FACTOR OF 7 FOR PURPOSES OF COMPARING INPUT WITH OUTPUT.

11/10/87 HSS

TIPPING FEES AND PRICES

GRIMM'S AND MCFARLANE'S

GRIMM'S

Tipping Fees for Yard Debris \$2.00 per cubic yard

Prices for Picked Up Yard Debris Compost:

Garden Fine Mulch (100% YD)	\$60.00 per unit	RES.
	54.00 per unit	COM.

Medium Hemlock Mulch (25% YD)	\$63.00 per unit	RES.
	57.00 per unit	COM.

Fine Hemlock Mulch (25% YD)	\$71.00 per unit	RES.
	64.00 per unit	COM.

Blended Soil (50% YD)	\$12.00 per cubic yard
-----------------------	------------------------

Grimm's adds approximately \$10.00 per unit for delivery.

MCFARLANE'S

Tipping Fees for Yard Debris \$3.00 per cubic yard

Prices for Picked Up Yard Debris Compost:

Fine (80% YD)	\$40.00 per unit
---------------	------------------

Medium (80% YD)	\$20.00 per unit
-----------------	------------------

Coarse (80% YD)	\$10.00 per unit
-----------------	------------------

Commercial rates take \$3.00 off per unit price.

McFarlane's adds approximately \$20.00 per unit for delivery within a 25-mile radius.'

PRICES
SAWDUST AND BARKDUST
(unit price)

GRIMM'S

	<u>Delivered</u>	<u>Picked up</u>
Fir	\$68.00	\$60.00
Hemlock	81.00	73.00
Sawdust	50.00	30.00

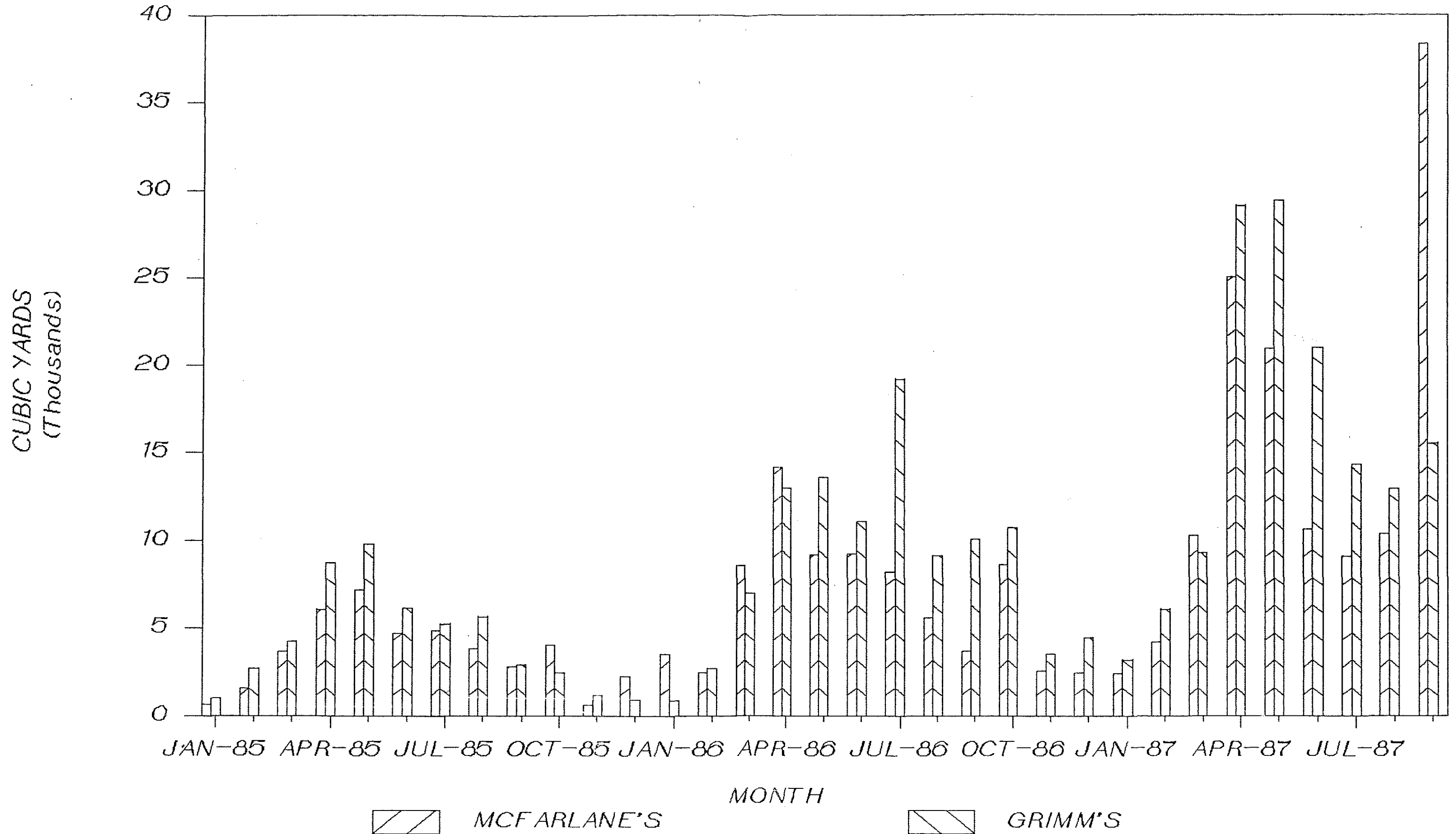
MCFARLANE'S

Barkdust (medium)	61.00 - 96.00	46.00
(bright medium)	71.00 - 105.00	56.00
(medium hemlock)	87.00 - 113.00	72.00
Economy Bark	47.00 - 85.00	31.00

HSS: 11/13/87

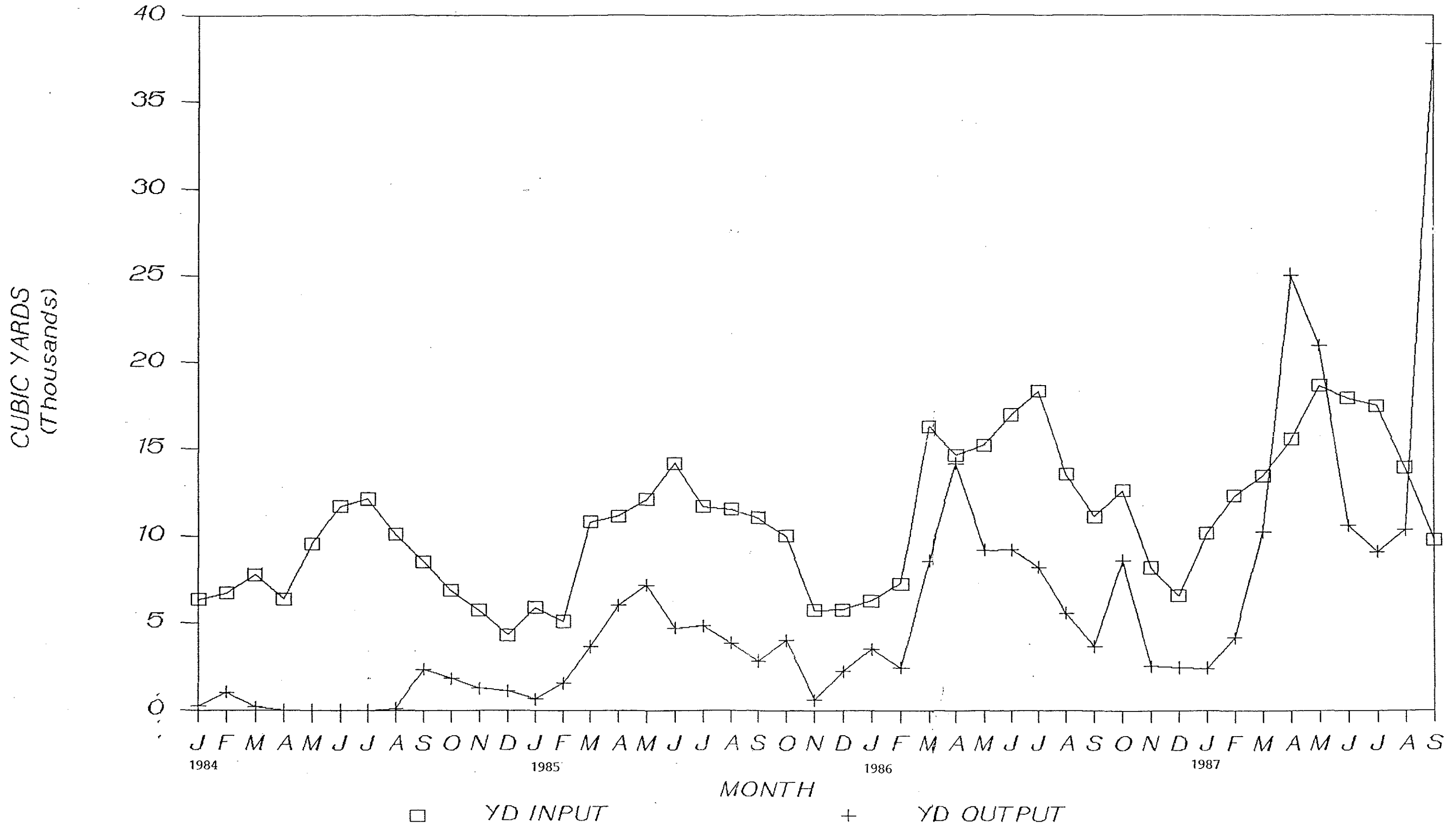
COMPOST SALES '85 - '87

MCFARLANE'S AND GRIMM'S



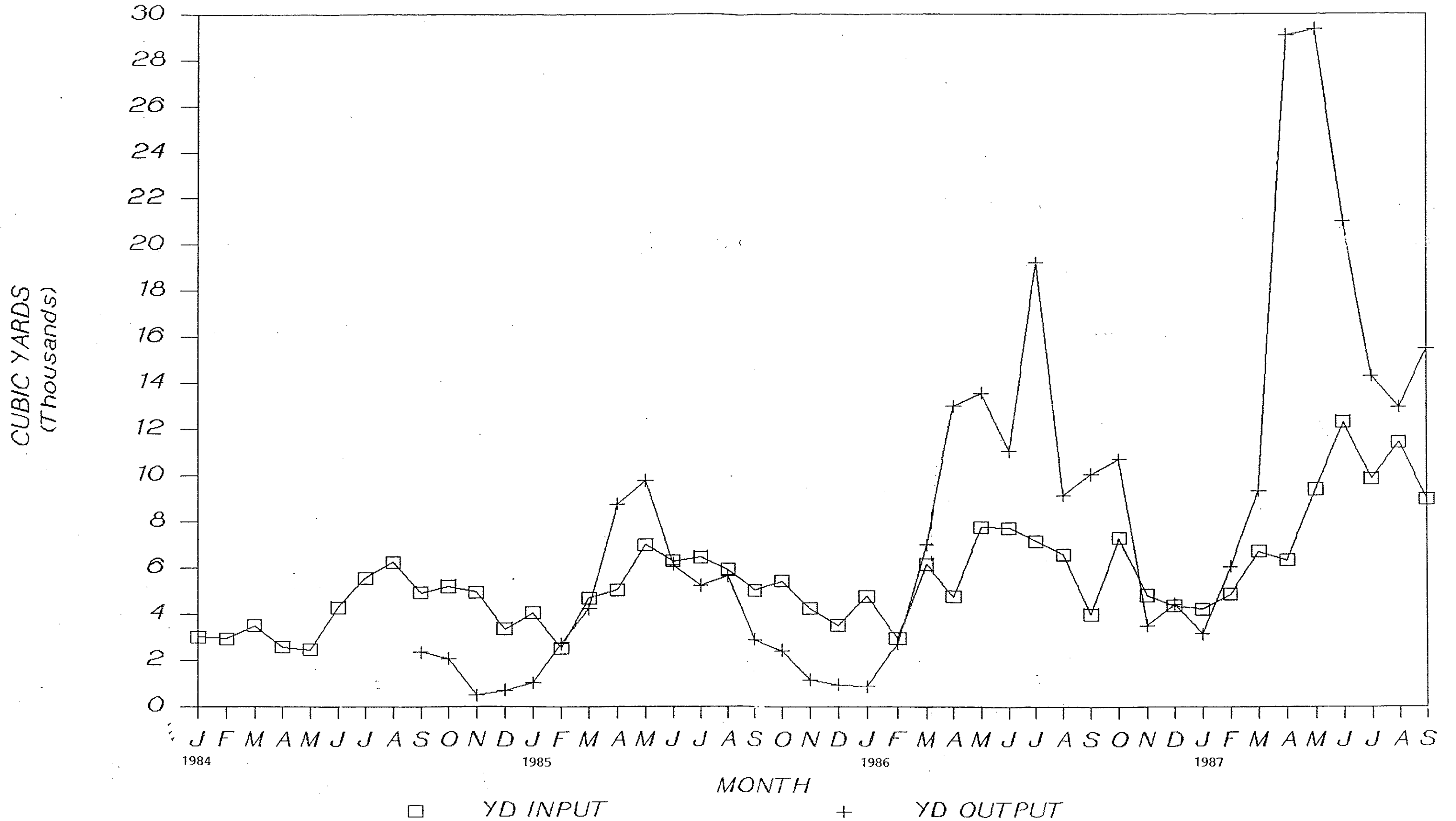
MCFARLANE'S YARD DEBRIS FLOW

CUBIC YARDS/MONTH



GRIMM'S YARD DEBRIS FLOW

CUBIC YARDS/MONTH





Reply to: ESTLE HARLAN, Consultant
2202 SE Lake Road
Milwaukie, OR 97222
654-9533

MEMBER
NSWMA
National Solid Wastes
Management Association

OREGON SANITARY SERVICE INSTITUTE

December 11, 1987

DESIGN FOR YARD DEBRIS DIVERSION PROGRAMS

I. DROP BOX LOADS/SELF HAULERS/LANDSCAPERS PROGRAM

1. Drop Box Loads

(a) Provider of Service: Solid Waste Hauler.

(b) Service: Divert drop box loads (or greater) of yard debris to a processing site, rather than landfilling it. Restrictions of processors, if any, would apply.

(c) Frequency: Participation would be on an on-call basis. The solid waste industry would provide informational material on their billings to make customers aware of the service.

(d) Incentive: Lower rates for diversion than for landfilling.

(e) Funding: Through the rate structure. There would be a haul charge and a disposal charge at the processor's. For customers over a given number of miles, there would also be a mileage charge. The mileage charge is the variable that would make it either more or less expensive to divert than to landfill the yard debris. For most customers within the Metro boundary (and inside the burning ban) it would be less expensive to divert the yard debris.

2. Self Haulers

(a) Provider of Service: Private individuals with yard debris from their own yards.

(b) Service: Divert personal yard debris to a processing site rather than landfilling it.

(c) Frequency: Probably seasonal as yard debris is generated. Education programs by DEQ/Metro should encourage self-haulers to divert their yard debris to a processor.

(d) Incentive: Lower rates for diversion than for landfilling.

(e) Funding: Self.

3. Landscapers

(a) Provider of Service: Landscaping companies.

(b) Service: Divert yard debris incidental to landscaping services to a processing site rather than landfilling it.

(c) Frequency: As often as a full load accumulates in their trucks used in landscaping operations. During peak seasons, the frequency would probably be at least daily, if not more often.

(d) Funding: Through customer service charge.

(e) Incentive: Lower rates for diversion than for landfilling.

II. NEIGHBORHOOD DROP-OFF CENTER PROGRAMS

1. City of Portland/Multnomah County (non-regulated)

(a) Provider of Service: Solid Waste Haulers would provide drop boxes and equipment and would seek assistance from neighborhood and service associations for manning the drop-off sites.

(b) Service: Provide neighborhood drop-off centers to which all residents within a neighborhood could bring yard-debris.

(c) Frequency: At least semi-annually (spring and fall), but not more frequent than quarterly (January for Christmas trees and winter yard cleanup; April for spring yard cleanup; July for summer yard cleanup; October for fall yard cleanup).

(d) Incentive:

(1) Clean-ups would be provided at peak seasons for generation of yard debris, so the ability to get rid of the yard debris would be timely.

(2) Convenience of drop-off centers in the various neighborhoods as opposed to having to get the yard debris to a processing facility.

(3) Much lower charge than landfilling.

(e) Funding: Fee for service to cover costs of labor, equipment, overhead, hauling, and processing.

2. Franchised Areas

(a) Provider of Service: Solid Waste Haulers in each geographic area would provide drop boxes and equipment and would seek assistance from neighborhood and service associations for manning the drop-off sites.

(b) Service: Provide neighborhood drop-off centers in more populated areas; in less populated areas, centers could be at grade schools or some other focal point for the community.

(c) At least semi-annually, but not more frequent than quarterly.

(d) Incentive (same as (d) above).

(e) Funding: Through the rate structure as a fee for service.

III. WEEKLY CURBSIDE COLLECTION PROGRAM (Assumes Tax Base Funding)

(a) Provider: Solid Waste Hauler.

(b) Service: Weekly curbside collection of yard debris:

(1) Yard debris to be at curbside before 7:00 AM on regular collection day for garbage service.

(2) Grass, small trimmings and other yard debris must be in 30 gallon cans, similar plastic cans, paper boxes or other suitable bag or container. Any container or bag over 60 pounds, it shall be placed in separate containers with each container not to exceed 60 pounds.

(3) All tree trimmings to be in lengths no longer than four feet. It would be the duty of citizens to see that woody trimmings met this length requirement.

(4) It would not be a requirement that citizens benefitting from this program be garbage customers of any individual collector.

(c) Frequency: Weekly. (A monthly program should be rejected because it would necessitate unsightly piles of yard debris accumulating along public streets. Experience with monthly programs in other areas of the country indicate that such accumulations of yard debris lend themselves to vandalism, arson, wind scattering the yard debris and creating traffic hazards, deposits by the public of contaminant materials, and unsightly neighborhoods generally.)

(d) Incentives:

(1) Convenience of pickup shortly after yard debris is generated.

(2) Lower charge than landfilling because the charge is spread among all landowners and not just users of service.

(e) Funding. The only finalized study available is City of Oregon City where funding is by a real property tax levy. The same solid waste company also has a weekly curbside yard debris program in the City of Gladstone which is funded by general fund dollars.

It is assumed that a weekly curbside collection program would require funding by tax monies in order to spread the cost over a greater base. The total amount of the 3-year levy in Oregon City is \$294,000 or an average of \$98,000 per year to cover the costs of the yard debris collection program. The average yearly amount of yard debris collected is 5,000 cubic yards (compacted). There are approximately 5800 dwellings in Oregon City, making an annual unit cost of \$17 per dwelling. According to Metro's records, there are 394,400 dwellings within the Metro service boundary, and if the cost were \$17 per dwelling, the total cost for the region would be \$6,704,800 annually.

OREGON ENVIRONMENTAL QUALITY COMMISSION
WITNESS REGISTRATION

Jim Brown
NAME (PLEASE PRINT)
4000 1st St. NE
ADDRESS
1000 1st St. NE
AFFILIATION

I REQUEST APPROXIMATELY 5 MINUTES TO SPEAK.
Smile MANAGEMENT.

OREGON ENVIRONMENTAL QUALITY COMMISSION
WITNESS REGISTRATION

GARY Newkirk
NAME (PLEASE PRINT)
2234 SE 53rd Ave
ADDRESS
None
AFFILIATION

I REQUEST APPROXIMATELY 10 MINUTES TO SPEAK.

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

in 1992 Air Quality

JOHN CHARLES

NAME (PLEASE PRINT)

2637 SW WATER AVE

ADDRESS

OREGON ENVIRONMENTAL COUNCIL

AFFILIATION

I REQUEST APPROXIMATELY 5 MINUTES TO SPEAK.

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Richard Kirkham

NAME (PLEASE PRINT)

9225 Steel Bridge Rd Willamina

ADDRESS

Farmer

AFFILIATION

I REQUEST APPROXIMATELY _____ MINUTES TO SPEAK.

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Tom Dowada
NAME (PLEASE PRINT)

Rm 1530 WILLAMETTE CENTER PORTLAND OREGON
ADDRESS

ASSOCIATED OREGON INDUSTRIES
AFFILIATION

I REQUEST APPROXIMATELY 1 MINUTES TO SPEAK.

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Rich Cannon
NAME (PLEASE PRINT)

Chairman
ADDRESS

Portland's Citizens Sewer Advisory Board
AFFILIATION

I REQUEST APPROXIMATELY < 2 MINUTES TO SPEAK.

- With Brad Hooper

AGENDA ITEM K

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Brad Higbee
NAME (PLEASE PRINT)

City of Portland
ADDRESS

AFFILIATION

I REQUEST APPROXIMATELY 2 MINUTES TO SPEAK.

- With Rich Cannon

AGENDA ITEM M ✓

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

LeRoy Childers
NAME (PLEASE PRINT)

P.O. Box E, Enterprise, OR, 97828
ADDRESS

Wallowa County
AFFILIATION

I REQUEST APPROXIMATELY 3 MINUTES TO SPEAK.

AGENDA ITEM M ✓

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Paul Castilleja
NAME (PLEASE PRINT)

P.O. Box 204
ADDRESS

City of Joseph, Marion
AFFILIATION

I REQUEST APPROXIMATELY 3-5 MINUTES TO SPEAK.

AGENDA ITEM M ✓

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Stephen C Anderson
NAME (PLEASE PRINT)

92 Cedar Street LaGrande Ore
ADDRESS

Consulting Engineer
AFFILIATION

I REQUEST APPROXIMATELY 3 MINUTES TO SPEAK.

AGENDA ITEM M Joseph ✓

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Ralph Schwehart
NAME (PLEASE PRINT)

PO Box 266 Enterprise Oregon 97829
ADDRESS

Consulting Engr - Wallawa Wdr. Engineering
AFFILIATION

I REQUEST APPROXIMATELY 5 MINUTES TO SPEAK.

AGENDA ITEM M

OREGON ENVIRONMENTAL QUALITY COMMISSION

WITNESS REGISTRATION

Jim Chandler
NAME (PLEASE PRINT) ✓

P.O. Box 639 Joseph, Ore.
ADDRESS

AFFILIATION

I REQUEST APPROXIMATELY 7 MINUTES TO SPEAK.

DEPARTMENT OF ENVIRONMENTAL QUALITY

To: Fred Hansen, Director
From: J. Core through J. Kowalczyk & R. Householder
Subject: EQC Presentation at Dec. 11th by Grande Ronde Resource Coalition

Date: November 20, 1987

During the public forum period of the December 11th EQC meeting, the Grande Ronde Resource Coalition will make a presentation on air quality in La Grande. The Coalition will be requesting Department action to control agricultural field burning in the Grande Ronde Valley and mitigation of residential wood smoke in La Grande. The presentation is the outgrowth of a growing conflict between some sectors of the public and the grass seed growers field burning activities. Smoke impacts from grass field burning were especially bad in late August and early September of this year, resulting in a number of complaints (about 25) to the Eastern Regional Office and Air Division.

In response to public concern, the Division has begun an evaluation of current air quality in La Grande and potential public health concerns. We are also conducting an indepth review of the Union County Seed Growers Association voluntary smoke management program and USDA Forest Service slash burning programs. The Division's evaluation and recommendations for future Department action should be completed in late December.

Our current perceptions are as follows:

1. PM₁₀ air quality in LaGrande is marginal with respect to meeting air quality standards. An intensive every-day sampling program being started this winter should resolve the compliance status of the community.

2. The voluntary program sponsored by the seed growers has not achieved the level of protection demanded by the community largely because of reluctance of a small number of growers to comply with burning advisories. There may be other problems uncovered during our study.

3. Residential wood smoke is a growing problem of community concern that is not likely to be delt with unless standards are exceeded.

The conflict between the growers and concerned sectors of the community is, at times, quite heated and is likely to require Department intervention. Our concept of a statewide smoke management plan dealing with slash and field burning was prompted to some extent by this problem and complaints concerning burning in the Madras area.

MICHAEL A. HETRICK, M.D., FAAP

PEDIATRICIAN: infants, children and adolescents

612 SUNSET DRIVE

LA GRANDE, OREGON 97850

Telephone (503) 963-9123

December 7, 1987

John Core
Department of Environmental Quality
811 S.W. Sixth
Portland, OR 97204

Dear Mr. Core,

I understand that there will be a hearing on December 10, 1987, regarding air quality issues and their health effects; and, that some of the particulars of these issues will deal with the Grande Ronde Valley in eastern Oregon. I would request that the following thoughts be read in public testimony at that hearing.

I am a practicing pediatrician in La Grande, Oregon, and have lived here for five years. During this period of time, I have had the opportunity to witness an increase in allergic and irritant respiratory symptoms in a number of young children during the field burning season in the Grande Ronde Valley. At least on one occasion a family has moved from this area because their son's asthma was so exacerbated at this time of year that he effectively had become a respiratory invalid, unable to participate in most activities out-of-doors.

While I am unaware of any clinical study having been done in this area, my impression of these adverse effects of field burning is certainly well supported in the pediatric medical literature by studies on the effects of wood burning stoves and passive smoking in the home. It seems clear to me that an increased concentration of products of combustion in the air that children breath can have adverse health effects on a significant number of individuals.

I am, therefore, very concerned about the issue of field burning, as well as wood smoke pollution, in the Grande Ronde Valley and statewide. I strongly feel that further study of this issue is required and that consideration be given to more regulation in this area.

Thank you for the consideration your committee gives these important health issues.

Sincerely Yours,



Michael Hetrick, M.D.

MAH/bjh.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED

DEC 10 1987

OFFICE OF THE DIRECTOR

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
DEC 09 1987

AIR QUALITY CONTROL

new Rocker

Gary E. Newkirk
2234 S.E. 53rd Ave.
Portland, OR 97215
December 11, 1987

Oregon Environmental Quality Commission
811 S.W. 6th Ave.
Portland, OR 97204

Commission Members:

I hereby request that you review and uphold my request for D. E. Q. to acknowledge having jurisdiction over this problem and that corrective action be required of the Twin Rocks Sanitary District to prevent the annual flooding of my house with raw sewage. If the Commission's decision is that you do not have authority for this health problem, I request that you state this formally in writing to me.

Janet A. Gillaspie of DEQ informed me in writing on October 14, 1987 that DEQ has no authority or responsibility to force corrective action because it is not a system wide problem. I filed my first complaint with DEQ in 1982. The Twin Rocks Sanitary District claims that it must only meet DEQ criteria and they will make no changes unless required to do so by DEQ. This is a classic Bureaucratic Catch "22".

I will give you in the following paragraphs a list of the six times the sewage system has flooded my house at Barview and the complaints that I have made up to now.

In 1978, DEQ ordered the construction of a sewage system in an area which included my house. DEQ reviewed and approved the design for this system. DEQ monitored the construction.

Listed below are the dates that raw sewage backed up into my house and the immediate cause given. In four of these occurrences the volume was sufficient to have it flowing out both the front and back doors. In occurrences 2 through 6, the raw sewage overflowed the manhole situated 18" higher than my bathroom floor on the elevated road in front of my house. I have no record of this point on the first occurrence.

March	1980	Main 8" line plugged
April	1981	Electric pump failure
January	1982	Pumps unable to handle volume of sewage
November	1983	Cause not revealed
April	1985	Cause not revealed
August	1987	Pump station setup wrong

The basic cause of all these occurrences is a design flaw. The section of sewer line in front of my house is located between

two pump stations which are situated near the edge of Tillamook Bay. The sewer line between them was put under the elevated road running along the edge of bay's breakwater. This road is elevated 3 feet to 4 feet higher than ground level. The houses are built on ground level. My house has the lowest floor level of this section and thus is flooded whenever there is a sewage system operating problem.

My first official complaint, other than to the Twin Rocks Sanitary District, was to the Tillamook County Health Department. They referred me to the Oregon State Health Division. After some months, Mr. Greg Chakarun of the Oregon State Health Division, said they did not have responsibility for this area of public health. That this area was the responsibility of DEQ. I then made my first complaints to DEQ in the summer of 1982.

Over the next six years I made a great many written complaints to DEQ under your file number 90578. I also made numerous personal visits to request action on the part of DEQ. Enclosed are just a few examples of both DEQ and my correspondence. The entire file is literally inches thick would be unwieldy to attach. I refer you to the DEQ file for additional details.

Another factor of which you should be aware is that my house is a listed National Historic Building. It was built in 1902 as the first United States Lifesaving Station on Tillamook Bay. It was the second such Station on the entire Oregon coast. The U. S. Lifesaving Service later changed its name to the U. S. Coast Guard. I believe that under several sections of Federal historic preservation laws you have additional responsibilities to protect and preserve historic building. I would call your particular attention to project grant requirements.

I again request your favorable ruling on my petition for help.

Sincerely yours,

Gary E Newkirk

File 90578

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Northwest Region Office

DATE: February 9, 1984

FROM: James L. VanDomelen,
Water Quality Division

SUBJECT: Complaint

A Mr. Gary Newkirk, 2234 S.E. 53rd, Portland, Oregon 97215; Bus/Res 239-9224; owns property at 15280 Lakeside Drive, Rockaway. This property is in the Harview area of Twin Rocks Sanitary District. His property includes a residence, the plumbing of which is the bypass point for a raw sewage pump station owned and operated by the Sanitary District. Gary complained to me about a year ago, informally. His residence had been dosed with sewage three times at that time. Despite his own efforts with the District Board during the past year, the problem is not solved. The residence hasn't been rented in 1-1/2 years, mainly due to this sewage problem. It has been dosed a total of four times now. He has formally complained to DEQ today.

Please investigate.

JLV:g
WG3205



Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE: (503) 229 5696

March 8, 1984

- Twin Rocks Sanitary District
P. O. Box 69
Pockaway, OR 97136

Re: Twin Rocks
File No. 90578

Gentlemen:

This letter is to confirm results of a field inspection with John Holstrom of conditions at the residence owned by Gary Newkirk, the old Coast Guard facility. It appears that this residence is the overflow point for the Jetty Pump Station when it is overloaded or fails. This station has duplex pumps, high water alarm and standby power from the Barview pump station generator.

We believe that the overflow point of a raw sewage pump station should be at an elevation lower than the floor of a private residence. You are permitted to provide such alternate overflow and, in this case, we hereby require that you provide same. This should probably have been provided at the time of original construction, if we all knew then what we all know now.

The sewer at the Newkirk property is between elevation 9.44 and 10.51. The top slab of the Jetty Pump Station wet well is elevation 14.70. Adjacent manhole covers are about elevation 13. An overflow pipe at elevation 10 would relieve a surcharge condition in the sewer fronting the Newkirk property whenever it develops. Such pipe could be at the pump station wet well or at an adjacent manhole. Discharge most likely would have to be into the bay. Exact elevation needs to be determined based upon engineering survey and should be no lower than needed. A site plan with details of construction will need to be submitted to DEQ for review and approval prior to construction.

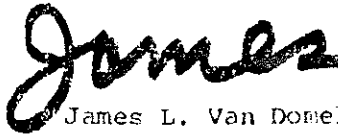
Providing an outside surface overflow at the Newkirk residence was discussed. Installing a backwater valve at his property was also discussed. Also providing a pump in lieu of gravity service was discussed.

These solutions would each leave Mr. Newkirk with some peril and will either transfer the overflow to the next higher residence or onto the surrounding streets in front of these residences. So, please reject these ideas.

Twin Rocks Sanitary District
March 8, 1984
Page 2

If you have questions, please call me at 229-5310.

Sincerely,



James L. Van Domelen
Sewerage Works Engineer
Source Control Section
Water Quality Division

JLV:g

cc: Gary Newkirk
2234 S.E. 53rd
Portland, OR 97215

Northwest Region Office, DE2



Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1780, PORTLAND, OREGON 97207 PHONE (503) 229-5696

March 23, 1984

Twin Rocks Sanitary District
Attention: William Fix, Board Chairman
P. O. Box 69
Rockaway, OR 97136

Re: WQ - Twin Rocks
File No. 90578
Tillamook County

Gentlemen:

I have recently reviewed the Department's letter dated March 8, 1984, authorizing the construction of facilities to bypass raw sewage to Tillamook Bay from the Jetty Pump Station in Barview. This action was proposed in order to eliminate the occasional backup of sewage into the Newkirk residence at 15280 Lakeside Drive, Rockaway.

The March 8, 1984, letter of authorization is not consistent with the program to protect the shellfish in Tillamook Bay. Therefore, the Department must hereby rescind the March 8, 1984, approval to construct a bypass structure.

This Department, together with the Oregon State Health Division, Federal Food and Drug Administration, and locally involved governments, has endeavored for a number of years to establish and maintain a shellfish protection program in Tillamook Bay. This program requires all sewage treatment facilities that may impact Tillamook Bay to have adequate treatment and disinfection equipment and procedures, special maintenance programs, breakdown alarm systems, and emergency notification procedures. The intent is to prevent raw or inadequately treated sewage discharges to the bay.

You are urged to work with your engineer to find a method to resolve this sewage backup problem without the necessity for construction of a bypass structure. In the event that other alternatives are not feasible, a proposal for a bypass must be approved by the Health Division, Food and Drug Administration, and this Department prior to construction and would, at a minimum, have to incorporate the protection measures cited above for Tillamook Bay.

We are prepared to meet with the Board to discuss and assist as we may, in the development of an acceptable plan. If you have any questions regarding this matter and if we can be of any assistance, please contact Tom Bispham of our Northwest Region Office in Portland at 229-5292.

Sincerely,

Harold L. Sawyer
Administrator
Water Quality Division

HLS:g
TG3334

cc: Oregon State Health Division, Attention: Greg Chakarun
Gary Newkirk, 224 S.E. 53rd, Portland, OR 97215
Northwest Region Office, DEQ

Gary E. Newkirk
2234 S. E. 53rd Ave.
Portland, OR 97215
Home Phone: 239-9224
March 27, 1984

Mr. Harold L. Sawyer
Administrator
Water Quality Division
Department of Environmental Quality
522 S. W. Fifth Avenue
Portland, OR 97201

SUBJECT: WQ - Twin Rocks
File No. 90578
Tillamook County

Dear Mr. Sawyer:

In your letter dated March 23, 1984 to the Twin Rocks Sanitary District you rescinded the March 8, 1984 approval to construct a bypass into Tillamook Bay for the raw sewage overflows that have been flooding my house. You stated in your letter that there were "occasional backups into the Newkirk residence" and implying that this caused me inconvenience.

The fact is that these regular floodings have caused me very great "inconvenience" and considerable financial loss. The Twin Rocks Sanitary District sewer has flooded my house four (4) times in four (4) years. This seems to be a rather good record for a five year old system. The worst time that this happened was the third time and I will briefly describe that one to you although the others were also bad. The sewage flooded the house to the extent that raw sewage was flowing out under the doors. The house was rented at the time and the tenant called me in Portland. I called Mr. Fix of the Twin Rocks Sanitary District. They were unable to shut off the flow in to my house. When it was over, there was a four and one-half (4½) inch layer of SHIT over all the house. I cleaned up the house myself as I have done the other three times. The Twin Rocks Sanitary District has refused both to help me clean up the "inconvenience" and to compensate me in any way for the clean up or the damages.

The Twin Rocks Sanitary District and their Insurance Company have refused all claims that I have made to them. Their agent did estimate cost of repair after the third flooding at about \$12,000.00 and this did not cover my time, effort and expenses to clean up the "inconvenience". In all my losses are well over \$20,000.00 and I have not collected anything from the Sewer District or their Insurance Company for these damages. As the house is unrentable in its present condition, I am even in very serious danger of having it repossessed.

Water Quality Division
Dept. of Environ. Quality

APR 3 1984
101 - WILMINGTON

Mr. Harold L. Sawyer
Department of Environmental Quality
Page 2

The Department of Environmental Quality ordered the sewer to be built in the first place. My house had been on a septic tank system for seventy eight (78) years without any problems. In the five years that we have been on the sewer system, I have been flooded four times. I have been trying to get the Twin Rocks Sanitary District to solve this problem for three years without success. Just when a solution to the problem was established, you rescind approval for that solution.

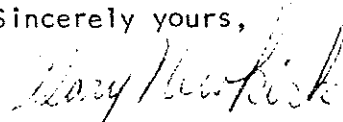
I now feel that both you personally and the Department of Environmental Quality have an obligation to have this problem corrected before I am again flooded.

Based on events of the past several years, my house will again be flooded sometime between November 1984 and February 1985, if not before then.

I am hereby asking you, Mr. Sawyer, to promptly respond to me in writing specifically about each of the following requests:

1. Acknowledge my letter and state that you understand the risk to my Barview house.
2. State whether or not the Twin Rocks Sanitary system is defective and whether or not they are responsible for making changes.
3. Set a Deadline for a method to resolve the sewage backup problem. I would urge the deadline not be over 60 or at the most 90 days.
4. Set a Deadline for completion of the project to resolve the sewage backup problem. I would again urge the deadline not be over 60 or at the most an additional 90 days.
5. Acknowledge that if modifications are not completed by the time fall rains come again, based on past experience my house will again be flooded by the sewer system.

Sincerely yours,



Gary E. Newkirk

cc: James L. Van Domelen
Sewerage Works Engineer
522 S. W. Fifth Ave.
Portland, OR 97201

Mr. Tom Bispham
Regional Manager
D.E.Q. - N.W. Region
P. O. Box 1760
Portland, OR 97207

Mr. Greg Chakarun
Oregon State Health Division
P. O. Box 231
Portland, OR 97207

355-2732
Twin Rocks Sanitary District

Twin Rocks Sanitary District

Serving Twin Rocks, Watseco and Barview

Post Office Box 69
Rockaway, Oregon 97136

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
JUN 25 1984

June 19, 1984

WATER QUALITY CONTROL

JLV

James L. Van Domelen
Sewage Works Engineer
Department of Environmental Quality
22 S.W. Fifth Avenue
Portland, Oregon 97201

Re: Sewage overflow at the Newkirk residence
File No: 90578

S-Twin Rock

Dear Mr. Van Domelen:

This is to advise you that Twin Rocks Sanitary District has installed a check valve at the above residence and therefore should resolve any back up problem.

Thank you for your past help.

Sincerely,

Twin Rocks Sanitary District

by *William W. Fix*
Wm. Fix, Chairman

NWRD/HLS

355-2424

cc: Gary Newkirk
2234 S.E. 53rd
Portland, OR 97215

If the check valve works, this will place the sewage onto road in front of Newkirk property or onto his front lawn instead -- not a solution or resolution


STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Environmental Quality Commission

DATE: November 12, 1987

FROM: Fred Hansen, Director 

SUBJECT: 1986 Annual Reasonable Further Progress

Enclosed please find a copy of the 1986 report on Reasonable Further Progress. This report to the Environmental Protection Agency describes our efforts and progress towards meeting clean air standards in Oregon's non-attainment areas. Reasonable Further Progress reporting on each non-attainment area must be submitted to the EPA annually until the area is redesignated as meeting clean air standards.

Should you have any questions about the report, please contact Merlyn Hough in Portland at 229-6446.

FH:d
AD1751
Enclosure

State of Oregon
Clean Air Act Implementation Plan

REPORT ON REASONABLE FURTHER PROGRESS
THROUGH DECEMBER 31, 1986

Oregon Department of Environmental Quality
October 1987

State of Oregon
Clean Air Act Implementation Plan
REPORT ON REASONABLE FURTHER PROGRESS
THROUGH DECEMBER 31, 1986

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**THE 1986 REPORT ON REASONABLE FURTHER PROGRESS
STATE OF OREGON CLEAN AIR ACT IMPLEMENTATION PLAN**

Department of Environmental Quality
October 1987

INTRODUCTION

This report outlines the progress made through the end of 1986 to attain and maintain ambient air quality standards in the air quality maintenance areas (AQMA) and nonattainment areas (NAAs) of Oregon. It includes emissions inventories and reasonable further progress (RFP) graphs, discussions of emission increases and decrease, and summaries of progress toward attainment of standards. The emissions and ambient air quality data are from the calendar year 1986, but the discussions of progress in implementing control strategies include some 1987 activities where pertinent. The pollutant emissions of concern are particulate matter, carbon monoxide (CO), and volatile organic compounds (VOC). These pollutant emissions have contributed to violations of the ambient air quality standards for total suspended particulate (TSP), carbon monoxide, and ozone in certain areas of Oregon. Pollutant control strategies have been submitted to EPA as required by the Clean Air Act.

GENERAL COMMENTS

1. In 1985 the DEQ issued a permit to one new major source: the co-generation facility, Biomass One L.P.. Biomass One L.P. is located in White City, within the Medford-Ashland AQMA, and first began operating in 1986. Biomass One does not affect RFP because its emissions were offset by reductions in emissions of other local industry. The quarterly grant reports to the EPA contain records of all other new permits issued.
2. Quarterly grant reports to the EPA also include Vehicle Inspection Program reports, enforcement actions against permitted and other sources and asbestos demolition and renovation activities. The 1986 compliance status of all major Oregon sources was reported in Compliance Data Systems (CDS) tapes which were submitted to the National Computer Center in Research Triangle Park, N.C. at the same intervals as quarterly grant reports. None of the few sources in noncompliance interfered with the demonstration of RFP.
3. New or revised regulations and strategies adopted and submitted as State Implementation Plan (SIP) revisions during 1986 are listed in the Eighth Annual Report submitted to the EPA on June 30, 1987. None of the 1986 SIP revisions affect the demonstration of RFP.
4. The Oregon air pollution control strategies are generally being implemented on schedule. No variances were issued during 1985 that affect RFP.

IMPLEMENTING THE NEW PM₁₀ STANDARD

Past RFP reports on particulate strategies have dealt with progress in implementing TSP control strategies. The Environmental Protection Agency (EPA) adopted new ambient particulate standards in July, 1987, that focus on the inhalable particulate less than ten micrometers in diameter (PM₁₀) that is of greater health concern. In anticipation of these new national particulate standards, the Department has given higher priority to those TSP particulate control measures that primarily reduce inhalable particulate levels (e.g., industrial requirements, woodstove certification program, open burning limits, and other programs to reduce combustion emissions). In the future, the RFP report will not include TSP strategies, since EPA has dropped its TSP standard. Instead, reports will focus on progress with PM₁₀ strategies.

The Department and the Lane Regional Air Pollution Authority are in the process of reevaluating which areas of Oregon are particulate problem areas and which control measures are most appropriate to reduce PM₁₀ levels. New particulate control plans, replacing the current TSP plans with PM₁₀-specific plans, are due to EPA by May 1, 1988. The PM₁₀ plans must be adequate to meet the ambient PM₁₀ standards by late 1991 (with a possible extension to 1993 if all reasonable control measures are not adequate to meet the standards by 1991).

Four areas of Oregon have been identified as Group I PM₁₀ problem areas: Medford, White City, Eugene-Springfield, Klamath Falls, and Grants Pass. Another four areas are Group II areas: Bend, Oakridge, La Grande, and Portland. In the Group I areas, worst day PM₁₀ levels must be reduced by 25-60% in order to meet the daily PM₁₀ standard, and annual average PM₁₀ levels must be reduced 0-30% to meet the annual standard.

Worst day PM₁₀ levels typically occur during the winter and appear to be caused primarily by woodsmoke from residential woodstoves and fireplaces. The other sources of interest, on worst days or annual average, include soil and road dust, the wood products industry, motor vehicle exhaust, and backyard burning.

Potential control measures to reduce woodsmoke include the woodstove certification program, financial incentives to add retrofit control devices or replace existing woodstoves with cleaner burning units, special utility rates to encourage less woodburning, curtailment during pollution episodes, better weatherization of woodheated homes, improved firewood seasoning, and expanded public education.

The Oregon Department of Environmental Quality and Lane Regional Air Pollution Authority are working with local officials and advisory committees to evaluate the potential control measures for residential woodburning and other source categories. The recommended package of control measures for each area will then be incorporated into the State Implementation Plan and implemented by interagency commitments, local ordinances, and ODEQ or LRAPA rules.

PORTLAND-VANCOUVER AQMA: Particulate Strategy

The Portland-Vancouver AQMA portion of the State Implementation Plan (SIP) for attainment of the secondary TSP standard was submitted to EPA on March 24, 1981 and was approved by EPA on April 12, 1982.

1. Update of the Particulate Emission Inventory

The 1977 base year and 1980-1985 emission inventories are summarized in Table 1 and outlined in more detail in Attachment 1. These inventories include only emissions from the Oregon portion of the AQMA. The 1980-1985 emission inventories are based on recent wood heating surveys, annual point source production/emission information, annual traffic volumes, and most recent emission factors.

Table 1. Portland-Vancouver AQMA (Oregon Portion) Particulate Emission Inventories.

Year	Particulate Emissions (Tons Per Year)				Total
	Residential Woodburning	Fugitive Dust	Industrial Process	Other Sources	
1977	6,310	18,794	4,448	3,480	33,032
1980	7,707	19,683	3,224	3,531	34,148
1981	8,918	20,034	3,064	3,618	35,624
1982	9,882	19,276	2,518	3,573	35,249
1983	9,035	18,084	2,421	3,536	33,076
1984	9,695	18,898	2,512	3,550	34,655
1985	11,400	22,212	2,085	3,654	39,373
1986	10,583	20,400	1,868	3,843	36,694

2. Reasonable Further Progress Tracking

The particulate emission trend for the Portland area is outlined in Figure 1. Since the Portland area particulate strategy consists of commitments to develop control measures for non-traditional particulate sources such as residential wood burning and road dust, the strategy did not include a specific RFP emission reduction graph.

Recent activities to implement the control measures of the Portland particulate strategy are summarized below.

a. Woodstove Certification Program

On June 8, 1984, the Environmental Quality Commission adopted emission standards for woodstoves. In order to be sold in Oregon after July 1, 1986, new woodstoves had to be approximately 50% cleaner than current models, and after July 1, 1988, they will have to be approximately 70% cleaner than current models. To date, five testing laboratories have been accredited and two additional laboratories are in the process of being accredited. As of October, 1987, 145 stove models have been certified, 107 of which meet the 1988 standard.

b. Other Vegetative Burning Emission Control Programs

The Oregon Environmental Quality Commission adopted a ban on open burning (except for hardship cases) in the more densely populated portion of the Portland area on May 18, 1984. As a result, residential open burning emissions in 1986 were less than 10% of 1983 emissions.

c. Fugitive Dust Control Programs

Improved winter sanding practices have been implemented in the Portland area. The use of cleaner, larger gradation sanding material and quicker, more effective cleanup of sanding material have reduced the fugitive dust emissions from winter sanding. Winter sanding is generally limited to curves, intersections, and hills. The ODOT sweeper fleet has now been converted to vacuum sweepers; water is normally sprayed ahead of the sweepers.

About five acres of unpaved area in the northwest industrial area of Portland have been paved since 1980.

The Regional Transportation Plan (RTP) was adopted by the Metro Council on June 24, 1982. The RTP projects that the recommended plan would reduce traffic volumes, or vehicle miles traveled (VMT), 8% by the year 2000 (compared to the committed transportation system).

3. Discussion of Particulate Emission Increases and Decreases

Overall industrial emissions were lower in 1986 than in 1985 due to fluctuations of production levels in the various categories. Reynolds Metals decreased emissions by about 105 tons from 1985 to 1986. Emissions decreases in residential wood heating and road dust emissions were due to warmer and wetter weather in 1986. In 1985 there were 5,095 degree days and 7.1% of hours had measurable rainfall. In 1986 there were 4,131 degree days and 10.3% of hours had measurable rainfall. Traffic volumes in the Portland Metropolitan Area increased by 3% from 1985 to 1986.

4. Report on Standard Attainment Progress

Ambient particulate levels in the Portland area have been generally lower since 1981 than in the 1977 through 1980 period. Particulate levels in 1980 were very high due to the eruption of Mt. St. Helens and the resultant ash deposition.

Total suspended particulate levels at three key Portland monitoring sites are summarized in Table 2 and Figure 2. The Central Fire Station (CFS) is located in a commercial area of downtown Portland. The Pacific Motor Trucking site (PMT) is located in an industrial area of southeast Portland. The Transcon site (TC) is located in an area of paved and unpaved roads in the industrial district of northwest Portland.

Between 1985 and 1986, the annual geometric mean decreased at the Pacific Motor Trucking and Central Fire Station sites, and increased at the Transcon site. The second highest day values show the same trend: decreases at Pacific Motor Trucking and Central Fire Station, and a substantial increase at Transcon. Extensive road construction in Portland's northwest industrial area generated fugitive dust which caused the records of high levels of suspended particulates at the Transcon site. This was a localized event, and does not indicate a trend for the whole city. Once construction near the Transcon site is complete, the readings there should be consistent with readings at other monitoring sites. Both the highest and second highest days at the Transcon sites occurred during the dry summer season (August and July respectively) when fugitive dust tends to be at its worst. The PM₁₀ fraction at Transcon was particularly low, only about 38% of the TSP, during 1986.

Table 2. Summary of Ambient Particulate Levels in the Portland Area.

Year	Total Suspended Particulate (ug/m ³)					
	Annual Geometric Mean			Second Highest Day *		
	TC	PMT	CFS	TC	PMT	CFS
1977	68	77	71	160	182	155
1978	70	84	66	210	269	159
1979	82	78	76	246	186	195
1980	97	85	99	941	828	654
1981	64	63	59	152	130	153
1982	51	56	58	184	150	222
1983	**	54	50	170	119	152
1984	79	60	59	204	195	189
1985	98	65	67	229	155	175
1986	116	50	55	385	124	136

* Based on all samples collected (routine every-sixth-day samples plus any special samples).

** Site relocated, no data for January-March, 1983.

Figure 1
PARTICULATE EMISSION TREND
 Portland-Vancouver AQMA (Oregon Portion)

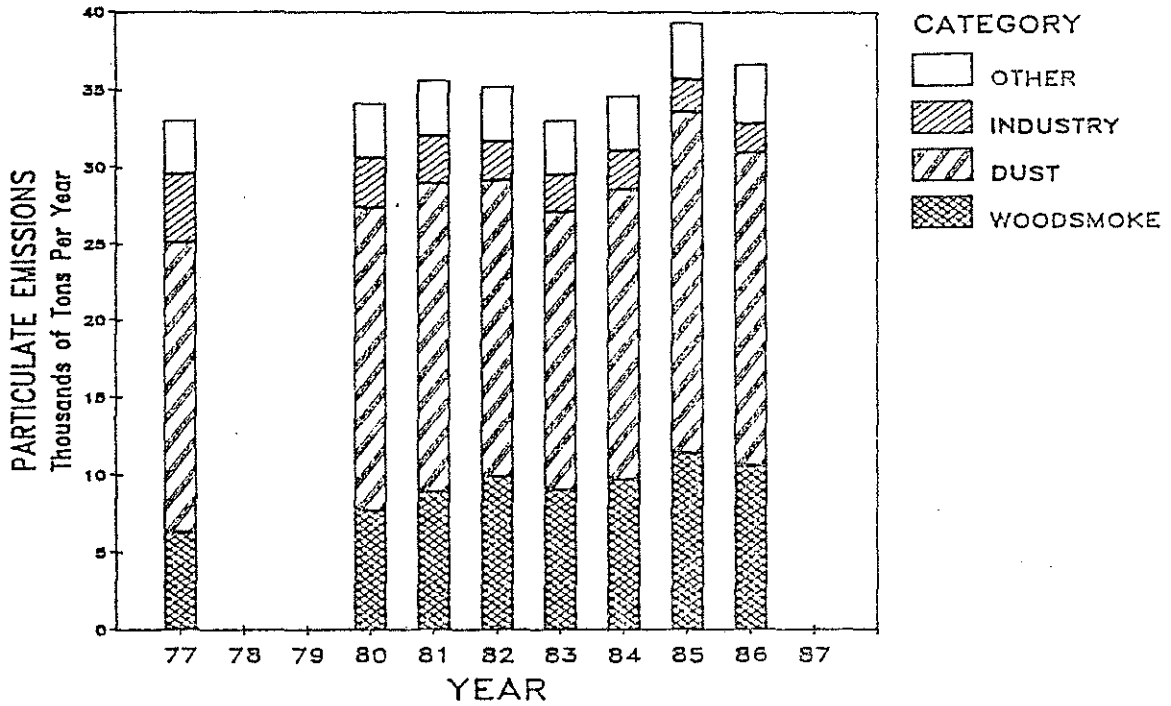
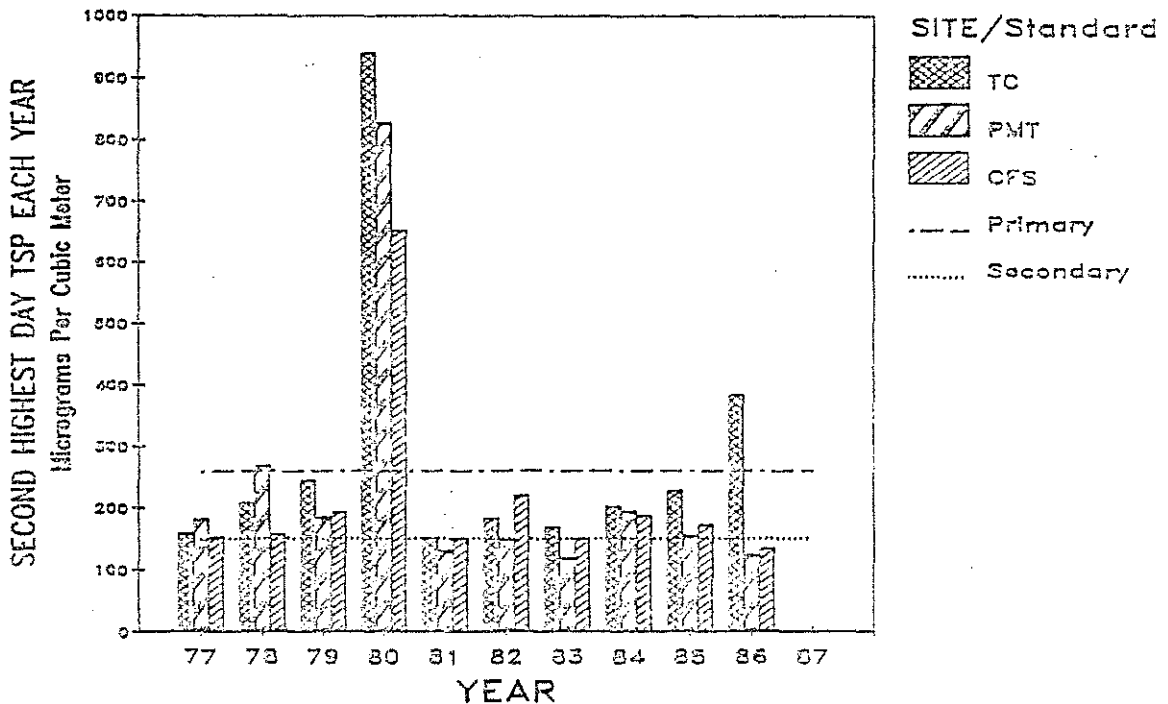


Figure 2
AMBIENT PARTICULATE TREND
 Portland-Vancouver AQMA (Oregon Portion)



PORTLAND-VANCOUVER AQMA: Carbon Monoxide Strategy

The Portland-Vancouver AQMA portion of the SIP for carbon monoxide was submitted to EPA on July 20, 1982 and approved by EPA on October 7, 1982.

1. Update of the Carbon Monoxide Emission Inventory

EPA Mobile 3.0 emission factors in conjunction with compatible Portland-specific inspection/maintenance (I/M) credits for carbon monoxide were used to estimate highway vehicle emissions. Rail and aircraft carbon monoxide emissions have been updated based on the latest number of operations. The emission inventories for highway motor vehicle emissions in the downtown Portland carbon monoxide nonattainment area are summarized in Table 3. The 1986 emission inventory for stationary and mobile source emissions in the Portland-Vancouver AQMA (Oregon portion) is outlined in Attachment 2.

Table 3. Carbon Monoxide Emission Inventories for Highway Motor Vehicles in Downtown Portland

Year	Carbon Monoxide Emissions (Kg/day)
1979	31,128
1982	28,289
1983	25,985
1984	26,077
1985	23,325
1986	22,674

2. Reasonable Further Progress Tracking

The updated RFP graph is displayed in Figure 3. The emission points on the RFP graph represent the annual highway motor vehicle emissions from Table 3. Highway motor vehicle emissions are the predominant influence on CO concentrations, and are the best indicator of the emission reduction progress to attain the CO standard, in the relatively small area of downtown Portland which is the CO nonattainment area. Woodstove emissions are considered minimal in this area.

3. Discussion of Carbon Monoxide Emission Increases and Decreases

The downward trend in carbon monoxide emissions from highway motor vehicles is primarily due to the Federal Motor Vehicle Emission Control Program (federal tailpipe program), the inspection and maintenance (I/M) program, and the downtown Portland Parking Management Program. The Downtown Parking Policy update was completed in 1985 and adopted by the Portland City Council on February 26, 1986. The Parking Management Program, as a first mandate of the update, completed a revised, comprehensive parking inventory during 1986.

The Department has operated a motor vehicle I/M program in the Portland area since July 1985. The I/M program in the Portland area operates in the 455 square mile Metropolitan Service District, which includes portions of Clackamas, Multnomah and Washington Counties. Vehicles registered within the program boundaries must comply with emissions control standards and obtain a Certificate of Compliance prior to vehicle registration renewal. Most vehicles must pass the exhaust emissions test every two years. Some vehicles, including government owned vehicles and heavy duty, gasoline powered trucks, must be inspected every year.

The biennial inspection includes two speed (idle and 2,500 rpm) exhaust gas analysis for carbon monoxide and hydrocarbon emissions, under hood inspection of pollution control equipment and check for visible smoke. During 1986, the Department conducted 507,936 emissions tests, and issued 345,321 Certificates of Compliance. At the Portland stations, the Department conducted 445,696 emissions tests, and issued 309,527 Certificates of Compliance. The pass rate was 66%.

Traffic volumes increased by 3% in the Portland Metropolitan Area from 1985 to 1986. A slight increase in downtown traffic is probably due to the September, 1986, completion of the Light Rail Project (MAX). MAX continues to experience a high rate of use, with 20,600 boarding riders per day during the last three months of 1986. In 1986 Tri Met buses had 159,300 boarding riders per day.

4. Report on Standard Attainment Progress

Ambient carbon monoxide levels are summarized in Table 4 and displayed in Figure 4. Ambient levels continued to improve in 1985. The second highest days at each site were less than 9 ppm, the federal CO standard.

Table 4. Summary of Ambient Carbon Monoxide Levels (8-Hour Averages) in the Portland Area.

Year	Second Highest CO Day (ppm)			Number of Days Over 9 ppm		
	Burnside*	Alder*	Hollywood	Burnside*	Alder*	Hollywood
1977	15.1	13.0	15.1	42	16	38
1978	13.2	11.1	14.3	25	5	40
1979	16.8	12.0	14.5	16	4	14
1980	12.0	13.0	12.6	12	8	12
1981	12.0	10.7	12.4	11	5	8
1982	9.4	9.8	10.4	1	2	3
1983	9.7	11.8	12.2	3	6	7
1984	6.9	9.9	9.2	0	2	1
1985	8.5	8.8	8.5	0	1	0
1986	6.9	8.6	8.6	0	0	1

* Located in the downtown Portland CO nonattainment area.

Although the 1985-86 ambient CO data indicates compliance with the federal CO standard, a 1984-85 study prepared by transportation consultants for the City of Portland indicates that continuous attainment will not occur until 1987. The City of Portland and the Department are in the process of updating the Portland CO portion of the State Implementation Plan. The updated SIP will be completed in 1988. The updated SIP will include the Downtown Parking Policy adopted by the City on February 26, 1986 and review the recent attainment projections.

Figure 3
CARBON MONOXIDE EMISSION TREND
 Highway Emissions in Downtown Portland

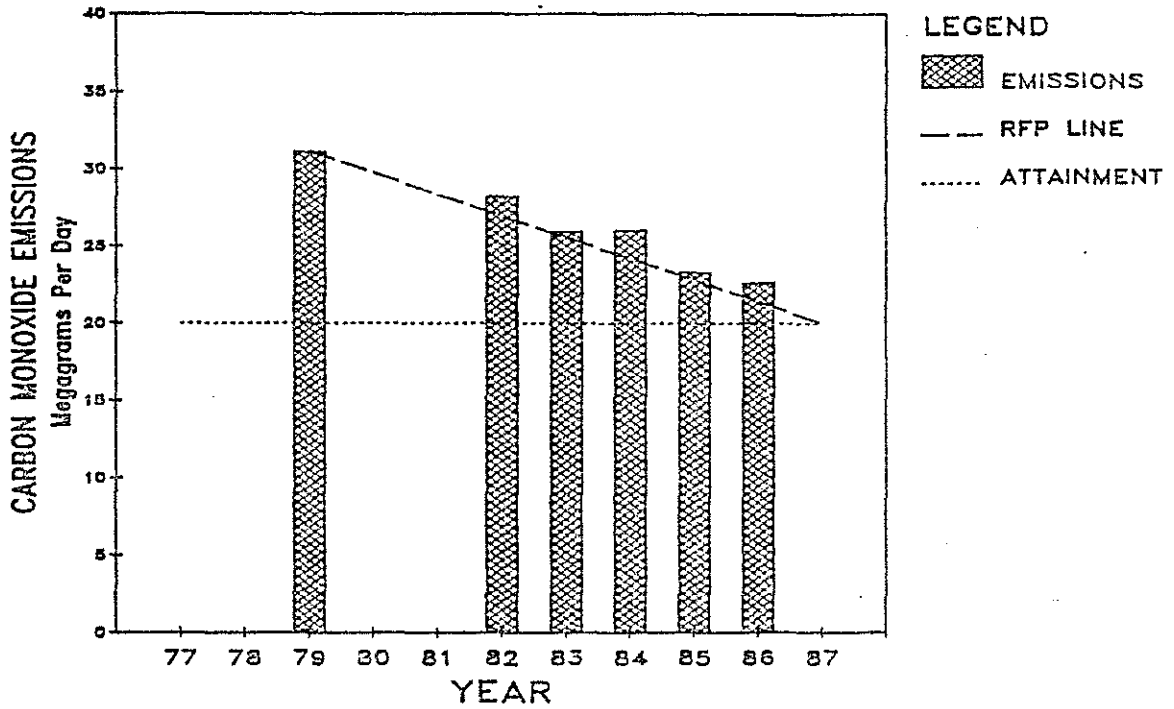
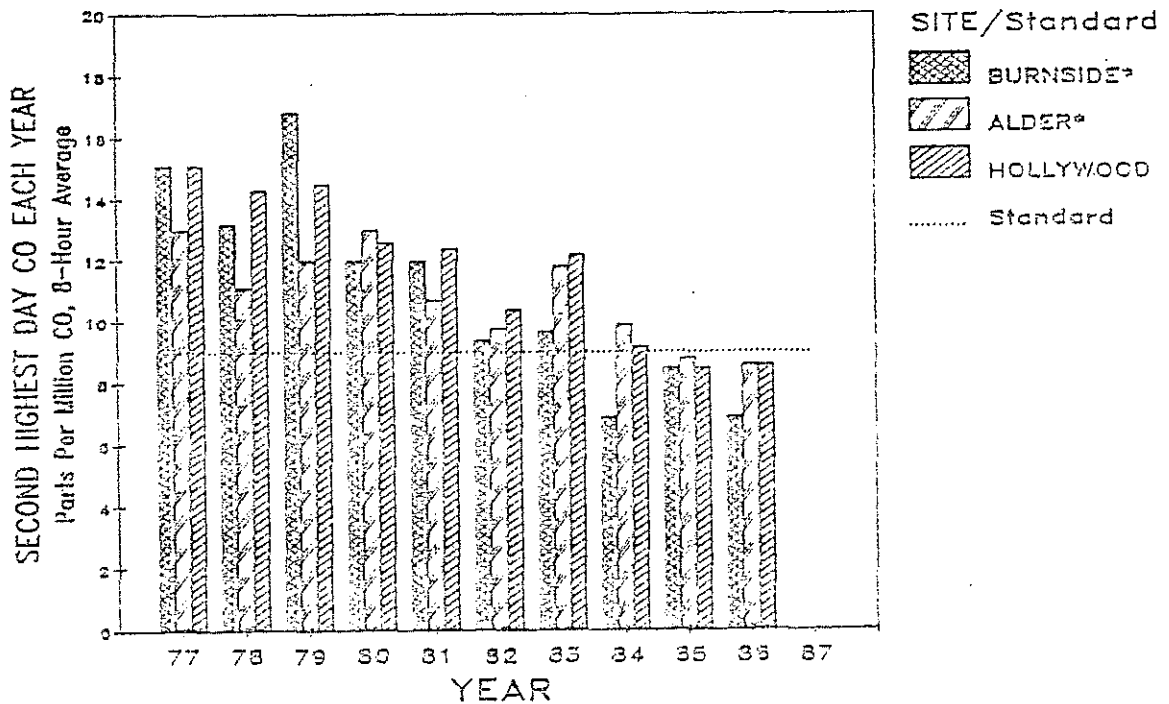


Figure 4
AMBIENT CARBON MONOXIDE TREND
 Downtown Portland* and Hollywood Areas



PORTLAND-VANCOUVER AQMA: Ozone Strategy

The Portland-Vancouver AQMA portion of the SIP for ozone was submitted to EPA on July 20, 1982 and approved by EPA on October 7, 1982. An updated ozone plan was adopted by the Environmental Quality Commission (EQC) on January 31, 1986 and submitted to EPA on February 24, 1986.

1. Update of the VOC Emissions Inventory

The base year for the Portland area VOC emission inventory is 1980. The VOC emission inventories are summarized in Table 5 and outlined in more detail in Attachment 3.

Table 5. Portland Area VOC Emission Inventories

Year	Volatile Organic Compound Emissions (Kg/day)*		
	Stationary Sources	Mobile Sources	Total
1980	87,843	83,335	171,178
1981	75,592	77,257	152,849
1982	62,157	73,678	135,835
1983	60,435	68,853	129,288
1984	59,654	65,955	125,609
1985	60,321	62,625	122,941
1986	58,718	55,857	114,575

* Average summertime weekday.

2. Reasonable Further Progress Tracking

The updated RFP graph is outlined in Figure 5. The emission points on the RFP graph represent the annual total VOC emissions from Table 5.

3. Discussion of VOC Emission Increases and Decreases

Highway VOC emissions in the Portland area have decreased substantially since 1980, primarily due to the federal tailpipe program and the Portland I/M program.

VOC emissions from petroleum marketing and storage sources decreased substantially during the 1980-1983 period due to the installation of floating roofs, secondary roof seals, vapor recovery systems on the loading racks at gasoline terminals, vapor return systems on gasoline bulk plants, and Stage I controls on gasoline service stations. VOC emission decreases also occurred in other stationary source categories such as paper coating.

The Portland-Vancouver AQMA ozone strategy identified a growth cushion of 1,780 kg/day. Essentially all of this growth cushion has now been allocated by the Department for the addition or expansion of several industrial sources or for revisions to the metal coater rules. Specifically, about 590 kg/d was allocated to the Port of Portland, 500 kg/d to Tektronix, 380 kg/d for rule revisions, and the remainder is allocated to a pending new source.

The Department, Metro and the Portland Ozone Task Force updated the Portland ozone strategy in 1985 using a 1982-85 data base. The Department submitted the updated strategy to EPA in February 1986.

4. Report on Standard Attainment Progress

The Portland ozone strategy projects attainment of the ozone standard by 1987. The RFP graph indicates that the Portland area VOC emission reductions are ahead of schedule. Ambient data appears to confirm that Portland will meet the ozone standard by the target date. Table 6 summarizes ambient ozone levels in the Portland area. The second highs are displayed graphically in Figure 6.

Table 6. Summary of Ozone Levels in the Portland-Vancouver AQMA

Year	Ozone Levels (ppm, hourly average)				Number of Days	
	Maximum		Second Highest		Over 0.12 ppm	
	Carus	Milwaukie	Carus	Milwaukie	Carus	Milwaukie
1979	0.125	0.115	0.105	0.102	1	0
1980	0.105	0.095	0.100	0.087	0	0
1981	0.215	0.108	0.145	0.106	5	0
1982	0.120	0.120	0.117	0.115	0	0
1983	0.106	0.125	0.093	0.124	0	1
1984	0.143	0.097	0.130	0.083	2	0
1985	0.136	0.155	0.130	0.118	2	1
1986	0.138	0.174	0.121	0.147	1	3
1987	0.114	0.145	0.105	0.111	0	1

The number of ozone exceedances averaged one or less per year at both Carus and Milwaukie during 1982-87, even though the frequency of ozone-conductive days (maximum temperature of 90°F or more) was about 25% greater than normal. The VOC emissions were similar, but consistently decreasing each year during this period. The expected number of ozone exceedances in 1987 and subsequent years is one or less per year.

Figure 5
 OZONE PRECURSORS EMISSION TREND
 Portland-Vancouver AQMA (Oregon Portion)

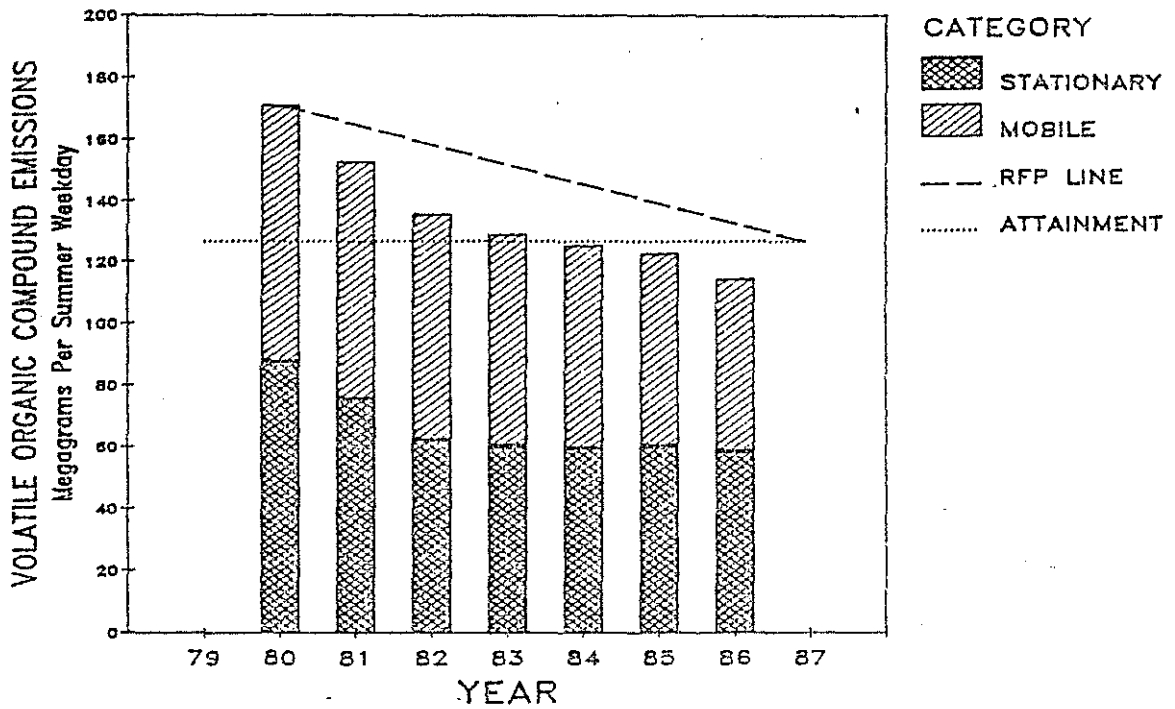
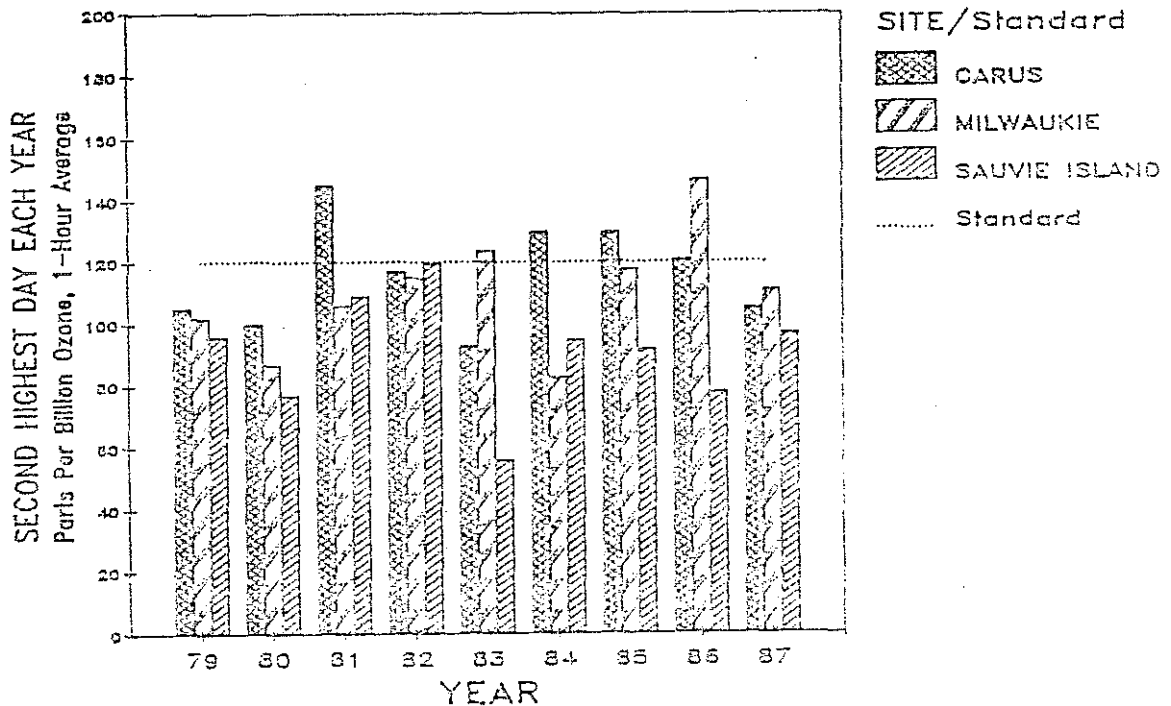


Figure 6
 AMBIENT OZONE TREND
 Portland Area



SALEM NONATTAINMENT AREA: Carbon Monoxide Strategy

The Salem Nonattainment Area portion of the SIP for carbon monoxide was submitted to EPA on June 20, 1979 and approved by EPA on June 24, 1980.

1. Update of the CO Emission Inventory

The base year for the Salem CO emission inventory is 1977. The updated CO emission inventories for mobile sources are summarized in Table 7. Stationary and mobile source emission inventories are included in Attachment 4.

Table 7. Carbon Monoxide Emission Inventories for Mobile Sources in the Salem CO Nonattainment Area.

Year	Highway	Off-Highway	Rail	Aircraft	Total
1977	50,055	2,310	120	908	53,393
1980	45,758	2,480	110	708	49,056
1981	44,096	2,544	105	641	47,386
1982	44,039	2,507	101	574	47,221
1983	42,295	2,490	100	500	45,385
1984	41,640	2,535	86	563	44,824
1985	40,385	2,572	86	507	43,550
1986	40,243	2,530	86	517	43,376

2. Reasonable Further Progress Tracking

The updated RFP graph is outlined in Figure 7. The emission points on the RFP graph represent the annual CO emissions from Table 7.

3. Discussion of CO Emission Increases and Decreases

Motor vehicle CO emissions have decreased substantially from 1977 to 1985, primarily due to the federal tailpipe program. The traffic volume in the Salem Nonattainment Area increased by 5.0% from 1985 to 1986.

4. Report on Standard Attainment Progress

The RFP graph indicates a steady decrease in CO emissions during the first five years. No exceedances of the 8-hour CO standard were recorded in Salem in 1982 through 1984. In 1985 there were four exceedances; a significant aberration related to an extended period of air stagnation that covered western Oregon (except for the Portland area) during December 1985. In addition, construction on Marion Street and the Marion Street Bridge during the entire month of December may have contributed significantly to high pollutant levels by causing increased traffic congestion. There were no exceedances during 1986.

The Department conducted a special CO study in Salem during the winter of 1983/84 to evaluate attainment with the 8-hour standard. This study resulted in the installation of a second continuous CO monitor in downtown Salem at the Nordstrom Building in February 1985.

However, because CO levels were lower at the second site than at the historical site, monitoring at the Nordstrom site was discontinued in 1986. The ambient CO data for the Salem area is summarized in Table 8 and Figure 8.

Table 8. Summary of Ambient Carbon Monoxide Levels
(8-hour averages) in Salem.

Year	Carbon Monoxide Levels (ppm)		Number of Days Over 9 PPM
	Maximum	Second Highest	
1978	11.0	9.5	1
1979	10.3	9.9	2
1980	12.8	9.1	1
1981	9.7	7.5	1
1982	7.4	7.1	0
1983	7.7	7.3	0
1984	6.6	6.5	0
1985	13.5	9.8	4
1986	7.5	7.1	0

Figure 7
CARBON MONOXIDE EMISSION TREND
 Mobile Source Emissions in the Salem Area

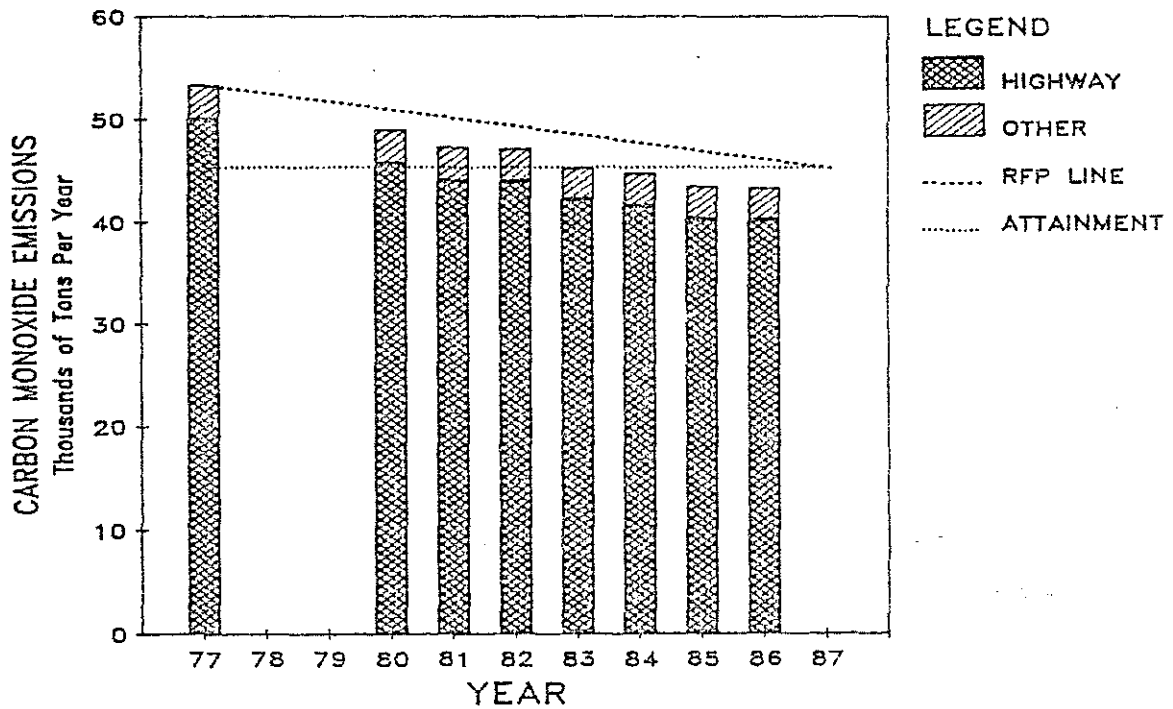
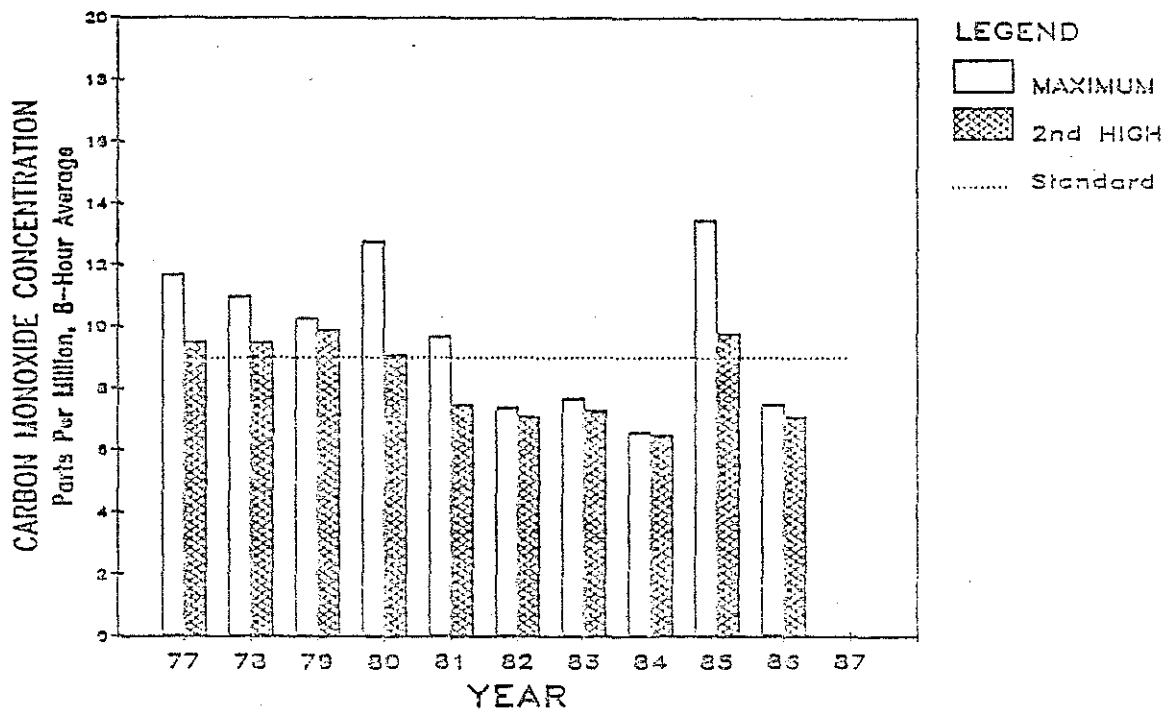


Figure 8
AMBIENT CARBON MONOXIDE TREND
 Downtown Salem



SALEM NONATTAINMENT AREA: Ozone Strategy

Since 1979, the Salem area has been classified as being in nonattainment with the ozone ambient air quality standard. The Department submitted the Salem nonattainment area portion of the SIP for ozone to the EPA on June 29, 1979. The EPA approved it on June 24, 1980. On October 20, 1980, the Department submitted to the EPA a revised ozone strategy which relied on EPA rural ozone policy. The EPA approved this strategy on April 12, 1982.

Because ozone monitoring in the Salem area has shown no violations of the ozone standard since 1981, the Department has proposed a redesignation of the Salem area as in attainment for ozone, and an accompanying revision of the SIP. The public hearing on this matter was held on October 16, 1987. The total Salem area airshed capacity for VOCs involved in ozone formation is conservatively estimated as 7,000 tons per year, and the current area emission rate is less than 6,000 tons per year. Under the proposed redesignation, there exist approximately 1,000 tons per year as a growth cushion for major new or modified area VOC sources.

1. Update of the VOC Emission Inventory

The base year for the Salem VOC emission inventory is 1977. The VOC emission inventories are based on the EPA Mobile 3.0 emission factors and latest DEQ emission surveys. Rail and aircraft emissions have been updated based on the latest emissions factors and number of operations. The VOC emission inventories for the Salem area are summarized in Table 9 and outlined in more detail in Attachment 5.

Table 9. VOC Emission Inventories for the Salem Nonattainment Area

Year	Volatile Organic Compound Emissions (Tons Per Year)		
	Stationary Sources	Mobile Sources	Total
1977	1,924	6,080	8,004
1980	2,026	5,115	7,141
1981	2,030	4,806	6,836
1982	1,711	4,652	6,363
1983	1,637	4,364	6,001
1984	1,671	4,217	5,888
1985	1,686	4,016	5,702
1986	1,704	3,704	5,408

2. Reasonable Further Progress Tracking

The VOC emission trend for the Salem area is outlined in Figure 9. According to the EPA rural ozone policy, RFP tracking based on Salem area VOC emissions is not required. Attainment of the ozone standard in the Salem area is due to VOC reductions in both the Salem area and the upwind Portland area. See RFP discussion for the Portland ozone strategy.

3. Discussion of VOC Emission Increases and Decreases

VOC emissions from sources in the Salem area have decreased by about 30% during the 1977-1986 period. The VOC emission reductions are primarily due to lower motor vehicle emissions as a result of the federal tailpipe program, and lower petroleum marketing and storage emissions as a result of DEQ regulations for bulk plants and service stations.

4. Report on Standard Attainment Progress

The VOC emission inventories for the Portland and Salem areas, and the RFP graph for the Portland ozone strategy indicate that the ozone standard has been attained.

Table 10. Summary of Ambient Ozone Levels in the Salem Nonattainment Area.

Year	Ozone Levels (ppm hourly average)		Number of Days Over 0.12 ppm
	Maximum	Second Highest	
1979	0.140	0.110	1
1980	0.085	0.082	0
1981	0.127	0.124	1
1982	0.082	0.080	0
1983	0.108	0.105	0
1984	0.108	0.098	0
1985	0.117	0.110	0
1986	0.112	0.103	0

Figure 9
 OZONE PRECURSORS EMISSION TREND
 Salem Nonattainment Area

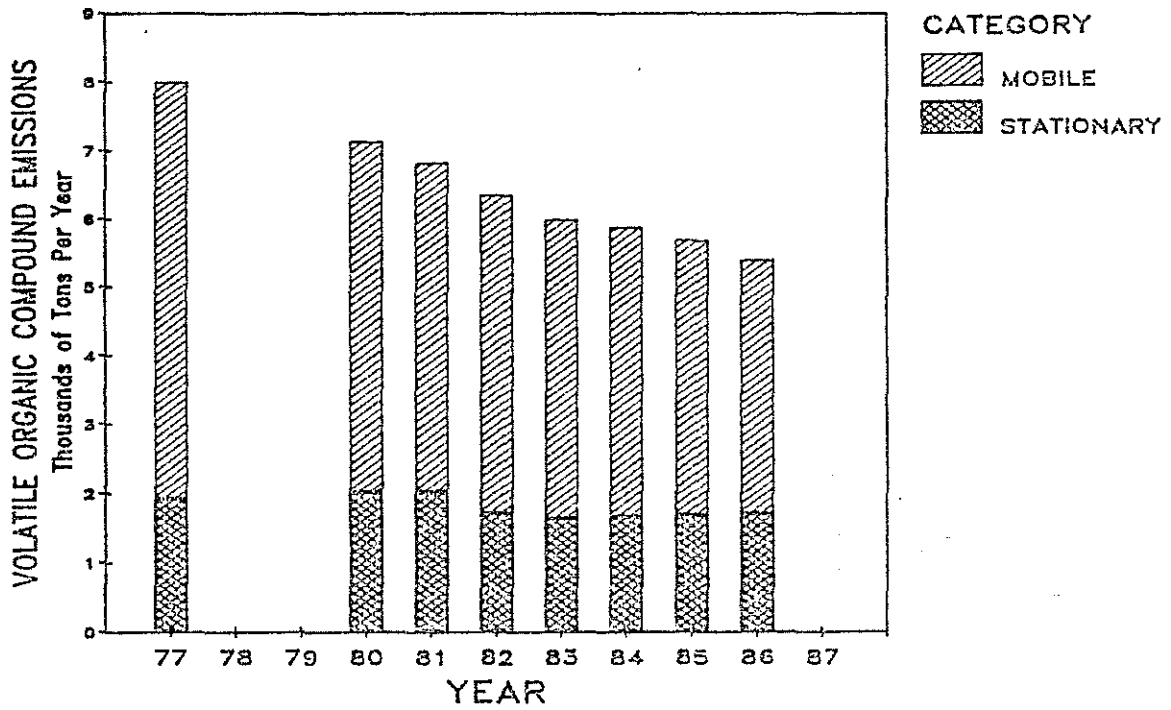
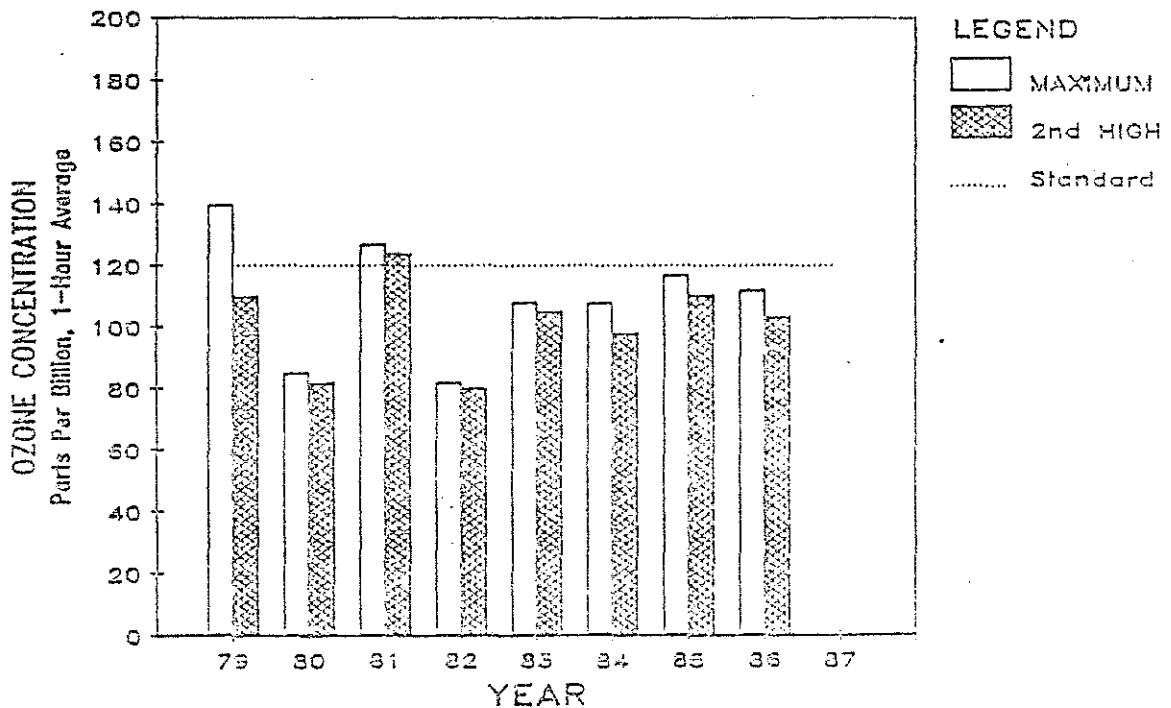


Figure 10
 AMBIENT OZONE TREND
 Salem Area



EUGENE-SPRINGFIELD AQMA: Particulate Strategy

The Eugene-Springfield AQMA portion of the SIP for total suspended particulate was submitted to EPA on March 23, 1981 and approved by EPA on April 12, 1982. The Lane Regional Air Pollution Authority (LRAPA) revised the Eugene-Springfield particulate strategy on July 8, 1986. The revisions were adopted by the EQC on October 24, 1986, and submitted to the EPA on December 5, 1986. LRAPA has opted to present a report to the EPA on its progress in promulgating the new PM₁₀ reduction standards and strategies. As a result Particulate Emission Inventory data for 1986 is not available for presentation in this report. In the interest of continuity, this report provides 1986 TSP ambient data for the Eugene-Springfield AQMA.

1. Update of the Particulate Emission Inventory

Particulate emission inventories up until 1986 are summarized in Table 11. Detailed emission inventories are included in Attachment 6.

Table 11. Particulate Emission Inventories for the Eugene-Springfield AQMA.

Year	Particulate Emissions (Tons Per Year)				Total
	Residential Woodburning	Fugitive Dust	Industrial Processes	Other Sources	
1978	1724	3896	8747	364	14,731
1982	2866	2813	5348	321	11,348
1983	2559	2699	5244	336	10,838
1984	3422	2937	4889	361	11,609
1985	3814	3121	4724	386	12,045

2. Reasonable Further Progress Tracking

The updated RFP graph is outlined in Figure 11. The emission points on the RFP graph represent the annual total particulate emissions from Table II.

The Eugene-Springfield particulate strategy included three phases. Phase I (paving unpaved roads, dry cyclone controls, weatherization promotion) is essentially completed (or ahead of schedule for measures scheduled for completion in 1987). Most of Phase II (study programs) has been completed, especially those portions dealing with fine particulate. Phase III (adoption of additional control measures) has been delayed due to the transition to an ambient PM₁₀ standard. LRAPA adopted a revised particulate strategy on July 8, 1986 which addresses the shift to PM₁₀ emphasis.

The revised particulate strategy extended the LRAPA schedule to adopt new control measures from 1986 to 1988. This schedule extension allows LRAPA time to evaluate potential new measures to deal with woodheating, fugitive dust, and open burning. Additionally, the extension will allow LRAPA to gather additional PM₁₀ information in preparation for the PM₁₀ control strategy (following adoption of fine particulate standard by EPA). The date to attain the secondary TSP standard was also extended by LRAPA from December 1987 to December 1992 to allow the necessary time to adopt and implement new non-traditional control measures. These revisions were approved by the EQC on October 24, 1986 and were submitted to EPA on December 5, 1986.

3. Discussion of Emission Increases and Decreases

As depicted in Table 11, the total annual particulate emissions for 1985 showed a net increase of 406 tons over 1984 (a 3.8% increase) with the greatest increase coming from residential wood heating emissions. Residential woodheating emissions increased by almost 400 tons due to colder weather in 1985 (11% more heating degree-days in 1985 compared to 1984). Fugitive dust emissions also showed an increase, due primarily to increased vehicular traffic in 1985 and the somewhat dryer weather (7.4% of hours in 1985 had measurable rainfall compared to 11.0% in 1984). Industrial emissions were reduced by 165 tons.

The Oregon Woodstove Certification Program (discussed under Portland TSP) is expected to significantly reduce residential woodburning emissions in future years as existing woodstoves are replaced with cleaner burning units.

4. Report on Standard Attainment Progress

Ambient particulate data is summarized in Table 12 and the trend is shown in Figure 12. All of the TSP monitoring sites within the AQMA, except Pac-West, had annual geometric means well below the 60 ug/m³ 24-hour standard.

The highest levels continue to occur during the winter months when ventilation is poor and temperatures are cold. There were 7 air stagnation advisory (ASA) days declared by the National Weather Service for the Eugene-Springfield area in 1986. This compares to 34 ASA days in 1985, no ASA days in 1984, six ASA days in 1983, and 12 ASA days in 1982. The seasonal high particulate levels correspond directly to the seasonal increase in emissions from residential woodheating, implicating this source as a significant contributor to the high levels.

Table 12. Summary of Ambient Particulate Levels in the Eugene-Springfield AQMA.

Site/Year	Annual Geometric Mean	High 24-Hour	2nd High 24-Hour	Number of Standard Exceedances
Eugene Airport				
1982	27	115	85	0
1983	25	120	88	0
1984	25	87	78	0
1985	30	144	111	0
1986	30	186	128	1
Westmoreland Elementary				
1982	40	226	201	3
1983	36	156	141	1
1984	37	166	137	1
1985	47	302	237	4
1986	41	191	136	1
LCC Downtown				
1982	39	206	137	1
1983	34	101	87	0
1984	36	152	134	1
1985	46	236	202	3
1986	40	132	115	0
Pac-West Bank, Hwy. 99				
1982	55	262	252	2
1983	53	188	155	2
1984	55	200	161	2
1985	69	278	261	8
1986	65	218	193	4
Springfield Fire Station No. 2				
1982	46	211	138	1
1983	44	107	106	0
1984	45	172	124	1
1985	54	223	194	2
1986	47	103	98	0
Springfield City Hall				
1982	—	—	—	—
1983	—	114	104	0
1984	38	133	121	0
1985	—	140	102	0
1986	—	152	120	1

Figure 11
 PARTICULATE EMISSION TREND
 Eugene-Springfield AQMA

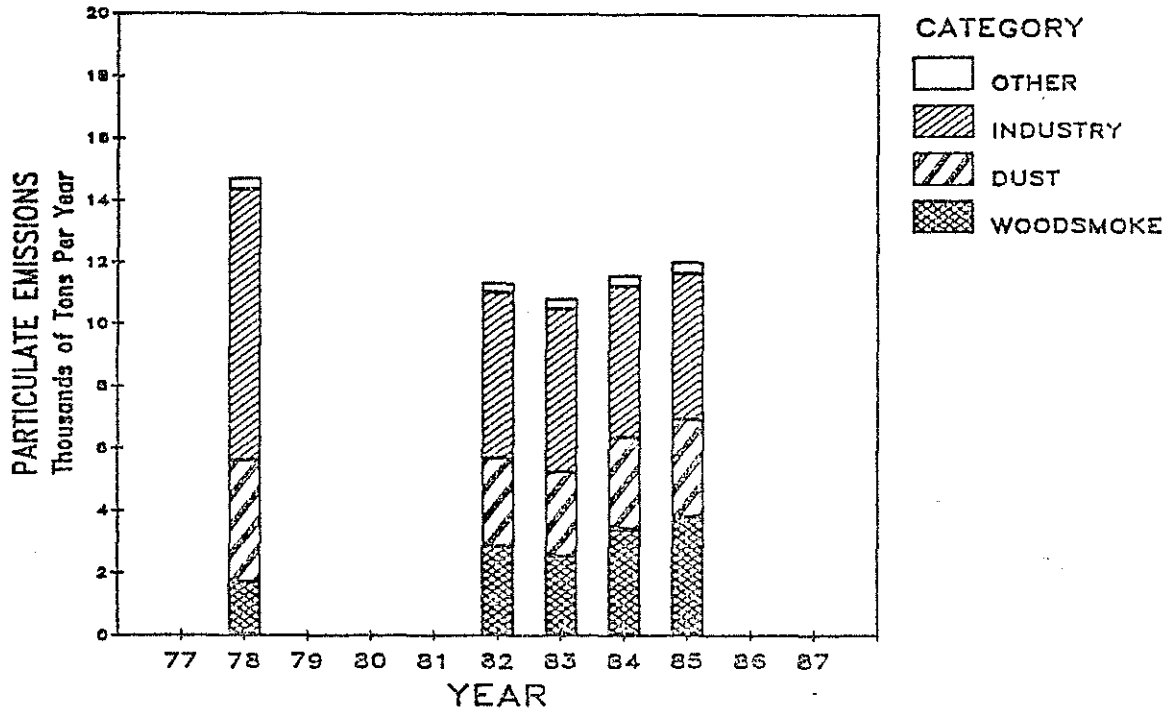
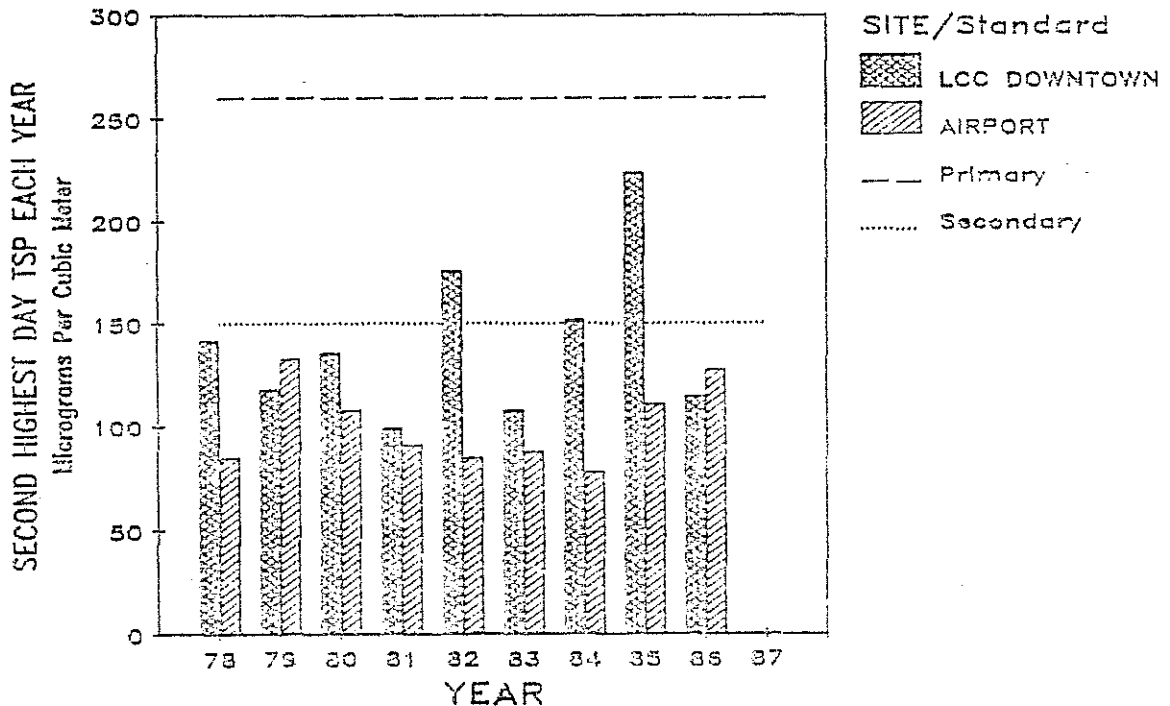


Figure 12
 AMBIENT PARTICULATE TREND
 Eugene-Springfield AQMA



EUGENE-SPRINGFIELD AQMA: Carbon Monoxide Strategy

The Eugene-Springfield AQMA portion of the SIP for carbon monoxide was submitted to EPA on June 20, 1979 and approved by EPA on June 24, 1980.

1. Update of the CO Emission Inventory

Carbon monoxide emission inventories are summarized in Table 13A. Detailed emission inventories are included in Attachment 7. Mobile source emissions are based on the latest EPA emission factors (Mobile 3.0). Previous inventories have been updated using Mobile 3.0.

Table 13A. Carbon Monoxide Emission Inventories for the Eugene-Springfield AQMA.

Year	Carbon Monoxide Emissions (Tons Per Year)				Total
	Industrial Processes	Residential Woodburning	Mobile Sources	Other Sources	
1977	2,293	10,106	57,704	461	70,564
1982	2,301	17,660	41,262	471	61,694
1983	2,242	15,772	43,555	491	62,060
1984	2,243	21,092	44,137	565	68,037
1985	2,177	23,506	42,176	566	68,425
1986	2,177	19,501	44,098	557	66,342

2. Reasonable Further Progress Tracking

The updated RFP graph is shown in Figure 13. The emission points on the RFP graph represent the annual total CO emissions from Table 13B. The trend in highway vehicle emissions in the Eugene area is the best indicator of progress to meet the ambient CO standard at the problem locations.

Table 13B. Carbon Monoxide Emission Inventories for Highway Motor Vehicles in the Eugene Area.

Year	Carbon Monoxide Emissions (kg/day)
1977	13,412
1982	10,903
1983	11,027
1984	10,848
1985	9,696
1986	10,309

3. Discussion of CO Emission Increases and Decreases

As depicted in Table 13A, the total annual emissions for 1986 showed a net decrease of more than 2,000 tons from 1985 emissions (a three

percent decrease), with most of that due to decrease in residential woodheating emissions. The AQMA transportation source category showed an increase due to increase in traffic volumes (4.2%).

The peak CO levels continue to occur during the cold winter months when ventilation is poor. Special studies conducted by LRAPA have indicated that the CO nonattainment problem is one of isolated "hot-spots" and is not areawide. LRAPA is working with the City of Eugene and ODOT to improve traffic flow and reduce CO emissions at identified hot-spot locations.

4. Report on Standard Attainment Progress

Ambient carbon monoxide data is summarized in Table 14 and Figure 14. The data indicates that this area is in attainment of the 8-hour CO standard. LRAPA intends to redesignate the Eugene-Springfield AQMA as in attainment for CO in the spring of 1988.

Table 14. Summary of Ambient Carbon Monoxide Levels
(8-Hour Averages) in the Eugene-Springfield AQMA.

Year	Carbon Monoxide Levels (ppm)		Number of Days Over 9 ppm
	Maximum	Second Highest	
1977	10.7	10.0	3
1978	10.3	9.6	2
1979	11.5	8.7	1
1980	11.5	10.1	2
1981	8.3	8.2	0
1982	8.8	8.3	0
1983	9.7	9.4	1
1984	8.8	7.9	0
1985	11.1	8.3	1
1986	9.0	8.4	0

Figure 13
CARBON MONOXIDE EMISSION TREND
 Highway Emissions in Eugene Area

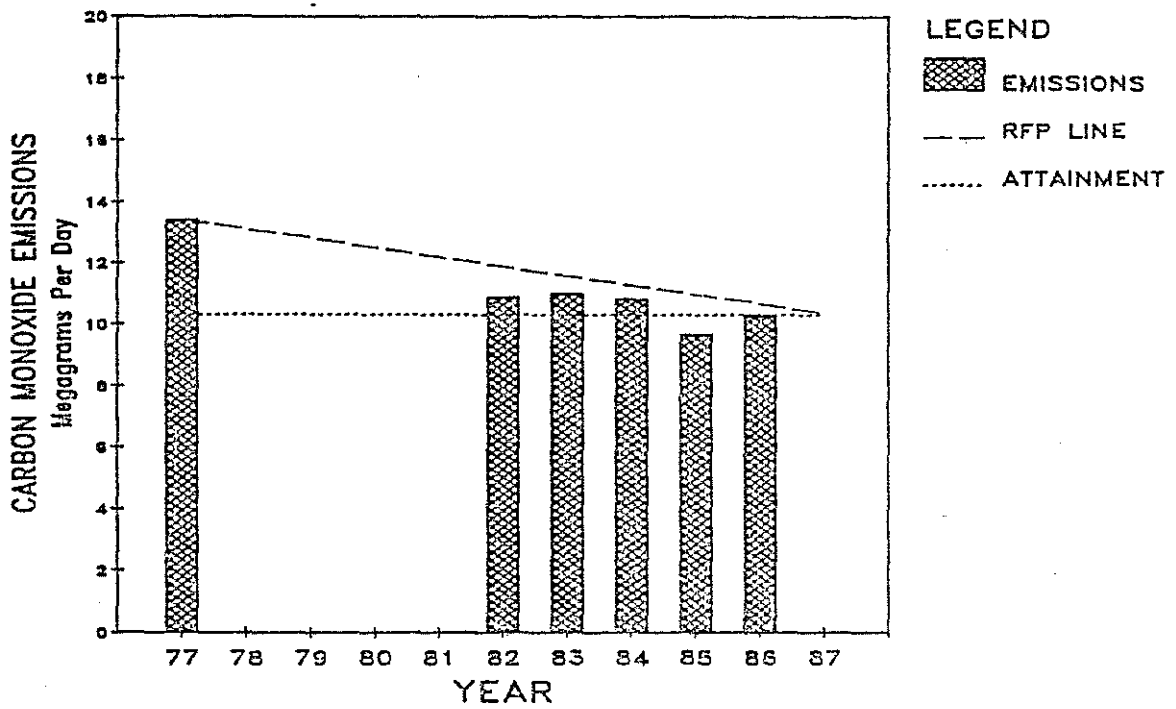
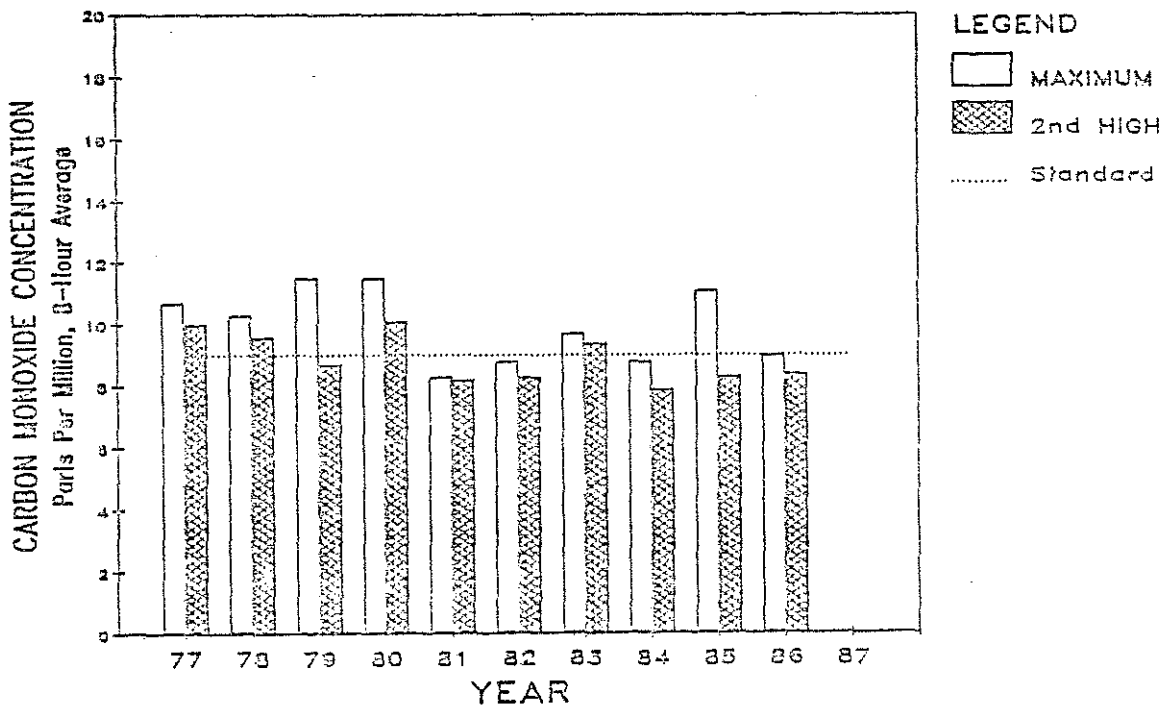


Figure 14
AMBIENT CARBON MONOXIDE TREND
 Downtown Eugene



MEDFORD-ASHLAND AQMA: Particulate Strategy

The Medford-Ashland AQMA portion of the State Implementation Plan for Total Suspended Particulate was submitted to EPA on April 25, 1983, and was approved by EPA on August 14, 1984.

1. Update of the Emission Inventory

The base year for the emission inventory is April 1979-May 1980, the period of the Medford Aerosol Characterization Study (MACS). The 1986 emission inventory is based on the most recent wood heating survey, 1986 point source production/emission information, and 1986 traffic volumes. The particulate emission inventories are summarized in Table 15 and are outlined in more detail in Attachment 8.

Table 15. Particulate Emission Inventories for the Medford-Ashland AQMA.

Year	Particulate Emissions (Tons Per Year)				Total
	Residential Woodburning	Fugitive Dust	Industrial Processes	Other Sources	
MACS	1741	3043	3778	1108	9676
1981	2079	3425	2177	1083	8764
1982	2027	3259	1588	762	7636
1983	1867	3131	1233	651	6882
1984	1886	3292	1241	721	7140
1985	1978	3458	1203	685	7307
1986	1779	3457	1149	718	7103

2. Reasonable Further Progress Tracking

Figure 15 is the updated RFP graph for the Medford-Ashland area. The emission points on the RFP graph represent the annual total particulate emissions from Table 15.

3. Discussion of Particulate Emission Increases and Decreases

Residential woodburning emissions have significantly increased in Medford and other areas of Oregon since 1973. This emission trend is due primarily to increased use of woodstoves for home heating as a result of escalating costs of electricity, natural gas, and fuel oil. Residential woodburning emissions were projected to increase by about 60% from the MACS year to 1986 (without additional control measures). The actual increase (based on a recent woodheating survey) was less than 10%, due to control measures such as increased weatherization, improved firewood seasoning, better woodstove sizing, curtailment during pollution episodes, and expanded public education. However, the Medford plan projected that woodburning emissions would be about 10% lower in 1986 than during MACS if the control measures were as effective as expected.

Medford had 4182 degree-days in 1986 compared to 4836 degree-days in 1985. An estimated 25-38% of woodburning households cooperated with a woodburning advisory program during the 1985-86 heating season. The Oregon Woodstove Certification Program (discussed under Portland TSP) is expected to significantly reduce residential woodburning emissions in future years as existing woodstoves are replaced with cleaner burning units.

Industrial emissions have decreased substantially since 1970 due to more stringent control equipment and the phase-out of wigwam burners. Industrial emissions decreased by about 70% from the MACS year to 1986 due to the adopted control measures of the particulate strategy.

The reduction in industrial emissions from 1982 to 1983 was due to a sharp decrease in particleboard plant emissions. Timber Products Company in Medford completed its new particle dryers and pollution control equipment in 1983. Down River Forest Products in White City closed down its particle dryers in June 1982 and has not operated them since that time. The slight decrease in paved and unpaved road emissions of fugitive dust was offset by increased aggregate storage and mineral products activities. In 1986 5.7% of hours had measurable rainfall as compared to 4.0% of hours in 1985.

4. Report on Standard Attainment Progress

Particulate monitoring results at the two key sites are summarized in Table 16. The second highest days are displayed in Figure 16.

Table 16. Summary of Ambient Particulate Levels in the Medford Area.

Year	Total Suspended Particulate (ug/m3)			
	Annual Geometric Mean		Second Highest Day*	
	Medford	White City	Medford	White City
1979	99	82	361	218
1980	79	85	398	224
1981	68	79	331	173
1982	63	58	232	157
1983	60	53	293	152
1984	70	62	260	205
1985	80	72	394	284
1986	72	65	218	150

* Based on all samples (routine every-sixth-day samples, plus special samples).

Figure 15
 PARTICULATE EMISSION TREND
 Medford-Ashland AQMA

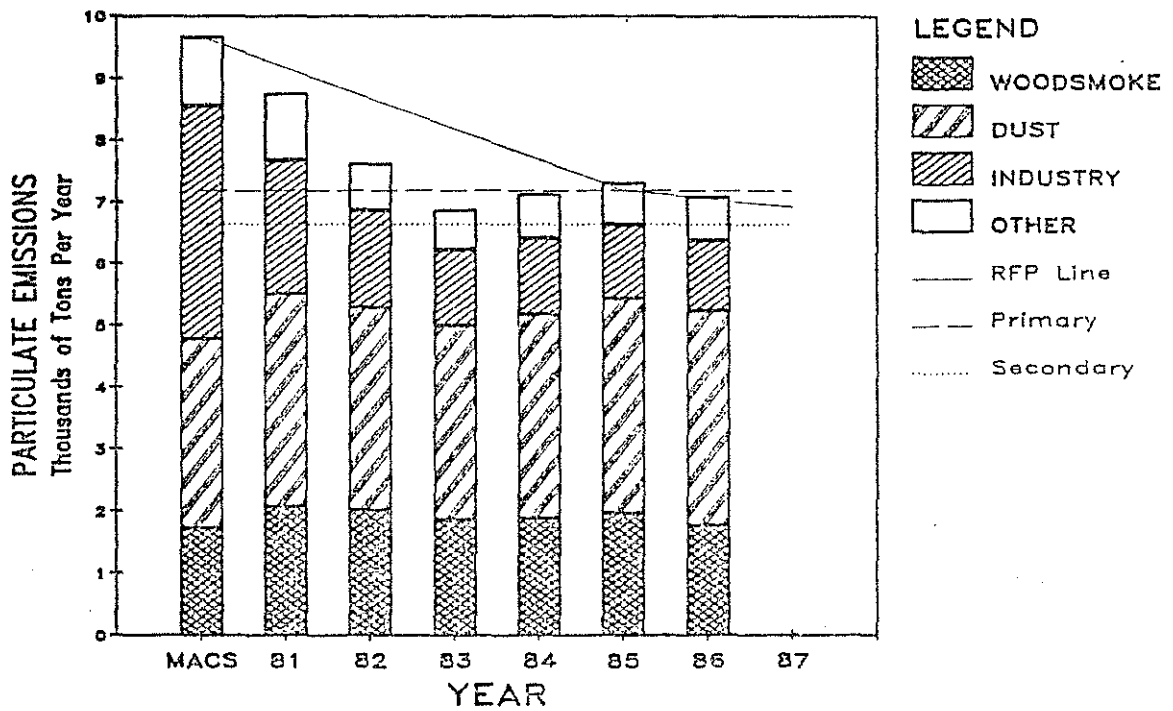
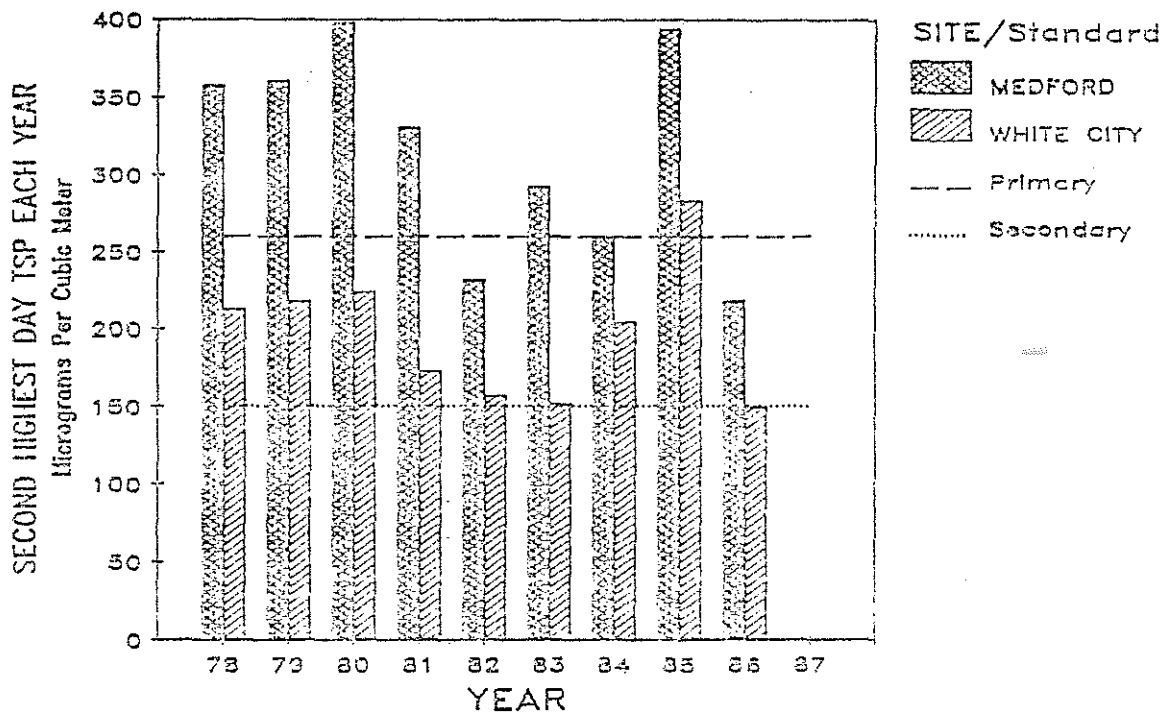


Figure 16
 AMBIENT PARTICULATE TREND
 Medford-Ashland AQMA



The annual average particulate levels in the Medford and White City areas have improved since 1979. The worst day particulate levels have not improved as much as expected. The local residential woodburning control measures have not been as effective as projected in the particulate strategy.

Implementation of some of the local weatherization ordinances has not occurred as scheduled. The City of Medford and Jackson County still require weatherization before installation of new woodstoves. But the portion of the ordinances that required weatherization of all homes at time of sale has been repealed. Woodstove use is not curtailed during pollution episodes to the extent identified in the particulate strategy. Woodstove use is prohibited during pollution episodes by Medford and Jackson County ordinances, but the City and County have not provided adequate enforcement resources to insure compliance. Compliance during the 1985-86 and 1986-87 heating seasons was less than half of the 70% compliance goal of the particulate strategy. The Department is working with the City of Medford and Jackson County to improve the effectiveness of the residential woodburning control measures.

Several particulate control measures for the Medford area are currently under development but have not yet been adopted or implemented. The Department worked with Pacific Power, the Oregon Department of Energy, and Oregon Environmental Council on a clean air electric rate but the Public Utilities Commission rejected the proposed clean air electric rate for the 1987-88 heating season. This program is intended to reduce the amount of wood burned in homes heated by a combination of wood and electricity (about 55% of the woodburning homes) by marketing increased electric usage (above the previous year baseline) at 60% of the normal rate. The proposed pilot program would have included Jackson County (in which the Medford-Ashland AQMA is located) and three other counties (Klamath, Josephine, and Deschutes). Public hearings and approval of the Public Utility Commission are required prior to implementation. A presurvey on wood and electric use and potential interest in the program was distributed by Pacific Power to 3600 Jackson County residences in September 1986.

The Department unsuccessfully requested \$985,350 of oil settlement funds for a demonstration project in the Medford-Ashland AQMA. The project was intended to demonstrate the environmental energy, safety and economic benefits of retrofit woodstove control devices and Oregon certified woodstoves. Approximately 2000 low-income homes or other hardship cases that use wood as the sole or primary heat source (and thus have the most difficulty complying with the Rogue Valley Woodburning Advisory Program during pollution episodes) were targeted in this project. The current allotment of oil settlement funds was distributed to other pressing Oregon energy priorities but this type of woodstove project will again be considered, using other funding sources or future oil settlement funds.

MEDFORD-ASHLAND AQMA: Carbon Monoxide Strategy

On June 20, 1979, the Department submitted to the EPA an extension request for development of the Medford carbon monoxide strategy. The EPA approved this request on June 24, 1980. On October 20, 1982, the Department submitted to the EPA the Medford-Ashland AQMA portion of the SIP for carbon monoxide. On October 9, 1983, a revised SIP, which included a vehicle inspection and maintenance (I/M) was submitted to the EPA. EPA proposed approval of the plan in June, 1986.

The Department implemented an I/M program in the Rogue Valley on January 1, 1986. The I/M exhaust emissions test is required for vehicles registered within the approximately 115-square mile Medford-Ashland Air Quality Maintenance Area. This includes the communities of Eagle Point, White City, Central Point, Jacksonville, Phoenix and Talent. The AQMA includes about 85 percent of the total Jackson County population. An estimated 88 percent of the motor vehicle traffic that regularly travels through the carbon monoxide problem areas in central and north Medford originates from within this area.

Vehicles going through the I/M inspection station in Medford receive the same test as those in Portland. An estimated 80,000 vehicles will have been issued certificates from the Medford station during the first two years of operation. During 1986, the station conducted 62,240 vehicle tests, and issued 35,794 Certificates of Compliance. The pass rate was 62%.

Traffic volumes increased by 4.5 percent in the Medford-Ashland area from 1985 to 1986.

1. Update of the CO Emission Inventory

EPA Mobile 3.0 emission factors were used to estimate highway vehicle emissions. Rail and aircraft emissions are based on the latest emission factors and number of operations. The emission inventories for highway motor vehicle emissions in the carbon monoxide nonattainment area are summarized in Table 17. Stationary and mobile source CO emission inventories are outlined in Attachment 9.

Table 17. Carbon Monoxide Emission Inventories for Highway Motor Vehicles in the Medford Nonattainment Area.

Year	Carbon Monoxide Emissions (kg/day)
1979	13,972
1980	13,475
1981	12,725
1982	12,267
1983	12,107
1984	11,666
1985	11,338
1986	11,185

2. Reasonable Further Progress Tracking

The updated RFP graph is outlined in Figure 17. The emission points on the RFP graph represent the annual highway motor vehicle emissions from Table 17.

DEQ has shown a segmented RFP line because reduced carbon monoxide emissions from the I/M program did not take effect until 1986.

3. Discussion of Carbon Monoxide Emission Increases and Decreases

The reduction in motor vehicle CO emissions from 1979 to 1985 is primarily due to the federal tailpipe program. The reductions from the federal tailpipe program have been lower than normally expected due to a low automobile replacement rate during the recession. Traffic volumes increased by 4.5% from 1985 to 1986.

4. Report on Standard Attainment Progress

The Medford CO strategy projects attainment of the CO standard by the end of 1987. Ambient CO levels in the Medford area are summarized in Table 18 and Figure 18. The number of CO violations in Medford has decreased most years since 1977.

Table 18. Summary of Ambient CO Levels (8-Hour Average) in Medford

Year	Carbon Monoxide Levels (ppm)		Number of Days Over 9 ppm
	Maximum	Second Highest	
<u>Central Medford</u>			
1977	19.0	17.2	207
1978	19.8	19.2	195
1979	16.2	13.7	121
1980	19.2	16.2	68
1981	14.9	14.4	35
1982	14.3	13.2	15
1983	15.8	12.6	24
1984	12.3	11.5	18
1985	16.9	16.3	35
1986	10.3	9.3	1
<u>North Medford</u>			
1985	14.3	13.3	24
1986	12.7	12.6	16

Attainment of the CO standard will be most difficult in North Medford since that is where most of the commercial growth is occurring. The city of Medford is in the process of optimizing the computerized traffic signal system in the North Medford area following the opening of the regional shopping center in October 1986.

Figure 18
 AMBIENT CARBON MONOXIDE TREND
 Central and North Medford

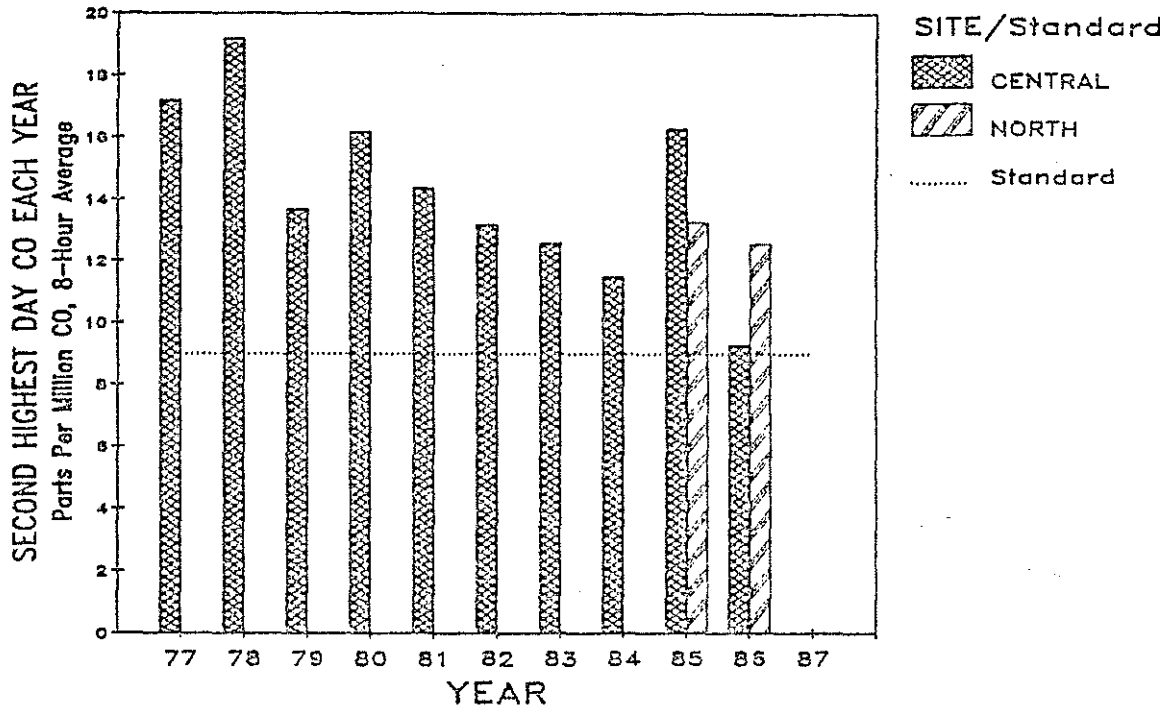
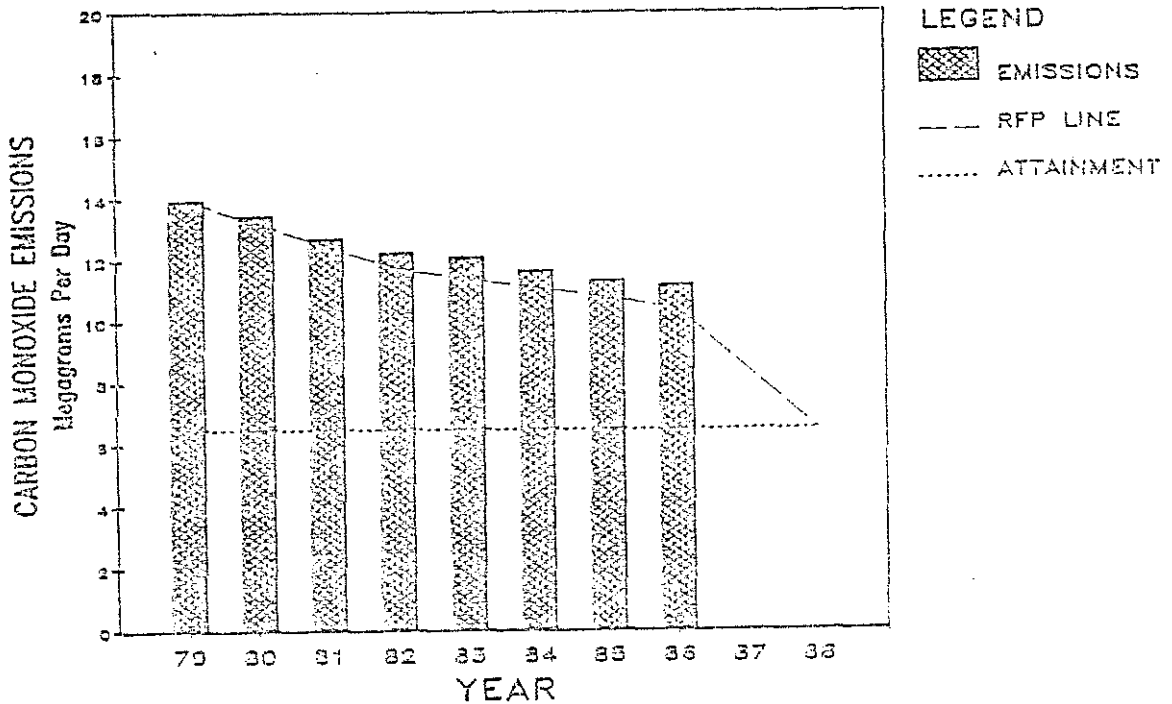


Figure 17
 CARBON MONOXIDE EMISSION TREND
 Highway Emissions in Medford Area



MEDFORD-ASHLAND AQMA: Ozone Strategy

On June 29, 1979, the Department submitted to the EPA the Medford-Ashland AQMA portion of the State Implementation Plan for Ozone. The EPA approved this plan on June 24, 1980. On February 28, 1985, the Department submitted to the EPA a revised plan which redesignated the area as in attainment for ozone and replaced the attainment plan with a maintenance plan. The EPA approved the redesignation and maintenance plans on June 1, 1986.

1. Update of the VOC Emission Inventory

The emission inventories for volatile organic compounds (VOC) are summarized in Table 19 and outlined in more detail in Attachment 10. The highway emissions are based on EPA Mobile 3.0 emission factors and the point source emissions are based on specific industrial production and emission information for each year.

Table 19. VOC Emission Inventories in the Medford-Ashland AQMA.

Year	Volatile Organic Compound Emissions (Tons Per Year)		
	Stationary Sources	Mobile Sources	Total
1977	7,359	5,707	13,066
1980	6,556	4,092	10,650
1981	7,375	3,745	11,120
1982	5,804	3,557	9,361
1983	5,008	3,346	8,354
1984	5,304	3,084	8,388
1985	5,565	2,926	8,491
1986	5,416	2,589	8,005

2. Reasonable Further Progress Tracking

The updated RFP graph is displayed as Figure 19. The emission points on the RFP graph represent the annual total VOC emissions from Table 19.

3. Discussion of VOC Emission Increases and Decreases

Highway motor vehicle VOC emissions have decreased substantially since 1977 due to the federal tailpipe program. The Oregon inspection and maintenance program which became effective in the Medford-Ashland area on January 1, 1986 further reduced motor vehicle VOC emissions.

The thermal oxidizer on the 3M paper coating plant in White City was completed in December 1982. All of the industrial VOC control measures in the Medford-Ashland ozone strategy have now been completed.

4. Report on Standard Attainment Progress

The RFP graph indicates that the Medford area VOC emission reductions have been ahead of schedule.

The Medford ozone strategy projected attainment of the ozone standard by 1982. Figure 20 demonstrates that the Medford area has been in compliance with the 0.12 ppm (235 $\mu\text{g}/\text{m}^3$) ozone standard continuously since 1979. The data is summarized in Table 20.

Table 20. Summary of Ozone Levels in the Medford-Ashland AQMA.

Year	Ozone Levels (ppm), hourly average		Number of Days
	Maximum	Second Highest	Over 0.12 ppm
1979	0.095	0.094	0
1980	0.115	0.100	0
1981	0.114	0.094	0
1982	0.111	0.105	0
1983	0.099	0.097	0
1984	0.102	0.098	0
1985	0.098	0.092	0
1986	0.105	0.098	0

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Figure 19
 OZONE PRECURSORS EMISSION TREND
 Medford-Ashland AQMA

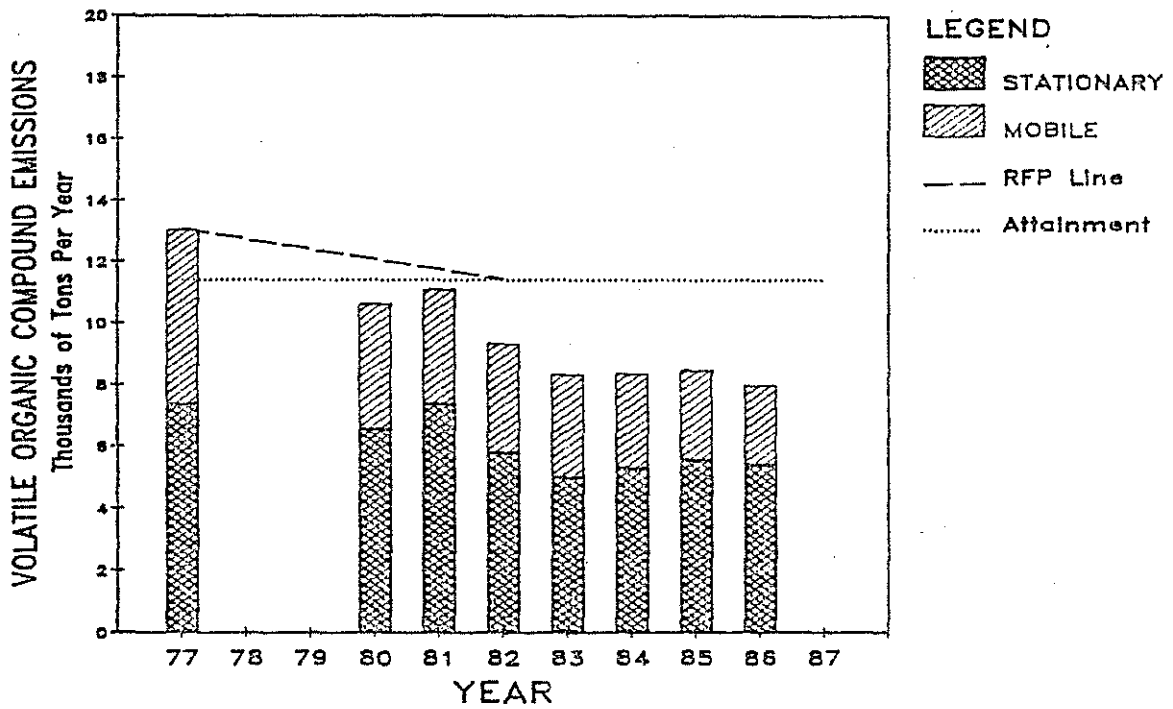
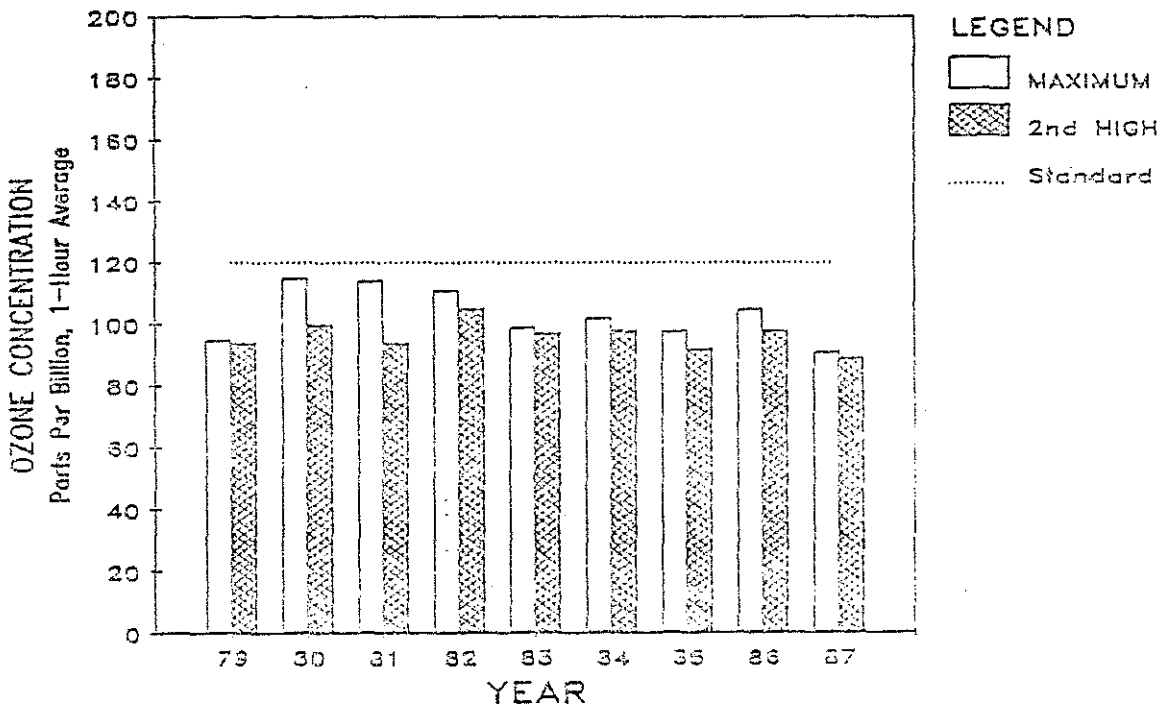


Figure 20
 AMBIENT OZONE TREND
 Medford-Ashland AQMA



DUE TO THE VOLUMINOUS NATURE OF THE MATERIALS,
PLEASE CONTACT THE DEQ AIR QUALITY DIVISION
FOR A COMPLETE SET OF ATTACHMENTS.