



METRO

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Memorandum

Meeting: Solid Waste Technical Committee

Day: Thursday

Date: August 27, 1992

Time: 9:00 AM to 11:00 AM

Place: Metro Council Chamber
Metro Center
2000 SW First Avenue
Portland, Oregon 97201

- | | |
|---|-------------------------|
| I. Approval of July 23 Meeting Minutes | Bob Martin |
| II. Updates | Bob Martin |
| III. Presentation of Departmental Organizational Chart and Staff Directory | Bob Martin |
| IV. Review of Metro South Transfer Station HHW Facility Six Month Report | Sam Chandler |
| V. Review of the Status of Petroleum Contaminated Soil Treatment Sites in the Tri-County Area | Jim Goddard |
| VI. Approval of Model Illegal Dumping Ordinance | Bill Metzler/Larry Shaw |
| VII. Adjourn: Next Meeting - Thursday, September 24 | |

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Solid Waste Technical Committee
July 23, 1992

Members Present:

Estle Harlan, OSSI - Tri-County Council
John Drew, Far West Fibers
Delyn Kies, Washington County
Dave Phillips, Clackamas County
Meganne Steele, City of Portland
Emilie Kroen, City of Tualatin
Bob Kincaid, City of Lake Oswego
Lynda Kotta, City of Gresham

Metro Participants

Bob Martin, SW Director
Mark Buscher, SW Department
Terry Petersen, SW Department
Steve Kraten, SW Department
Mike Huycke, SW Department

Chair Bob Martin brought the meeting to order.

Approval of May 28 Meeting Minutes
Approval of June 26 Meeting Minutes

Mr. Martin introduced and welcomed two new members of the Solid Waste Technical Committee: Emilie Kroen of City of Tualatin and Bob Kincaid, City of Lake Oswego.

Estle Harlan made a motion to approve both meeting minutes and John Drew seconded the motion.

Delyn Kies asked for a correction on the May 28th meeting: Page 1, last paragraph: "taking up the matter of the Washington County Transfer fee . . ." should be Transfer RFF

With that correction, the Minutes were approved unanimously.

Updates

Mr. Martin announced that Terry Petersen's division is now fully staffed. He said after filling one or two staffing vacancies in one of the other divisions he will be able to complete the organizational chart as requested by the Committee.

Mr. Martin said the Request for Franchise for the transfer station which will serve the eastern portion of Washington County has been completed. Metro received only one Franchise application, from Willamette Resources. We are currently in the process of analyzing that application. The results of this analysis and its presentation to Council for action should be completed within the next couple of months.

Mr. Drew asked if there appeared to be any "organized" opposition to the construction of the transfer station to the southeast portion of Washington County, and what is the general feel of the Metro Council and other interested parties to this issue.

Mr. Martin did not feel there was any organized opposition, but felt there were some issues with regard to the proposal (or any proposal) that will be important to the Council when it comes forward, what it might do to the overall system rate, the amount of processing that is involved in the facility, how that processing is done and how it relates to recycling activities which already exist.

Mr. Martin said we have recently completed an update on the progress of Metro's activities in compliance with the longstanding DEQ order which has directed some of Metro's activities in the area of waste reduction. Mr. Martin said there were only two items remaining uncompleted in the order and Metro and DEQ are discussing issues related to those items. Mr. Martin said he felt confident that DEQ would agree that Metro has done a good job of maintaining the commitment to achieve the schedule of progress contained in the order. The next report is due in January and is scheduled to be the final report but Mr. Martin envisions a "progress report" will continue to be submitted to define Metro's progress for the next period of time and will address the Waste Reduction Work Program.

Estle Harlan asked if there was any consideration for establishing a "pelletizing" facility at Metro Northwest, or any other facility.

Mr. Martin said there were a number of people interested in the issue of producing a refuse derived fuel out of some component of the wastestream. He said the operator of the Metro Central facility has looked at some preliminary economics of doing that but has not made a conclusion as of this date. He said there was also a private company looking at the possibility of building such a facility in Newberg to supply refuse derived fuel to the SMURFIT plant, their main interest being to acquiring some dedicated portion of flow from the region. He said there had been a variety of persons looking at acquiring and reopening the Compost facility and combining that operation with a pelletizing operation. Residual from the Compost facility would be used to make a refuse fuel.

Ms. Harlan asked if a pelletizing operation were to occur at any of the Metro franchised facilities, would it be an open process and bids let or would someone just take on the operation?

Mr. Martin said he had not given a lot of thought to that process as no one had approached him with a proposal at this point nor has Metro solicited proposals. Mr. Martin said it was hard for him to envision how you would open something like that independent of the current contract operator of one of our facilities. Mr. Martin added that there were problems associated with such an operation, i.e., somebody would have to install equipment and capitalize that equipment while Metro owns the facility and obviously the equipment will stay with the facility, although the contract can be renegotiated in two years. Mr. Martin said that any pelletizing at the compost facility would most probably be linked with whoever comes in and attempts to operate that facility. However, Metro does not own that facility. Whether or not we would allow them to produce fuel pellets would depend on whether they do it competently, and whether they are pelletizing things that can't otherwise be recycled, etc.

Ms. Harlan said there were rumors concerning fuel pellets. Ms. Harlan said she had been specifically requested to ask the question and the individual was hoping that industry would have a chance to become involved with an open bid process.

There were no further updates

Discussion of the 1992-93 Metro Challenge Grant Program

Mr. Steve Kraten was introduced and gave a presentation of the Annual Waste Reduction Program and the Metro Challenge Grant Program. He said the Challenge Program is basically a grant program whereby funds are granted to local governments to help defray the costs of administering their annual waste reduction programs. Eligibility requirements require local governments to submit, adopt and implement an annual waste reduction program and must have substantially have completed their previous year's programs.

Mr. Kraten said upon the establishment of the grant program, a Resolution was passed specifying that appropriated funds would be allocated to local governments based on population. Population was determined by counting residents within cities which were within each County as well as within the Urban Growth Boundary (UGB). We are now proposing (by way of resolution) to make the entire 3-county area eligible for the grants as long as their waste is going into Metro's system. This is partly due to the Recycling Act establishing the three-county area as a single waste shed and also because those cities residents living outside the UGB are still contributing by way of fees to Metro for the waste being placed in our system. This would also apply to a couple of related grant programs: the Multi-family Container program and the Neighborhood Cleanups.

Dave Phillips commented that he definitely supported the new resolution in that he felt there had been inequities in the past, especially in unincorporated Clackamas County, especially inasmuch as Clackamas County has been offering the same type programs to everyone in the county including many of the cities outside the UGB.

Mr. Drew agreed that if you paid for the service (through taxes) you should reap some benefit or representation. Mr. Drew said that he noticed when DEQ had made a similar grant available for recycling and solid waste planning they had been received by more or less remote Oregon jurisdictions and he saw this as a similar service through the Metro challenge grants. Mr. Drew asked Mr. Kraten if he could give some examples as to parties that would be ineligible for this type of grant.

Mr. Kraten said that the primary criteria for eligibility would be that the waste is coming into our system and that they are within the tri-county boundaries. It would take in cities like Sandy, but off the top of his head could not indicate a city which sent its waste out of the region. He asked Mr. Phillips if he knew of any cities sending their waste outside the region.

Mr. Phillips said that part of Canby's waste went to Yamhill County.

Mr. Martin said that some of the cities outside the UGB were inside the tri-counties and were using the system so they would be remain eligible for the Metro challenge grant.

Mr. Phillips said that if a city did not submit their work program and appropriate reports for the year they would be ineligible for the funds.

Mr. Kraten said that a city outside UGB would either submit its own annual waste reduction program to Metro and have it approved, or go in on a joint program with another city or county.

Meganne Steele asked if there were other communities outside the Metro boundaries but within the tri-county area which only had a portion of their waste coming into the system and if so, how would Mr. Kraten accommodate an adjustment for grant eligibility.

Mr. Kraten said that taking Canby as an example, there were several possibilities: yes, no, or it could be divided up on the basis of how much of the waste is coming into our system and reduce the grant by the resulting percentage.

Bob Kincaid asked Mr. Kraten what, for instance, Lake Oswego would receive under the new formula vs. the old formula.

Mr. Kraten said he had run the program with two formulas, one showing the allocations as they would be if areas outside the boundary were not eligible and one using, for each county, the entire population of the unincorporated county. Mr. Kraten said he did not include cities outside the boundary. Mr. Kraten said there is a reallocation under those

circumstances from the cities to the counties. He said the amount each city losses is relatively small for most cities, somewhere between \$500 and \$1,000, most likely not enough to cause a serious impact on their programs. He said the effect on Washington County, for instance, where there is a joint program and all of the Metro challenge grants go directly to the county, it is virtually unchanged. He said that Clackamas county benefited considerably, about \$25,000, and the largest impact being on the City of Portland which would receive approximately \$18,000 less, this being the case because the City of Portland had the largest proportion of the funds. Mr. Kraten said that if cities sought to receive their Metro challenge funds directly, in that event counties might not benefit, but most likely they would.

Delyn Kies said that in the rural areas, if the monies were available to be spent, would they be able to implement some different kinds of programs? Ms. Kies said that in Banks (Washington County) they prefer a depot over roadside collection but would like to expand their depot, have it staffed more frequently, etc. If they could reach the same amount of recycling called for, would that be allowable?

Mr. Kraten said that one overriding factor is that everyone is required to meet the provisions of the Recycling Act and the Annual Waste Reduction Program. Mr. Kraten said that with regard to the Annual Waste Reduction Program is something everyone works on together and come to a consensus about and said it was his opinion they would do the same thing on the issue Ms. Kies was concerned with.

Ms. Kies asked what the timeframe was on applying for funds.

Mr. Kraten said they wanted to make the grants available to local jurisdictions at the earliest date possible. He said the programs were due July 1, 1992 and because of the new method of allocation it was critical that interested jurisdictions submit their programs as soon as possible in order that the funds could be released in this fiscal year. Mr. Kraten said they would discuss these programs at the next Waste Shed Programs.

Ms. Kies felt it was difficult to carry on with the implementation of programs without a definite idea as to funding allocations

Mr. Kraten said he had distributed a worksheet showing allocations to counties. Mr. Kraten said he didn't think the distribution of funds would vary enough to have a great impact on implementing programs. Mr. Kraten said that for Washington County the allocation was within a few hundred dollars of the original figure.

Ms. Steele said she was concerned with the equity issue related to the jurisdictions outside of the UGB and although she thought it was a reasonable proposal to open up the challenge grant program to the populations which are using the transfer facilities but felt there was a disproportionate benefit for those communities outside the UGB if the revenues were received based on tonnage and the allocation made based on population. Ms. Steele said her support for the change would be contingent upon some assurance that

there would be some adjustment factor if less than the whole community's waste was coming through the system. Ms. Steele asked if Mr. Kraten had considered moving to a tonnage based allocation screen for the entire regional area since revenues were coming in on a tonnage basis.

Mr. Kraten said they had not considered that alternative. He said that because of the way the trucks cross boundaries, it is difficult to get good numbers.

Estle Harlan added that commercial tonnage would be mixed in there as well.

Mr. Phillips pointed out that a tonnage based system would be inconsistent with the philosophy of offering incentives to reduce waste.

Mr. Martin presented the next agenda item: **Review and Comment on the Model Zoning Ordinance for Mixed Solid Waste and Recyclables Storage Areas in New Multi-Unit and Non-Residential Buildings.**

Mark Buscher introduced Mary Dorman, a consultant who helped develop the Model Ordinance.

Mr. Buscher said the purpose of the ordinance was to provide space in new development and any major expansion for solid waste storage and recyclable storage by providing physical space. Mr. Buscher said most of the focus heretofore with regard to recycling had been on single family housing. Mr. Buscher said Metro's goal was to help local governments in an effort to reduce duplication of developing research and background information necessary to implement the ordinance. Mr. Buscher said Metro was desirous to implement uniformity of standards throughout the region which would help developers respond to requirements for siting solid waste and recyclable storage areas and incorporate the provisions in their architectural plans. Mr. Buscher said the ordinance was fashioned more towards a guide. The input received from local governments indicated that site plan review and zoning ordinances vary significantly in their format and it was hoped that this approach would facilitate fitting the model ordinance standards into local site plan review ordinances.

Mr. Buscher said he had been working with the Joint Land Use and Waste Reduction Subcommittee in order to receive input from local governments and the hauling community on how to best develop the model ordinance so it can be implemented efficiently and so that the resultant storage areas can be served efficiently. In addition, inquiries were sent to local governments to determine if they had existing recycling standards in their ordinances, and if not, what ideas they would like incorporated in the development of an ordinance. Mr. Buscher said their research indicated very few ordinances existed within local governments which deal with recycling standards. He said they received overwhelming comments indicating they desired an ordinance with objective and measurable standards in it rather than an ordinance geared toward performance

standards. Local governments desired something easy to review and implement within the site plan review process which is often times lengthy and complicated.

Mr. Buscher said the committee also developed four focus groups for multi-family, retail, institutional, and industrial development. He said individuals from these groups were interested in an aggressive ordinance. Mr. Buscher said after they developed the draft ordinance they requested input from other development groups to determine they were not unduly impacting the development community and issues related to taking away space dedicated for retail sales, industrial development and apartment complexes.

Mr. Buscher said the ordinance was being presented to the Solid Waste Technical Committee members for any new input they might have and that they were continuing to receive input from other sources as well. Mr. Buscher said there was no adoption action necessary for the document. He said it would be presented to local governments and that implementation of the ordinance would be through local governments taking the ordinance and putting it into their site plan review ordinances.

Ms. Dorman commented that the initial objective of the project was to keep everything as simple as possible. Ms. Dorman said that in addition to the minimum standards approach there was a desire for some alternative options for compliance. Ms. Dorman said this may have added more volume and complexity to the document than was originally desired.

Ms. Dorman said they focused on the threshold of five dwelling units to define multi-family because that was consistent with the State of Oregon (Senate Bill 66). Ms. Dorman said non-residential would be anything else from retail to office, industrial, institutional. Ms. Dorman said that rather than trying to regionally design the ordinance was designed to key in to whatever the local government requirement was in terms of full site plan review, the assumption being on new construction or extensive expansion.

Ms. Dorman then proceeded through the ordinance as submitted to the committee.

Mr. Drew asked if there were any type of standards similar in nature to the ones contained in the ordinance for defining solid waste collection in buildings.

Ms. Harlan said that in Clackamas County there was design review but nothing for existing structures.

Mr. Phillips said that basically if it was outside storage it received design review. Mr. Phillips said there had not been adequate review on the collection issue, especially on interior spaces. Mr. Phillips said the design review standards had been changed about a year ago to place a requirement that the waste hauler be contacted and receive an okay from him on the location (both for recycling and garbage collection).

Mr. Drew asked if it was customary to have a disclosure that says . . . the foregoing document or ordinance can be amended or superseded by more strict standards, or can be

amended by federal or state or Metro or local government standards, do you ever put any qualifying comment at the end of the document to indicate it is susceptible to further modification, or is that understood.

Mr. Buscher said it was understood, and it was not necessary to insert that language in the document. Mr. Buscher said there would be a cover document to local governments explaining the objectives and Metro's intention that it serve as a guide

Mr. Drew commented that on Section D "Franchised Hauler", that some local governments tend to "match the assets of the haulers with the requirements of their customers". He said that some commercial activities provide their own carriage vehicles for that material separate from the franchise hauler and sometimes other haulers besides the "franchised hauler" end up hauling the recyclables.

Mr. Buscher said they had dealt with that problem via the "waste assessment method" recognizing that larger businesses have specific means of handling their waste. The "franchised hauler method" was to avoid the need of having to obtain a zoning variance in order to erect their building.

Ms. Steele said she was concerned that a lot of staff time by people outside of the general fund areas might need to be expended and would it be appropriate to set a specific fee to recover costs in their refuse fund operations.

Mr. Buscher commented that concern might be addressed by alerting local governments to change their site plan review fees. He said they endeavored to minimize that work load by suggesting the solid waste coordinator review the ordinance.

Ms. Kies commented that some jurisdictions do not have a separate solid waste fund.

Mr. Phillips suggested it may save work for governments to conduct a review on the assessment followed by the waste audit a week after the establishment is opened up.

Emilie Kroen said it had been her experience that in establishing the multi-family depots, that the most successful depots were those that were not co-located (garbage and recyclables) because there was no contamination and there are so many more garbage enclosures vs. recycling enclosures. Ms. Kroen wondered if co-location was something Metro was firm on or could local governments make their own choice.

Mr. Buscher said they could state that although recyclables and garbage containers need not be together in the same enclosure, the enclosure's should be placed next to one another. Mr. Buscher again stated that the model ordinance was a guide or tool, if you will, and that local governments could choose what worked best for them. Mr. Buscher said the model ordinance was an effort to bring some standardization so developers have an understanding they have to meet certain standards.

Ms. Kroen said another question is how they might incorporate within the model ordinance something to help solve the problem of "the use that changes -- or the need that will change tomorrow".

Ms. Dorman said there was consideration for that problem when establishing the minimum standards for containers and enclosures.

Mr. Buscher urged committee members to call him with any comments, suggestions or changes they might have.

Mr. Martin suggested that the meeting was running late and the last agenda item be postponed until the next meeting, August 28.

Mr. Martin asked Mr. Buscher what the next step was for the Model Ordinance.

Mr. Buscher said the model ordinance would be presented to the Solid Waste Policy Committee for comment and review, and then to the Council for an update. Mr. Buscher said there was no action required, no adoption.

The meeting was then adjourned.

**SOLID WASTE DEPARTMENT
STAFF DIRECTORY
JULY 1992**

Solid Waste Department Programs

Name/Title	Ext.	Areas of Responsibility
Bob Martin Solid Waste Director	139	. Department Director
 <u>Administration Division</u>		
Judith Mandt Administrative Manager	235	. Division Manager . 1 Percent for Recycling program manager . Community enhancement program manager
Katie Dowdall Associate Management Analyst	348	. Community enhancement program coordinator
Aletta Yantis Administrative Assistant	226	. Support services lead worker . Public meeting information . Project coordination . Payroll and timesheets
Jennifer Ness Records Specialist	225	. Records and library coordination . Special projects
Julie Cash Administrative Secretary	244	. Word processing . Solid Waste Information System
Gina Cubbon Secretary	233	. Word processing . Material and supplies ordering . Budget
Connie Kinney Secretary	142	. Word processing . Rate Review, Planning and Technical Committees
John Curtin Office Assistant	168	. Department information . Records and data resources . Solid waste resource library
Ava DeVinaspre Office Assistant	545	. Department information . Records and data resources . Solid waste resource library

Solid Waste Department Programs

Name/Title	Ext.	Areas of Responsibility
<u>Budget and Finance Division</u>		
Roosevelt Carter Budget and Finance Manager	239	. Division Manager
Lee Bené Management Technician	255	. Accounts payable (backup) . Financial analysis . Budget and contracts monitoring
Angela Chappue Program Assistant 2	126	. Process contracts payments and maintain files
Kate Geise Senior Management Analyst	259	. Budget preparation and monitoring . Financial planning and analysis . Solid waste rate and tonnage analysis
Jeannie Leathers Program Assistant 2	144	. Accounts payable
Craig Lewis Senior Management Analyst (Contracts Compliance)	251	. Contract review and processing . Major contract payments
Phil North Senior Solid Waste Planner (Franchise Administrator)	247	. Franchise administration . Solid waste flow control
Maria Roberts Senior Management Analyst	227	. Solid waste rate and tonnage analysis . Economic/financial planning and analysis . Staff to Solid Waste Rate Review Committee

Solid Waste Department Programs

Name/Title	Ext.	Areas of Responsibility
<u>Solid Waste Facilities Division</u>		
Sam Chandler Solid Waste Facilities Manager	544	. Division Manager
Ray Barker Assistant Facilities Manager	285	. Assistant to division manager
Janell Davis Site Manager	286-9614 499	. St. Johns Landfill
Penny Erickson Senior Site Manager	223-7924 406	. Metro Central Station
Annette Keathley Site Manager	657-2873 498	. Metro South Station
Carrie Heaton Facilities Manager/Project Coord.	393	. Metro Central Household Hazardous Waste Collection Facility
Sally Koch Facilities Manager/Project Coord.	message 545	. Metro South Household Hazardous Waste Collection Facility
Ron Nagy Associate Solid Waste Planner	129	. Health, safety, and policy analysis
Jim Quinn Project Manager/Chemist	293	. Facilities chemist . Hazardous waste management

JM:ay
OPPALST
August 5, 1992

SOLID WASTE DEPARTMENT PROGRAMS

Name/Title	Ext.	Areas of Responsibility
<u>Waste Reduction Division</u>		
Debbie Gorham Waste Reduction Manager	232	. Division Manager
Market Development Programs		
Leigh Zimmerman Solid Waste Planning Supervisor	230	. Market Development Manager . Plastics recycling/markets . Recycling Level Survey
Andy Sloop Associate Solid Waste. Planner	351	. Paint, oil, glass, tire and building recycling/markets . Legislation . Data management . Business development
Lauren Ettlin Associate Solid Waste Planner	545	. Yard debris compost market development . Home composting
Pat Varley Associate Solid Waste Planner	350	. Institutional purchasing of recycled materials . "Buy Recycled" conference . Paper recycling/markets
Recycling Programs		
Steve Kraten Solid Waste Planning Supervisor	191	. Recycling Program Manager . Annual Waste Reduction Program for local government . Yard debris recycling program
Genya Arnold Assistant Solid Waste Planner	219	. Commercial recycling . Recycling consultations for business
Mike Huycke Associate Solid Waste Planner	145	. Container recycling programs (single-family, multi-family, yard debris) . Neighborhood cleanup programs
Jim Goddard Senior Solid Waste Planner	141	. Petroleum contaminated soil remediation . Construction & demolition debris recycling . Post-collection materials recovery
Pat Merkle Assistant Solid Waste Planner	141	. Resourceful Renovation of new Metro Headquarters building

SOLID WASTE DEPARTMENT PROGRAMS

Name/Title	Ext.	Areas of Responsibility
<u>Planning & Technical Services</u> <u>Division</u>		
Terry Petersen Manager	143	. Division Management
Mark Buscher Senior Solid Waste Planner	194	. Regional Solid Waste Management Plan . Solid waste committees . Solid waste land use issues . Facility regulations
Jeff Stone Senior Management Analyst	256	. Solid waste forecasting . Solid Waste Information System (SWIS) . Forecast Review Committee . Tonnage data for rates and budget
Scott Klag Senior Management Analyst	146	. Solid waste policy analysis . System measurement projects
Keith Massie Associate Solid Waste Planner	257	. METRO-SIM waste flow model . Solid waste RLIS projects . Regional hauler franchise maps
Bill Metzler Associate Solid Waste Planner	290	. Waste characterization . Illegal dumping . Solid waste policy analysis

SOLID WASTE DEPARTMENT PROGRAMS

Name/Title	Ext.	Areas of Responsibility
<u>Engineering & Analysis Division</u>		
James Watkins Engineering & Analysis Manager	234	. Division Manager
Chuck Geyer Senior Solid Waste Planner	231	. Methane gas recovery . Washington County transfer/material recovery facility
Pete Hillmann Construction Coordinator	237	. St. Johns Landfill closure
Joanna Karl Senior Engineer	212	. St. Johns Landfill closure
Vacant Associate Solid Waste Planner		
Maurice Neyman Associate Engineer	140	. Metro Headquarters building . St. Johns Landfill closure . Transfer Station capital projects
Dennis O'Neil Senior Solid Waste Planner	229	. St. Johns Landfill closure
Linda Pang-Wright Associate Engineer	271	. St. Johns Landfill closure
Rob Smoot Senior Engineer	539	. Metro Central Station, H2W Facility . Transfer Station capital projects
Reford "Jeep" Reid Senior Engineer	213	. Compost facility

Metro South Transfer Station
Household Hazardous Waste Facility

Six Month Report

Submitted by

Metropolitan Service District
Solid Waste Department
Operations Division

August 1992

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ATTACHMENT A - Household Hazardous Waste Staff Vitae

ATTACHMENT B - Metro Paint Recycling Fact Sheet

ATTACHMENT C - Labor Cost Analysis

BACKGROUND

DEVELOPMENT OF THE FACILITY

The Metropolitan Service District has been involved with the management of household hazardous waste (HHW) since 1986, when a pilot HHW collection event was conducted. Between 1988 and 1991, Metro sponsored a series of collection events, generally held twice a year, and usually staged simultaneously at four different locations in the Metro area. These events each serviced between 1000 and 3600 participants. In 1989 the Oregon legislature mandated that Metro establish permanent depots for the collection of household hazardous waste.

Early planning for compliance with the legislature's mandate included several key decisions. It was decided that two facilities would be built, to be located at each of Metro's solid waste transfer stations; that the facilities would be designed and built from scratch, without using existing structures or prefabricated buildings; and that Metro would operate and staff the facility, using an outside contractor only for transportation and disposal of wastes.

The facility to be sited at the Metro South Transfer Station in Oregon City was designed first. An engineering firm experienced in the design of structures for handling and storage of hazardous materials was utilized for the project, with Metro engineering and operations staff closely involved in the design process. Because there was very little precedent for designing a full-service HHW facility from the ground up, the design team developed many original approaches. The entire design process took a considerable amount of time and effort. The cost of utilizing the engineering firm totaled more than \$120,000, and this does not include the costs of considerable Metro staff time and support services needed during the design phase.

After the design was complete, funds for building the facility were authorized, and construction was initiated in June of 1991. The construction process took a total of seven months. While it was recognized that construction of a facility of this kind would be costly, the final \$1,007,000 price tag was not anticipated during the planning process. This construction cost again does not include significant Metro staff time spent overseeing the construction.

DESIGN FEATURES

Three main factors determined the major design characteristics of the facility: the size, shape and grading of the site chosen for the facility; practical considerations regarding flow of materials during waste handling operations; and compliance with numerous recent fire code regulations for facilities handling hazardous chemicals. Figure 1 shows the general layout of the facility.

The 1988 edition of the Uniform Fire Code, adopted as law by the State of Oregon, includes a greatly expanded Article 80, which addresses facilities handling hazardous materials. Article 80 imposes an array of new requirements on facilities built after the code change. Among the requirements are:

- x The ability to contain 20 minutes of flow from the facility fire suppression sprinkler system.
- x A variety of standards for the facility ventilation system.

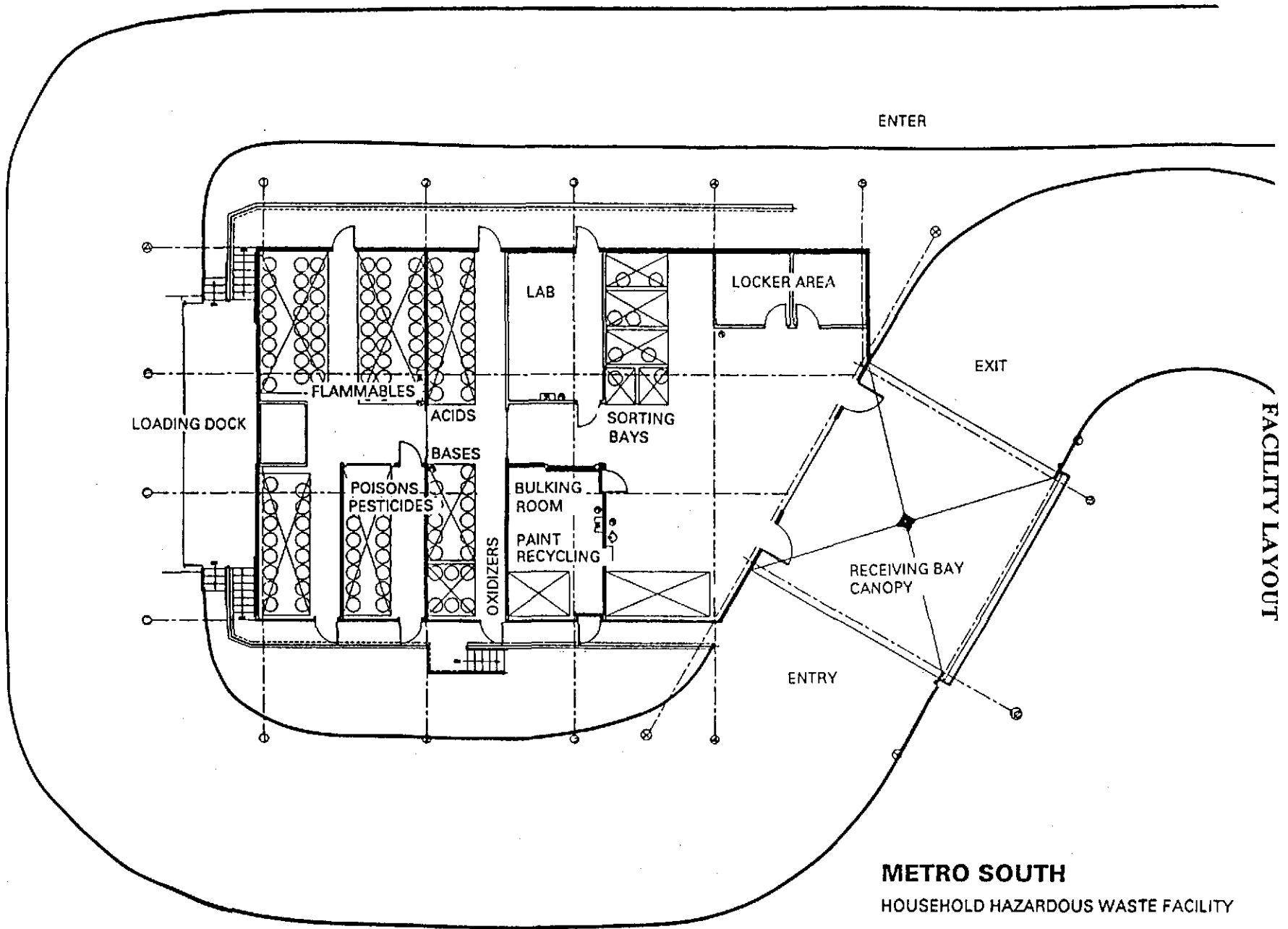


FIGURE 1

- x Minimum standards for construction materials and fire containment properties of walls and doors.
- x Segregation and proper storage of various classes of hazardous materials.
- x Explosion-proof wiring and other types of hazard-resistant wiring in certain areas.
- x A standby generator capable of fully powering the facility in the event of power failure.

In addition to the statewide fire code requirements, the Oregon City Fire Department imposed conditions on facility design and operation during the local permitting process. The Oregon Department of Environmental Quality (DEQ) also developed a set of design and operational standards for permanent HHW facilities in Oregon. The final facility design successfully incorporates all of these regulatory requirements.

A number of *operational features* were desired for the facility, and were incorporated into the design. It was decided that wastes would be received at the front of the facility, and move toward the rear as they were processed. The various steps were planned as follows :

- x First, customers are greeted and vehicles are unloaded in a drive-through canopied area
- x Wastes are then wheeled into the facility by facility staff into a receiving and sorting area, where they are staged, and then sorted either for lab-packing into drums located in the sorting area, or sent to other parts of the facility.
- x Unlabeled materials are brought into a laboratory for identification.
- x Paints and solvent-based materials are brought into a bulking room, where they are poured into 55-gallon drums.
- x Drummed materials are placed in segregated storage areas.
- x When a drum pick-up occurs, drums are brought to a loadout dock at the rear of the facility.

Overall, the operational concepts developed during the facility design have proven to be sound, and the facility generally functions quite well. Some aspects of the design were found to be unsatisfactory, however, and certain alterations have been necessary:

- x The ventilation in the bulking room was inadequate, and a retrofitted system of exhaust ducts and improved air flow is currently being designed and installed.
- x Space allocated for storage of supplies and for office and computer tasks was inadequate. A storage room has been converted into an office space, and storage cabinets are located in various corners throughout the facility, with some storage on the loading dock and outside of the facility as well.
- x The assignment of storage space to drummed acids, bases and oxidizers was greater than actually needed. A new arrangement for the segregated storage areas is in process. It will free up what is currently the acids bay for other uses, including storage of supplies.

- x An unexpectedly high volume of material is being received at the facility, and thus inadequate space is available for bulking of both solvent-based materials and latex paint. Fortunately, a large tunnel formerly housing a compactor was available adjacent to the facility, and is currently being utilized for latex operations.

PREPARATION FOR STARTUP

Concurrent with the construction of the facility, Metro obtained equipment to be used in facility operations, hired and trained staff to operate the facility, and researched some of the technical aspects of facility operation.

Expenditures totaling about \$55,000 were made to outfit the facility with equipment including: a forklift, stainless steel tables, shelving and other furniture, a computer system, tools, carts, safety equipment, lab equipment, and a variety of other non-disposable supplies.

Most of the facility staff hired prior to the opening of the facility were Metro employees experienced in hazardous waste handling through the solid waste load checking program at Metro's transfer stations. Facility staff were given considerable additional training prior to the facility opening, some of which was provided by outside trainers, and some developed in-house. Standard training for all staff includes:

- OSHA 40 hour hazardous waste
- Emergency response team (ERT) 24 hour training
- First aid/CPR
- Hazard communication
- Respiratory protection program
- Chemical hygiene program
- Identification of unknowns
- Forklift operation

Training also includes thorough instruction on the specific operations of the HHW facility. Training is considered to be an ongoing effort, with additional in-house and outside training being provided to all staff on a regular basis. Attachment A details the training of the current staff.

The operating procedures for the facility were developed by drawing on a variety of resources: staff experience in the hazardous waste industry, consultation with the disposal contractor selected, observations and operation manuals from existing facilities, and staff experience with one day collection events. Two specific aspects of facility operation required considerable research prior to facility startup: the identification of unlabeled wastes, and recycling of latex paints.

Identification of unlabeled containers received at the facility is probably the most technically involved aspect of facility operation. Facility staff were trained by the developers of two existing identification schemes- HazCat, designed for identification of the 200 most commonly spilled hazardous substances, and WICT, developed by the staff of the San Francisco HHW facility. In the months since the facility opened, our staff has developed a customized system, utilizing some of the

aspects of both existing systems, but more closely coordinating with the exact requirements of our disposal contractor.

Although some HHW programs do not accept latex paint, Metro decided to accept it because it is unacceptable as normal trash, and is a disposal problem. Upon researching the available options for latex paint, it was determined that careful sorting and quality control could result in recycling of a significant portion of the latex paint collected. The latex paint recycling program currently in place is patterned after other regional pilot programs. A sorting scheme was established and refined, with the assistance of a paint recycling consultant (see Attachment B).

PARTICIPATION, DISPOSAL AND COST DATA

PARTICIPATION FIGURES

Metro's HHW collection events in 1988 through 1990 were held twice a year. In 1991, because of the impending opening of the first permanent facility, only one event was held. Apparently, the residents of the region have become quite conscientious about the potential problems associated with household hazardous waste, because the opening weeks of the facility brought out a massive turnout. The first two weeks alone over 850 participants showed up to dispose of the wastes they had collected. This is particularly significant since Metro did not publicize the opening nor has there been any major advertising to date. After the initial two weeks, the participation dropped off a bit, but it has remained quite steady in the months since the opening. The ongoing participation level is significantly higher than the estimated figures that were used during the planning process, which was projected to be under 50 customers per weekend. Nearly 40% of the facility customers are from neighborhoods within 3 miles of the site.

The facility received its first waste at the end of January, 1992. Metro employees were asked to bring any wastes that they had in order to give the facility staff a little hands on practice, and help fine tune some of the procedures. On Thursday February 6, 1992 the facility was opened to the general public. Since that time, the facility has been open every Thursday, Friday and Saturday, from 10 a.m. to 5 p.m. Participation figures through the end of June are shown in the table following.

DATE	DAILY TOTAL		WEEKLY TOTAL	DATE	DAILY TOTAL		WEEKLY TOTAL
1/30 - 2/1	(Metro employees)		35	4/16	54		
2/6	101			4/17	36	week 11	162
2/7	203	week 1	513	4/18	75		
2/8	209			4/23	65		
2/13	127			4/24	63	week 12	203
2/14	104	week 2	350	4/25	75		
2/15	119			4/30	71		
2/20	77			5/1	52	week 13	192
2/21	77	week 3	269	5/2	69		
2/22	115			5/7	61		
2/27	104			5/8	59	week 14	194
2/28	76	week 4	295	5/9	74		
2/29	115			5/14	53		
3/5	66			5/15	48	week 15	173
3/6	77	week 5	238	5/16	72		
3/8	95			5/21	77		
3/12	68			5/22	67	week 16	232
3/13	63	week 6	241	5/23	88		
3/14	110			5/28	65		
3/19	65			5/29	64	week 17	231
3/20	63	week 7	223	5/30	102		
3/21	95			6/4	88		
3/26	113			6/5	72	week 18	234
3/27	71	week 8	283	6/6	74		
3/28	99			6/11	80		
4/2	55			6/12	57	week 19	233
4/3	51	week 9	188	6/13	96		
4/4	82			6/18	85		
4/9	59			6/19	66	week 20	231
4/10	49	week 10	214	6/20	80		
4/11	111			6/25	66		
				6/26	66	week 21	214
				6/27	82		

Total customers served through June 30, 1992 = 5,148

If we consider the first two weeks of operation to be uncharacteristically busy, and calculate an average from weeks 3 through 21, the average weekly turnout is 223.7 participants.

COSTS

The following is a summary of ongoing operational costs. In some places estimates were used, and data from portions of the time period were extrapolated to the whole time period.

The largest portion of operational expenses for the Metro South HHW facility was for transportation and disposal of drummed wastes. The total cost for disposal of all wastes collected through the end of June, 1992, is \$277,770. A breakdown of this cost by type of waste follows in the disposal data section.

The second largest operational cost is labor. During the facility planning process, it was expected that three technicians and one supervisor would be sufficient to staff the facility. In actual practice, an unexpectedly high participation level, coupled with a higher-than expected proportion of labor-intensive wastes such as paints among the materials collected requires a staff of 12 persons to

properly operate the facility. Personnel records for the first months of operation of the facility indicate that it takes an average of about 2.4 hours of labor per participant serviced.

It should be noted that the more labor-intensive aspects of facility operation generally result in significant overall cost savings. Bulking of solvent-based materials, for example, allow for disposal costs that are greatly reduced compared to disposal of non-bulked materials through a hazardous waste contractor. During the first two months of operation, a total of 104 drums of non-bulked solvent-based materials were shipped out, because the sheer volume of incoming material was overwhelming. If facility staff had been able to bulk this material, a net savings of about \$30,000 would have resulted. Sorting and bulking of latex paint, and on-site identification of unknowns are two other labor-intensive operations which result in a large net savings in operational costs.

In the course of a typical operating day, perhaps 140 unlabeled containers of waste are received at the facility. About 40% of these are paints, which are categorized quickly and inexpensively. Of the remaining unknowns, about two thirds can be identified sufficiently for disposal purposes in two or three minutes, consuming only twenty cents or so worth of test tubes and other disposable supplies. The remaining unknowns take more time, although rarely does it take more than fifteen minutes of work and a few dollars in supplies to identify even the most difficult items. Using the identification scheme developed at the facility, the equivalent of two staff persons working full time and the expenditure of about \$800 in supplies each month is all that is required to identify all unlabeled containers received. This compares favorably to a typical charge of \$50.00 per unknown levied by many hazardous waste firms, which would result in a monthly expenditure of \$84,000.

Various other supplies are used on a regular basis in the course of facility operations. The most costly supply is empty drums for packaging of waste. Disposable personal protective clothing for facility staff is also a significant expense. Other items used on an ongoing basis include absorbent, drum liners, labels, and cleaning supplies. An estimated \$11,500 per month is spent on all disposable supplies.

The operating costs for the facility break down as follows:

Disposal	\$ 54.00
Labor	42.00
Supplies	<u>13.00</u>
Total	\$109.00 per participant

The estimated total operating cost for January through June 1992 - \$561,130.

RECYCLING AND DISPOSAL OF MATERIALS COLLECTED

In the following tables, information on types of materials collected, disposal methods, and amounts of materials collected is tabulated. Amounts were calculated using manifests of materials shipped through June 30, 1992, as well as an inventory of materials stored in the facility on that date.

Where "landfill" is indicated under disposal method, it refers to permitted hazardous waste landfill. Where "energy recovery" is indicated, it refers to use as a fuel at an EPA-permitted cement kiln

facility. "Treatment" refers to processing of liquids through an industrial water-treatment system to remove hazardous constituents, and monitored discharge of the cleaned-up water portion of the waste.

Bulked Materials

For these materials, each drum contains 55 gallons of material.

<u>Material</u>	<u>Disposal Method</u>	<u>Quantity Generated (6 months)</u>
Flammable liquids	Energy recovery	190 drums
Flammable solids	Energy recovery	82 drums
Antifreeze	Recycle	10 drums

Latex Paint

All drums are 55 gallon drums. The landfill category also contains other water-based wastes such as sheet-rock compound, adhesives, etc. During the opening weeks of facility operation, a relatively low percentage of the latex paint received was recycled. This was due in part to the inexperience of the facility staff, and in part because much of the paint received initially had been stored for long periods of time. The latex paint operation is now achieving a recycling rate in excess of 60%, and hopes to eventually reach 75%.

<u>Material</u>	<u>Disposal Method</u>	<u>Quantity Generated (6 months)</u>
Latex paint	Reprocessing	27 drums
Latex paint	On-site recycling	91 drums
Latex paint	Landfill	170 drums

Lab Packs

Lab pack drums hold separate containers of solids and liquids. The amount of waste contained varies, but is typically 100 to 120 pounds net.

<u>Material</u>	<u>Disposal Method</u>	<u>Quantity Generated (6 months)</u>
Acids	Treatment	6.25 drums
Acids	Landfill	20 drums
Alkalis	Treatment	9 drums
Alkalis	Landfill	19.25 drums
Oxidizers	Treatment	2.1 drums
Oxidizers	Landfill	2.75 drums
Pesticides	Landfill	111 drums
Cleaners	Treatment	35.5 drums

Loose Packs

Drums of aerosols contain about 235 aerosol cans. Drums of asbestos tar contain about 20 gallons of tar. Currently we have no data on the quantity of batteries contained in loose pack drums.

The flammable materials category refers to loose packed cans of paints and other solvent-based materials that were shipped directly to our hazardous waste disposal contractor during the initial few weeks of facility operation when we were overloaded with waste and were unable to bulk all materials received. This method is no longer used.

<u>Material</u>	<u>Disposal Method</u>	<u>Quantity Generated</u>
Aerosols	Incineration	76.75 drums
Household batteries	Recycle	0.125 drums
Household batteries	Landfill	2.125 drums
Asbestos tars	Landfill	48 drums
Flammable materials, misc.	Energy recovery	104 drums

Miscellaneous

This includes various materials that are not collected in drums. The amounts indicated are estimates from the volume, or extrapolations from three or four weeks of data.

<u>Material</u>	<u>Disposal Method</u>	<u>Quantity Generated</u>
Isocyanates	Landfill	120 pounds
PCB ballasts	Landfill	5 gallons
Organic peroxides	Incineration	15 pounds
Water reactives	Incineration	20 pounds
Propane	Recycle	12 cylinders (approx. 5 gal. size)
Fire extinguishers	Recycle	50 units
Motor oil	Recycle	1,400 gallons
Lead-acid batteries	Recycle	330 batteries
Radioactives	Landfill (via state health dept.)	2 pounds
Infectious waste (sharps)	Incineration	1 small container
Gas Cylinders	Treatment, recycle	4 cylinders
Explosives	Detonation (bomb squad)	100 pounds

REUSE PROGRAM

Approximately 1,500 pounds of fertilizers were used on the Metro South grounds, about five drums of usable cleaning products and related materials were collected for later giveaway, and 150 to 200 gallons of various materials were reused by employees and associates. Small propane cylinders with material remaining inside are utilized by the facility laboratory as fuel for a lab burner in tests requiring a flame.

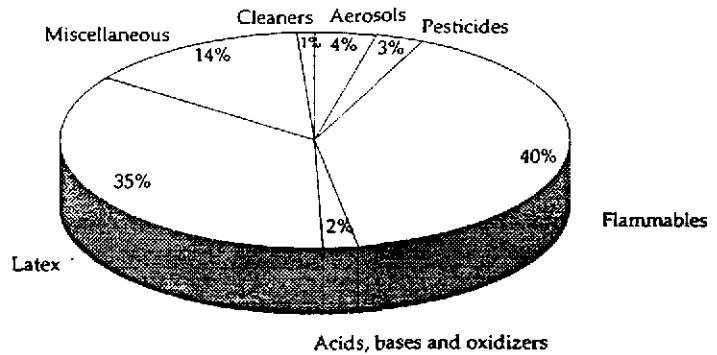
NON-HAZARDOUS MATERIALS

A significant amount of packaging and other non-hazardous materials are collected along with household hazardous waste. All steel cans resulting from the latex paint bulking operations were recycled, totaling 25,060 pounds of metal. Two hundred yards of cardboard was also recycled (weight data is not available). One hundred tons of regular trash was generated in the course of facility operations.

SUMMARY

Various assumptions and estimates were used to convert all incoming wastes into pounds. An estimated total of 361,010 pounds of waste (180.5 tons) were collected through June 30, 1992. The average customer delivered 70 lbs. per trip.

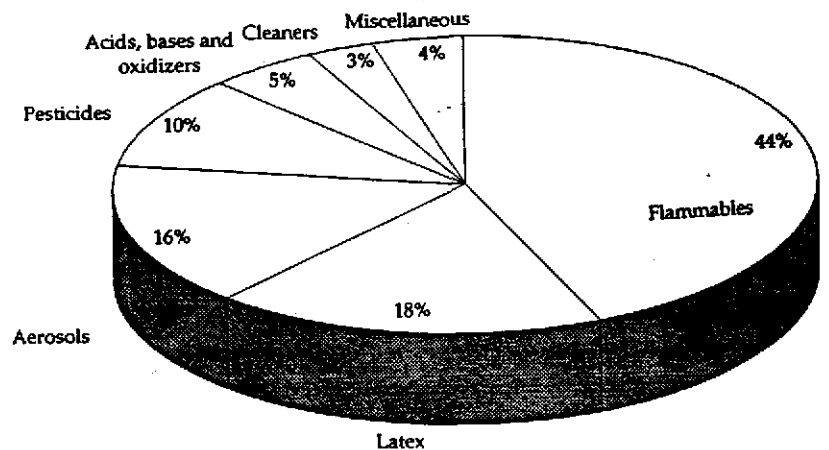
Flammables	40%
Latex	35%
Aerosols	4%
Pesticides	3%
Acids, bases and oxidizers	2%
Cleaners	1%
Miscellaneous	14%



The estimated average cost per pound was \$1.55 (total operating cost \$561,130 divided by 301,010 total pounds). Although not all materials were shipped out in drums, by using conversions we can estimate that 1,108 drums of material were collected. This amounts to approximately one-fifth of a drum per participant, and indicates an average cost per drum of \$251.

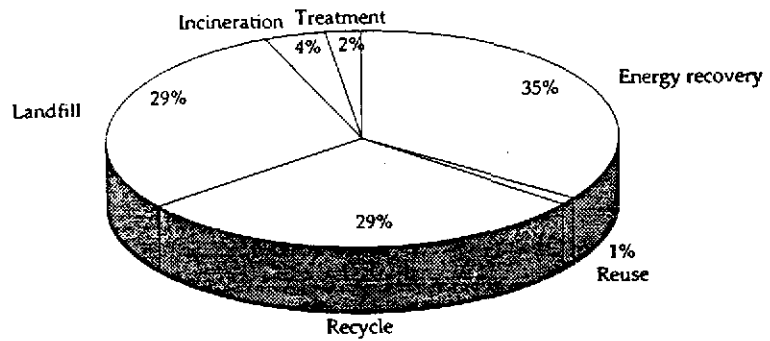
As a portion of disposal costs:

Flammables	44%
Latex	18%
Aerosols	16%
Pesticides	10%
Acids, bases and oxidizers	5%
Cleaners	3%
Miscellaneous	4%



By disposal method, it breaks down as follows:

Energy recovery	35%
Recycle	29%
Landfill	29%
Incineration	4%
Treatment	2%
Reuse	1%



The following table indicates the cost per pound for disposal for each of the above disposal methods. These figures represent disposal costs only. Costs for labor and supplies differ only slightly among wastes destined for different disposal methods.

<u>Disposal Method</u>	<u>Average cost per pound</u>
Energy recovery	\$0.96
Recycle	\$0.02
Landfill	\$0.93
Incineration	\$3.02
Treatment	\$1.93
Reuse	-none-

FUTURE PLANS

SECOND COLLECTION FACILITY

Metro's second HHW collection facility will be located at the Metro Central Transfer Station in northwest Portland. The design for the facility has been completed, although some modifications to the bulking room will be made based on what has been learned at the Metro South facility. A construction contractor to build the facility will be selected in August. Construction is scheduled for the fall of 1992, and is expected to be completed by early 1993. The Metro Central facility will have a configuration similar to the Metro south facility, but has a few different characteristics, so some details of the facility will differ. The floor plan is smaller in area than the Metro South facility, and no area equivalent to the latex operations area at Metro South is available, so space problems will be likely, requiring some outside staging of non-hazardous materials and supplies. It is difficult to predict the participation level at the new facility, but it is estimated that the total regional participation will be about one and two-thirds times the current participation levels when two facilities are available.

MOBILE COLLECTION

Metro is currently negotiating with Oregon Department of Environmental Quality (DEQ) regarding a DEQ-funded Metro-operated mobile collection program for the Metro region. If approved, this would be a limited pilot program during the 1992-93 fiscal year to explore the viability of collecting various substreams of household hazardous waste in neighborhood locations distant from the two permanent facilities. Many of the details of this program have yet to be finalized.

COST-SAVING AND ENVIRONMENTALLY PREFERABLE INNOVATIONS

One of the advantages of using Metro staff to operate the HHW facility is the large degree of control that may be exercised over packaging and disposal of materials collected. Metro staff is continually searching for practices which can either reduce the cost of waste disposal or provide disposal methods which are higher on the waste reduction hierarchy, or ideally, do both simultaneously. Several innovations are currently under development.

Reuse Program

Facility staff are undertaking an ambitious program to find users for certain reusable items received at the facility. This will not involve a browseable collection of materials like some other facilities have developed, but will entail keeping potentially reusable materials at an off-site storage location, networking with local community and social service groups, and giving away materials by appointment. Specific procedural guidelines for the reuse program are currently under development.

Recycling of Paint Solids

A disposal facility has been located which will accept the solids generated in the course of bulking oil-based paints, burn off the organic portion in a rotary kiln, and sell the solids to a paint manufacturer. Once approved, this will result in lower costs for managing this waste stream, and will provide a disposal method that is higher on the waste management hierarchy.

Recycling of Aerosols

Facility staff are researching and designing equipment that can puncture spray cans, release the liquid contents into a drum, and route the hydrocarbon propellants into a state-of-the-art compost filtration system that will break down the propellant, emitting only carbon dioxide and water. This will allow the metal cans to be recycled, and significantly reduce disposal costs. This system may also be used for puncturing empty propane tanks (the type used in camping stoves), and treating the trace amounts of propane left in these tanks when "empty".

Bulking of Cleaners

Currently, items such as household detergents and cleaners are lab-packed in the facility receiving area, and shipped to the disposal contractor's site, where they are bulked and sent to a treatment facility for treatment and eventual discharge to the sewer. Soon facility staff will begin pouring these items into a 55-gallon drum on site, which will result in significant cost savings. This will include

only items in the pH 3 to 11 range. All these materials are considered non-hazardous under most regulations, but are not acceptable for disposal as normal trash.

Solidification of Latex

The portion of latex paint that is collected that is not recyclable is currently being sent to a hazardous waste contractor for solidification and disposal in a hazardous waste landfill. Facility staff has found that the sorting scheme used for latex paint is able to exclude paints high in lead and mercury. Thus only the high heavy metal portion need be sent out as hazardous waste, while the remainder may be solidified on site and sent to a municipal landfill as a special waste. Once procedures are finalized and approval is obtained from the landfill, a substantial cost savings will result.

Barcode System

Facility staff will soon utilize a portable barcode reading system to inventory all lab-packed wastes. While this system required a capital investment for hardware and programming, it is expected to result in reduction of the amount of labor devoted to paperwork, as well as prevent costly and time-consuming packaging errors which if uncorrected could result in fines from regulatory agencies.

CONCLUSION

The first six months of operation of the Metro South Household Hazardous Waste Collection Facility have been a remarkable success. Some of the planning projections prior to the facility opening estimated that 2% of the households located within a 15 minute drive of the facility would bring wastes during the first year, which would have resulted in under fifty participants per week. The actual turnout has been five times that predicted level, and yet all residents who made use of the facility were serviced safely and efficiently. There were no long lines waiting for service, no significant spills or accidents, and all waste was processed in a safe manner and within the constraints of the facility permits.

If the participation rate achieved during the opening months continues through January of 1993, then a total of 12,342 households will be serviced during the first year of operation. This amounts to 2.6% of the households in the entire Metro region. Not only would this be an excellent accomplishment for a single facility in its first year of operation, it would signify the diversion of 420 tons of hazardous materials from the regional landfill and other potentially environmentally destructive resting places.

The fact that operating expenses of over one million dollars would be incurred in the course of servicing just one-fortieth of the population does however beg the question of the potential costs of servicing most or all households. While it probably wouldn't cost a full forty times as much, it certainly would run into many millions of dollars. This fact not only underscores the importance of efforts to find more efficient disposal methods, it also forcefully argues for a strong campaign to educate the region's population to buy only what they will use, find other users for their leftovers, and switch to less hazardous substitutes whenever they are available. An examination of the disposal and cost figures generated at the facility can help set priorities for both types of waste reduction efforts.

Wastes with a high per pound cost for example, are an obvious target for future reduction efforts, as are types of waste that are responsible for a relatively high proportion of disposal costs, but only constitute a small proportion of incoming materials. Aerosol cans, for example, are losers in both of these categories. For this reason disposal alternatives for aerosols are currently being actively pursued by facility staff. Another example is pesticides, which make up 3% of incoming materials, but account for 10% of disposal costs. There is very little that can be done with pesticides once they are received for disposal, suggesting that education efforts should focus on pesticide use habits as a high priority.

The first six months of operation of the Metro South HHW facility have been quite a challenge, and much has been learned in the course of successfully meeting that challenge. We are now in an excellent position to move forward with our plans for further improvements in operational methods, providing HHW collection in neighborhood locations, contributing to public education efforts, and startup of Metro's second HHW collection facility.

JQ:jc
August 18, 1992
HHW/REPORT.DOC

ATTACHMENT B
METRO PAINT RECYCLING FACT SHEET



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Metro Paint Recycling Fact Sheet

Background

Metro's Household Hazardous Waste Facility (HHW) in Oregon City began collecting unwanted paint in February 1992. To reduce disposal costs and minimize environmental impacts, Metro technicians separate incoming paints for recycling. Solvent-based paint is burned for fuel in specially equipped boilers. Good quality latex paint is reprocessed for use as a primer or surface coating. Poor quality latex is solidified and landfilled. Approximately 60-75% of the paint waste stream is recyclable. About 330 gallons of recyclable paint are collected at the HHW facility each week.

Sorting

Specially trained Metro technicians carefully sort all latex paint into recyclable and nonrecyclable fractions based on observable characteristics. Paint that is old, sour or gloppy is rejected, as well as colors, brands and types that typically contain lead or mercury. The remaining recyclable paint is sorted into interior light and a range of exterior colors and then screened and bulked in 55-gallon drums. Some of this paint is given away to non-profit organizations and the rest is shipped to Rasmussen Paint Company in Beaverton for further reprocessing.

Reprocessing

Rasmussen inspects the properties of incoming paint (e.g., consistency, color, etc.), strains it and then blends each variety in 350- to 1000-gallon batches so that it is thoroughly homogenized. After initial blending, Rasmussen evaluates each batch, blends in additives if needed, runs the resulting product through a fine mechanical strainer, and then packages the final product in two- and five-gallon buckets made out of recycled plastic.

Testing

Metro has commissioned certified laboratories to test the performance characteristics and chemical composition of three pilot batches of Metro/Rasmussen recycled paint. Testing indicates that Metro/Rasmussen recycled paint contains trace amounts of lead and mercury that are well within Environmental Protection Agency and National Paint and Coatings Association guidelines. Laboratory performance tests conducted on the first pilot batch of interior indicate that it is a good quality product that meets rigorous federal standards for comparable new paint. It has particularly good hiding characteristics, working properties and stability, but it has low resistance to alkali and staining. It has 49.8 % solids by weight, sets in 30 minutes, hard dries in two hours and can be recoated in four hours. Laboratory performance testing of the exterior varieties – including accelerated weathering and fungal resistance – has not been completed yet.



Suggested Applications

Recycled interior is recommended for walls and ceilings and it makes an excellent primer. It is not recommended for use in bathrooms, kitchens or other areas with high exposure to soiling. It is excellent for residential, office and warehouse uses. Exterior varieties are expected to be appropriate for use as primer and surface coating in residential, office and industrial uses. Recycled paint produced under this program is intended for airless and conventional spray, 3/4 inch nap roller, brush or sponge. Ongoing applicator evaluations will confirm the most effective application methods.

Demonstration projects and Metro's commitment

Several areas of the Metro Center offices, located at 2000 S.W. First Avenue in Portland, have been painted with recycled paint. These include office space and hallways. Additionally, Thompson, Vaivoda & Associates Architects has specified Metro/Rasmussen paint for use as a primer and a surface coating in some parts of the building that is being renovated for Metro's future offices. A number of demonstration projects are being developed to evaluate ease of application and field performance.

Availability, Price and Color

Rasmussen is selling two-gallon buckets of interior light for \$12 and five-gallon buckets for \$25. Exterior varieties marketed by Rasmussen will be approximately the same price as the interior. The interior is available in antique white, and the exteriors will be available in a light Oregon Sky and a darker Oregon Sand. For more information about purchasing, custom blending or the recycling process, contact Chris Rasmussen directly at 644-9137.

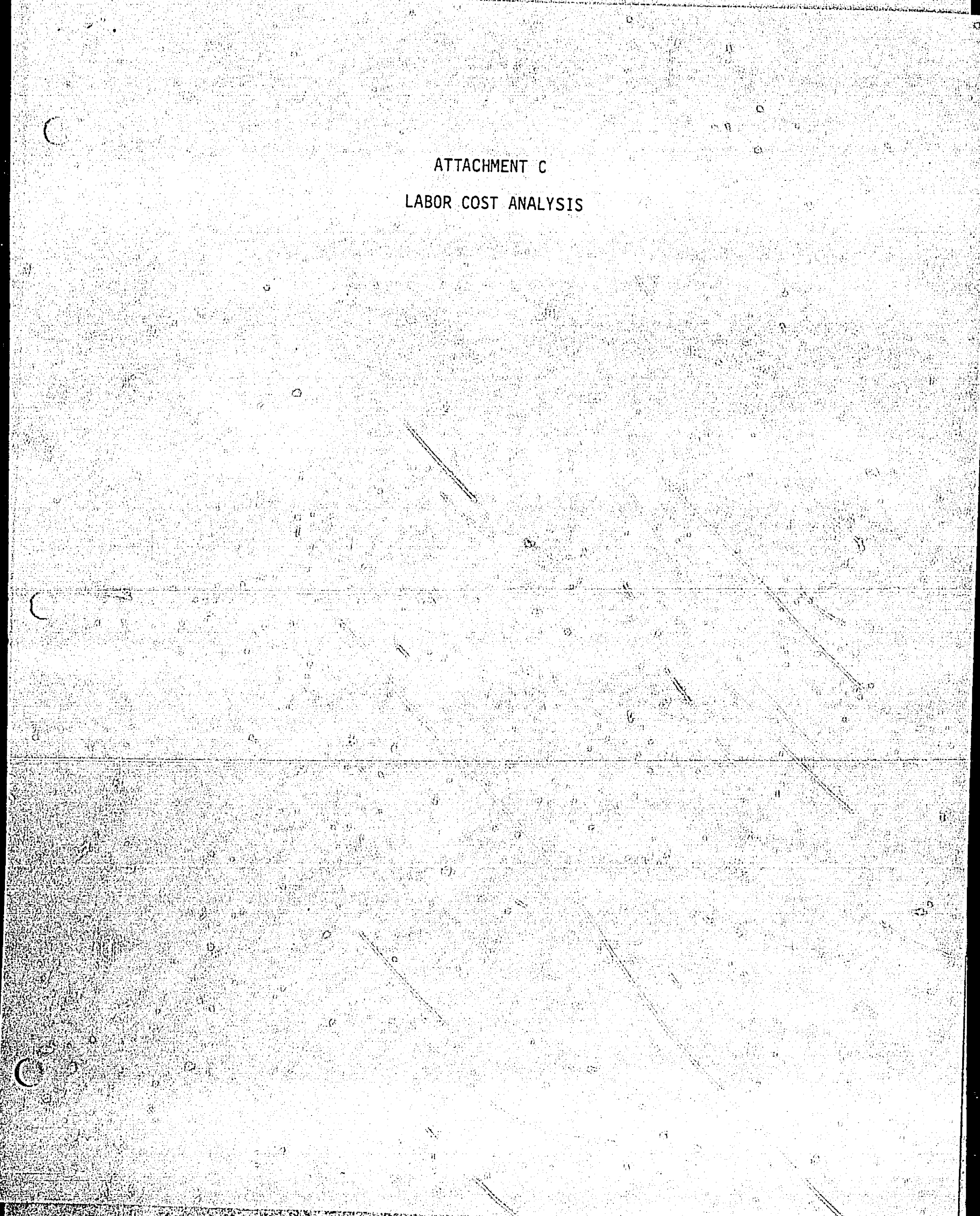
Less refined recycled paint also is available free of charge directly from the HHW facility. This product is chemically equivalent to Rasmussen's product, but does not go through the rigorous straining that the Rasmussen product does, so it may contain some particulate matter and it is not color-standardized. HHW interior is available in eggshell white. Exterior paint from the HHW facility are available in French Vanilla, Mushroom, Sage, Pistachio, Chocolate-Banana and Cocoa-Mousse. For more information about HHW paint availability and color, contact Sally Koch, Site Supervisor, or Kathie Linfoot, Hazardous Waste Technician, at 655-0480.

General Information

For general information about Metro's Paint Recycling Program, contact Andy Sloop, Associate Solid Waste Planner, 221-1646, ext. 351.

August 10, 1992

ATTACHMENT C
LABOR COST ANALYSIS



LABOR COSTS
METRO SOUTH TRANSFER STATION
HOUSEHOLD HAZARDOUS WASTE FACILITY

Name	Tasks/Hours per week										Avg. Hourly Rate***	Total Cost
	Admin	Receiving	Bulking	Latex	Education & Reuse	Lab	Shipping	Non-facility*	Misc	Total Hours**		
Bassham	---	20	---	---	---	---	---	25	---	45		
Bechtel	---	---	---	---	---	---	---	37	8	45		
Bomber	---	9	4	---	12	20	---	---	---	45		
Crockett	---	15	10	---	---	5	10	---	5	45		
Endicott	---	10	6	---	3	4	---	22	---	45		
Forbes	---	17	10	---	---	16	---	---	2	45		
Hays	---	6	6	33	---	---	---	---	---	45		
Heaton	15	---	---	---	15	---	---	10	---	40		
Koch	30	5	---	---	---	---	---	5	---	40		
Linfoot	---	---	---	20	---	---	---	5	20	45		
Linhart	---	6	6	33	---	---	---	---	---	45		
Meyer	---	21	8	---	---	8	---	8	---	45		
Quinn	16	---	---	---	---	16	---	8	---	40		
Williams	---	21	16	---	---	8	---	---	---	45		
Walden	---	24	16	---	---	---	---	5	---	45		
TTL HRS	61	154	82	86	30	77	10	125	35	660		
TTL CST	1,378	2,445	1,295	1,462	612	1,424	183	2,260	641		17.73	\$11,700

* Examples: Freon recovery, St. Johns Landfill groundwater monitoring and methane collection; and Metro Central load-checking program.
 ** Average per week
 *** Includes fringe benefits (38%)



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503.221-1646

Memorandum

Date: August 20, 1992

To: Technical Advisory Committee Members:

From: Jim Goddard, Senior Solid Waste Planner *JGD*

Re: Petroleum Contaminated Soils (PCS)

Petroleum Contaminated Soils (PCS) is defined as a special waste in the Special Waste Chapter of Regional Solid Waste Management Plan. The majority of PCS is generated during the removal of underground storage tanks. Prior to February of 1991, PCS was accepted for disposal at St. Johns Landfill by special waste permit. After the St. Johns Landfill closure, DEQ permitted Hillsboro Landfill to accept the waste. The cost of disposal for petroleum contaminated soils at St. Johns Landfill and Hillsboro Landfill, prior to the scale installation, was approximately \$14.00/per ton which was a relatively low cost PCS management option.

The Special Waste Chapter recommended that "Metro should encourage the treatment of petroleum contaminated soils by increasing the disposal charge for petroleum contaminated soils generated within the Metro region to a level comparable to the cost of treatment. Metro and DEQ should work closely to bring about treatment capacity which would remove and destroy hydrocarbons contained within the soil." Metro implemented the plan by adopting Ordinance No. 91-422B which establishes a franchise mechanism for PCS processors that destroy hydrocarbons from soils. The ordinance also banned the off-site aeration of soils which was considered to be the most environmentally damaging and abused method of PCS management.

During the same period, Hillsboro Landfill installed scales which effectively increased the disposal fee for PCS to \$52.00/per ton. This fee is competitive with that charged by franchised processors and proper on-site remediation practices.

Since the enactment of Ordinance 91-422B Metro and DEQ have been working closely to monitor PCS management practices within the region to identify items which may require further action by either agency. The amount of PCS generated has increased as DEQ's underground storage tank removal program has grown.

Through the first half of 1992 the quantity of soil being disposed of at Hillsboro Landfill has dropped by over 50% from the previous year. The soils arriving at the franchised processors have not reached their estimated quantities. This has prompted Metro and DEQ to investigate potential causes. The cost of proper management for soils either on-site or off-site is relatively consistent at \$40.00 to \$60.00 per ton, however, mismanagement of soils would be substantially less expensive since many of the

environmental protection measures would not be incorporated. This would provide a relatively large incentive to the owner of PCS to improperly manage the soils. Metro and DEQ embarked upon a joint investigation of on-site treatment practices beginning in May, 1992. The attached report summarizes the results of the field investigations.

Approximately 700 underground storage tank removal files are active at DEQ's Northwest region which includes the Metro area. Of these, 163 reported that on-site aeration was being used to remediate the soils. These sites were visited to determine the appropriateness of PCS management practices being implemented on these sites. The investigation indicated that 85 sites had no soils present. DEQ had not been informed that the soils were removed. Of the sites which still had soils, only 43% were actively treating the soils. The remainder of the soils were contained in stockpiles. The total quantity of soil found on these sites was about 27,000 cubic yards or 35,000 tons.

Each site's PCS management practice was rated good, marginal or poor. Only 25% of the sites were considered to have good management practice. These sites contained approximately 11,000 tons of soil. The remaining sites had marginal or poor management practices.

Another aspect of proper PCS management is the appropriateness of aeration as a remediation method. Approximately 16,000 tons of diesel contaminated soils were being treated by aeration. This is an inappropriate method for treating these soils since only about 50% of diesel fuel is comprised of volatiles which would be removed from the soil by aeration.

Most property owners were shocked to see interest in their on-site PCS management practices and were often very concerned about the outcome of the investigation. Fifty-one sites have been identified which will require further follow-up. This investigation has shown that the current self reporting system is not working effectively. DEQ is working on permit changes which would manage PCS more proactively.

Metro and DEQ will continue to work jointly to resolve this situation. The effort is not intended to be duplicative, but to build on each others resources. These efforts will be discussed in greater detail at the Technical Committee meeting.

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**SUMMARY REPORT ON THE STATUS
OF PETROLEUM CONTAMINATED SOIL TREATMENT SITES
IN THE TRI-COUNTY AREA**

**A COOPERATIVE EFFORT OF
THE METROPOLITAN SERVICE DISTRICT
SOLID WASTE DEPARTMENT
AND
THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHWEST REGION**

**JENNIFER NESS
METRO SOLID WASTE DEPARTMENT**

AUGUST 1992

BACKGROUND/PURPOSE

In June 1992, Metro and the DEQ Northwest Region entered into an Intergovernmental Agreement for the purpose of investigating the status of petroleum contaminated soil (PCS) aeration practices within the tri-county area. The goal of this study was to determine compliance with appropriate soil aeration practices and procedures, assess the volume of soil being treated, ascertain the level of mismanagement, and help direct future regulatory action by Metro and DEQ.

METHODOLOGY

The study methodology included field visits to 163 sites listed with DEQ as actively aerating soil and a review of project files at the DEQ offices. At each site, a field inspection report was completed (Exhibit A) and two or more photographs were taken. Results of the inspection reports were entered into the DEQ's Alpha 3 database and statistical reports were generated to determine the status of soil aeration practices.

RESULTS

Of the total 163 sites visited, 85 had soils on the premises that were being stockpiled, actively treated or had completed treatment. Although off-site aeration of soils was banned by the Metro Council effective January of 1992, seven sites continue to conduct off-site aeration. These are sites that were aerating off-site previous to the Metro ban.

Results were tabulated using the 92 sites (85 with soil on-site and 7 with soil off-site) as a basis for comparison. Of the total sites with soils, only 40 (43%) were actively remediating the soil by either aeration or bioremediation. Treatment was considered active if the soils were spread thin (1-2 foot thickness) and/or top layers appeared recently tilled. Over one half (53) of the sites had soils stockpiled on-site. Of those stockpiling, only eight were proceeding with active treatment. These eight were stockpiling due to lack of space on the property to aerate the soil all at once. This leaves a total of 45 sites that reported active aeration to the DEQ, but are in actuality only stockpiling the soils. The estimated total amount of soil at the sites visited is approximately 27,330 cubic yards. Of that total 16,190 cubic yards (59%) are being aerated and 11,140 cubic yards (41%) are being stockpiled. The average site is treating between 300 and 400 cubic yards of PCS.¹

The following table illustrates the inspection results according to the parameters used in the field inspection report form.

¹This figure is based on sites with cubic yard amounts available. This average does not include sites with less than 100 or more than 1000 cubic yards.

TABLE 1

**SOIL AERATION FIELD INSPECTION DATA
 BASED ON 92 SITES WITH SOIL PRESENT
 (the 92 includes five sites with post-treatment soils present)**

CRITERIA	NUMBER OF SITES	PERCENTAGE*
SOILS PRESENT: TREATMENT COMPLETE (desirable)	5	5%
STOCKPILED SOILS/ NO TREATMENT (undesirable)	45	49%
ACTIVELY TREATED** (desirable)	40	43%
APPROPRIATELY LINED (desirable)	65	71%
APPROPRIATELY BERMED (desirable)	32	35%
COVERED DURING RAIN (desirable)	33	36%
RESTRICTED ACCESS (desirable)	37	40%
NEAR WETLAND AREA (undesirable)	23	25%
NEAR PUBLIC AREA (undesirable)	39	42%
ON STEEP EMBANKMENT (undesirable)	1	1%
OPEN EXCAVATION (undesirable)	9	10%
WATER IN EXCAVATION (undesirable)	4	4%
FOLLOW-UP NECESSARY (undesirable)	47	51%

*Percentages are rounded to the nearest whole number.

**This figure includes ALL sites actively treating soils including those both stockpiling AND remediating.

Aeration is considered an effective treatment option for soils contaminated with gasoline, but not with heavier petroleum products. It is interesting that fourteen sites are attempting to aerate soils contaminated with products such as waste oil and heating oil. Aeration is also of questionable effectiveness when remediating soils contaminated with diesel fuel as only about 50% of the diesel contaminant is removed under optimum aeration conditions. Approximately 12,967 cubic yards of diesel or combination diesel/gasoline contaminated soil is currently being aerated or stockpiled at 30 different sites in the tri-county study area. This comprises 47% of the total soil volume at sites visited for this report.

OBSERVATIONS

Management of PCS appears to be haphazard at best. At many of the sites, treatment was begun to some degree but then ignored. Several sites had liners and berms, but the soils were left untilled, or spread at a thickness that was not conducive to aeration. A large proportion of the soils had medium to heavy vegetative growth indicating that they were not being tilled nor covered during inclement weather.

A few of the subjects did not seem to be aware of what comprised active, effective, and responsible treatment. One example being the Boring Fire Department which had a large covered stockpile of approximately 600 cubic yards reaching 7 feet in height. They explained that they were planning to leave the stockpile in its present condition for the duration of the year. They planned to have it tested in 1993 and then dump the soil at the rear of the property. It appeared that the fire department felt that stockpiling the soil was a form of effective treatment.

There were many examples of what appeared to be blatant disregard for proper PCS management practices. The Portland Golf Club had approximately 1,500 cubic yards of soil stored in a ravine where it collected a large amount of rain creating a serious run-off problem. The soils were poorly covered, wet, and obviously neglected. The site supervisor implied that the soils were being treated and there was nothing wrong with the way the soils were being managed. In many instances, site owners communicated that their soils were being correctly handled, but upon inspection it was obvious that the soils were mismanaged and for the most part ignored.

Personal visits to the sites are very effective in making site managers aware of the need for compliance to appropriate soil aeration practices. The majority of the site owners or managers were surprised to have their sites inspected and became defensive or apologetic about their PCS management practices. Some were concerned that the inspections would become a regular practice. Many were worried that samples would be taken for testing and were quick to say that they had been planning to arrange for sampling. Others began to apologize for other problems on their property such as sump sludge piles and tire stockpiling and claimed that they were working on taking care of those problems.

Post-treatment use of the soils did not appear to be a problem. Many sites used treated soil as backfill for the original excavation, or incorporated it into the established areas on unused portions of their property. One exception to this was Tualatin Valley Fire & Rescue #225. The firemen had placed a portion of their treated soils into their vegetable garden; not a recommended end use for the material.

The following table illustrates the breakdown of good, marginal and poor sites and corresponding soil volumes classified according to the parameters below:

- Good: well bermed, lined, tilled, fenced and obviously covered during bad weather.
- Marginal: partially bermed, some liner present, spread thin, but not well tilled, some vegetative growth, inconsistently covered, unrestricted access; or non-aerating but responsibly stockpiled.
- Poor: unlined, not bermed, heavy vegetative growth, improperly located, access unrestricted, or irresponsibly stockpiled and ignored.

TABLE 2

**PETROLEUM CONTAMINATED SOIL SITE MANAGEMENT
RATING AND CORRESPONDING SOIL VOLUMES**

GOOD	MARGINAL	POOR
21	35	29
25%	41%	34%
8,120 cubic yards	11,095 cubic yards	7,210 cubic yards

METRO PERSPECTIVE

Metro's interest in the management of PCS in the tri-county area revolves around the principle that, according to the Regional Solid Waste Management Plan, PCS is considered a special waste and should be managed and regulated as such. The first step Metro took was to pass Ordinance 91-422B which restricted off-site aeration in the hope that treatment could be more closely monitored "to further the health, safety and welfare of District residents."² Through my observations, it was evident that PCS is not being managed well. The prevalent attitude seemed to be disregard; owners are aware of the lack of regulation and take it for granted that sites will not be closely monitored. Many of the subjects chose aeration incorrectly assuming it would be an option that would take minimal effort. The visits illustrated the need for greater education, close monitoring, and strict, enforceable penalties for violators.

²Metro Ordinance No. 91-422B, page 1.

DEQ PERSPECTIVE

by Laurie McCulloch, DEQ Northwest Region

The mismanagement of PCS has the potential to create environmental problems through contaminated rainwater runoff and nuisance problems of dust and odor. In rare cases there may be potential health risks to the public from exposure to benzene from vapors associated with soils contaminated with high concentrations of gasoline. In addition, if aerating soils are not managed properly, there is a likelihood that treatment will not be effective in reducing contaminate levels.

DEQ developed the UST Permit Addendum with requirements for controlling the PCS in a responsible manner. Technical assistance and guidance were provided primarily by phone as owners and consultants contacted DEQ with questions. The UST Cleanup Program does not have sufficient staff resources throughout the state to oversee every cleanup project, whether or not soil aeration is the treatment option selected.

The results of this survey clearly show that the "semi-voluntary" program now in place has not worked. DEQ is currently in the process of developing plans to address this problem. Written guidance on how to conduct soil aeration properly and a specific format for written treatment plans have already been developed and will be available before September 1, 1992. A written policy that specifies how treated PCS can be reused and what those treatment levels shall be is now being circulated for final approval. DEQ is also looking at different mechanisms that might provide funding for increased staff resources to conduct inspections and provide enforcement follow-up.

By rule, DEQ has established a hierarchy of disposal options. For PCS, the best option is thermal destruction and the last option is on-site aeration or landfill disposal. However, DEQ feels that it is necessary to keep all options available so that site specific factors can determine the most environmentally appropriate and cost effective cleanup option.

CONCLUSION

As seen from the analysis of the inspections, only one PCS site in four is being managed in an effective and responsible manner. The need for follow-up and a high level of monitoring is evident; and the lack of regulation and minimal instruction given to site managers has allowed mismanaged sites to remain as such. Fortunately, Metro and DEQ have taken the first steps towards alleviating a potentially serious problem.

EXHIBIT A

SOIL AERATION FIELD INSPECTION REPORT

Site Name: _____ Date: _____

Site Address: _____

File No.: _____ Inspector: _____

PHOTOS TAKEN? Y / N (attach) ESTIMATED VOLUME OF SOIL: _____ yd³

- Y N 1. Is there any soil onsite?
- Y N 2. Is any soil being treated offsite? If yes, please list the site address. _____
- Y N 3. If soil is present onsite is it stockpiled?
- Y N 4. If soil is present onsite is it being actively treated?
- Y N 5. Is the soil placed on plastic sheeting or other liner or in a paved or concreted area?
- Y N 6. Are appropriate runoff controls in place? (berms, hay bales, etc.)
- Y N 7. Is the treatment area located near (<100 feet) a wetland, stream, or residential area?
- Y N 8. Does it look like the soil is covered during peak runoff periods?
- Y N 9. Is access to the soil restricted? (within fenced area, area posted, etc.)
- Y N 10. Is the treatment area located near residential properties, parks, or other areas with public access?
- Y N 11. Is the treatment area on a steep embankment?
- Y N 12. Is there an open excavation?
- Y N 13. Is water present in the excavation?
- Y N 14. Is follow up at the site recommended?



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Memorandum

DATE: August 20, 1992

TO: Solid Waste Technical Committee

FROM: *WM* Bill Metzler, Associate Solid Waste Planner

RE: Draft Model Illegal Dumping Ordinance

Attached is the draft model illegal dumping ordinance. It is accompanied by an overview for local governments that will be adopting the model ordinance into municipal and county codes.

The Illegal Dumping Subcommittee recommended approval of the draft model ordinance at their meeting on August 13, 1992. Once you have completed your review and recommended approval, we will forward this package, along with any amendments made by this committee, to the Solid Waste Policy Committee and then to the Metro Council for adoption by Resolution.

Once adopted, Metro staff will assist local governments in their efforts to adopt and implement the illegal dumping ordinance.

WM:gbc
Attachment

A:tech0920.mmo

MODEL ILLEGAL DUMPING ORDINANCE

Overview

Introduction

The Regional Illegal Dumping Plan, Chapter 4 of the Regional Solid Waste Management Plan, directs Metro to develop a model illegal dumping enforcement code that local governments may adopt. As directed, Metro has developed the model ordinance. The model illegal dumping ordinance borrows from Multnomah County's 1992 ordinance and a Lane County ordinance (dog control and litter ordinance), that established a civil procedure through administrative adjudication. The Lane County administrative adjudication approach has been upheld by the Oregon Supreme Court.

Purpose

The draft model illegal dumping ordinance provides a clear, consistent approach empowering local governments to effectively enforce against illegal dumping. The primary effect of the ordinance will be to:

1. Enable a city or county to exercise the civil enforcement option in ORS 459.108 to establish and enforce civil penalties for refuse hauling, dumping and littering violations.
2. Implement regionally consistent enforcement procedures and standards.
3. Establish local government enforcement responsibilities for the administrative hearing and determination of illegal dumping civil infractions.
4. Increase the fine for illegal dumping violations.
5. Set up a reward system to assist in the enforcement of the ordinance.
6. Provide for the option of establishing a shared hearings officer.

Background

Historically, illegal dumping has been a criminal offense in Oregon. In order to prosecute illegal dumping cases, an eye witness to the event was usually required, which is very difficult to obtain. Moreover, the criminal court system is overburdened with higher priority cases. Therefore, successful prosecution of offenders has not occurred.

State law now specifically authorizes local government civil penalties as an alternative to criminal procedures for illegal dumping cases (ORS 450.108). Recent efforts to address illegal dumping through civil penalties have culminated in Multnomah County's 1992 ordinance. Multnomah County's ordinance creates a code hearings officer procedure that implements the new state law alternative and provides due process for a civil penalty of \$500 minimum and \$999 maximum.

Overview of Model Illegal Dumping Ordinance

In developing the model illegal dumping ordinance, a number of legal issues required careful consideration and review by Metro's Office of General Counsel. The following is an overview of those issues, and their applicability to the model illegal dumping ordinance.

Decriminalization / Civil Procedure

The 1991 legislature removed the state criminal code preemption issue by explicitly stating that local governments may create an alternate civil procedure and penalty for illegal dumping of garbage. Decriminalization is intended to avoid (1) the requirement of appointed lawyers, and (2) delays in the overburdened criminal courts. A civil procedure that uses a hearings officer can avoid the necessity of a court retrying the evidence presented. The basic precepts of civil due process are still required: notice, opportunity to be heard, opportunity to address the decision-maker. Lane County pioneered the civil "administrative adjudication" approach in Oregon with its dog control and litter ordinance. This civil hearings officer procedure results in a final decision that creates a debt that is directly enforceable in court. The draft model ordinance borrows from the Lane County approach and the Multnomah County Illegal Dumping Ordinance.

Hearings Officer / Enforceable Debt

Hearings officer procedures are used to save the time of elected officials in many circumstances, including land use infractions. Hearings officers provide efficiency by developing a factual record, giving the parties an opportunity to present evidence, and recommending a decision. The opportunity for the parties to be heard and for any settlements based on the parties learning all the facts may occur without the necessity of taking up the time of elected officials. The finality of the hearings officer's decision, if not appealed to the courts, allows a city or county to follow a hearings officer decision with enforcement actions to collect any fines and costs by direct action.

The necessity of reproving the facts used by the jurisdiction to make its decision in a new court action alleging the violation of the ordinance is eliminated. Instead, the only issue before the court is the debt owed. Because there are very few defenses to a debt owed, the approval of this kind of hearings officer procedure by the Oregon Supreme Court is very important. Therefore, any ordinance-hearings officer procedure should follow the outline in the model illegal dumping ordinance which is based on The Lane County procedure that has been "pretested" and approved by the courts.

Collecting Costs Incurred

ORS 459.108(2) gives local government's the alternative to use a civil approach to collect all costs incurred in addition to any fines for an illegal dumping violation. Costs incurred are defined in the model illegal dumping ordinance to include such things as investigation costs, hearings costs, and costs of restoration of property. See Section __.030(B)(1)(2) of the model illegal dumping ordinance.

Evidentiary Presumption

Section __.100(C)(D) of the model illegal dumping ordinance contains an evidentiary presumption. A name on an item of illegally dumped garbage that "would ordinarily denote

ownership" is prima facie evidence of a littering infraction. This means that a presumption of illegally dumping is created sufficient for penalty, unless rebutted. By definition, a presumption is rebuttable by other evidence brought in by the alleged violator. ORS 450.108(4) specifically allows the use of this evidentiary presumption to identify a perpetrator for illegal dumping purposes from "a name found on various items in a deposit of rubbish".

Rewards

The model illegal dumping ordinance, borrowing from the Multnomah County Ordinance, provides that up to 51 percent of the fine collected for violations of the illegal dumping ordinance can be used to reward persons assisting in investigating the violation who are not employees of the jurisdiction administering the case. The model illegal dumping ordinance includes this option as a matter of policy choice. See Section __.040 of the model illegal dumping ordinance.

Technical Assistance

Metro staff is available to answer questions and provide assistance to local governments in their efforts to adopt and implement the model illegal dumping ordinance. Metro staff will continue to work with local governments to explore a process for a regional hearings officer, including funding options. For more information, questions or comments please contact Bill Metzler at Metro's Planning and Technical Services Division, 221-1646, extension 290.

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BEFORE THE _____ [GOVERNING BODY]

FOR _____ [JURISDICTION]

ORDINANCE NO. _____

Ordinance adding new Chapter ____ to the _____ [jurisdiction] Code in order to regulate and provide for the administrative hearing and determination for refuse hauling, dumping, and littering cases arising out of civil infractions of certain _____ [jurisdiction] ordinances.

_____ [jurisdiction] ordains as follows:

Section I. Provisions

_____ [jurisdiction] Code Chapter ____ is adopted to read as follows:

____.005 Title and Area of Application

This ordinance shall be known as the _____ [jurisdiction] Illegal Dumping Ordinance, may be so pleaded and referred to and shall apply to _____ [jurisdiction].

____.010 Establishment and Purpose

(A) This ordinance is intended to exercise the option in ORS 459.108 to establish and enforce civil penalties for refuse hauling, dumping, and littering.

(B) Departmental enforcement responsibilities are established by this ordinance.

1 (C) An _____ [jurisdiction] Infractions Section with the powers and
2 responsibilities provided in this Chapter, and subject to the procedures and limitations set
3 forth below, is hereby established.

4 (D) The _____ [jurisdiction] Infractions Section has been established for the
5 purpose of providing a convenient and practical forum for the administrative hearing and
6 determination of cases arising out of civil infractions of this ordinance.

7
8 _____020 Refuse Hauling Regulations

9 (A) No person, firm, or corporation shall transport or carry, or direct another
10 person, firm or corporation to transport or carry, any rubbish, trash, garbage, debris or other
11 refuse, or recyclable material, in or on a motor vehicle or trailer, upon a public road right of
12 way in the _____ [jurisdiction], unless such refuse or recyclable material is either:

13 (1) Completely covered on all sides and on the top and bottom thereof and
14 such cover is either a part of or securely fastened to the body of such motor vehicle or
15 trailer; or

16 (2) Contained in the body of the motor vehicle or trailer in such a way as not
17 to cause any part of the hauled refuse or recyclable material to be deposited upon any private
18 or public road right of way or driveway in the _____ [jurisdiction].

19 (B) Any person, firm, or corporation violating subsection (A) shall be subject to a
20 civil fine of not less than \$100 and no more than \$500 for each infraction. A complaint for
21 any infraction of subsection (A) shall be initiated before a Hearings Officer, pursuant to this
22 Chapter.

1 _____.030 Dumping and Littering Prohibited

2 (A) No person, firm, or corporation shall throw or place, or direct another person,
3 firm, or corporation to throw or place, other than in receptacles provided therefor, upon the
4 private land or waters of another person, firm, or corporation without the permission of the
5 owner, or upon public lands or waters, or upon any public place, any rubbish, trash,
6 garbage, debris, or other refuse or recyclable material.

7 (B) Any person, firm, or corporation violating subsection (A) shall be subject to:

8 (1) A civil fine of not less than \$500 and no more than \$999 for each
9 infraction; and

10 (2) An award of costs to reimburse the _____ [jurisdiction] for the
11 following actual expenses: (a) administrative costs of investigation, adjudication, and
12 collection; and (b) cleanup and disposal costs incurred.

13 A complaint alleging any infraction of subsection (A) shall be initiated before a
14 Hearings Officer, pursuant to this Chapter.

15
16 _____.040 Reward

17 Any person, other than a _____ [jurisdiction] officer, employee, or agent
18 charged with the enforcement of this ordinance, who provides information leading to the
19 imposition and collection of a fine under Sections _____.020 or _____.030 may receive a
20 reward of up to fifty-one percent (51%) of the amount of the fine collected by the
21 _____ [jurisdiction] as determined by _____.

1 .050 Departmental Enforcement

2 (A) Enforcement of the regulatory enactments and policies set forth in this Chapter
3 shall be the responsibility of _____.

4 (B) The Department shall:

5 (1) Investigate refuse hauling, dumping, and littering infractions;

6 (2) Issue complaints;

7 (3) Reach written settlements, signed by the Department and any alleged
8 violator;

9 (4) Represent the _____ [jurisdiction] before the Hearings Officer;
10 except where counsel is necessary; and

11 (5) Collect fines and costs.

12
13 .060 Infraction Section Organization

14 (A) The Section shall consist of the chief Hearings Officer, any temporary or
15 assistant Hearings Officers, and supporting clerical staff and shall be under the general
16 supervision of _____.

17 (B) Consistent with this Chapter and other applicable law, _____ [jurisdiction]
18 may establish rules for the performance of the functions assigned to the Section.

19 (C) The chief Hearings Officer, temporary Hearings Officers, and assistant Hearings
20 Officers shall be appointed by and subject to removal by _____ [governing body or
21 department]. All appointments made pursuant to this Section shall be for a period of one
22 year or less.

1 (D) The compensation of the Hearings Officers shall be as established by separate
2 Order of the _____ [governing body]. Other employees of this Section shall be subject
3 to the personnel system of the _____ [jurisdiction].

4 (E) A personal services contract may be entered into by the _____
5 [jurisdiction] and the Hearings Officer to cover their compensation. The _____
6 [jurisdiction] may enter into an intergovernmental agreement to share the Hearings Officer
7 with other jurisdictions.

8
9 _____.070 Complaint and Notice of Hearing

10 (A) A proceeding before the Hearings Officer may be initiated only as specifically
11 authorized by this Chapter.

12 (B) A proceeding shall be initiated only by the department filing a complaint with the
13 Hearings Officer in substantially the following form:

14
15 COMPLAINT REGARDING _____ [JURISDICTION] INFRACTIONS

16 CODE INFRACTION

17 _____ [jurisdiction], Petitioner,

18 v.

19 _____,

20 Respondent(s)

21 1. Address of respondent(s).

22 _____

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2. Address or location of the alleged infraction.

3. Nature of infraction including Chapter section violated.

4. Maximum penalty assessable.

5. Relief sought.

Date: _____

Signed

Department of _____

Title _____

(C) The Hearings Officer shall cause notice of the hearing to be given to the respondent(s) either personally or by certified or registered United States mail at least 15 days prior to the hearing date. The notice shall contain a statement of the time, date, and place of the hearing. A copy of the complaint shall be attached to the notice.

(D) _____ shall prepare the Summons and Complaint to be used for _____ [jurisdiction] infractions and shall establish procedures to control its use.

1 _____.080 Answer: Default

2 (A) A respondent who receives a notice of hearing and complaint for an infraction
3 shall answer such complaint and notice of hearing by either (1) personally appearing to
4 answer at the time and place specified herein, or (2) mailing or otherwise delivering to the
5 place specified on or before the assigned appearance date, a signed copy of the complaint and
6 notice of hearing, together with a check or money order in the amount of the scheduled fine
7 listed therein. If the infraction is denied, a hearing will be held on the date assigned in the
8 notice of hearing.

9 (B) If the respondent alleged to have committed the infraction fails to answer the
10 complaint and notice of hearing by the appearance date indicated thereon, which shall be no
11 sooner than seven days from the date of the notice of hearing, or appear at a hearing as
12 provided herein, the Hearings Officer shall accept the department's file as the entire record
13 and shall deliver or mail a final order declaring a default, making findings based on the
14 record, and making the fine and costs identified in the complaint due and payable.

15

16 _____.100 Hearing

17 (A) Unless precluded by law, informal disposition of any proceeding may be made
18 between the department and respondent, with or without a hearing, by stipulation, consent
19 order, agreed settlement, or default.

20 (B) The _____ [jurisdiction] shall not be represented before the Hearings
21 Officer by legal counsel except in preparation of the case or as provided below. A
22 respondent charged with an infraction may be represented by a retained attorney provided

1 that five working days' written notice of such representation is received by legal counsel.

2 The _____ [jurisdiction] may have legal counsel represent it when respondent is
3 represented by counsel. The Hearings Officer may waive this notice requirement in
4 individual cases or reset the hearing for a later date.

5 (C) The _____ [jurisdiction] must prove the infraction occurred by a
6 preponderance of the admissible evidence. The Oregon Evidence Code shall be applied by
7 the Hearings Officer.

8 (D) A name of a person, firm, or corporation found on rubbish, trash, garbage,
9 debris, or other refuse, or recyclable material, in such a way that it denotes ownership of the
10 items, constitutes rebuttable evidence that the person, firm, or corporation has violated the
11 refuse hauling, dumping, and/or littering regulations.

12 (E) The Hearings Officer shall place on the record a statement of the substance of
13 any written or oral ex parte communications made to the Officer on a fact in issue during the
14 pendency of the proceedings. The Officer shall notify the parties of the communication and
15 of their right to rebut such communications.

16 (F) The Hearings Officer shall have the authority to administer oaths and take
17 testimony of witnesses. Upon the request of the respondent, or upon his or her own motion,
18 the Hearings Officer may issue subpoenas in accordance with the Oregon Rules of Civil
19 Procedure, which shall apply to procedural questions not otherwise addressed by this
20 Chapter.

21 (1) If the respondent desires that witnesses be ordered to appear by subpoena,
22 respondent shall so request in writing at any time before five days prior to the scheduled

1 hearing. A \$15 deposit for each witness shall accompany each request, such deposit to be
2 refunded as appropriate if the witness cost is less than the amount deposited.

3 (2) Subject to the same five-day limitation, the _____ [jurisdiction] may
4 also request that certain witnesses be ordered to appear by subpoena.

5 (3) The Hearings Officer may waive the five-day limitation for a request in
6 writing with the required deposit for good cause.

7 (4) Witnesses ordered to appear by subpoena shall be allowed the same fees
8 and mileage as allowed in civil cases.

9 (5) If a fine is imposed in the final order, the order shall include an order for
10 payment of actual costs for any witness fees attributable to the hearing.

11 (G) The respondent shall have the right to cross-examine witnesses who testify and
12 shall have the right to submit evidence on his, her, or its behalf.

13 (H) After due consideration of the evidence and arguments, the Hearings Officer
14 shall determine whether the infraction alleged in the complaint has been proven by a
15 preponderance of the evidence.

16 (1) When the determination is that the infraction has not been proven, an
17 order dismissing the complaint shall be entered.

18 (2) When the determination is that the infraction has been proven, or if an
19 answer admitting the infraction has been received, an appropriate order shall be entered,
20 including penalty and costs.

1 (3) The final order issued by the Hearings Officer shall set forth both findings
2 of fact and conclusions of law and shall contain the amount of the fine and costs imposed and
3 instructions regarding payment.

4 (4) A copy of the order shall be delivered to the parties, or to their attorneys
5 of record, personally or by mail.

6 (I) A tape recording shall be made of the hearing unless waived by both parties. The
7 tape shall be retained for at least 90 days following the hearing or final judgment on appeal.

8
9 ____.120 Review

10 (A) Any motion to reconsider the final order of the Hearings Officer must be filed
11 within 10 days of the original order to be considered. The Hearings Officer may reconsider
12 the final order with or without further briefing or oral argument. If allowed, reconsideration
13 shall result in reaffirmance, modification, or reversal in a new final order. Filing a motion
14 for reconsideration does not toll the period for filing an appeal in court.

15 (B) A respondent may appeal a final adverse ruling by Writ of Review as provided in
16 ORS 34.010 through 34.100.

17
18 ____.140 Enforcement of Fines and Costs

19 (A) Fines and costs are payable upon receipt of the written settlement or final order
20 imposing the fines and costs. Fines and costs under this Chapter are a debt owing to the
21 _____ [jurisdiction] and may be collected in the same manner as any other debt
22 allowed by law.

1 (B) The _____ [jurisdiction] may initiate appropriate legal action, in law or
2 equity, in any court of competent jurisdiction to enforce the provisions of any written
3 settlement or final order of the Hearings Officer.
4

5 Section II. Effective Date

6
7 This ordinance shall take effect _____.

8 Adopted this ____ day of _____, 199__, being the date of its _____
9 reading before the Board of _____ [jurisdiction] Commissioners of _____
10 [jurisdiction], Oregon.
11

12
13 By _____
14

15 REVIEWED:

16
17
18 _____
19 _____ [jurisdiction] Counsel
20 of _____ [jurisdiction], Oregon
21