



1990 Recycling Levels

Survey of Recycling Markets

July 1991

METRO

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THE 1990 SURVEY OF RECYCLING MARKETS

**Solid Waste Department
Metropolitan Service District**

July 1991

Printed on Recycled Paper

ACKNOWLEDGMENT

Metro thanks all of the industry representatives who spent a considerable amount of time helping with this survey.

Ordering Information

Title: The 1990 Survey of Recycling Markets

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**Metropolitan Service District
Solid Waste Department
2000 SW First
Portland, OR 97201-5398**

SUMMARY

The overall recycling level for the Metro region during 1990 is estimated to be 32% of the waste generated. This is a significant increase from the 1989 level of 28%. Increased recovery of paper (primarily office and other paper besides OCC and newsprint) was the main reason for the higher recycling level. The 1990 per-capita disposal rate, 5.1 lbs/person/day, was the same as in 1989. In contrast, the per-capita recycling rate increased from 2.0 lbs/person/day in 1989 to 2.5 lbs/person/day in 1990. Per-capita generation increased from 7.2 to 7.6 lbs/person/day.

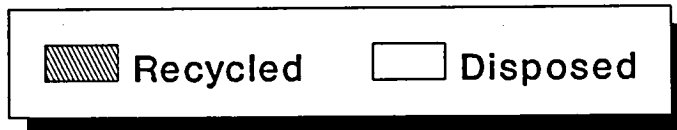
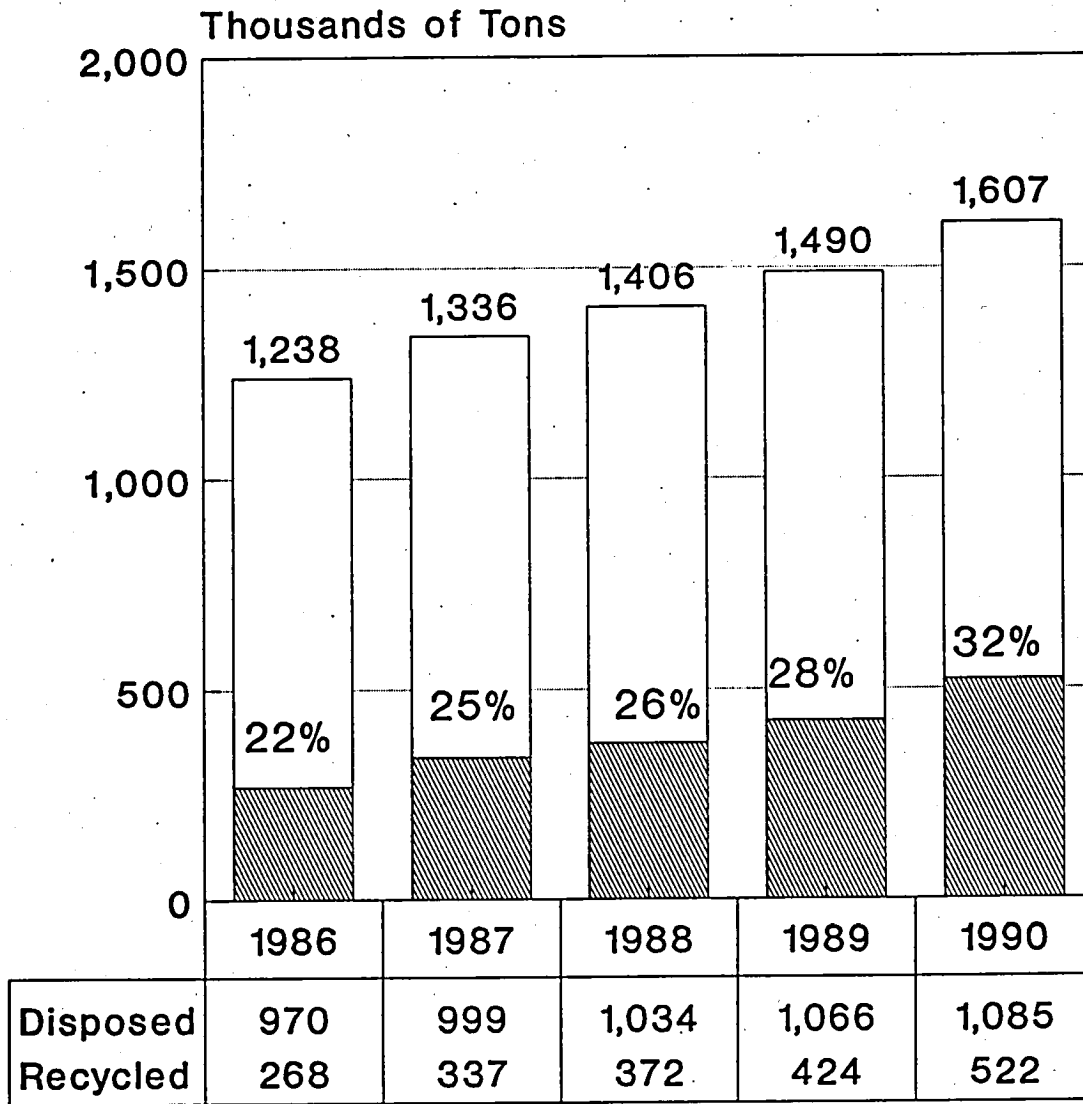
I. INTRODUCTION

Every year Metro conducts a markets survey to determine the regional recycling level. Data for 1990 are presented in this report.

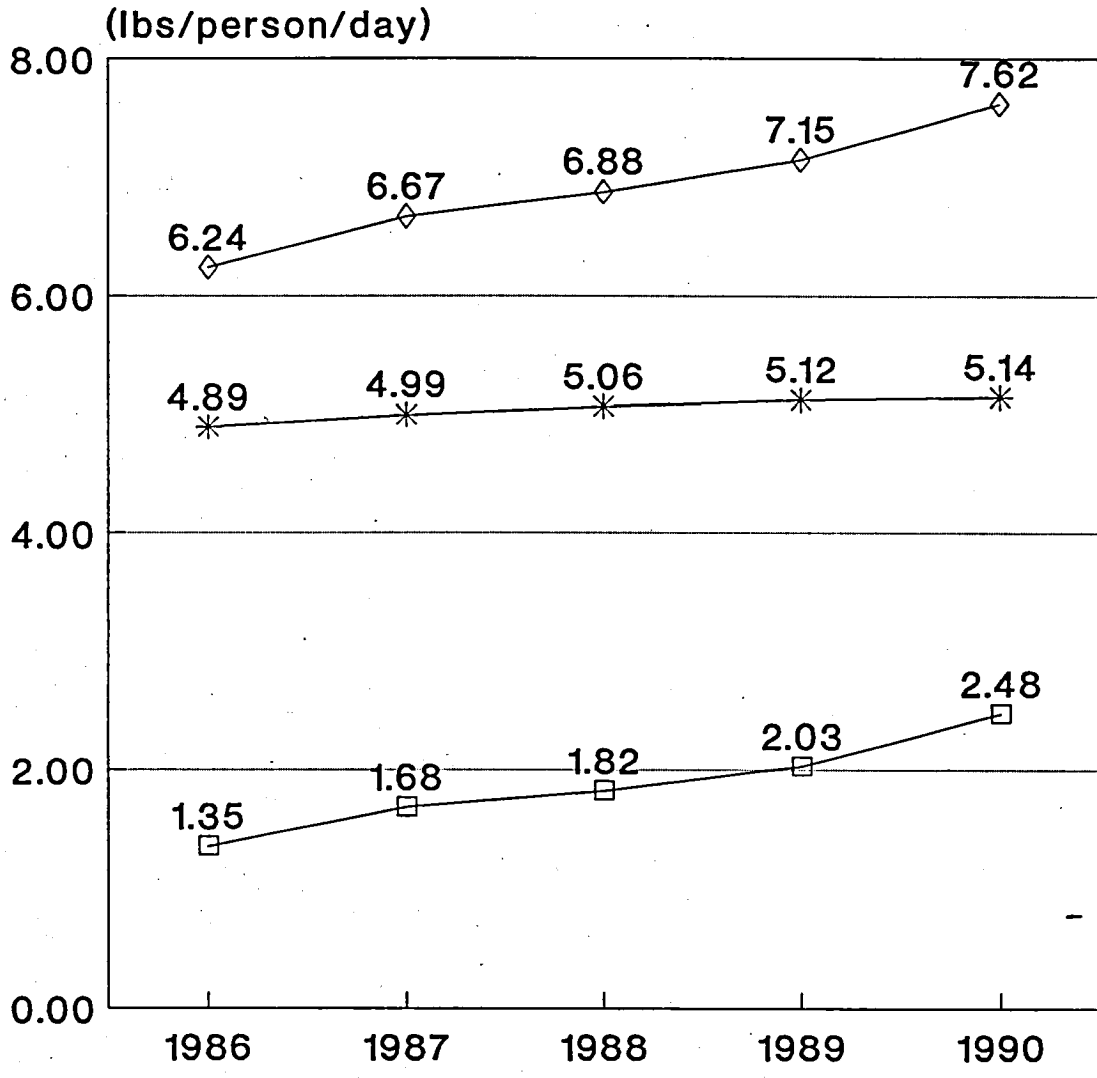
The main purpose of the survey is to evaluate how the effectiveness of recycling programs in aggregate changes from year to year in the Metro region. The intent is to use a survey methodology that is as consistent as possible each year so that comparisons over time are valid. Comparison with other jurisdictions is not a primary objective of this survey, although the methodology used is generally consistent with methods used in other jurisdictions.

The recent passage of new legislation (SB66) in Oregon places a new emphasis on the measurement of recycling levels. The Metro region is required to achieve at least a 45% recovery level by 1995. The following new programs that will increase the 32% recycling level by the estimated percentage in parentheses are: the Metro/Riedel Compost Facility (5%), expansion of the curbside collection program (2%), increased recovery at transfer stations (5%), additional yard debris recycling (2%), recycling of construction/demolition debris (2%), and further expansion of non-residential recycling programs (3%). With the implementation of these new recycling programs, the Metro region is expected to exceed the standards established in the state legislation.

Recycling Levels (1986-1990) Metro Region



Per-Capita Rates (1986-1990) Metro Region



* Disposed □ Recycled ◇ Generated

1990 Recycling Data

	Recycled Tons	% of Total Disposal Tonnage	Disposed Tonnage	Generated Tonnage	% Recycling Level
Paper					
OCC	119,982	12.0%	130,427	250,409	48%
Newspaper	89,717	4.1%	44,286	134,003	67%
Printing & Writing	55,627	N/A	N/A	N/A	N/A
Magazines	8,095	0.6%	6,645	14,740	55%
Other Paper	41,844	N/A	N/A	N/A	N/A
Total Paper	315,265	26.0%	282,008	597,273	53%
Plastics					
HDPE Clear	319	N/A	N/A	N/A	N/A
HDPE Colored	1,041	N/A	N/A	N/A	N/A
Polystyrene	300	N/A	N/A	N/A	N/A
Polystyrene Foam	12	N/A	N/A	N/A	N/A
LDPE	2,259	N/A	N/A	N/A	N/A
PET	1,645	N/A	N/A	N/A	N/A
Other Plastic	678	N/A	N/A	N/A	N/A
Total Plastic	6,254	9.9%	107,280	113,534	6%
Glass Containers					
Green	4,886	N/A	N/A	N/A	N/A
Brown	9,936	N/A	N/A	N/A	N/A
Clear	13,046	N/A	N/A	N/A	N/A
Other Glass	5,000	N/A	N/A	N/A	N/A
Total Glass	32,868	1.7%	18,532	51,400	64%
Yard Debris	32,223	12.8%	139,298	171,521	19%
Wood	17,679	11.6%	126,128	143,807	12%
Metals					
Ferrous	88,000	4.0%	42,915	130,915	67%
Tin	3,000	1.6%	17,433	20,433	15%
Aluminum	13,000	0.8%	8,856	21,856	59%
Other Metal	5,000	0.7%	7,398	12,398	40%
Total Metal	109,000	7.1%	76,601	185,601	59%
Other Material (From "Thriffs")	8,347			8,347	
Other Waste		30.9%	335,072	335,072	
TOTAL	521,636	100.0%	1,084,919	1,606,555	32%

1990 Total Recovery Level

	Tons	Cumulative Recovered Tonnage	Cumulative Generated Tonnage	Cumulative % Recovery Level
Recyclables	521,636	521,636	1,606,555	32.5%
Marion County Energy Recovery	13,500	535,136	1,620,055	33.0%
Oil	19,492	554,628	1,639,547	33.8%
Tires	16,652	571,281	1,656,200	34.5%
Total	571,281	571,281	1,656,200	34%

II. HIGHLIGHTS

- The recycling level increased from 28% in 1989 to 32% in 1990.
- Recycling of printing, writing, magazines, and "other" paper significantly increased during 1990. The recycling level of these types of paper increased from 23% in 1989 to 49% in 1990. The increase in volume may in part be attributed to the emphasis on office paper recycling by Metro (Metro's 1990 "Paper Train Your Staff" campaign and Commercial Waste Audits program) and programs by the paper recycling industry.
- There was no significant change in newspaper recycling.
- Recycling of plastic remained at about the same level as in 1989. The lack of improvement in plastics recycling may have been due to several collection programs being discontinued in 1990 because of fluctuating markets and non-payment by some re-processors, two re-processors ceasing operation, and some materials (non-HDPE) being stockpiled in anticipation of improved market conditions. There are many new plastic recycling programs currently being developed that are expected to be reflected in the 1991 recycling level.
- There was a significant increase in the recovery of wood as a result of new processing capacity. Hog fuel prices also rose in 1990 due to a supply shortage from the lumber mills. As a result, processors diverted some woody materials previously used in compost processing to their hog fuel line. Processors also sourced additional woody materials (e.g. building demolition and pallets) to add to their hog fuel.
- Recycling of yard debris remained at about the same level as in 1989. The 1990 yard debris tonnage does not include over 1,000 tons that were delivered to St. Johns Landfill but were not processed until 1991. In contrast, the 1989 yard debris figures included 6,000 tons of yard debris that was processed from the stockpiled inventory of one of the major processors.
- Glass recovery increased from 48% to 63% in 1990. There was a slight decline in the price paid for clear and brown glass, and a 50% decline in the price paid for green glass. Contributing factors that helped increase the recycling rate include a greater awareness of recycling because of education and promotion programs and the first phase distribution of curbside recycling containers in the region.

III. COMPARISONS WITH NATIONAL AVERAGES

Comparisons of the numbers reported for the Metro region with national averages could potentially help check the accuracy of the data. The table on the next page compares Metro tonnages from this survey with projections of national averages to the Metro region population. Based on these data, the national average for total recycling is 15%.

The national OCC and newspaper tonnages are from the American Paper Institute. The total 1990 production of OCC and newspaper (24,468,000 and 11,038,000 tons respectively) and the total 1990 recovery (13,451,000 and 4,817,000 tons respectively) were used to calculate national per capita rates for generation and recovery. The difference between generation and recovery was assumed to be the national disposal rate.

National per-capita rates for other materials were taken from the Franklin study as reported by the EPA (Characterization of Municipal Solid Waste in the United States: 1990 Update). The 1988 data reported by the EPA were linearly projected to 1990.

Most of the Metro tonnages are considerably different from the national averages. For example, the API data would predict 113,101 tons of OCC generated in the Metro region. This is less than the 119,982 tons reported as recycled by the local paper industry. The API also estimates that present recycling technology and the network of users of OCC limit the potential recycling level to 66% of the total generation of OCC (Solid Waste Management Newsletter, University of Illinois, Vol. 5, No. 7, July 1991). Therefore, it is likely that the national data considerably underestimate the amount of material generated, recycled, and disposed in the Metro region.

There may be many reasons why tonnages for the Metro region are different from the national averages. For example, use of kraft paper for shopping bags is higher than in metropolitan areas of the east coast. Local data as reported by area recyclers and gathered through waste stream analysis are likely to be more accurate than national data.

**Comparison of Tonnage Estimates for the Metro Region
EXCLUDING CONSTRUCTION AND DEMOLITION WASTE**

"Metro Data" estimates are based on this survey and the 1989/90 Metro Waste Characterization Study.

"National Data" estimates are projections of national averages of per-capita tonnages to the Metro region population.

Generation (tons)				
	Metro Data	National Data	Difference (tons)	Difference (%)
OCC	241,633	113,101	137,308	121.4%
Newspaper	132,343	51,022	82,981	162.6%
Other Paper	210,136	199,506	13,356	6.7%
Total Paper	584,046	363,629	233,644	64.3%
Glass	50,729	55,623	(4,223)	-7.6%
Plastics	107,653	75,191	38,343	51.0%
Wood	101,316	33,435	110,372	330.1%
Yard Debris	162,447	150,998	20,523	13.6%
Other	253,111	145,760	189,312	129.9%
TOTAL	1,267,650	885,652	535,302	60.4%

Recovery (tons)				
	Metro Data	National Data	Difference (tons)	Difference (%)
OCC	119,982	62,176	57,806	93.0%
Newspaper	89,717	22,266	67,451	302.9%
Other Paper	105,566	101,385	4,181	4.1%
Total Paper	315,265	185,827	129,438	69.7%
Glass	32,868	8,474	24,394	287.9%
Plastics	6,254	1,233	5,021	407.4%
Wood	17,679	0	17,679	NA
Yard Debris	32,223	3,852	28,371	736.5%
Other	0	15,562	(15,562)	NA
TOTAL	412,636	130,506	282,131	216.2%

Disposal (tons)				
	Metro Data	National Data	Difference (tons)	Difference (%)
OCC	121,651	50,925	70,726	156.1%
Newspaper	42,626	28,756	13,870	54.0%
Other Paper	104,570	182,563	(77,994)	-41.2%
Total Paper	268,781	262,244	6,537	7.5%
Glass	17,861	47,148	(29,288)	-60.7%
Plastics	101,399	73,958	27,441	45.1%
Wood	83,637	33,435	50,202	277.2%
Yard Debris	130,224	147,146	(16,922)	-5.3%
Other	253,111	130,198	122,913	216.2%
TOTAL	855,014	755,146	99,867	43.7%

National Data Sources:

American Paper Institute, New York City

Characterization of Municipal Solid Waste in the United States: 1990 Update.

(EPA/530-SW-90-42)

IV. METHODOLOGY

Recycled Tonnage and Market Conditions

The survey was conducted during May and June of 1991. Industry representatives were contacted through mail and telephone interviews. Plastics, paper, yard debris, wood, tin, oil, tires, and glass markets were surveyed.

Disposal Tonnage

Disposal tonnage used in this report is from two sources: (1) Metro's Solid Waste Information System quarterly report (May 15, 1991), and (2) Metro's 1989 waste characterization study. Both reports are available upon request.

The waste composition percentages were adjusted to 1990 using the following methodology. The generated amount of each material was estimated by assuming that the growth rate for each material was equal to the growth rate for the total amount of waste generated. The quantity of material disposed was then calculated as the difference between the amount generated and the amount recycled. In the absence of annual waste characterization studies, such a method of estimating the amount of each material disposed is required.

Petroleum-contaminated soils and sewage sludge are not counted as part of the generated tonnage in the region. During 1990 an estimated 50,000 tons of these wastes were landfilled in the region (Note: disposal tonnage reported in Metro's SWIS Reports includes contaminated soils).

Changes In Methodology

In order to evaluate annual changes in the region's recycling level, this study attempts to use the same methodology from year to year. Changes are made, however, when necessary to accurately portray the region's recycling activities.

Several members of the metals industry have reported that they are unable to provide reliable estimates of tonnages that meet the above definitions. In order to maintain the reliability of this report, metal tonnage (except for tin) from 1989 is used in the calculation of the 1990 recycling level. Only documented increases in metals recycling will be added in future years. Curbside collection and recovery at transfer stations are two activities for which Metro will be able to obtain reliable data. This method of reporting metals is likely to result in a conservative estimate of future increases in the region's recycling level.

Revisions of 1989 Data

Several errors in the 1989 recycled tonnage were discovered during the preparation of this report. Revisions made in the previously published 1989 data are as follows:

1. The 1989 OCC tonnage was increased from 95,000 to 101,000. Tonnage from one of the major processors was incorrectly assumed to be included as part of another processor's tonnage.
2. The 1989 yard debris tonnage was reduced from 48,000 to 38,000. This was a typographical error in the 1989 report.
3. The 1989 glass tonnage was reduced from 30,000 to 23,000. Out-of-region tonnage from one of the processors was incorrectly included as part of the Metro tonnage.
4. The 1989 plastic tonnage was reduced from 15,000 to 6,000. Out-of-region tonnage from one of the major processors was incorrectly included as part of the Metro tonnage.
5. The 1989 newspaper tonnage was increased from 57,000 to 87,230. Tonnage from one of the major processors was incorrectly assumed to be included as part of another processor's tonnages.

After making these revisions, the overall recycling level for 1989 remains at 28% as previously reported.

V. LIMITATIONS ON THE USE OF RECYCLING LEVELS

The following limitations of the recycling level reported in this study should be recognized.

1. The recycling level is a regional average for all types of waste produced by all types of generators. The recycling level may not accurately reflect recycling activity within individual waste streams. For example, an increase in residential recycling would be underestimated by the regional average if non-residential recycling did not also increase during the same time period.
2. The recycling level is an estimated value. Many brokers and processors receive material from throughout Oregon and, in some cases, the U.S. Many do not record the geographic origin of material they receive, and therefore have a difficult time estimating how much of their annual tonnage was generated within

the Metro region. In addition, they often are unable to identify how the material was generated (e.g. post-consumer or industrial manufacturing scrap). As a result, the actual recycling level is within some range of the estimated value of 32% for 1990.

3. Recycling levels underestimate the value of waste reduction relative to recycling. The recycling level expresses recycled tonnage as a percent of generated tonnage. Reducing the amount of waste generated causes less of an increase in the recycling level than will additional recycling by the same amount. The recycling level could actually decrease if waste reduction causes both generated and recycled tonnages to decrease. Other data, such as per capita disposal rates (lbs/person/day), may be more meaningful measures of waste reduction programs.
4. Energy recovery from oil, tires, and the Marion County energy facility are not included in the recycling level. The 13,500 tons delivered to the Marion County Energy Recovery Facility from the Metro region during 1990 are counted as resource recovery. The majority of tires and oil recovered are also burned for energy. A large light fill project by the Oregon State Highway Division, however accounted for most of the increase in tire recovery compared to 1989. These items increase the recovery rate to 34%.
5. Recycling levels for other regions may not be directly comparable to the Metro region because of differences in what is counted as recycled or generated waste. Even within the Metro region, some local jurisdictions have reported recycling levels that are not comparable to the level in this report. For example, construction and demolition debris delivered to limited-purpose landfills is included in Metro's recycling level as disposal tonnage. However, this waste is excluded by some local jurisdictions in their calculation of recycling levels.
6. Yard debris is only counted as recycled if it is actually marketed or processed into new products. Material that is collected and stockpiled is not counted. Delivery of yard debris to processors (not marketing) is reported in Metro's quarterly SWIS report.
7. Disposal tonnage used to calculate recycling levels for individual materials includes some material that is not currently recycled. For example, the OCC disposal and generation tonnage includes waxed corrugated paper even though this material is not currently being recycled.

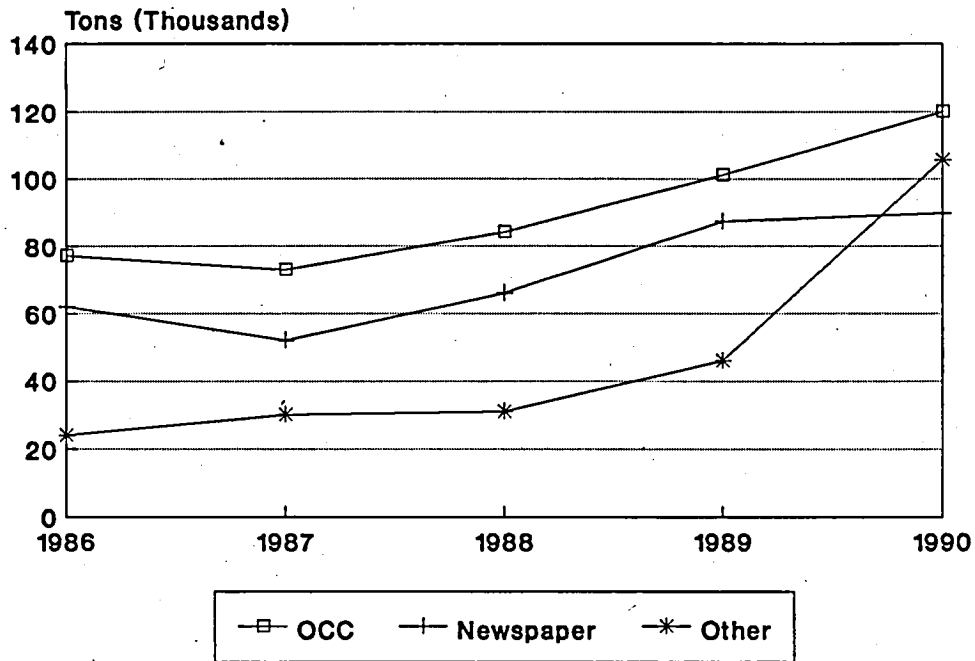
VI. DEFINITIONS

Not all waste that is diverted from the landfill through recycling or recovery is counted as recycled tonnage for calculating the recycling level. The following definitions give examples of the types of included and excluded waste. See the definitions in the appendix for a more detailed description of each material type.

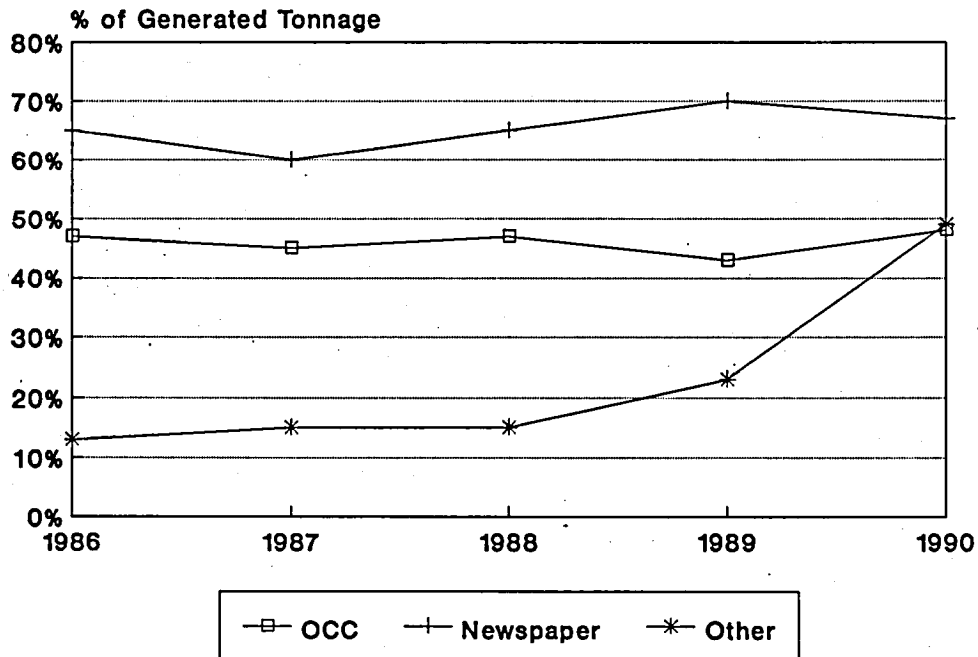
1. Recovered manufacturing waste. This material includes by-products of manufacturing that are recovered without entering the wastestream. Newspaper over-runs during printing and aluminum scrap when car parts are cut from sheet metal are examples. This material is not counted as recycled or disposed tonnage in this report.
2. Major demolition debris (metal and other pure loads of inorganics). Major demolition projects produce significant quantities of metals and other inorganic materials. Examples include ferrous metal from decommissioned power plants and concrete from street reconstruction. Arrangements are made to sell or give this material to processors prior to demolition and it does not enter the waste stream. This type of material is not counted as recycled tonnage in this report. Other material from construction work, such as wood and land clearing debris, is counted.
3. Obsolete material. This includes consumer goods with a limited life span. Examples include appliances, bicycles, pots and pans, and other recyclable household items. Most of this material is included as both waste generated and recycled. Obsolete material that is not counted as recycled includes the ferrous and non-ferrous metals from discarded vehicles or parts of vehicles.
4. Post-consumer items. This category includes disposable consumer items (both residential and commercial consumers) with associated packaging, and is a finished material which would normally be disposed of as solid waste having completed its life cycle as a consumer item. This material is included in the recycling level. These items are included regardless of the method of collection and delivery to processing facilities. The recycling of post-consumer items by non-profit charitable recycling organizations (i.e. thrifts) is included in this year's recycling level.
5. Yard debris. Yard debris is a unique material that does not fit into any of the above categories. As in past years, yard debris is counted as recycled tonnage and waste generated if it is delivered to one of the regional processors of yard debris. Yard debris that is home composted or chipped by landscaping and tree services is not counted. See the 1990 Yard Debris Plan for recent estimates of these alternative methods of recovering yard debris.

VII. HISTORICAL TRENDS AND OTHER DATA

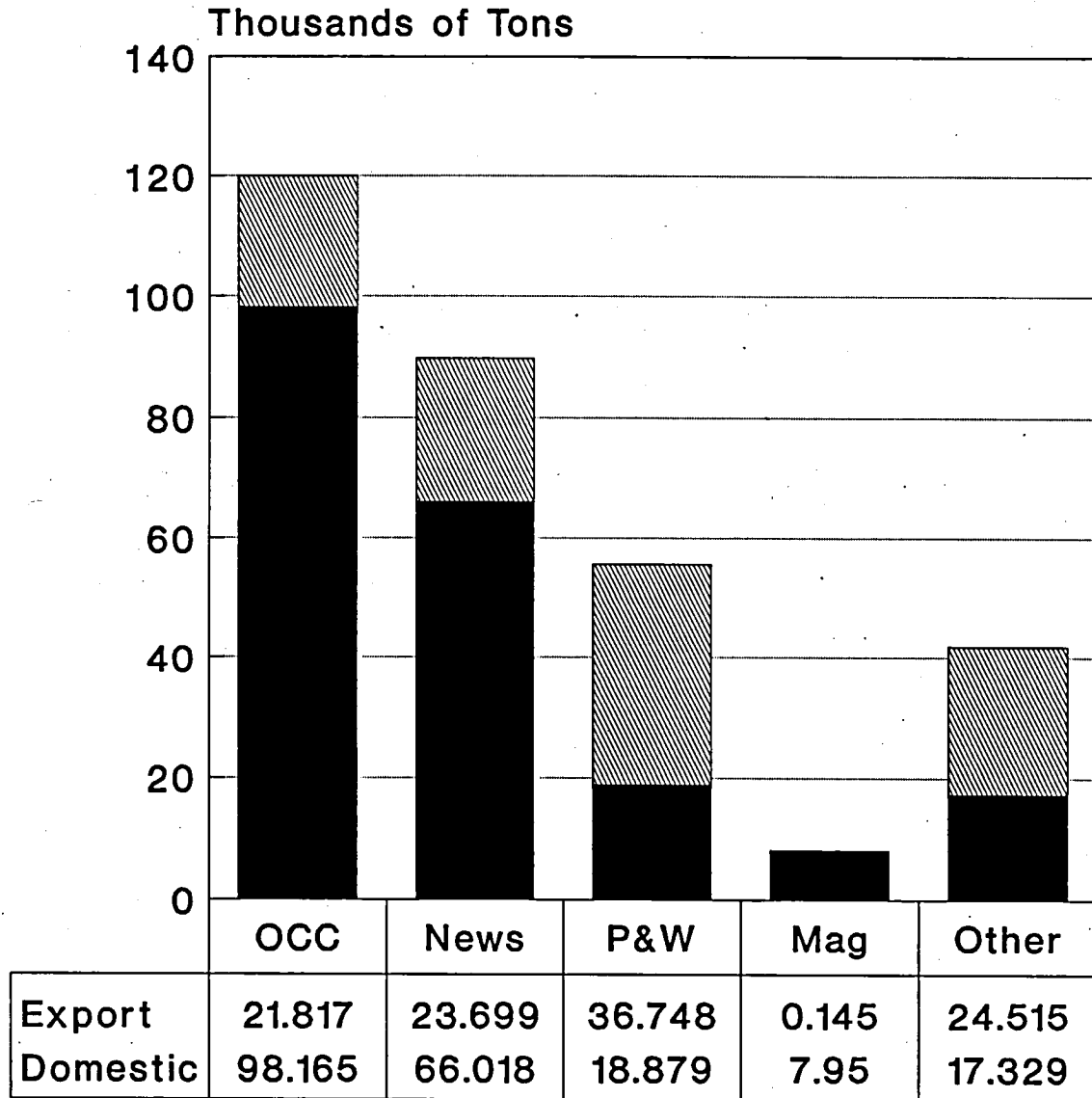
Recycled Paper Tonnage (1986-1990)



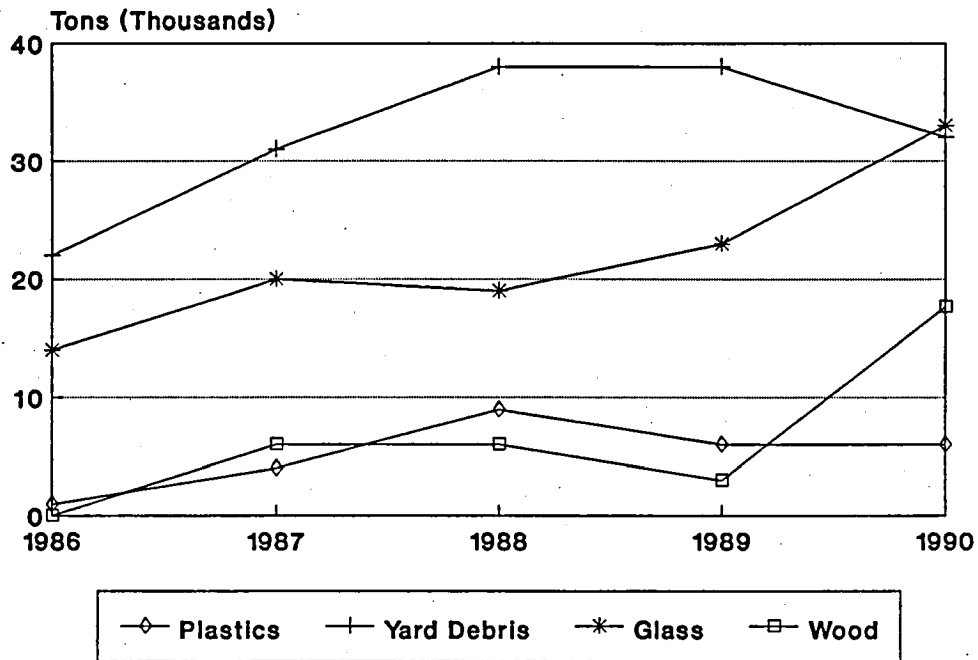
Paper Recycling Level (1986-1990)



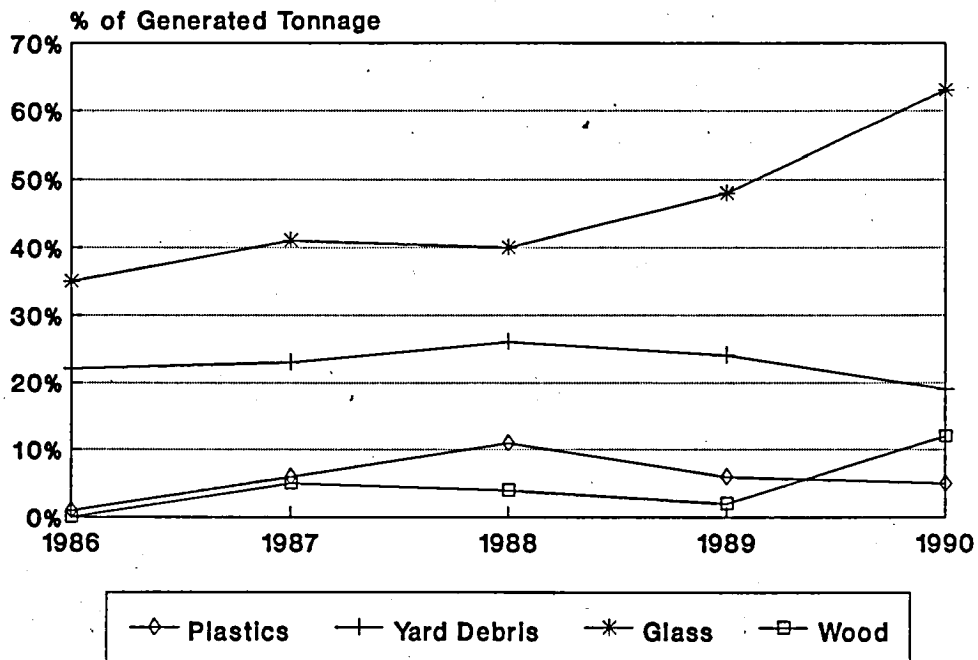
1990 Markets for Recovered Paper Metro Region



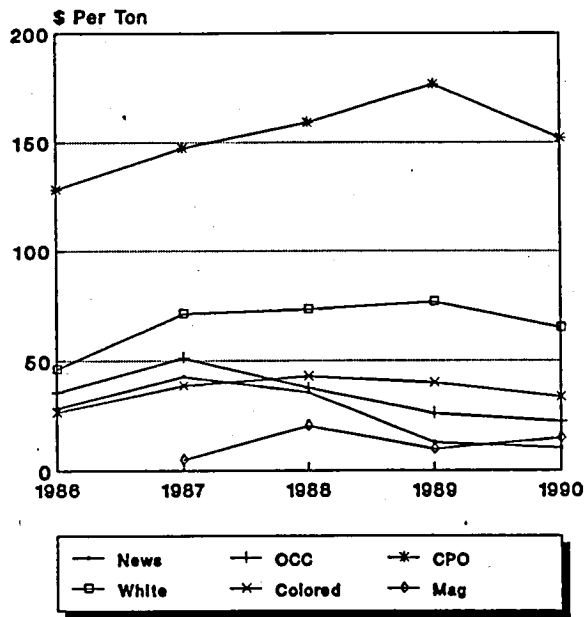
Other Recycled Tonnage (1986-1990)



Other Recycling Levels (1986-1990)

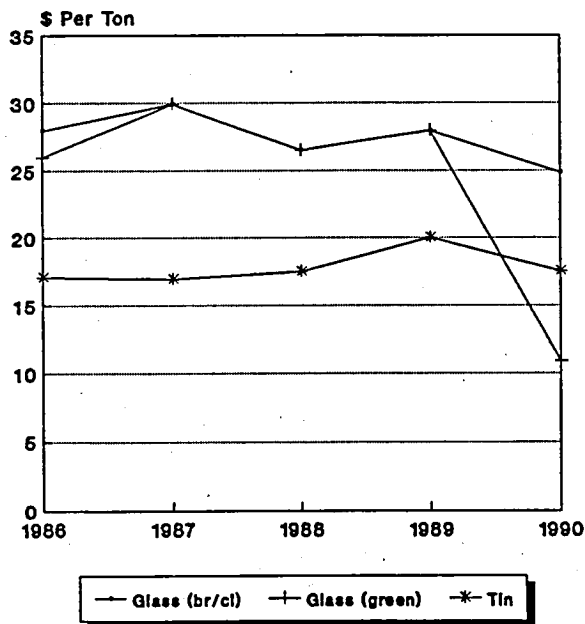


**Paper Average Annual Market Prices
(Metro Region)**



Prices shown are monthly averages of
end-use and buy-back prices.

**Other Average Annual Market Prices
(Metro Region)**



Prices shown are monthly averages of
end-use and buy-back prices.

APPENDIX A

MATERIAL CATEGORIES AND DEFINITIONS

The following are definitions of the categories of the waste stream.

1. **Corrugated Cardboard (OCC)/Kraft Paper.** Kraft linerboard and containerboard cartons of corrugated paper (waxed or unwaxed) and kraft paper bags. Excludes converting plant waste paper (i.e. DLK clippings and kraft grocery bag waste).
2. **Newspaper.** Printed ground-wood newsprint (minimally bleached fiber) and newspaper inserts; referred to as #1 news. Includes over-runs, trim and printer waste.
3. **Printing and Writing Paper.** White ledger, colored ledger, coated book stock, envelope grades, non-groundwood print shop waste, computer printouts (CPO), tab cards, bond paper, copy machine paper, and converting plant waste paper (i.e. business forms and manifolds waste paper). Includes printing and writing paper sold as mixed paper.
4. **Magazines.** Glossy, clay-coated, bleached paper; no newspaper inserts; no groundwood, tabloids or paperback books; may include magazine-type catalogs.
5. **"Other" Paper.** Books, manuals, phone books, non-corrugated paperboard and packaging, carbon paper, recycled boxboard and chipboard, and any other paper not included in the first four categories.
6. **Plastics.** HDPE clear, HDPE colored, polystyrene, polystyrene foam, LDPE (films and bags), PET (beverage containers), and "other" plastics.
7. **Yard Debris.** Pruning, bulky woody yard waste, and leaves and grass clippings.
8. **Wood.** Construction lumber (i.e., dimensional lumber construction materials resulting from remodeling, repair, demolition, or construction of residences, buildings and other structures); Packaging lumber used in pallets and crates; and wood from land clearing.
9. **Glass.** Beverage glass, container glass and other recyclable glass. Bottles that are washed and refilled are not included.

10. **Tin Cans**
11. **Ferrous Metals.** Ferrous metal scrap (other than tin cans).
12. **Aluminum.** All aluminum waste including food containers (i.e., food and beverage containers, which are generally not alloyed).
13. **Non-ferrous Metals.** Metals that are not materials derived from iron, including copper, brass, bronze, aluminum bronze, lead, pewter, zinc, and other metals to which a magnet will not adhere.
14. **Motor Oil.**
15. **Tires.** The majority of tires were chipped and recovered for energy, or were used in a tire-fill project with the Oregon State Highway Department. Only small amounts were recycled as crumb rubber because of limited markets. Estimated conversion factor was 106.4 tires per ton.

TP:ay
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July 29, 1991

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF ORDINANCE NO. 91-417, FOR THE PURPOSE OF AMENDING AND RENEWING THE FRANCHISE AGREEMENT WITH EAST COUNTY RECYCLING, INC.; AND DECLARING AN EMERGENCY

Date: August 7, 1991

Presented by: Wyers

Committee Recommendation: At the August 6 meeting, th Committee voted unanimously to recomend Council adoption of Ordinance No. 91-417. Voting in favor: Councilors Gardner, McLain, and Wyers.

Committee Issues/Discussion: Bob Martin, Director of Solid Waste, reviewed the proposed franchise agreement and responded to questions raised in a Council staff memo. He noted that the new agreement will allow the franchisee to accept up to 60,000 tons of material per year compared with the annual limit of 100,000 yards imposed under the present agreement. This change is being made because new scaling equipment at the facility permits tipping fees to be based on the weight of the material instead of its volume.

This change will permit the franchisee to accept more material, though it is difficult to determine the amount of the increase because of the wide range of material accepted by East County Recycling. Martin noted that new equipment at the facility will allow the operator to process more material. The agreement will limit the amount of material that can be landfilled from the facility to 25,000 tons.

The franchisee, Mr. Ralph Gilbert, noted that he was not aware of any complaints concerning the operation of the facility and he did not believe that accepting additional material would cause any traffic or other problems in the adjacent neighborhood. He explained that the original daily and annual limits on the amount of material that could be accepted were based on best estimates of the facility capacity and material supply made by himself and Metro staff. He noted that new equipment would allow the recycling rate to remain at 50+ percent even though additional material would be processed.

MOTION:

I move to amend Ordinance No. 91-415, Section 1(a) to read:

(a) The 13 Council subdistricts shall be as described in Exhibit A (attached) except as amended in subsection (c) below.

(b) The assignment of Councilors to subdistricts shall be described in Exhibit B, ~~except as amended.~~

(c) Exhibit A shall be modified by staff to conform the legal description of subdistricts in Exhibit A, and the corresponding data in Appendices A and B to include: the territory bounded by

Option 1: (insert streets or other boundary description) shall be included in District _____ and the territory bounded by _____ shall be included in District _____ and etc. as necessary.

Option 2: Repeat above language with new territorial changes for second option if adopted.

GOVERNMENTAL AFFAIRS COMMITTEE REPORT

ORDINANCE NO. 91-415A, REAPPORTIONING COUNCIL SUBDISTRICTS

Date: August 5, 1991

Presented by: Councilor Devlin

COMMITTEE RECOMMENDATION: At its August 1, 1991 meeting, the Governmental Affairs Committee voted 4-0 to recommend Council adoption of Ordinance No. 91-415. Voting were Councilors Devlin, Collier, Hansen, and Knowles. Councilor DeJardin was excused.

COMMITTEE DISCUSSION/ISSUES: The Governmental Affairs Committee has held numerous work sessions on the subject of Council district reapportionment since February. The committee has also held seven public hearings on the issue and approved submittal of Ordinance No. 91-415 to the Council for first reading at its meeting of July 25.

Committee staff Casey Short presented the staff report. He summarized the public hearings on reapportionment held the previous three days, as outlined in his August 1 memo to the committee, and advised the committee that another hearing had been scheduled for Gresham on Wednesday evening, August 7. He also reported that there was an error in the legal description of the boundary between districts 10 and 11 which needed correction.

Mr. Short presented three sets of alternatives staff has developed to adjust certain subdistrict boundaries. Two of the alternatives would reduce the population variances in districts 3, 4, and 9, and the third responds to a citizen's request to adjust the boundary between districts 1 and 13.

The committee first addressed the options for adjusting the boundary between districts 9 and 10. Under the plan contained in Ordinance No. 91-415, District 9 was the largest district at 4.41% above the median. Councilor Collier pointed out that the 9% variance between the smallest and largest districts was within the legal guidelines, and asked whether the proposed changes made the plan better or just got the numbers closer. Councilor Devlin responded that the proposed options did both: they got the numbers closer and kept the criteria the committee has been using for drawing boundaries. Councilor Buchanan said he supported the option that moved the area between 102nd - 122nd, NE Halsey - Glisan from District 9 to District 10 because it did not split the Mill Park neighborhood and brought the two districts to 0.76% and 2.02%, respectively, above the median population. All configurations the committee has seen would split the Hazelwood community, which is quite large. The committee agreed to amend the ordinance to effect the change noted above.

The next issue dealt with districts 3, 4 and 5. In the ordinance, District 4 was the smallest district with a population 4.76% under the median; District 3 was larger than any district

except District 9, at 3.81% over median. Mr. Short summarized the proposed options. Councilor Devlin reported that he has discussed the issue with Councilor Gardner, who agreed not to oppose the move of the Far Southwest Neighborhood in Portland from District 3 to District 4 to help reduce the population variances in both districts. Councilor Devlin added that this change posed the additional benefit of following a major arterial (Highway 99W) as a boundary and of straightening the boundary line somewhat. The drawback to this proposal is that it would separate one City of Portland neighborhood from the rest. Councilor Collier asked what Councilor Gardner's first preference was; Councilor Devlin responded that Councilor Gardner's first preference was probably to leave District 3 the way it was, but he recognized all other districts would vary less than 3%, and his district would stand out without a reduction in population.

Councilor Collier asked Councilor Devlin what his preferred option was, and he responded that he supported the Far Southwest Neighborhood shift from District 3 to 4, and also moving the Rosewood Neighborhood and the City of Rivergrove from District 5 to District 4. The result of these moves would make District 3 the largest district at 2.61% above median (down 1.2% from the proposal in the ordinance), bring District 4 from 4.76% below to 0.26% below, and shift District 5 from 1.01% above to 2.28% below median. Councilor Collier asked if Councilor DeJardin objected to the shift from his district. Councilor Devlin said he had not had a chance to discuss it with Councilor DeJardin, but that he had been supportive of needed changes through the process, and no objection was expected. Councilor Devlin added that placing Rivergrove in District 4 was an improvement because Rivergrove has a connection with Tualatin, which is in District 4. The committee approved making these two changes.

Councilor Devlin told the committee that he had received objections to the proposed plan from the city of Tigard and a citizen of Lake Oswego. Those two cities are divided under the plan, where they are not divided in the current 12 districts. He outlined potential options for keeping the cities whole, which neither he nor the committee thought were feasible. Councilor Collier requested committee staff to draft responses to the elected officials who had expressed concern, and Mr. Short said he would do that.

The final issue arose at the public hearing in Washington County on July 29. Mr. John Breiling, chair of CPO 7 in the Rock Creek - Sunset Corridor area, asked that the area west of 185th and north of Sunset Highway be included in District 13 instead of District 1. His reason was that the people in this area identify more with the District 13 area, which is oriented more toward Beaverton than Hillsboro. In order to make that change, which involves over 6,000 people, changes would be required in District 2 as well as 1 and 13. Mr. Short described the changes staff had developed to accommodate the request. Councilor Knowles asked if the sole purpose of this proposal was to move one neighborhood.

Mr. Short responded yes, with subsequent changes required to keep the districts of substantially equal population. Councilor Knowles said he saw no compelling need to make the large changes in order to accommodate the single request. Councilor Hansen said she supported the change because she had been at the hearing and thought Mr. Breiling's suggestion had merit based on his involvement and familiarity with the area. Councilor Knowles asked how Councilor Bauer felt about the proposal. Mr. Short and Councilor Devlin said they had not had the opportunity to consult Councilors Bauer and McLain. The committee discussed whether to forward the ordinance prior to discussing it with the two Councilors affected, and decided to include the change. Councilor Devlin promised to discuss it with Councilors Bauer and McLain, and give them the opportunity to raise any objections they might have.



METRO

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

Memorandum

DATE: August 8, 1991
TO: Metro Council
FROM: Casey Short,^{CS} Council Analyst
RE: Reapportionment Hearing in Gresham

Councilors Devlin, Buchanan, and McFarland held a public hearing on reapportionment last night (August 7) in Gresham City Hall. Six people testified, and their comments are summarized below:

Gussie McRobert, Mayor of Gresham: Mayor McRobert spoke briefly, saying she liked the east Multnomah County section of the plan. It recognized the growth of the area, and gave east county residents more people on the Metro Council to come to with their concerns.

Angel Olsen, 19319 NE Couch: Ms. Olsen is a resident of the Rockwood community, and expressed her concern that the plan splits that community between two Council districts. She said that people in that area have worked hard in the past six years, since their annexation to Gresham, to become a part of the Gresham community, and she would like to keep the community together.

There was some discussion about defining the Rockwood boundary, with the conclusion being that including the area between 182nd - 201st, Halsey - Glisan with the rest of the historic Rockwood community would resolve her concerns.

Gordon Hunter, 5260 NE 74th: Mr. Hunter asked that the area between I-205 - NE 72nd, Killingsworth - Prescott be moved from District 11 to District 10. He based his request on his preference that the Cully neighborhood be represented by two Councilors, and his wish for continuity in Council representation: Cully is now in District 10, and he thought it would be disruptive to have to change districts. Mr. Hunter also questioned the accuracy of the population numbers the staff has generated for the area in question and for the Cully neighborhood as a whole.

Barbara Wiggin, Gresham City Council member: Ms. Wiggin spoke to a couple of minor discrepancies on the maps, pointing out that the maps we were using did not list all the major streets in east county. She also stated that the Rockwood boundary was Glisan St., not Halsey as Ms. Olsen had maintained. There was some

discussion about the Rockwood boundary. Ms. Olsen maintained that the area between Glisan and Halsey was part of a new community that was based in historic Rockwood, although it may not have been part of the officially designated Rockwood Community Group.

Sen. Glenn Otto, 23680 NE Shannon Ct., Troutdale: Senator Otto said he only had a couple of questions, and thought the plan was pretty good. He asked what the ideal population of a district was. Councilor Devlin gave the number, 80,909. Sen. Otto also asked what court had jurisdiction over any suit challenging the plan, and he was told that the Oregon Supreme Court has original jurisdiction.

Jim Worthington, 3232 SE 153rd: Mr. Worthington appreciated the plan's observing county lines; he lives in a part of Multnomah County that is now in District 6, which is primarily a Clackamas County district. He was surprised that District 7 was proposed to be as geographically large as it is, because of the growth in the area. He also pointed out that it is difficult to identify community groups and neighborhood associations because they have had to change due to annexations; he also said it is difficult to draw boundary lines that both reflect neighborhood affiliations and run along arterial streets because the arterials are not always the neighborhood boundaries.



METRO

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

Memorandum

DATE: August 1, 1991
TO: Governmental Affairs Committee
FROM: Casey Short, Council Analyst
RE: Reapportionment

This memo is to provide you a summary of the three public hearings held this week on reapportionment, and to summarize the options for bringing the population of each district within 3% of the median.

SUMMARY OF HEARINGS

Committee members conducted three hearings on the reapportionment plan earlier this week. Those hearings were held in Beaverton, Northeast Portland, and West Linn.

July 29 - Beaverton: Councilors DeJardin and Hansen

Three people testified. Mr. Henry Kane distributed a prepared statement (attached). The salient points of Mr. Kane's testimony were that he thought Washington County should have four Council districts completely within the county, and that all districts should be as close as possible to equal in population.

Forrest Soth, President of the Beaverton City Council, thanked the committee for keeping Beaverton mostly intact within one Council district. Councilor DeJardin pointed out that thanks should go to Councilor Bauer for his efforts in this regard. For the record, Mr. Soth said that his comments constituted his personal opinion, and that he was not speaking for the Council as it has not taken a position on the issue.

John Breiling, Chairman of Community Planning Organization #7 (in the Sunset Corridor/Rock Creek area), requested a change in the boundary between districts 1 and 13. The change he requested was to move the area between Cornelius Pass Rd. and NW 185th, north of Sunset Highway, from District 1 into District 13. The reason for this is that the area in question is largely part of the Rock Creek community, which identifies more closely with District 13 than District 1. To compensate for the population reduction in District 1, he suggested moving the area west of 198th to Farmington or Grabhorn Rd. into District 1 from District 2.

(Note: I have asked Mark Bosworth to look into the possibility

Reapportionment Report
August 1, 1991
Page 2

of making this change, and to identify possible adjustments between districts 2 and 13 that would be necessary if Mr. Breiling's suggestion were adopted.)

July 30 - NE Portland: Councilors Knowles, DeJardin, Hansen, and Buchanan.

One citizen appeared who was looking for the State reapportionment hearing. He did not identify himself, but asked why the plan put high crime areas such as inner North/Northeast Portland and Old Town into District 12.

July 31 - West Linn: Councilor DeJardin

No one appeared to testify.

Note: Councilor Devlin has scheduled one more hearing in the community. This will be next Wednesday, August 7, at 7:00 p.m. in the Council Chambers of Gresham City Hall (1333 NW Eastman Parkway).

POSSIBLE ADJUSTMENTS

Attached is a series of possible adjustments to districts 9/10, 3/4, and 4/5, which Mark Bosworth developed at Councilor Devlin's request. The purpose is to reduce the population variance in the largest and smallest districts to bring them closer to the median.

Option 1 (labeled "AS IS"): shows the plan as outlined in Ordinance No. 91-415.

Dist. 9:	84,480	+3,571	+4.41%
Dist. 10:	79,588	-1,321	-1.63%

Option 2: 122nd - 130th, Division - Stark from 9 to 10. Splits Mill Park NA; makes straight recognizable boundary.

Dist. 9:	82,218	+1,309	+1.62%
Dist. 10:	81,850	+ 941	+1.16%

Option 3: 102nd - 122nd, Halsey - Burnside from 9 to 10. Mill Park remains whole in Dist. 9; Hazelwood remains divided.

Dist. 9:	80,154	- 755	-0.93%
Dist. 10:	83,914	+3,005	+3.71%

Option 4: 102nd - 122nd, Halsey - Glisan from 9 to 10. Mill Park remains whole in Dist. 9; Hazelwood remains divided.

Dist. 9:	81,526	+ 617	+0.76%
Dist. 10:	82,542	+1,633	+2.02%

Option 5: Far Southwest NA (PDX) from 3 to 4. (Population: 971)

Dist. 3:	83,022	+2,113	+2.61%
Dist. 4:	78,031	-2,878	-3.56%

Option 6: Far Southwest and West Portland NA's from 3 to 4. (Population: 4,058)

Dist. 3:	79,935	- 974	-1.20%
Dist. 4:	81,118	+ 209	+0.26%

Option 7: Rosewood NA (Lake Oswego area) from 5 to 4. (Population: 2,664)

Dist. 4:	79,724	-1,185	-1.46%
Dist. 5:	79,062	-1,847	-2.28%

Supplemental Option: Combine Options 5 and 7 (Far SW NA from 3 to 4; Rosewood NA from 5 to 4)

Dist. 3:	83,022	+2,113	+2.61%
Dist. 4:	80,695	- 214	-0.26%
Dist. 5:	79,062	-1,047	-2.28%

Examples of four alternatives are listed below:

Options 2 and Supplemental

<u>District</u>	<u>Pct. Dev.</u>
1	- 2.32
2	+ 0.13
3	+ 2.61
4	- 0.26
5	- 2.28
6	- 2.29
7	- 0.44
8	+ 2.34
9	+ 1.62
10	+ 1.16
11	- 0.44
12	+ 1.72
13	- 1.54

Overall range in deviation:
 Population 3,994
 Percentage 4.93%

Options 2 and 6

<u>District</u>	<u>Pct. Dev.</u>
1	- 2.32
2	+ 0.13
3	- 1.20
4	+ 0.26
5	+ 1.01
6	- 2.29
7	- 0.44
8	+ 2.34
9	+ 1.62
10	+ 1.16
11	- 0.44
12	+ 1.72
13	- 1.54

Overall range in deviation:
 Population 3,776
 Percentage 4.66%

Options 4 and Supplemental

<u>District</u>	<u>Pct. Dev.</u>
1	- 2.32
2	+ 0.13
3	+ 2.61
4	- 0.26
5	- 2.28
6	- 2.29
7	- 0.44
8	+ 2.34
9	+ 0.76
10	+ 2.02
11	- 0.44
12	+ 1.72
13	- 1.54

Overall range in deviation:
 Population 3,994
 Percentage 4.93%

Options 4 and 6

<u>District</u>	<u>Pct. Dev.</u>
1	- 2.32
2	+ 0.13
3	- 1.20
4	+ 0.26
5	+ 1.01
6	- 2.29
7	- 0.44
8	+ 2.34
9	+ 0.76
10	+ 2.02
11	- 0.44
12	+ 1.72
13	- 1.54

Overall range in deviation:
 Population 3,776
 Percentage 4.66%

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ATTORNEY AT LAW
12275 S.W. 2ND
P.O. BOX 518
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AREA CODE 503
TELEPHONE 646-0566
FAX 644-9574

July 29, 1991

Richard Devlin, Chair
Metro Council Governmental Affairs Committee
200 S.W. 1st Ave.
Portland OR 97201-5398

STATEMENT OF HENRY KANE RE PROPOSED MSD RESTRICTING PLAN

My name is Henry Kane. I reside in Beaverton and my law office is in Beaverton. I am a long-time supporter of the concept of Metro -regional government. The Legislature has seen fit to make a number of my recommendations part of ORS Chapter 268, relating to metropolitan service districts.

I incorporate by this reference my April 23, 1991 prepared statement submitted at the April 23, 1991 public hearing of this committee. At that time I urged the Metro Council to follow the spirit and letter of state and federal law government redistricting/reapportionment of legislative bodies. Exhibit 1 to this statement is a copy of my April 23, 1991 statement to this committee.

Exhibit 2 to this statement is a true copy of my July 27, 1991 letter to the Metro Executive Director and Metro Council.

Exhibit 3 to this statement is a true copy of the July 27, 1991 Oregonian editorial titled "Metro: Give all equal voice."

Exhibit 4 to this statement is a copy of a document I received from Metro July 29, 1991, dated 7/26/91. Exhibit 4 lists the population of 13 districts by population, deviation, and the percent of deviation.

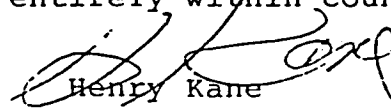
Exhibit 5 to this statement is a copy of the two-page document dated July 22, 1991 titled "SECRETARY OF STATE/PROPOSAL FOR EASTERN OREGON DISTRICTS."

The listed deviations are a fraction of one percent. In contrast, Exhibit 4 lists a mean percent deviation of 2.07 percent.

I submit that the 2.07% figure is too high under the circumstances.

Metro provided the 7/18/91 version 5 - final draft - of the proposed Reapportionment Plan. The map indicates that only three of the 13 MSD subdistricts would lie entirely within Washington County, which has approximately one-third of Metro's population. The 7/18/91 final draft indicates an unacceptable "gerrymander" of Washington County. I urge this committee and the Metro Council to give Washington County to respect county lines and to give Washington County one more subdistrict entirely within county boundaries.

encl.


Henry Kane

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EXHIBIT 1

April 23, 1991

STATEMENT OF HENRY KANE RE MSD REAPPORTIONMENT

Executive Director and Councilors
Metropolitan Service District
1500 S.W. First Avenue
Portland OR 97201

My name is Henry Kane, I reside in Beaverton and my law offices are in Beaverton. I am a long-time supporter of the concept of regional government and the Legislature has seen fit to make a number of my recommendations part of ORS Chapter 268, relating to metropolitan service districts.

I appear to urge the Metro Council to follow the spirit and letter of the law, state and federal, governing reapportionment.

As some may know, the Legislature amended the original law governing Metro reapportionment after Kane v. Paulus, 41 Oregon Appeals 466, 599 P2d 1154 (1979) authorized population disparities and gerrymandering of Metro subdistricts. That was one of a number of instances in which I lost a battle but won the war.

ORS 268.150(2) provides:

"(2) * * * The reapportionment shall provide for substantially equal population in each subdistrict. Area within each subdistrict shall be contiguous. In apportioning subdistricts the council shall give consideration to existent precincts, maintaining historic and traditional communities and counties as opposed to following existent city or special district boundaries or

Henry Kane Statement to Metro
April 23, 1991
Page Two

the political boundaries of state representatives
or state senate election districts except when
these political boundaries coincide with natural
boundaries. * * * "

U.S. Supreme Court reapportionment decisions indicate that
population disparity should be no more than one percent, and
Metro should be able to achieve to goal of subdistricts
within one percent of population.

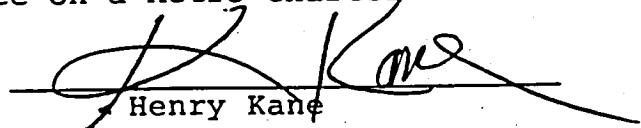
There may growing judicial williness to strike down
"gerrymandering" of election districts. I hope so.

May I urge that the Metro Council respect the boundaries
of the three counties, for at least Washington County differs
in political, social and economic interest from Multnomah
County.

The Metro Council may wish to take into account the
possibility of "fairness" or "unfairness" perceptions of
reapportionment may decide whether tri-county voters approve
a Metro Charter.

Reapportion fairly and Metro voters may approve a Charter.

Be perceived as having reapportioned unfairly and Metro
may wind up in the Oregon Supreme Court under ORS 268.150(3)
and on the losing end of the vote on a Metro Charter.


Henry Kane

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EXHIBIT 2

July 27, 1991

FAX 241-7417 (this letter mailed)

Rena Cusma, Executive Director
and Councilors
Metro
2000 S.W. First Ave.
Portland OR 97201-5398

Re: Notice of possible litigation if subdistricts do not
comply with equal population requirement

Dear Mrs. Cusma and Councilors:

This notice is prompted by the enclosed copy of the July 27, 1991
Oregonian editorial titled: "Metro: Give all equal voice.

I support the following Oregonian editorial statement:

"Metro's reapportionment subcommittee carved
out 13 districts, ranging in population from
77,060 to 84,480. That is not supportable.

* * *

"The Metro Council should tell its subcommittee
to draw a map that lets all residents boo, hiss
or cheer their regional government with a
substantially equal voice."

My schedule calls for me to testify in opposition to the population
disparities at the 7 p.m. Monday, July 29, 1991 public hearing
in the Community Room of the Beaverton Public Library, Beaverton.

I believe population disparities should not exceed 1-2% and that
Tri-Met can redistrict within that population disparity limit.

As you know, I lost the Metro gerrymandering by then Secretary
of State Paulus and won the war after Kane v. Paulus, 41 Or App
455, 599 P2d 1154 (1979).

Please consider this letter formal notice that if not satisfied
that Metro redistricting population disparities are as small
as practicable, I reserve the right to take appropriate legal
action in state or federal court.

Sincerely

Henry Kane

cc: Dan B. Cooper, Metro General Counsel
media

The Oregonian

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SATURDAY, JULY 27, 1991

Metro: Give all equal voice

State law requires the Metro Council to reapportion its districts with populations "substantially equal." A Metro proposal allows a disparity of 9.2 percent between the most-populous and least-populous districts. That's too much.

Secretary of State Phil Keisling's goal was zero disparity on his proposal for redrawing legislative districts. That's an impossible dream, considering geography, population spread and communities of interest. Nevertheless, he ended up with a total deviation of less than 4 percent.

In Multnomah County Auditor Gary Blackmer's redistricting plan for the county commission, no district exceeded another in population by more than one-half of 1 percent.

Metro surely ought to do as well or nearly so.

State law requires that districts be contiguous and that consideration be given to existing precincts and to maintaining historic and traditional communities and counties — a complex task.

However, the "substantially equal" guideline should be paramount. Its aim is to give each resident as close to an equal voice as possible in government. The U.S. Supreme Court has thrown out reapportionment plans where the deviation was only 2 percent.

Metro's reapportionment subcommittee carved out 13 districts, ranging in population from 77,060 to 84,480. That is not supportable. The one-person, one-vote empowerment of residents of the most-populous district, the Mount Scott area, would be significantly diluted, compared to that of the least-populous, the Tualatin-Sherwood area.

The regional council's subcommittee drew its districts of lowest population where growth is expected to be highest. But crystal-ball guesswork is a sappy substitute for the U.S. Census, the official, federal count.

The Metro Council should tell its subcommittee to draw a map that lets all residents boo, hiss or cheer their regional government with a substantially equal voice.

7/26/91

EXHIBIT 4

"AS IS"
Population Summary Report

District	Population	Deviation	Pct. Dev.
1	79,028	-1,881	-2.32
2	81,017	108	0.13
3	83,993	3,084	3.81
4	77,060	-3,849	-4.76
5	81,726	817	1.01
6	79,056	-1,853	-2.29
7	80,553	-356	-0.44
8	82,804	1,895	2.34
9	84,480	3,571	4.41
10	79,588	-1,321	-1.63
11	80,552	-357	-0.44
12	82,298	1,389	1.72
13	79,664	-1,245	-1.54
=====			
	1,051,819	2	0.00

Mean Deviation is: 1,671
Mean Percent Deviation is: 2.07

Largest Positive Deviation is: 3,571 4.41 Percent
Largest Negative Deviation is: -3,849 -4.76 Percent
Overall Range in Deviation is: 7,420 9.17 Percent

RECEIVED

JUL 29 1991

HENRY KANE

HOUSE DISTRICT 59 - Portion of Morrow, all of Baker, Crook, Gilliam, Grant, Morrow, Sherman and Wheeler Counties

POPULATION: 46,113

+ .0265% DEVIATION

CONSIDERATIONS: Adds needed population from all of Gilliam, Sherman and Wheeler counties. Loses small area in the northeast corner of Morrow County north of Highway 84 containing Boardman and Irrigon which are added to HD 57.

HOUSE DISTRICT 60 - Portion of Klamath, all of Harney, Lake and Malheur Counties

POPULATION: 46,699

+ .0163% DEVIATION

CONSIDERATIONS: Retains basic 1981 house boundaries; adds necessary population by moving west into Klamath County. The Klamath County portion is rural area east of Merrill, Klamath Falls, Shady Pine, Algema and Chiloquin, to Sand Creek. Includes north half of Diamond Lake. Uses Highway 97 as west boundary from Sand Lake, north to Deschutes County boundary.

(page two of Exhibit 5 to Henry Kane Statement)

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF REAPPORTIONING) ORDINANCE NO. 91-415A
COUNCIL SUBDISTRICTS) INTRODUCED BY THE
) GOVERNMENTAL AFFAIRS
) COMMITTEE

WHEREAS, ORS 268.150 directs the Council to reapportion the Council subdistricts after the data of the United States decennial census are compiled and released; and

WHEREAS, the 1991 legislature passed and the Governor signed Senate Bill 299, directing the Council to describe the 13 subdistricts into which the district will be divided on the first Monday in January 1993, and further directing that the description of the 13 subdistricts shall be accomplished not later than the 250th day before the 1992 primary election; and

WHEREAS, Senate Bill 299 requires each Councilor whose term extends beyond the first Monday in January 1993 to be assigned to a subdistrict described by the Council in the reapportionment ordinance; and

WHEREAS, Senate Bill 299 requires the description of the 13 subdistricts and the assignment of Councilors to subdistricts to be accomplished in one legislative enactment by the Council; and

WHEREAS, Senate Bill 299 provides that an ordinance shall become effective 90 days after adoption unless otherwise specified by the Council in the ordinance, and further provides that the Council by a majority vote of its members may declare that an emergency exists in which case an ordinance may take effect immediately or in less than 90 days; and

WHEREAS, in order to meet the statutory deadline for enactment of reapportionment, it is necessary for this ordinance to be effective on September 12, 1991, and an emergency exists pursuant to ORS 268.360(2), as amended by the 1991 Oregon Legislature; now, therefore,

THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT HEREBY ORDAINS:

Section 1.

(a) The 13 Council subdistricts shall be as described in Exhibit A (attached).

(b) The assignment of Councilors to subdistricts shall be as described in Exhibit B (attached).

Section 2. The Council declares that, in order to meet the statutory requirement that the reapportionment become operative on the 250th day before the date of the next primary election, an emergency exists pursuant to ORS 268.360(2), and the reapportionment shall become operative on September 12, 1991 for the purpose of describing Council subdistricts; the District shall be divided into the 13 described subdistricts on the first Monday in January 1993.

ADOPTED by the Council of the Metropolitan Service District
this _____ day of _____, 1991.

Tanya Collier, Presiding Officer

ATTEST:

Clerk of the Council

Attachment A

Metro Council District Reapportionment

Legal Description of proposed boundaries

Metro Council Reapportionment

The following is a description of the proposed Metro Council Districts. Each district is described beginning usually at the northwestern most point and moving in a clockwise fashion around district. The phrase: "outer boundary of the district" refers to the boundary of the Metropolitan Service District as a whole. Unless specified otherwise, references to city streets are meant to indicate the street centerline. Population figures for each of the districts are included in Appendix A. Appendix B includes a description of each sub-district by Census Tract/Block.

District 1: Beginning at the intersection of the East line of section 23 of Township 1 North 4 West and the Bonneville Power Administration right of way, follow the outer boundary of the district; SW Cornelius Pass Rd; US 26 (Sunset Highway); SW 185th Ave; SW Farmington Rd; SW 209th Ave to the outer boundary; back to the point of beginning.

Notes: Includes the portion of the communities of Forest Grove, Hillsboro and Cornelius that lie within the boundary of Metro.

District 2: Beginning at the intersection of SW 209th and SW Farmington Rd; SW Farmington Rd; SW 185th Ave; SW Baseline Rd; SW 158th Ave; SW Jenkins Rd; SW Cedar Hills Blvd; SW Walker Rd; Highway 217; SW Scholls Ferry Rd; Fanno Creek; SW Tiedeman Ave; SW Walnut St; Pacific Highway (Hwy 99W); Bull Mt Rd; the outer boundary of the district back to the point of beginning.

Notes: the district includes the city of Beaverton as well as the Tigard Neighborhood Planning Organization (NPO #7).

District 3: Beginning at the intersection of the Multnomah/Washington County line and Burnside Rd; Burnside Rd; NW Westover; NW 25th Ave; NW Lovejoy; NW Cornell Rd; Boundary of Forest Park; unnamed intermittent stream paralleling NW Groce St to St Helens Rd; NW Vaughn St; 1-405; W Burnside St; Willamette River; Dunthorpe/City of Portland boundary; Multnomah/Clackamas County line The City of Portland Boundary; SW 49th

Ave; SW Capitol Highway; SW 51st Ave; SW Pomona; SW Barbur Blvd; the Multnomah/Washington County line back to the point of beginning.

Notes: The district includes all of SW Portland that is within Multnomah County, with the exception of the Far Southwest Neighborhood Association. The NW Neighborhood Association is also included.

District 4: Beginning at the intersection of the West line of section 8 of Township 2 South 1 West and Bull Mt Rd; SW Bull Mt Rd; Highway 99W; SW Walnut St; SW Tiedman Ave; Fanno Creek; SW Scholls Ferry Rd; Highway 217; Hall Blvd; SW Locust St; SW 72nd Ave; SW Oak St; SW 71st Ave; SW Pacific Highway (99W) ; SW Pamona; SW 51st Ave; SW Capitol Highway; SW 49th Ave; City of Portland boundary; Multnomah Clackamas County line; City of Portland/Dunthorpe boundary; Willamette River; Oswego Creek; Lake Oswego; South Shore Blvd; West Bay Rd; Bryant Rd; Lakeview Blvd; The Boundary of the City of Lake Oswego as defined by the South or Western Boundaries of the following blocks: 208A, 403, 405A, 401A, 411 and 412 of tract 204.01, and block 327 of tract 204.02; the Tualatin River; SW Stafford Rd; the outer boundary of the district back to the point of beginning.

Notes: Includes the communities of Sherwood, Wilsonville, Lake Oswego (North of the lake), King City, Durham, Tualatin and Dunthorpe Rivergrove and most of Tigard; Straddles all three counties in order to balance population, as well as keep Lake Oswego and Dunthorpe communities intact.

District 5: Beginning at the intersection of SW Bryant Rd and SW Lakeview Blvd; SW Lakeview Blvd; SW Bryant Rd; West Bay Rd; South Shore Blvd; Lake Oswego; Oswego Creek; Willamette River; SE Risley Ave; SE River Rd; SE Concord Rd; SE Oatfield Rd; SE Theissen Rd; SE Webster Rd; SE Strawberry Ave; SE 82nd Dr; Gladstone city boundary to the Clackamas River; the outer boundary of the district; SW Stafford Rd; Tualatin River; The boundary of the cities Rivergrove and Lake Oswego as defined by the following census blocks: block 327 of tract 204.02, blocks 412A, 411, 401A, 405A, 403 and 208A of tract 204.01; SW Lakeview Blvd back to the point of beginning.

Notes: Includes the communities of West Linn, Oregon City, Gladstone and Johnson City. Breaches the Willamette River to keep this "tri-city" area intact.

District 6: Beginning just South of the Sellwood Bridge - at the junction of the Willamette River and the Multnomah/Clackamas County line; The Multnomah/Clackamas County line; the outer boundary of the district; Clackamas River to the Gladstone city boundary; SE 82nd Dr; SE Strawberry Ave; SE Webster Rd; SE Theissen Rd; SE Oatfield Rd; SE Concord Rd; SE River Rd; SE Risley Ave to the Willamette River.

District 7: Beginning at the intersection of NE Marine Dr and NE 185th Ave; Due North to the center of the South Channel of the Columbia River; South Channel to the outer boundary of the district; Multnomah/Clackamas County line; 112th Ave; Foster Rd; 122nd Ave; Portland Traction Co. Railroad right of way (40 mile loop trail); the boundary of Powell Butte Park; SE 148th Ave; SE Division; SE 201st Ave (Birdsdale); NE Glisan St; NE 181st Ave; Sandy Blvd; NE 185th Ave back to the point of beginning.

Notes: this district includes the communities of Gresham, Fairview, Wood Village and Troutdale.

District 8: Beginning at the Center of the Hawthorne Bridge; SE Hawthorne Blvd; SE 26th Ave; SE Stark St; SE 49th Ave; SE Hawthorne; SE 50th Ave; SE Division St; SE 52nd St; SE Powell Blvd; SE Foster Rd. SE 82nd Ave; the Clackamas/Multnomah county line; the Willamette River back to the point of beginning.

Notes: Includes the Hosford-Abernathy, Richmond, Sunnyside, Brooklyn, Creston-Kenilworth, Sellwood-Moreland, Reed, Eastmoreland, Woodstock, Mt Scott-Arleta, and Brentwood-Darlington Neighborhood Associations.

District 9: Beginning at the intersection of NE Halsey St and I-84 (Banfield Freeway); I-84; NE Halsey St; NE 102nd Ave; NE Glisan St; NE/SE 122nd Ave; SE Stark St; SE 130th Ave; SE Division St; SE 148th Ave; the boundary of Powell Butte Park; Portland Traction Co. Railroad right of way (40 mile loop trail); SE 122nd Ave; SE Foster Rd; SE 112th Ave; Multnomah/Clackamas county line; SE 82nd Ave; SE Foster Rd; SE Powell Blvd; SE 52nd Ave; SE Division St; SE 50th Ave; SE Hawthorne Blvd; SE 49th Ave; SE Stark St; SE 50th Ave; E Burnside St; NE 68th St; NE Halsey St back to the point of beginning.

Notes: Includes the Mt Tabor, South Tabor, Montavilla, Lents, Foster-Powell, Mill Park and the Powellhurst-Gilbert Neighborhood Associations. The district splits the Hazelwood Neighborhood Associations with District 10.

District 10: Beginning at the intersection of the I-205 Bridge and the Oregon/Washington State boundary; the outer boundary of the district (Oregon/Washington State boundary); South Channel of the Columbia River to a point due North of the intersection of NE Marine Dr and NE 185th Ave, in the center of the South Channel of the Columbia River; 185th Ave; Sandy Blvd; NE 181st Ave; NE Glisan St; 201st Ave (Birdsdale); SE Division St; SE 130th Ave; SE Stark St; SE/NE 122nd Ave; NE Glisan St; NE 102nd Ave; NE Halsey St; I-84 (Banfield Freeway); NE 60th Ave; NE Hassalo; NE 57th Ave; NE Fremont St; NE 63rd St; NE Prescott St; NE Sandy Blvd; I-205; Columbia Blvd; NE 82nd Ave; NE Lombard St; NE Airport Way; NE Lombard St to a point in

the center of the South Channel of the Columbia River; the South Channel to the Oregon/Washington State boundary and back to the point of beginning.

Notes: Includes the Parkrose Community Group, Madison North, Madison South, Woodland Park, Parkrose Heights, Parkrose, Argay and Wilkes Neighborhood Associations. Also includes Government Island and the City of Maywood Park. The Hazelwood Neighborhood Association is split with district 9. The Rose City Neighborhood Association is also split with district 11. The existing boundary between 11 and 10 also created this split. This district splits block 104 of tract 73.00 (pop = 0).

District 11: Beginning at the intersection of the Interstate Bridge and the Oregon/Washington boundary; the outer boundary of the district; the South Channel of the Columbia River to a point opposite the intersection of NE Lombard St and NE Marine Dr; NE Lombard St; NE Airport Way; NE Lombard St; NE 82nd Ave; Columbia Blvd; I-205; NE Sandy Blvd; NE Prescott St; NE 63rd St; NE Fremont St; NE 57th Ave; NE Hassolo; NE 60th Ave; I-84 (Banfield Fwy); NE Halsey St; NE 68th Ave; E Burnside St; SE 49th St; SE Stark St; SE 26th Ave; SE Hawthorne St; The Willamette River; NE Broadway St; NE 7th Ave; NE Fremont St; NE 21st St; NE Mason St; NE 23rd Ave; NE Prescott St; NE 22nd Ave; NE Killingsworth St; NE 21st Ave; NE Lombard St; NE 13th Ave; NE Lombard Pl; Columbia Blvd; I-5; The shoreline of Hayden Island and back to the point of beginning.

Notes: This district includes all of Hayden Island, the East Columbia, Sunderland, Concordia, Cully, Alameda, Beaumont-Wilshire, Irvington, Grant Park, Hollywood, Lloyd Center, Sullivan's Gulch, Kerns, Laurelhurst, Center, Buckman and Sunnyside Neighborhood Associations. Most of the Rose City Neighborhood Association is in this district the split being along 57th Ave. This district splits block 104 of tract 73.00 (pop = 0)

District 12: Beginning at the confluence of the Columbia and Willamette Rivers; the outer boundary of the district; the channel of the Columbia River as it passes south of Hayden Island; I-5; NE Columbia Blvd; NE Lombard Pl; NE 13th Ave; NE Lombard St; NE 21st Ave; NE Killingsworth St; NE 22nd Ave; NE Prescott St; NE 23rd St; NE Mason St; NE 21st St; NE Fremont St; NE 7th Ave; NE Broadway; Willamette River; Burnside St; I-405; NW Vaughn St; St Helens Rd; unnamed intermittent stream paralleling NW Groce Rd to the boundary of Forest Park; NW Cornell Rd; NW Lovejoy St; NW 25th Ave; NW Westover; W Burnside/Burnside Dr; Multnomah/Washington county line; the outer boundary of the district back to the point of beginning.

Notes: Includes the Piedmont; Woodlawn, Humboldt; King, Boise, Sabin, Vernon, Eliot, Overlook, Arbor Lodge, Kenton, Portsmouth, University Park, Friends of Cathedral Park, St. Johns; Linnton, Northwest Industrial, Northwest

Industrial Addition, NW Triangle and Burnside Neighborhood Associations. This district comprises the highest concentration of ethnic Black population in the Metro area.

District 13: Beginning at the intersection of US 26 (Sunset Highway) and Cornelius Pass Rd; the outer boundary of the district; Multnomah/Washington county line; Pacific Highway (99W); SW 71st Ave; SW Oak St; SW 72nd Ave; SW Locust St; SW Hall Blvd; Highway 217; SW Walker Rd; SW Cedar Hills Blvd; SW Jenkins Rd; SW 158th Ave; Baseline Rd; SW 185th Ave; US 26 (Sunset Highway) back to the point of beginning.

Notes: This is the new district, which is characterized by straddling the Sunset Highway out to SW 185th Ave. It has the advantage of not having an incumbent living in the area.

Appendix A

Population and Ethnic data - Proposed Metro Council Districts

8/ 8/91

"Version6" final draft
Population Summary Report

District	Population	Deviation	Pct. Dev.
1	81,413	504	0.62
2	79,105	-1,804	-2.23
3	83,039	2,130	2.63
4	80,644	-265	-0.33
5	79,096	-1,813	-2.24
6	79,056	-1,853	-2.29
7	80,553	-356	-0.44
8	82,891	1,982	2.45
9	81,439	530	0.66
10	82,542	1,633	2.02
11	80,552	-357	-0.44
12	82,298	1,389	1.72
13	79,191	-1,718	-2.12
=====			
	1,051,819	2	0.00

Mean Deviation is: 1,256
Mean Percent Deviation is: 1.55

Largest Positive Deviation is: 2,130 2.63 Percent
Largest Negative Deviation is: -1,853 -2.29 Percent

Overall Range in Deviation is: 3,983 4.92 Percent

Plan Type : METRO
 Plan name : OPT8
 Date : August 0
 Time : 9:51 AM
 User : markb

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DISTRICT No. : 1

Total Population : 81,413
 Deviation : 504
 Dev. Percentage : 0.62
 Total 18+ : 56,417

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHother
Group Total	70,597	370	7,291	480	2,622	53
% of Total Pop.	87.00	0.45	8.96	0.59	3.22	0.07
18+	49,897	196	4,298	335	1,665	26
% of Total 18+	88.00	0.35	7.62	0.59	2.95	0.05

=====

DISTRICT No. : 2

Total Population : 79,105
 Deviation : -1,804
 Dev. Percentage : -2.23
 Total 18+ : 58,084

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHother
Group Total	69,964	728	2,629	424	5,316	44
% of Total Pop.	88.00	0.92	3.32	0.54	6.72	0.06
18+	52,039	451	1,663	297	3,616	18
% of Total 18+	90.00	0.78	2.86	0.51	6.23	0.03

=====

DISTRICT No. : 3

Total Population : 83,039
 Deviation : 2,130
 Dev. Percentage : 2.63
 Total 18+ : 70,494

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHother
Group Total	75,460	1,553	2,012	588	3,378	48
% of Total Pop.	90.00	1.87	2.42	0.71	4.07	0.06
18+	64,111	1,258	1,610	484	2,829	32
% of Total 18+	90.00	1.78	2.28	0.69	4.01	0.05

=====

DISTRICT No. : 4

Total Population : 80,644
 Deviation : -265
 Dev. Percentage : -0.33
 Total 18+ : 61,856

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHOther
Group Total	76,164	453	1,758	374	1,853	42
% of Total Pop.	94.00	0.56	2.18	0.46	2.30	0.05
18+	58,758	296	1,188	286	1,308	20
% of Total 18+	95.00	0.48	1.92	0.46	2.11	0.03

=====

DISTRICT No. : 5

Total Population : 79,096
 Deviation : -1,813
 Dev. Percentage : -2.24
 Total 18+ : 57,004

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHOther
Group Total	75,377	332	1,521	453	1,388	25
% of Total Pop.	95.00	0.42	1.92	0.57	1.75	0.03
18+	54,738	191	892	312	863	8
% of Total 18+	96.00	0.34	1.56	0.55	1.51	0.01

=====

DISTRICT No. : 6

Total Population : 79,056
 Deviation : -1,853
 Dev. Percentage : -2.29
 Total 18+ : 59,648

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHOther
Group Total	74,513	387	1,679	554	1,895	28
% of Total Pop.	94.00	0.49	2.12	0.70	2.40	0.04
18+	56,623	239	1,069	392	1,311	14
% of Total 18+	95.00	0.40	1.79	0.66	2.20	0.02

=====

DISTRICT No. : 7

Total Population : 80,553
 Deviation : -356

Dev. Percentage : -0.44
 Total 18+ : 58,071

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHOther
Group Total	74,729	767	2,291	606	2,129	31
% of Total Pop.	93.00	0.95	2.84	0.75	2.64	0.04
18+	54,234	503	1,455	427	1,438	14
% of Total 18+	93.00	0.87	2.51	0.74	2.48	0.02

=====
 DISTRICT No. : 8
 Total Population : 82,891
 Deviation : 1,982
 Dev. Percentage : 2.45
 Total 18+ : 64,824

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHOther
Group Total	72,729	1,457	2,421	1,034	5,164	86
% of Total Pop.	88.00	1.76	2.92	1.25	6.23	0.10
18+	57,756	986	1,595	684	3,776	27
% of Total 18+	89.00	1.52	2.46	1.06	5.83	0.04

=====
 DISTRICT No. : 9
 Total Population : 81,439
 Deviation : 530
 Dev. Percentage : 0.56
 Total 18+ : 61,468

	NHwhite	NHblack	Hispanic	NHameri	NHasian	NHOther
Group Total	71,846	1,053	2,529	849	5,087	75
% of Total Pop.	88.00	1.29	3.11	1.04	6.25	0.09
18+	55,052	641	1,571	608	3,566	30
% of Total 18+	90.00	1.04	2.56	0.99	5.80	0.05

=====
 DISTRICT No. : 10
 Total Population : 82,542
 Deviation : 1,633
 Dev. Percentage : 2.02
 Total 18+ : 63,176

=====
 : NHwhite : NHblack : Hispanic : NHameri : NHasian : NHOther :
 -----+-----+-----+-----+-----+-----+-----

Group Total	:	73,777:	1,388:	2,575:	735:	4,014:	53:
% of Total Pop.	:	89.00:	1.68:	3.12:	0.89:	4.86:	0.06:
18+	:	57,343:	902:	1,716:	512:	2,686:	17:
% of Total 18+	:	91.00:	1.43:	2.72:	0.81:	4.25:	0.03:

=====
DISTRICT No. : 11

Total Population : 80,552
Deviation : -357
Dev. Percentage : -0.44
Total 18+ : 62,856

	:	NHwhite	:	NHblack	:	Hispanic	:	NHameri	:	NHasian	:	NHother
Group Total	:	66,016:		7,575:		2,593:		851:		3,371:		146:
% of Total Pop.	:	82.00:		9.40:		3.22:		1.06:		4.18:		0.18:
18+	:	52,997:		5,112:		1,785:		604:		2,314:		44:
% of Total 18+	:	84.00:		8.13:		2.84:		0.96:		3.68:		0.07:

=====
DISTRICT No. : 12

Total Population : 82,298
Deviation : 1,389
Dev. Percentage : 1.72
Total 18+ : 59,875

	:	NHwhite	:	NHblack	:	Hispanic	:	NHameri	:	NHasian	:	NHother
Group Total	:	53,087:		20,565:		3,796:		1,404:		3,255:		191:
% of Total Pop.	:	65.00:		25.00:		4.61:		1.71:		3.96:		0.23:
18+	:	41,371:		12,991:		2,364:		930:		2,142:		77:
% of Total 18+	:	69.00:		22.00:		3.95:		1.55:		3.58:		0.13:

=====
DISTRICT No. : 13

Total Population : 79,191
Deviation : -1,718
Dev. Percentage : -2.12
Total 18+ : 60,069

	:	NHwhite	:	NHblack	:	Hispanic	:	NHameri	:	NHasian	:	NHother
Group Total	:	72,595:		559:		1,645:		310:		4,046:		36:
% of Total Pop.	:	92.00:		0.71:		2.08:		0.39:		5.11:		0.05:
18+	:	55,581:		373:		1,107:		224:		2,771:		13:
% of Total 18+	:	93.00:		0.62:		1.84:		0.37:		4.61:		0.02:

Appendix B

Census Tract/Block Description - Proposed Metro
Council Districts

Council District 1

Tract	Blocks
31504	103A 302A 401A 402A
31603	All
31605	All
31606	All
31703	All
31704	All
32300	902A 903 904 905 906A 906B 906C 906D 906E 906E 907 908A 908B 908D 911
32402	All
32403	All
32404	All
32500	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 201 202 203 204 205A 205C 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 301 302 303 304 305 306A 306C 307 308 309 310 311 312A 312B 313A 313B 315 316 317 318 319B 319C 320 321 322 323 401 402 403 404 405 406 407 408 409 410 411 412 501A 501B 502A 502B 503 504 505A 505C 506 507 508
32601	101 102 103 104 105 106 107 108 109 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 502A 502B 502C 502D 503 504A 504B 505 506 507 508 509 510A 510B 511 512 513 514 610 614D 615 901A 901B 901C 901D 901E 901F 901G 903A 903B 903C 904 905 906
32602	ALL
32700	101A 101B 102A 102B 104 181A
32900	102 103 104B 106 107 108A 108B 108C 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129A 129B 129C 129C 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149A 149B 149C 150 151 152 153 154 155 156 157 158A 158B 158C 159

160 161 162 163 164 165A 165B 165C 166 167 168 169 170
171 172 173 174 175 176 201 202A 203 205 211 212 213 214
215 216 217 218 219 220 221 222 223 224 225 226 227 228
229 230 231A 231B 231C 232 233 234 236 237 238 239 240 241
242 243 244 245 246 247 248 249 250 251 252 253 254 255 256
257 258 259 260 261 262 263 301 302 303 304 305A 305B 306

33100

101 102 103 104 105 106 107 108 109 110 111 112 113 114
115 116 117 118 119 120 121 122 123 124 125 126 127 128
129 130 131 132A 132B 132C 133 134 135 136 137 138 139
140 141 142 143 144 145 146 147 148 149 150 151 152 153
154 155 156 157 158 159 160 161 162 163 164 165 166 167
168 169 201A 201B 202 203 204A 204B 204C 205 206 207 208
209 210 211 212 213 214 215 216 217 218 219 220 221 222A
222B 224 225 226 227 228 229 230 231 232 233 234A 234B
235A 235B 237A 237B

33200

104A 104B 105 106 108A 108B 108C 108D 109 110 111 112A
112B 113 114 115A 115B 116 117 118 119 120 121 122 123
124 125 126 127 128 129 130A 130B 131 132 133 134 135
136 137 138 139 140 141 142 143 144 145 146 147 148 149

33300

102A 102B 102C 102D 103A 103B 103C 104A 104C 110A 110B
110C 111 112 113 115 116 117 118 119 120 121 122 123 124
125 126 127 128 129 130 131A 131B 131C 131C 132 133 134
135 136A 136B 137 138 139 140 141 142 143 144 145 146 147
148 149 150 151 152 153 154 155 156 157 158 159 160 244

Council District 2

Tract	Block
30401	224 225 236 237 238 249
31003	All
31004	All
31005	All
31006	All
31100	All
31200	All
31300	112 113 114A 114B 114C 115 116 117 118A 118B 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 202A 202B 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 226A 226B 229A 229B 229C 230 231 232A 232B 233
31401	305 306 324 325
31402	103 104 105 106 109A 109B 109C 110 111 112A 112B 113 114 115 116A 116B 117 118A 118B 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133A 133B 134A 134B 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150
31607	102A 102B 103A 103B 104 105 106 107 108A 109 110 111 112 113A 113B 114 115 116 117 201 202 301 302 303 304 305 306 307 308 401 402 403 404 405 501 502 503 504 505 506 507 508
31702	All
31801	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 201 202 203 204 205 206 301 302 303 304 305 306 801 802 803 901 902 903 904 905 906 907 908
31802	ALL
31803	801 802 803 804 805 806 807A 807B 808 809 810A 810B 811A 811B 812 901A 901B 901C 901D 902 903 904 905A 905B 905C 906A 906B 907 908 909
31901	101 102 103 104A 104B 104C 104D 104E 104F 104G 104H 104J 104K L 104M 104N 105 106 107 108 109 110
31903	101 102 103 104 105 106 107 108 109 110 111 112 113 114 201

202 203 204 205 206A 206B 207A 207B 207C 208 209A 209B 210
211 212 213 214 302 303 304 305 306 307 308 309 310 311A
311B 311C 312 313 314 315 316 317A 317B

31904

ALL

32300

917 924 925 926 931

Council District 3

Tract	Block
4500	115 116 117 122 124 125 126 127 223 224 225 227 228 230 231 232 234 235 301 302 303 304 306 307 308 309 312 313 316 317 319 320 321 322 325 326 330 331 332 333 334 335
4601	201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 227 230 231 233 234 235 237 238
4602	ALL
4700	ALL except 211 and 313
4800	ALL
4900	ALL
5000	104 105 106 107 108 109 110 111 112 113 114 115 118 119 120 121 123 131 132 135 136 152 204 205 206 207 208 209 210 211 218 219 220 221 222 223 224 225 304 316 317 318 319 320 322 323 324 325 326 327 328 401 402 403 404 405 406 407 408 423 424
5200	ALL
5300	ALL
5400	ALL
5500	ALL
5600	ALL
5700	ALL
5800	ALL
5900	ALL
6001	ALL
6002	ALL
6100	ALL
6200	ALL
6300	101B 102 103 104 105 106 107 108 109 110 111 112 114 115 131 132 139 142 143 201A 207A 208 209 228 301 302 303 304 305 306 308 309 312 313 315 316 317 319 320 323 330 332 335

6401 101 102 103 104 105 106 107 108 109 110 201 202 203 204 205
206 207 208 209 210 211 212 213 214 216 301 302 401 402 403
404 405 406 407 408 409 410 411 412 413 414 415 416 417 418
419 420C 429C

6402 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115
116 117 118 119 120 121 122 123 124 125 126 127 128 129 130
131 132 133 134 201 202 203 204 205 206B 207 208 209 210 211
214 215 216 217B 219

6501 ALL

6502 ALL

6601 ALL

6602 ALL

6701 ALL

6702 ALL

6801 ALL

6802 ALL

6900 ALL

Council District 4

Tract	Block
6300	101A 101C 113A 113B 116 117 118 119 120 121 122 125 201B 202 203 204 205 206 207B 207C 210 211 212 213 214 220A 220B 221 225 226A 226B 226C
6401	215 217 218 219 220 221 303 304 305 306 307 308A 308B 309 310 311 312 313 314 315 316 317 318 319 320 321 322 420A 420B 421 422 423 424 425 426 427 428 429A 429B 430 431
6402	206A 212 213 217A 217C 217D 218 220 221 222 223 224 225 226
20100	ALL
20200	ALL
20301	ALL
20302	ALL
20401	104 105 201A 201B 201C 202A 202B 202C 202D 203 204 205 206 207 208B 209 210 211 212 213 301 302 303 304A 304B 305 306 307 308 309 310 311 312 313A 313B 313C 314 315 316 317 318 319 320 401B 401C 404 405B 406 407 408A 408B 409A 409B 409C 409D 410 412B 414 415A 415B 415C
22701	201 202 203A 204A 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 302A 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317A 318 319 320 321 322 323 324 325 326 327 401A 401B 407A 411A 411B 412 413 414 415 416 417 418 419 420 421A 422 423 424 425 426 427 428
22702	101 102 103A 103B 103C 103D 103E 103F 103G 104A 104B 105 106A 106B 107 108 109A 109B 110 111 112 116 117 118 119 120A 120B 203 204
22800	101A 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 122A 203A
30600	111 112 113 114 115 116 117 118A 119 120A 120B 121A 121B 124A 125A 126 127 128 129 130 131 132 133 134A 135 136 137 138 139 143A 143B 144 145 146 202 203 204
30700	ALL
30801	ALL
30802	ALL
30900	ALL
31901	201A 201 202 203 205A 205B 206 207 208 209 210 211 212

901 902 903 904 905 906 907 908 909A 909B 909C 910 911
912 913 914 915 916 917 918 919 920 921 922 923 924 925A
925B 925C 926 927 928 929 930 932 933 935 937 938

31903 301 401 402 403 404 405 406 407 408 409 410A 410B 410C
410D 411A 411B 412 413 414 415 416

32000 101 102A 102B 102C 103 104A 104B 105A 105B 105C 106A 106B
107A 107B 108 109A 109B 110 111 112 113 114 115A 115B 116A
116B 117A 117B 117C 117D 118 119 120 121 122 123A 123B 124
125 126 127 128 129 130 131 132 133 134 135 136 137 138 139A
139B 140 141 142 143 144 145 146 147 148 149 150 151 152 153
154 155 156 157 158 159 160 161 162A 162B 163 164 165 166 167
168A 168B 168C 169A 169B 169C 169D 169E 169F 170 171 172 173
174 175 176 177 178 179 180 181 182 183 184 185 186 187 188
189 190 191 192 193 194 195 201A 201B 201C 202A 202B 203A
203B 204A 204B 205A 205B 205C 205D 205E 206A 206B 206C 207
208

32101 101 102A 102B 102C 102D 103A 103B 104A 104B 105A 105B 105C
106 107 108 109 110 111 112 113 114 115 116 117 118 119
120 121 122 123 124 125 126A 126B 127 128 129 130 131 132
133 134A 134B 135 136A 136B 137 138 139 140A 140B 141 142
143 144 145 146 147 148 149 150 151 152 153 154 155 156A
156B 156C 157A 157B 158A 158B 158C 158D 159 160 161 162
163A 163B 164 165 166A 166B 167 171A 171B

32102 101 102A 102B 102C 103A 103B 103C 104 105 106 107 108 109
110 111 112 113 114 115 116 117 118 119A 119B 120 121 122
123 124 125 126 127 128 129 130 131 132 133 134 135 136 137
138A 138B 139 140 141 142 201A 201B 202 207A 207B 208 209
210 211 212 213A 213B 214A 214B 214C 214D 215 216A 216B
216C 217A 217B 218A 218B 219 223 224 225 226 227 228 229 237

32200 101A 101B 101C 102 104A 104B 105 107A 107B 108A 108B 109A
109B 326 339

Council District 5

Tract	Block
20401	101 102 103 106 107 108 109 110 111 112 113 208A 401A 402 403 405A 411 412A 413
20402	ALL
20501	ALL
20502	ALL
20600	ALL
20700	ALL
21700	ALL
21800	101 102 103A 103B 103C 103D 104 105 106 107 108 109 110 111 112 120 124 125 126 134 135 137 138 139 140 142 143 144 145 201 202 203 204 205 206 207 208 209 212 214 215 216 217 218 219 220 221 222 223 224
21900	ALL
22000	ALL
22101	204A 204B 204C 204D 205 219 220 221 223 224
22102	104A 104B 105A 105B 106A 107 108 701A 703A
22300	111 120 121 123 124 125 126 127 128 129A 129B 129C 129D 130A 130B 131A 131B 132 133 134 135 136 137 138 139 140 141 142A 142B 142C 142D 143 144 145 146 147 148 149 150 151 152 153 154 155 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 220 303 304 402 403 404 405 406 503 504 601 602 603 604 901 902A 902B 903 904 905A 905B 906 907 908 909 914 915
22400	ALL
22500	ALL
22600	101A 101B 102 103 104 105 106 108 109 901A 901B 901C 902A 902B 902C 903A 903B 903C 904 905 906 907 908 909A 909B 909C 909D 910 911 912A 912B 913A 913B 913C 914A 914B 915 916A 916B 917A 917B 917C 918A 918B 919 920A 920B 920C 921 922 923A 923B 923C 924A 924B 925 926 927 928 929 930 931 942 943 944A 944B 944C 945 946 947 949A 949B 951 952 953 954 955 956 957 958 959 960 961A 961B 962 963 964A 964B 965A 965B 966 966 967

22702

113 114 115 121 122 123 124 125 126 127 128 129 201 202
205 301 302 303 304 305 315 316

23000

101 103 106 107

Council District 6

Tract	Block
20800	ALL
20900	ALL
21000	ALL
21100	ALL
21200	ALL
21300	ALL
21400	ALL
21500	ALL
21601	ALL
21602	ALL
21800	113 114 115 116 117 118 119 121 122 123 129 130 131 132 133
22101	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 201 202 203 207A 207B 212 213 214 215 216A 216B 217 218 225
22102	101 102 103 106B 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 236 237 238 239 240 241 242 244 245 266 267 268 301 302 303 304 305 306 307 308 309 310 401 402 403 404 405 501 502 503 504 505 506 507 508 509 510 601 602 603 701B 703B 704 705 706 707 708 709 710 711
22201	ALL
22202	ALL
23200	101 102 103 104 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 301 302 303 304 305 306 307 308 309 310 311 312 401 402 403 404 405 406 407 408 409 410 411 501 502 503 504 505 506 507 508 512 513 514 515 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 616
23300	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 201 202 203 204 205 206 207 208 210 211 213 214 215 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 3 20 321 322 323 324 325 326 327 328 329

Council District 7

Tract	Block
8900	101A 101B 101C 102 103 104 105 106 107A 107B 107C 108 109A 109B 110 111A 111B 111C 111D 112 113 114A 114B 115 116 117A 117B 117C 117D 117E 118 119A 119B 119C 120 121 122 123 124A 124B 124C 125A 125B 126 127 128 129 130 131 132 133 201 204 205A 205B 205C 206 207A 207B 207C 207D 207E 208 209 210 211 212 213A 213B 213C 213D 214A 214B 215 216 218A 218B 219
9100	101 102 103 104 105 106 107 108 109 110 111 119 120 121 122 123 125 126 128 203 207 208 209 210 211A 211C 211D 214 216 217 221 222 223 224 225 226
9602	101 102 103 104 105 106 110 111 113 115 116 117 118 119 120 128 129 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319
9802	ALL
9901	ALL
9903	ALL
10000	ALL
10100	ALL
10200	101A 101B 101C 101D 101E 101F 102 103A 103B 103C 104 105A 105B 106A 106B 106C 106E 106F 107 108 109 110 111 112 113 114A 114B 115 116 117 118 119 120A 120B 120C 121 122 123 124A 124B 125A 125B 126A 126B 127 301 302A 302B 303A 303B 304 305A 305B 305C 306A 306B 306C 307 308 309A 309B 310
10301	ALL
10302	ALL
10402	101 102 103 104 105 106 107 108 109 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 134 135 136 137 201A 201B 202 203 204A 204B 205 206 207 208 209 210 212 213 301 302 303 304 305 306 307 308A 308B 309 310 311A 311B 312A 312B 313 314 315 316 317 318 319
10404	ALL
10405	ALL
10406	ALL
10407	ALL
10500	101A 101B 102 104A 104B 105A 105B 106A 106B 107 108A 108B 109 110 111 113 114 115 116 205 206 215 219

Council District 8

Tract	Block
100	ALL
200	ALL
301	ALL
302	ALL
401	ALL
402	ALL
501	ALL
502	201 202 203 204 205 206 207 208 209 210 211 212 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 401 402 403 404 405 406 408 409 410 411 412 413 414 415 416 417 418 419 421 422 423
801	202 203 204 205 206 207 208 209 210 218 219 220 221 222 223 301 302 303 304 305 306 307 308 309 310 312 314 315 316 317 318 319 320 321 322 323 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 417 418 420 421
802	201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 219 222 223 301 302 303 304 305 306 307 308 309 310 311 313 314 315 316 317 318 319 320 321 322 323 324 325 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 422 423
901	ALL
902	ALL
1000	ALL
1102	ALL
1201	101 102 105 108 109 110 111 112 121 122 123 124 201 202 210 211 212 213 214 215
1202	ALL
1301	ALL
1302	ALL
1400	ALL

1802	201 202 203 204 205 206 207 208 225 226 227
8600	ALL
8700	ALL
8800	ALL

Council District 9

Tract	Block
502	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519
601	ALL
602	ALL
701	ALL
702	ALL
801	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 201 211 212 213 214 215 216 217
802	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122
1500	ALL
1601	ALL
1602	ALL
1701	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 301 302 303 304 305 306 307 308 309 310 311 312 313 314 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 501 502 503 504 505 506 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 720 725 728 729 734
1702	ALL
1802	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 126 212 214 215 216 217 218 219 220 221 222 223 224 228
8100	110 111 112 114 115 116 117 118 121 123 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 220 221 301 302 303 304 305 306 307 308 309 311 312 314 323 324 325 332 336 337
8201	ALL
8202	ALL
8301	ALL

8302 ALL

8400 ALL

8500 ALL

8900 202 203 217 301 302 303 304 305 306 307 308 309 310 311 312 313
314 315 316A 316B 317 318 319 320 321 401 402 403 404 405 406
407 408 409 410 411 412 413 414

9000 ALL

9100 112 113 114 115 116 117 118 124 127 129 130 131 132 133 201 202
204 205 206 211B 212 213 215 218 219 220

9201 203 204 207A 207B 207C 209A 209B 210 301A 301B 302A 302B 303
304A 304B 305A 305B 306A 306B 307 308 309A 309B 310A 310B
311A 311B

Council District 10

Tract	Block
2801	101 102 103 104 105 118 119 120 121 122 123 124 125 126 127 207 208 209 210 211 212 213 214 215 224 225 226 227 228 229 230 231 232 233 234
2802	101 102 103 104 105 118 119 120 121 122 201 202 203 204 205 218 219 220 221 222 301 302 303 304 305 306 307 308 311 312 313 314 315 316 317 318 401 402 403 404
2901	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 120 121 122 123 124 125 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 301 302 303 304 305 306 308 309 310 311 312 313 314 315 316 317 319 320 321 322 323 324 325 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 428 429 430 431 432 433 434
2902	ALL
2903	ALL
7300	119 120 121 122 123 124 125 137 138 139 140 141 142 143 144 145 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240
7700	101 102 120 121 122 129 130 201 202 203 204 205 206
7800	ALL
7900	ALL
8001	ALL
8002	ALL
8100	101 102 103 104 105 106 107 108 109 113 119 120 122 401 402 403 404 405 406 407 408 409 410 411 414 415 416 417 418 421 422 423 425 429 431 433 434 439
9201	101 102 103 105 107 109 110 111 112 113 114 115 116 120 121 201 202 205A 205B 206A 206B 208A 208B 211 212 213 214 215 216 217 218 219
9202	ALL
9300	ALL
9400	ALL

9500 ALL

9601 ALL

9602 107 108 109 112 114 121 122 123 124 125 126 127 201 202
203 204 205 206 207 208 209 210 211 212 213 214 215 216
217 218 219 220

9701 ALL

9702 ALL

9801 ALL

10200 106D 124C 128 129 130A 130B 131A 131B 131C 131D 132A 132B
133A 133B 134 201 202 203 204 205 206A 206B 206C 206D 207
208A 208B 208C 209A 209B 209C 210

Council District 11

Tract	Block
1101	ALL
1201	103 104 106 107 113 114 115 116 117 118 119 120 203 204 205 206 207 208 209 216 217 218 219 220 221 222 223 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429
1701	507 524 525 719 721 722 723 724 726 733 735 736
1801	ALL
1802	119 120 121 122 123 124 125
1900	ALL
2000	ALL
2100	ALL
2202	125 126 127 129 130 204 206 207 208 209 210 211 212 213 214
2301	113 201 214 301 310
2302	101 108 118 119 126 127 128 129 130 131 132 201 202 203 204 205 206 207 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 226 227 228 229 230 231 232 233 234 235 236 237 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318A 318B 319 320 321 322 323 324 325 326 327 330 331 333 334 335
2401	ALL
2402	ALL
2501	ALL
2502	ALL
2600	ALL
2701	ALL
2702	ALL
2801	106 107 108 109 110 111 112 113 114 115 116 117 128 129

	130	131	132	133	201	202	203	204	205	206	217	218	219	220
	221	222	235	236	237	238	239	240						
2802	106	107	108	109	110	111	112	113	114	115	116	117	206	207
	208	209	210	211	212	213	214	215	216	217	309	310	405	406
	407	408	409	411	413	414	416	417	418	419	420			
2901	326	327	328	329	330	331	401	402	403	404	405	406	426	427
	435	436	437	438										
3000	ALL													
3100	ALL													
3200	101	102	116	117	118	119	208	209	210	211	226	227	301	302
	319	320	321	322	414	415	416	417	418	419	420	421		
3602	101	102	103	104	105	106	107	108	109	110	111	112	113	114
	115	116	117	118	119	120	121	122	123	124	125	126	127	128
	201	202	203	204	205	206	207	208	209	210	211	212	213	214
	215	216	217	218	219	220	221	222	223	224	225	226	227	301
	305	306	310	311	410	411	412	413	414	415	416	430	431	432 433
3603	ALL													
7201	101	102	103A	103B	104	105	106A	106B	107A	107B	108	109		
	201A	201B	202	203	204	205	206							
7202	201	202	203	204	205	206	207	208	209	210	211			
	212	213	214	215	216	217	218	219	220	221	222			
	223	224	225	226	227	228	229	230	231	232	233			
	234	235	236	237	238	239	240	241	242	243	244			
	245	246	247	248A	248B	249	250							
7300	101	102A	102B	103	104	105	106	107	108	109	110	111	112	
	113	114	115	116	117	118	126	127	128	129	130	131	132	133i
	134	135	136											
7400	ALL													
7500	ALL													
7600	ALL													
7700	103	104	105	106	107	108	109	110	111	112	113	114	115	116
	117	118	119	123	124	125	126	127	128	207	208	209	210	211
	212	213	214	215	216	217	218	219	220	221	222	223		

Council District 12

Tract	Block
2201	ALL
2202	101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 123 124 131 132 133 136 138 139 140 201 202 203 205 221 223 224 225 226 227 230 231 232 233 236A 236B 237 238
2301	101 102 103 104 105 106 107 108 109 110 111 112 202 203 204 205 206 207 208 209 210 211 212 213 302 303 304 305 306 307
2302	102 103 104 112 113 114 115 116 117 120 121 122 123 124 125 133 134 135 136 137 138
3200	103 104 105 106 107 108 109 110 111 112 113 114 115 120 121 122 123 124 125 126 201 202 203 204 205 206 207 212 213 214 215 216 217 218 219 220 221 222 223 224 225 303 304 305 307 308 309 310 311 312 313 314 315 316 317 318 323 324 401 402 403 404 405 406 407 408 409 410 411 412 413 422 423 424 425 426 427 428
3301	All
3302	All
3401	ALL
3402	ALL
3501	ALL
3502	ALL
3601	ALL
3602	302 303 304 307 308 309 312 313 314 315 316 317 318 319 320 321 323 324 325 326 327 328 329 330 401 402 403 404 406 407 408 409 417 418 419 420 421 422 423 424 427 429
3701	ALL
3702	ALL
3801	ALL
3802	ALL

3803 ALL
 3901 ALL
 3902 ALL
 4001 ALL
 4002 ALL
 4101 ALL
 4102 ALL
 4200 ALL
 4300 ALL
 4400 ALL
 4500 101 102 103 104 105 106 107 108 109 110 111 112
 113 114 118 119 120 121 123 135 201 202 203 204
 205 206 207 208 209 210 211 212 214 215 216 217
 218 219 220 221 222 226 229 233 305 310 311 314
 315 318 323 324 327 328 329
 4601 101 102 103 104 105 106 107 108 109 110 111 113
 114 115 116 117 119 120 121 122 123 124 125 126
 127 128 129 131 132 133 134 135 136 137 138 139
 140 141 143 147
 4700 211 313
 5000 101 102 103 116 117 122 201 202 203 212 213 214
 215 216 217 226 228 229 301 302 303 305 306 307
 308 309 310 311 312 313 314 315 321 409 410 411
 412 413 414 415 416 417 418 419 420 421 422
 5100 ALL
 7000 101A 101B 101C 101D 101E 101F 102 103A 103B 104
 105 106 109A 109B 111A 111B 114 115A 115B 118A
 118B 119A 119B 120 122 201A 201B 201C 202 204 205A
 205B 205C 205D 205E 206 207 208 209 210 211 212 213A
 213B 214 215A 215B 215C 216A 216B 216C 216D 217 218A
 218B 218C 218D 218E 218F 219 220 301A 301B 301C 306
 307 308 309 310A 310B 311
 7100 304A 308A
 7202 101A 101B 101C 101D 102 103A 103B 103C 104 105 106
 107 108 109 110 111 112 113 114 115 116 117 118 119
 120 121 122 123 124 125 126 127 128 129 130 131 132
 133 134 135 136 137 138 139 140 141 142
 7299 103Z

Council District 13

Tract	Block
30100	ALL
30200	ALL
30300	ALL
30401	101 125 149 201 202 203A 203B 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 226 227 228 229 230 231 232 233 234 235 239 240 241 242 243A 243B 244A 244B 245 246 247 248 250 251 252 253 254 255 256A 256B 256C 257 258 259
30402	ALL
30501	ALL
30502	ALL
30600	101 102 103 104 105 106 107 108 109 110A 110B 118B 118C 122 123 124B 125B 134B 140 141 142A 142B 201 205 206 207 208 209 210 211 212 213 214 215A 215B 216 217 218A 218B 219 220 221 222 223 224 225 226 227 228A 228B 229A 229B 229C 229D 230A 230B
31300	101A 101B 102 103A 103B 104 105A 105B 105C 106A 106B 106C 106D 107 108 109A 109B 109C 110A 110B 110C 111 143A 143B 201 219 220 221 222 223 224A 224B 225 227 228
31401	ALL
31402	101 102 107 108
31501	129 130 131 925 926 928 929 930
31504	101 102 103B 104 105 106 107 108 109 201 202 203 204 205 206 207 208 209 301 302B 303 304 305 306 307 402B 403 404 405 406 407
31505	ALL
31506	ALL
31507	ALL
31508	ALL
31604	ALL
31607	101A 101B 108B
32700	105A 105B

EXHIBIT B

District 1 - Susan McLain

District 2 - n/a

District 3 - n/a

District 4 - n/a

District 5 - n/a

District 6 - George Van Bergen

District 7 - Ruth McFarland

District 8 - Judy Wyers

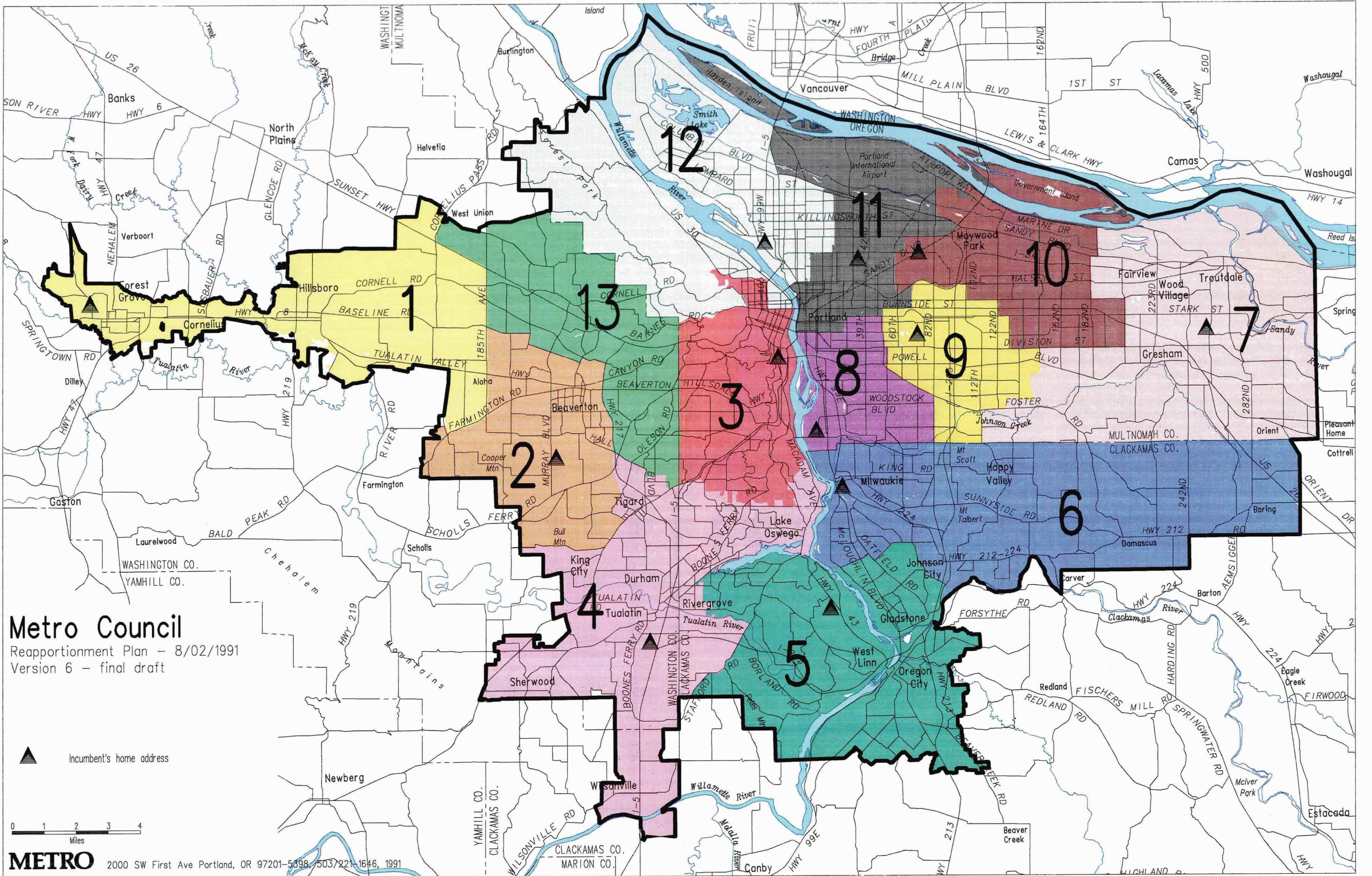
District 9 - n/a

District 10 - n/a

District 11 - David Knowles

District 12 - Sandi Hansen

District 13 - n/a



Metro Council
 Reapportionment Plan - 8/02/1991
 Version 6 - final draft

▲ Incumbent's home address



Metis Cou.
6.2

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 91-1486, FOR THE PURPOSE OF
AWARDING A TWO-YEAR CONTRACT TO MARX/KNOLL, DENIGHT & DODGE TO
DESIGN AND IMPLEMENT RECYCLING AND WASTE REDUCTION EDUCATION
CAMPAIGNS TO SUPPORT METRO'S WASTE REDUCTION PROGRAMS

Date: August 7, 1991

Presented by: Gardner

Committee Recommendation: At the August 6 meeting, the Committee
voted unanimously to recommend Council adoption of Resolution No.
91-1486. Voting in favor: Councilors Gardner, McLain, and Wyers

Committee Issues/Discussion: Vicki Rocker, Public Affairs
Director, reviewed the selection process and praised the caliber of
the applicants and the presentations made to the selection
committee. She noted that the timing of the selection process
allowed the applicants sufficient time to develop their proposals
for consideration by Metro.

Representatives from Marx/Knoll, Denight, and Dodge presented
examples of prior work on behalf of other clients including the
Benjamin Franklin, Northwest Natural Gas and AAA Automobile Club.
Ray Dodge indicated that he believed that his firm is distinguished
by it's "creativity." He noted that the promotional campaign for
Metro will appeal to people's emotions.

Councilor Wyers questioned whether the program will address waste
reduction issues. Ms. Rocker indicated that it would address both
recycling and waste reduction. Wyers asked about the level of
public input into the development of the promotional program. Ms.
Rocker indicated that interested parties will be contacted during
program development and that the Council Solid Waste Committee will
have an opportunity to review the program before it is finalized.

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 91-1486, FOR THE PURPOSE OF AWARDING A TWO-YEAR CONTRACT TO MARX/KNOLL, DENIGHT & DODGE TO DESIGN AND IMPLEMENT RECYCLING AND WASTE REDUCTION EDUCATION CAMPAIGNS TO SUPPORT METRO'S WASTE REDUCTION PROGRAMS

Date: August 7, 1991

Presented by: Gardner

Committee Recommendation: At the August 6 meeting, the Committee voted unanimously to recommend Council adoption of Resolution No. 91-1486. Voting in favor: Councilors Gardner, McLain, and Wyers

Committee Issues/Discussion: Vicki Rocker, Public Affairs Director, reviewed the selection process and praised the caliber of the applicants and the presentations made to the selection committee. She noted that the timing of the selection process allowed the applicants sufficient time to develop their proposals for consideration by Metro.

Representatives from Marx/Knoll, Denight, and Dodge presented examples of prior work on behalf of other clients including the Benjamin Franklin, Northwest Natural Gas and AAA Automobile Club. Ray Dodge indicated that he believed that his firm is distinguished by its "creativity." He noted that the promotional campaign for Metro will appeal to people's emotions.

Councilor Wyers questioned whether the program will address waste reduction issues. Ms. Rocker indicated that it would address both recycling and waste reduction. Wyers asked about the level of public input into the development of the promotional program. Ms. Rocker indicated that interested parties will be contacted during program development and that the Council Solid Waste Committee will have an opportunity to review the program before it is finalized.

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 91-1477, FOR THE PURPOSE OF AUTHORIZING AN EXEMPTION TO THE REQUIREMENT OF COMPETITIVE BIDDING AND AUTHORIZING ISSUANCE OF A REQUEST FOR PROPOSALS FROM PAINT MANUFACTURERS TO REPROCESS LATEX PAINT COLLECTED AT METRO'S PERMANENT HOUSEHOLD WASTE COLLECTION FACILITIES

Date: August 7, 1991

Presented by: McLain

Committee Recommendation: At the August 6 meeting, the Committee voted unanimously to recommend Council adoption of Resolution No. 91-1477. Voting in favor: Councilors Gardner, McLain and Wyers.

Committee Issues/Discussion: Sam Chandler and Bob Quinn, Solid Waste Department, reviewed the staff report. The department anticipates that latex paint will constitute a substantial portion of the household hazardous waste deposited at Metro's new hazardous waste disposal facilities. The purpose of the resolution is to allow the department to use a request for proposals (RFP) process to select a contractor to recycle latex paint. Such a process will provide maximum flexibility to the department to consider new and innovative approaches to paint recycling and marketing of recycling paint products.

Initially up to 5-6,000 gallons of paint may be deposited at Metro facilities annually, though ultimately this figure could increase to 50,000 gallons. Chandler indicated that the initial contract could be up to \$25,000. But, he noted that as recycling processes and resale markets are developed, it is Metro's goal that it's cost could be reduced to \$2 per gallon.



METRO

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

Memorandum

MC
7.3

DATE: August 2, 1991
TO: Metro Council
Interested Parties
FROM: Paulette Allen, Clerk of the Council *PA*
RE: RESOLUTION NO. 91-1477

Resolution No. 91-1477 Exhibit A, Request for Proposals for Reprocessing of Latex Paint Collected at Metro Permanent Household Hazardous Waste Collection Facilities (attached) has been published separately from the agenda packet due to the volume of the document. Supplemental packets will be distributed in advance to Councilors and available at the Council meeting August 8.

REQUEST FOR PROPOSALS

for

**REPROCESSING OF LATEX PAINT COLLECTED AT METRO
PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION**

FACILITIES

(RFP# 91R-32-SW)

**Metropolitan Service District
2000 S.W. First Avenue
Portland, OR 97201**

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REQUEST FOR PROPOSALS FOR REPROCESSING OF LATEX PAINT COLLECTED AT METRO PERMANENT HOUSEHOLD HAZARDOUS WASTE COLLECTION FACILITIES (RFP# 91R-32-SW)

I. INTRODUCTION

The Metropolitan Service District (Metro) seeks proposals from qualified vendors to: 1) reprocess recycled latex paint, or 2) reprocess and distribute recycled latex paint.

Proposals are due no later than 3:00 p.m. PDT on September 23, 1991 in Metro's business offices at 2000 S.W. First Avenue, Attention Jim Quinn, Solid Waste Department. Details concerning Metro paint collection and the reprocessing proposal are contained in this document.

An optional pre-proposal conference will be held September 6, 1991, at Metro Center, 2000 SW First Avenue, Portland. Questions about the RFP will be answered, and possible addenda to the RFP will be issued based on the results of this conference.

II. BACKGROUND

In the fall of 1991, Metro will begin collecting household wastes, including leftover latex paint, at its Metro South Household Hazardous Waste Collection Facility, located at 2001 Washington Street in Oregon City, Oregon. In early 1992, Metro will also begin collecting leftover latex paint at its Metro Central Household Hazardous Waste Collection Facility at 6161 NW 61st Avenue in Portland, Oregon.

The goal of this project is to produce a marketable recycled latex paint from the old latex paint Metro collects at its two facilities. Most household waste collection programs that choose to recycle latex paint simply combine all usable paints, and give the resulting material away as an anti-graffiti paint. Metro is planning to undertake a higher quality recycling method, similar to that operated by the city of Seattle.

Metro personnel at the household hazardous waste facilities will perform all receiving, sorting, bulking, and storage operations. This will include two steps unique to this high quality approach:

1. Careful screening to exclude material that is not recyclable, or that is likely to be high in hazardous ingredients such as lead or mercury

2. Separation into varieties based on whether the paint is light or dark in color, and on whether it is formulated for interior or exterior use

The purpose of this RFP is to solicit the services of a paint manufacturer to pick up 55-gallon drums of pre-sorted paint, and then to perform batching, testing, addition of additives, mixing, sieving, and other processing as necessary to meet high quality specifications.

This RFP is also intended to solicit proposals that include distribution of the reprocessed paint. Metro's preference is to become a supplier of pre-sorted, bulked leftover latex to a private firm who will assume ownership of the paint, reprocess it, and then sell it. If it is not possible in the short term to contract with a firm that is willing to do this, Metro will retain ownership of the paint, and attempt to contract with a single firm to do both reprocessing and distribution. If this is unsuccessful, Metro will seek to contract separately for reprocessing and distribution services.

SORTING METHODOLOGY

Metro is currently planning to utilize a detailed sorting methodology for latex paint that is based on procedures which were originally developed for a Seattle collection program. A report summarizing this project is included as Attachment 1. The consulting firm that assisted Seattle with this project will be working with Metro as well. The sorting procedure that Metro is currently contemplating, described below, differs slightly from that used in Seattle. Proposals which include a reprocessing scheme which varies from that outlined in this RFP will also be considered.

The proposed procedure starts with removal of hazardous and non-recyclable paints. This initial sorting includes procedures to eliminate paint that has hardened, soured, gone through freeze-thaw cycles, and paint that is likely to contain significant quantities of lead or mercury. During the initial stages of this project, Metro intends to perform detailed testing of sorted paint, to confirm that the sorting procedure developed successfully minimizes hazardous components. The remaining material is then sorted into three varieties of paint for reprocessing: flat interior light beige, flat exterior light beige, and flat exterior rust brown.

It is anticipated that approximately 72% of the paint collected at the facilities will be recyclable, 24% will be nonrecyclable and nonhazardous, and about 4% will require disposal as a hazardous waste. The recyclable fraction will be shipped to a paint manufacturer for reprocessing; the paint reprocessing firm will not be required to manage the hazardous and non-recyclable fractions.

Metro staff at the household hazardous waste facilities will be thoroughly trained in safe handling of paints and hazardous materials. The facilities will have well ventilated indoor work areas, and sufficient carts and tables to sort, stage, and bulk anticipated volumes of paint. Substantial storage space for bulked latex paint drums exists at the Metro South facility, so recyclable material could be stored until an appropriate quantity for reprocessing were collected.

ESTIMATED VOLUMES

While it is difficult to predict participation figures for Metro's permanent household hazardous waste facilities, estimates have been developed based on the experiences of other collection programs. During the first year of operations, approximately 40 participants per week are expected to use the Metro South facility, while approximately 80 per week are expected to utilize the Metro Central facility. An average of about 1.5 gallons of latex paint were collected per participant at Metro's one day household hazardous waste collection events. Based on these figures, it is estimated that approximately 5000-6000 gallons of recyclable latex paint will be collected by Metro during the first year of operations.

It is expected that participation rates at the facilities will increase in future years. Current predictions estimate that the volume of recyclable paint will increase by about 6500 gallons per year for the first several years, eventually reaching a peak of as much as 50,000 gallons per year.

REPROCESSING

The goal of this project is to produce a marketable recycled latex paint. Proposed specifications for the final product are described in Attachment 2. Metro encourages proposals which seek to meet different specifications, provided the proposal demonstrates that the paint would be at least as marketable and economical as that specified. Expected steps in performing the reprocessing are listed below in section III, Proposed Scope of Work.

DISTRIBUTION OF RECYCLED PAINT

Consumer awareness of solid waste and recycling issues, and their role in both recycling and buying recycled products has increased significantly over the last several years. The climate is ripe for the introduction of quality products that contain recycled material. This is evidenced not only by the increasing number of products available from retailers but also from the growth of the Northwest Regional Buy Recycled Conference and Trade Show. Metro is a co-sponsor of this conference

which showcases recycled products and educates potential buyers on how to integrate the "buy recycled" ethic into their workplace.

A survey performed by Metro and Morely and Associates indicates that potential recycled paint purchases by public agencies represents about forty-six to fifty-five percent of the total reprocessed volume for the first year of HHW facility operation. Metro is working to obtain commitments from government agencies to purchase recycled paint and increase government's market participation.

Marketing and distribution to other markets is critical to a self sustaining paint recycling program. Metro welcomes proposals on all viable approaches to sales and distribution of the reprocessed paint product. This may include distribution of a portion of the bulked (before reprocessing) product to landlords, farmers or other large users. Metro seeks proposals which include acting as the product distributor, obtaining specific orders, providing technical support, providing color-blending services, and conducting market outreach to existing and new customers.

Metro's Market Development Section provides assistance to government and business purchasing agents to encourage the purchase of products that are made with recycled material. Currently, Metro ordinances require the solicitation of bids for recycled paper, recycled soil amendments and retread tires. An ordinance for recycled paint will soon be added to our procurement guidelines. New state legislation will require government agencies to look for and purchase a variety of recycled products.

Metro can provide technical assistance to the successful proposer by: promoting purchase of recycled paint through the Buy Recycled Conference, the purchasing newsletter - Acquirer, and Recycled Products index; providing information on businesses currently purchasing recycled products; and performing demonstration projects.

III. PROPOSED SCOPE OF WORK

REPROCESSING

Following are the major steps anticipated in the course of paint reprocessing. Metro will accept proposals which vary from this outline.

1. Transport paint drums from HHW facility to processor:

Contractor will pick up and transport pre-sorted leftover paint which has been bulked in 55 gallon drums. Each drum will be marked as to

which of the three varieties it contains: mixed interior and exterior dark paints; interior light paints; or exterior light and white paints. Each drum will contain both flat and semigloss paints.

2. Mix paint drums to attain color depth:

Contractor will empty the drums and mix the paint in three batches, and will measure the exact volume in each batch. Batch size will depend on the processing equipment to be used by the contractor.

3. Test for hazardous constituents:

For each batch, the concentrations of lead, mercury, PCB's, and ethylene and diethylene glycols must be tested to determine whether the paint is recyclable, and to meet federal and state labeling and Material Safety Data Sheet (MSDS) requirements. Any paint that contains unacceptable quantities of hazardous constituents will be returned to Metro for proper disposal.

4. Prepare label and MSDS:

Before the paint is reprocessed, a label and MSDS must be prepared. It is anticipated that these can be prepared once and reused for successive batches.

5. Additional tests:

Contractor will test samples from each batch to determine the reprocessing needs of each. Sample detailed specifications are included in Attachment 2. Additional tests which may be necessary include: viscosity, percent solids, contrast ratio, sag, bubbling, grind, gloss, and color.

6. Add required additives based on test results:

Based on results from testing, a variety of additives may be required to bring the paint to specification. These may include ethylene glycol to raise freeze resistance, hydroxy ethyl cellulose to adjust viscosity, odor masks, biocides, or a variety of other additives.

7. Add pigments to adjust color:

Pigments (titanium dioxide or tints) would be added as needed to bring the color to specification.

8. Mix using a high-speed disperser:

Additives and pigments will be thoroughly mixed into the paint using a high speed disperser.

9. Filter with a Vorti-sieve (100 mesh):

The final product will be filtered using at least a 100 mesh screen.

10. Quality control tests:

The paint will be retested to assure quality control, and consistency between batches.

11. Repackage paint:

The paint will be canned and labeled in one gallon and five gallon containers, ready for sale.

12. Deliver product:

Contractor will deliver paint to the appropriate location for marketing. Contractor will deliver emptied drums to Metro for reuse.

DISTRIBUTION

Following are the major anticipated aspects of marketing and distribution of the reprocessed paint. Metro will accept proposals which vary from this list.

- Maintain active contact with committed agencies to obtain specific paint orders;
- Provide delivery/or will-call service as needed;
- Provide staff to give customers technical support for the product (e.g.: proper types of applications, product limitations, surface preparation, etc.)

- Tint paint as requested;
- Resolve customer complaints;
- Monitor inventory and demand;
- Keep track of sales and accounting as necessary;
- Conduct additional marketing efforts to expand and create new markets for recycled paint; and
- Provide storage space for unsold paint.

IV. PROPOSAL INSTRUCTIONS

SUBMISSION OF PROPOSAL

Please submit five (5) copies of the proposal to Metro, addressed to:

Jim Quinn
Hazardous Waste Specialist
Solid Waste Department
Metropolitan Service District
2000 SW First Avenue
Portland, OR 97201-5398

DEADLINE

Proposals will not be considered if received at Metro's business office attention Jim Quinn, Solid Waste Department, after 3:00 p.m. PDT on September 23, 1991.

RFP AS BASIS FOR PROPOSALS

This RFP represents the most definitive statement Metro will make concerning information upon which proposals are to be based. Any verbal information which is not contained in this RFP, or in addenda to this RFP, will not be considered by Metro in evaluating proposals.

A pre-proposal conference will be held September 6, 1991, at Metro Center, 2000 SW 1st Avenue, Portland. Questions about the RFP will be answered, and possible addendum to the RFP will be made based on the results of this conference. After

the pre-proposal conference, and no later than August 14, 1991, additional questions shall be addressed in writing to Jim Quinn. If Metro determines that a question asked is significant to the outcome of this competitive process and merits a response, the question and Metro's answer will be sent to all parties on the list of proposers (those parties who have received a copy of the RFP) on or before August 16, 1991. Any proposer who has submitted a proposal and who subsequently receives an addendum, may supplement their proposal as they consider appropriate, provided that the supplementary material is received by Metro on or before the due date for proposals.

In addition to the above, Metro may issue addenda to clarify or add to the RFP. In such an event, additional time to respond to the RFP or to provide supplementary material will be granted as appropriate.

V. PROPOSAL CONTENTS

1. A transmittal letter that identifies the project manager, and states that the proposal will be valid for ninety (90) days after the submittal date; include the name, title, address, and telephone number of an individual or individuals with authority to contractually bind the company during the period in which Metro is considering proposals.
2. Methodology:
 - A) If proposal is for reprocessing only, include all costs associated with performing reprocessing, and details of the proposed reprocessing methodology, including:
 - Volume of paint to be processed at one time, and frequency with which this batch may be processed
 - Procedure for conducting tests
 - Procedures for adding required additives, and performing mixing and filtering operations
 - Methods to control and attain consistent quality-specifications to be used, if different from those supplied with RFP
 - Preparation of labels and MSDS's

- B) If proposal is for reprocessing and distribution, also include the following:
- Details of proposed marketing and distribution scheme.
 - Whether your firm would assume ownership of paint
 - All costs associated with performing marketing and distribution as described.

3. Qualifications:

- A) If proposal is for reprocessing only, please describe the following:

- Experience manufacturing latex paint
- Experience recycling latex paint, if any
- Processing facilities you propose to use for recycling latex paint
- Testing facilities and expertise, and the qualifications of any outside testing services you propose to use
- Ability to pick up and deliver paint
- Experience preparing labels and material safety data sheets-include samples if any

- B) If proposal is for reprocessing and distribution, also include the following:

- Experience and capability to retail latex paint, including to public agencies
- Experience and capability to provide technical support to purchasers/users

- Ability to tint paint
 - Experience introducing new products, or developing new markets for existing products
4. All proposals must also include:
- Disadvantaged Business Compliance Form (see Attachment 4)
5. Optional exceptions and comments section. To facilitate evaluation of proposals, Metro requires that all responding firms adhere to the format outlined within this RFP. Firms wishing to take exception to, or comment on, any specified criteria within this RFP are encouraged to document their concerns in a distinct section of their proposal. Exceptions or comment should be succinct, thorough and organized.

VI. GENERAL CONDITIONS

LIMITATION AND AWARD

This RFP does not commit Metro to the award of a contract, nor to pay any costs incurred in the preparation and submission of proposals in anticipation of a contract. Metro reserves the right to accept or reject any or all proposals received as the result of this request, to negotiate with all qualified sources, or to cancel all or part of this RFP.

INSURANCE REQUIREMENT

The contractor shall provide (from insurance companies acceptable to Metro) the insurance coverage designated hereinafter and pay for all costs therefore. Before commencing work under the contract the contractor shall furnish Metro with certificates of insurance evidencing coverage as specified, and where indicated naming Metro as an additional insured.

a. **Comprehensive General Liability**

Contractor shall maintain Comprehensive General Liability insurance covering all operations including contractual liability and product liability, against bodily injury or death including personal injury and

property damage with a combined single limit of not less than \$1,000,000. Product liability for paint produced as part of this project, and/or environmental impairment insurance may be required, as determined during contract negotiations. Such policy shall name Metro, its directors, officers, agents and employees as an additional insured. Such insurance shall provide for thirty days prior written notice to Metro in the event of alteration or cancellation.

b. Auto Liability

Contractor shall maintain Auto Liability with a combined single limit of not less than \$1,000,000. Such policy shall insure against bodily injury and property damage arising out of the use by or on behalf of the contractor, its agents and employees in pursuit of services provided for in the contract, of any owned, non-owned or hired vehicle. Such policy shall name Metro, its directors, officers, agents and employees as an additional insured. Such insurance shall provide for thirty days prior written notice to Metro in the event of alteration or cancellation.

c. Worker's Compensation Coverage

Contractor shall maintain in force Worker's Compensation coverage as required by the state of Oregon. Contractor shall also maintain Employer's Liability insurance including bodily injury caused by disease with a limit of not less than \$1,000,000. Contractor shall require its sub-contractors (if any) to maintain such insurance also.

CONTRACT TYPE

Metro intends to award a public contract with the selected firm for this project. A copy of the standard form contract used by Metro is attached. (See Attachment 3). The terms of the contract awarded will be subject to negotiation between Metro and the firm selected for this project. Metro intends that the contract be for a period of one year, with an option for an additional one-year extension.

BILLING PROCEDURES

Depending upon whether ownership is taken by the contractor or by Metro, reprocessing costs would be recovered either directly from sales revenues, or

by contract payment from Metro. The billing procedures of the Contractor will be subject to the review and prior approval of Metro before reimbursement for services can occur.

SUBCONTRACTORS/DISADVANTAGED BUSINESS PROGRAM

A subcontractor is any person or firm proposed to work for the prime Contractor on this project. No subcontractor selection shall be finalized prior to contract award.

Metro has made a strong commitment to provide maximum opportunities to Disadvantaged and Women-Owned Businesses when contracting for goods or services. If subcontractors are to be used, the successful proposer agrees to reach the goal of subcontracting 7 percent of the total contract amount to Disadvantaged Business Enterprises (DBEs), and 5 percent of the total contract amount to Women-Owned Business Enterprises (WBEs) or to make good faith efforts, as defined in Metro's Disadvantaged Business Program (Section 2.04.160 of the Metro Code), to reach the goals.

DBEs and WBEs must be certified by the state of Oregon as DBEs or WBEs to be counted toward the Contract goals. The state's list of certified DBEs/WBEs may be obtained from the Office of Minority & Women & Emerging Small Businesses, State Executive Dept., 155 Cottage Street N.E., Salem, OR 97310, Attn: Susan Parek, (503)387-5651.

The proposal documents submitted must contain a fully completed Disadvantaged Business Program Compliance form included with Attachment 4. Thereafter, within 24 hours of notice by Metro, firms will be required to submit completed DBE and WBE utilization forms which are also included in Attachment 4. Metro expects to request utilization forms (which call for project costs) during the negotiation process. Detailed procedures for completing the forms and for demonstrating good faith efforts are contained in Metro's Disadvantaged Business Program attached to this RFP as Attachment 5. Proposer's special attention is directed to Section 2.04.155 (Contract Award Criteria), and Section 2.04.160 (b) (Determination of Good Faith Efforts). Proposers should note the following requirement of the latter section:

Advertisement in trade association, general circulation, minority and trade-oriented, women-focus publications, if any and through a minority-oriented newspaper or minority-owned trade publication concerning the subcontracting or material supply opportunities on the project at least ten (10) days before bids or proposals are due.

The following are minority-oriented newspapers published in the Portland Metropolitan area:

The Skanner, 2337 N. William Avenue, Portland, OR 97221 (503) 287-3562.

The Portland Observer, P.O. Box 3137, Portland, OR 97208 (503) 283-2486.

The American Contractor, P.O. Box 11233, Portland, OR 97208 (503) 280-9000.

The Hispanic News, 3302 S.E. 20th Avenue, Portland, OR 97202 (503) 777-6759.

Pro-Woman, P.O. Box 6957, Portland, OR 97228 (503) 452-0121

The requirement to advertise is but one of the actions necessary to demonstrate good faith efforts under this program. Failure to comply with all the requirements of the Disadvantaged Business Program will result in the proposal being deemed nonresponsive. Metro reserves the right, at all times during the period of this agreement, to monitor compliance with the terms of this paragraph and Metro's Disadvantaged Business Program. All proposers should read section 2.04.160 (b) at least 14 days prior to the proposal due date.

Questions regarding DBE/WBE requirements will be answered at the pre-proposal conference. Questions not answered at that time should be addressed to Metro's Contracts Administrator, Mr. A. M. Hazen at (503) 221-1646.

VII. EVALUATION

Evaluation of proposals will be based on the following evaluation criteria:

	<u>Weighting</u>
1. General compliance with the RFP	5%
2. Reprocessing methodology	15%
3. Distribution methodology	20%
4. Cost	50%
5. Qualifications	10%

Proposals will be reviewed by a selection committee. Proposals that include both reprocessing and distribution components will be favored. The committee will select a finalist from among the proposers, and contract negotiations will be conducted with this proposer. If these negotiations proceed satisfactorily, the candidate will be given final contract award. If these negotiations are unsuccessful, the next most highly rated firm will be selected for negotiations. If the firm selected for contract award includes reprocessing only, then award of the contract will be contingent upon Metro locating and successfully contracting with a firm to perform the distribution portion of the project.

VIII. ATTACHMENTS

1. Excerpt from Seattle Latex Recycling Project
2. Proposed Technical Specifications for Reprocessed Paint
3. Metro Standard Contract
4. DBE/WBE Compliance Forms
5. Metro Code Section 2.04 Covering DBE/WBE Requirements

ATTACHMENT 1

Excerpt From Seattle Latex Paint Recycling Project

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT
LATEX PAINT

PART 1:
LATEX PAINT RECYCLING

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT
LATEX PAINT RECYCLING

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SEATTLE PAINT RECYCLING & DISPOSAL PROJECT

LATEX PAINT RECYCLING

INTRODUCTION

PART 1 examines the feasibility of recycling leftover latex paint turned in through household hazardous waste collection programs. It recommends establishing a permanent program in 1991 for recycling leftover latex paint from Seattle's household hazardous waste collection sheds. Moreover, the findings indicate that other communities could also benefit from establishing latex paint recycling programs.

PART 1 is organized in three major sections:

- I. PROJECT DESCRIPTION**
- II. FINDINGS**
- III. RECOMMENDATIONS**

The Project Description section recounts how latex paint recycling was tested.

The next section, Findings, describes the successful results of these tests.

And finally, Recommendations details how Seattle (and other jurisdictions) can establish a permanent latex paint recycling program.

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT

LATEX PAINT RECYCLING

I. PROJECT DESCRIPTION

The Seattle Paint Recycling & Disposal Project was designed to follow-up "Mother of Paint", Seattle's first latex paint recycling effort. Mother of Paint represented a major breakthrough: for the first time, it appeared that it was possible to manufacture a consistent, good-quality and marketable recycled latex paint. Other paint recycling efforts in the U.S. produce low quality paints with little, if any, resale value.

"Son of Paint" was undertaken to answer two key questions about latex paint recycling:

1. Can recycled latex paint be made which is a good quality paint; and can the quality be kept consistent between batches; and
2. Is there a sufficient market to sell the recycled latex paint?

To answer these questions, approximately 5,550 gallons of leftover latex paint was collected from householders and sorted. Latex paint was sorted into three categories: recycling, municipal landfilling, and hazardous disposal. The recycling fraction was used to test latex recycling. The municipal landfilling fraction was used to test whether non-hazardous paint can be segregated for landfilling as a municipal solid waste (see PART 2 of this report). The hazardous disposal fraction was simply disposed of as a hazardous waste.

Next, the recycling fraction was reprocessed and subjected to a battery of tests to determine the paint's quality after recycling.

And finally, the recycled paint was test marketed through 19 local paint retailers.

Each step is described in more detail below.

COLLECTION AND SORTING

Post-consumer residential latex paint was collected at four household hazardous waste collection sites, where it was sorted and bulked for recycling in four batches.

Leftover paint can be gathered through any type of household hazardous waste collection program. Leftover household paint for this project was drawn from Seattle's Household Hazardous Waste Collection Shed (located at the Solid Waste Utility's South Transfer Station), and from three Round-Up sites in Seattle and King County (the University of Washington in Seattle, Shoreline, and Kent). This allowed us to test the consistency of recycled paint collected through diverse programs.

5,550 gallons of latex were collected, sorted and bulked into 55-gallon drums at the four sites. See TABLE 1-1.1, below. 47.8% was recyclable, and 48.3% was non-recyclable and was set aside for municipal landfilling, while 3.8% was disposed as hazardous waste. The hazardous fraction was mostly solvent-based paints which had been misidentified during initial sorting, plus small amounts of high-mercury and lead-pigmented latexes.

**TABLE 1-1.1
LATEX PAINT COLLECTION**

SITE	RECYCLE		LANDFILL		HAZ DISPOSAL		TOTAL		LABOR	
	(Gal)	(%)	(Gal)	(%)	(Gal)	(%)	(Gal)	(%)	(Hrs)	(hr/gal)
SEATTLE COLLECTION SHED	460	57.0%	315	39.0%	31	3.9%	806	100.0%	127.7	0.1582
SEATTLE ROUND-UP SITE	750	45.0%	899	53.9%	16	0.9%	1,665	100.0%	101.0	0.0606
SHORELINE ROUND-UP SITE	810	31.4%	613	28.9%	150	9.5%	1,573	100.0%	113.7	0.0722
KENT ROUND-UP SITE	634	42.1%	855	56.8%	15	0.9%	1,504	100.0%	81.0	0.0531
TOTAL	2,654	47.8%	2,682	48.3%	213	3.8%	5,549	100.0%	425.4	0.0767
TOTAL EXCLUDING COLLECTION SHED							4,742		297.7	0.0627

Latex paint turned in at Seattle's Collection Shed was accumulated March 11 through June 10, 1989. It was loose-packed in 55-gallon drums for sorting at a later date. It was subsequently unpacked and sorted June 10 and June 18. Unpacking the drums was inefficient, adding significant labor time (see the last column of TABLE 1-1.1).

At Round-Up locations in Seattle, Shoreline and Kent, leftover latex paint was sorted as it was collected, on June 3, 1989. Sorting was more efficient at these locations, averaging approximately 334 minutes to sort and bulk each gallon of paint.

Properly sorting leftover latex paint is the key step to producing recycled latex of high and consistent quality. The sorting protocol was designed to meet three goals:

- **Exclude hazardous constituents.** Federal regulations restrict the content of lead and ethylene glycol in latex paint. Moreover, concern for public health dictates that we restrict the content of other hazardous constituents, such as mercury.
- **Produce a good quality paint that is consistent.** This requires excluding all paint whose emulsion has been compromised, such as dried or congealed latex, separated emulsions ("sawdust"), and latex which has soured.
- **Produce a marketable color.** A random mixture of leftover latex is brown -- virtually impossible to sell. By selecting only lighter shades of latex and excluding all others, a more marketable light beige color can be achieved.

Sorting was conducted by crews of municipal employees plus a few volunteers. Almost all of the sorters were sorting for the first time. Crew members were given detailed training in the sorting protocol.

To follow the sorting protocol, sorting crews adhered to three steps:

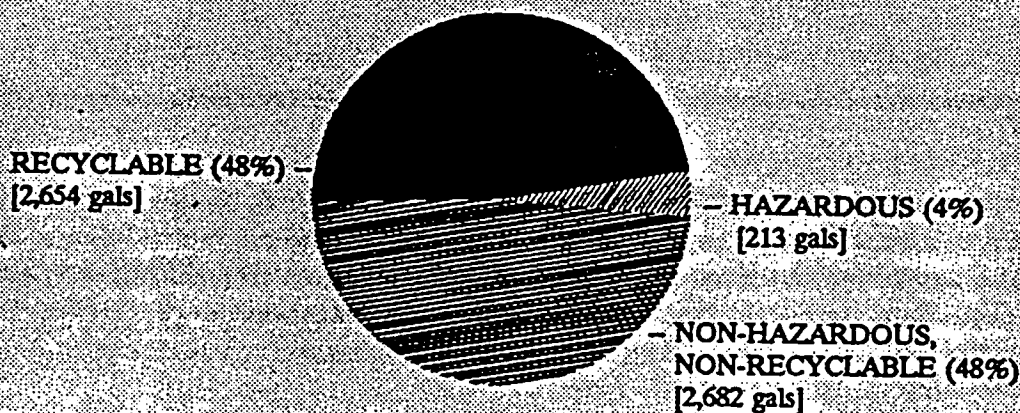
**TABLE 1-12
OVERVIEW OF SORTING**

1. Scan can label to reject solvent-based products, old white lead primers, mildew resistant paints (high mercury) and unknowns.
2. Open can, check color and appearance to reject dark colors, oranges and yellows, separated or congealed latex, or other unknowns.
3. Pay attention to odor while performing step 2, reject sour latex or non-latex products.

FOR MORE DETAIL ABOUT THE SORTING PROTOCOL, SEE TABLE 1-3.2, IN THE RECOMMENDATION SECTION (§III A.), BELOW.

In this manner, a small amount (3.8%) of truly hazardous waste was screened out. The remaining paint was split evenly between that which was recyclable, and that which was not (see FIGURE 1-1, below).

**FIGURE 1-1
SORTING YIELD (recyclable v. nonrecyclable)**



DATA SOURCE: Morley & Associates, 1990.

Next, the recyclable fraction was reprocessed and tested, as described below.

REPROCESSING

The 2,654 gallon recyclable fraction of the leftover latex was reprocessed and canned as about 2,900 gallons of "Community Pride" Recycled Interior Flat Latex Paint.

Reprocessing was performed under contract for the City by Martec, a local latex paint manufacturer. All seven latex paint manufacturers in the Puget Sound region were invited to bid on reprocessing the leftover latex. While several expressed interest, Martec was selected on the basis of price.

The sorted, recyclable paint was delivered from each site to Martec in 55-gallon drums. Each site's paint was reprocessed separately to test the possibility of gaining consistency between discrete batches. TABLE 1-1.3 outlines how the paint was reprocessed.

TABLE 1-1.3
STEPS TO REPROCESS LATEX PAINT

1. TEST FOR HEAVY METALS AND GLYCOL LEVELS
2. TEST TO DETERMINE REPROCESSING NEEDS
3. PREPARE LABEL AND MSDS
4. ADD ETHYLENE GLYCOL AS NEEDED TO RAISE FREEZE RESISTANCE
5. ADD HYDROXY ETHYL CELLULOSE TO ADJUST VISCOSITY
6. ADD ODOR MASK
7. ADD PIGMENTS TO ADJUST COLOR
8. MIX USING A HIGH SPEED DISPERSER
9. FILTER WITH A VORTI-SIEVE (150 MESH)
10. QUALITY CONTROL TESTS
11. CAN PAINT

Each batch was blended in a 800 gallon vat, sampled and tested. Simple chemical tests were conducted to gain necessary information for a can label and a Material Safety Data Sheet (MSDS). Lead and other heavy metals were analyzed to confirm that their concentrations were not too high. Federal law prohibits lead concentrations above 0.06%. Similarly, Ethylene and Diethylene Glycol concentrations were measured to ensure conformation with federal labelling thresholds of 10% each.

Additional manufacturer's tests were conducted to determine each batch's reprocessing needs. Tests included viscosity, percent solids, contrast ratio, sag, bubbling, grind, and gloss, among others.

The paint was reprocessed to meet federal procurement specifications for interior flat latex paint: TT-P-29J.

The total yield was 2,922 gallons, about 350 gallons more than was started with. Wash water and small amounts of additives were blended into the paint, and account for this difference.

Small amounts of Ethylene Glycol were added to raise the paint's freezing resistance to meet TT-P-29J specifications. Hydroxy Ethyl Cellulose was added to raise the paint's viscosity slightly (particularly batches to which wash water was added).

An odor mask was added even though it did not appear necessary, simply as a precaution.

Titanium and other pigments were added as needed to adjust each batch to a uniform color.

Additives were dispersed into each batch using a high-speed mixer. Next, the paint was filtered to remove skins and other large particles, using a Vorti-Seive with a 150 wire mesh filter screen.

And finally, the paint was canned in both 5-gallon and 1-gallon containers. The 2,900 gallons of recycled paint was test marketed as described below.

FOR MORE DETAIL ABOUT REPROCESSING, SEE THE RECOMMENDATION SECTION (SIII. A.), BELOW.

MARKETING

Community Pride was test marketed as a low-end painter's grade flat interior latex. Test marketing efforts were aimed at commercial painting contractors. Targetted applications included projects where cost containment is important, such as speculative construction or low quality maintenance projects.

At the request of the local paint industry, test marketing was directed towards architectural paint contractors only. Local paint manufacturer/retailers were reluctant to risk their public reputations on a new unproven product -- they felt more secure that they could protect their reputation by working with painting professionals, and not with the public or large institutions. Moreover, contractors are limited in number, yet purchase large quantities of paint. It was thought that it would therefore be easier to introduce a new product successfully.

Sales were not aimed at public agencies because of the difficulty of fitting into or modifying government procurement practices within the short time frame of the project's marketing effort.

For these reasons, the paint was not aimed at individual homeowners or institutions.

The pilot marketing effort was intended to meet four objectives:

- Test whether demand exists at a price of about \$5/gallon;
- Test whether contractors will accept a recycled product, accept its quality and purchase it;
- Test whether its color and tints are acceptable; and
- Document consumer satisfaction with the product after purchase and use.

In an effort to attract a dedicated sales force and successfully introduce Community Pride, the paint was sold through the retail outlets of local paint manufacturers.

The paint was sold beginning January, through May, 1990. Five local paint manufacturer/retail companies volunteered to test market the paint through 19 retail outlets, as displayed in TABLE 1-1.4.

**TABLE 1-1.4
RETAIL OUTLETS**

DALY'S		PRESERVATIVE	
1.	<u>Seattle</u> 3525 Stoneway N. 633-4200	11.	<u>North Seattle</u> 12012 Aurora N. 363-0520
2.	<u>Bellevue</u> 200 - 105th NE 454-3093	12.	<u>South Seattle</u> 3410 Airport Wy S. 763-0300
DANIEL BOONE		13.	<u>Bellevue</u> 2033 - 140th NE 746-4342
3.	<u>Tukwila</u> 15701 Nelson Pl. S. 228-7767	14.	<u>Everett</u> 6620 Evergreen Wy 355-7879
JARVIE		15.	<u>Federal Way</u> 34331 Pac. Hwy S. 838-3727
4.	<u>Seattle</u> 640 Aloha St. 284-1040	16.	<u>Lynnwood</u> 19620 Scribr Lk Rd 776-1564
5.	<u>Tacoma</u> 5102 S. Washington 473-4420	17.	<u>Renton</u> 350 Sunset Blvd N. 228-1750
PARKER		18.	<u>Tacoma</u> 3635 S. Lawrence 475-0191
6.	<u>Ballard</u> 5500 - 14th NW 783-8418	19.	<u>Woodinville</u> 13440 NE 177th Pl. 487-2468
7.	<u>Seattle-South</u> 2924 - 4th S. 467-8981		
8.	<u>Burien</u> 136 SW 152nd 243-4818		
9.	<u>Redmond</u> 15940 Redmond Wy 885-7858		
10.	<u>Renton</u> 206 Wells Ave. S. 255-6262		

Direct sales by the manufacturer/retailers were supported in a variety of ways by the Project Team, including:

- Documentation of the paint's quality;
- Preparation of a product brochure describing the paint and displaying color chips (see EXHIBIT at the end of PART 1);
- Preparing a direct mail marketing piece which a retailer could send to selected contractors, property managers and architectural paint specifiers (see EXHIBIT);
- Publicizing the paint through presentations to trade organizations and articles in trade publications and the general news media (see EXHIBIT); and
- Providing technical support to contractors and to manufacturer/retailer sales staff.

The test marketing effort was evaluated by tracking sales volumes and by surveying the retailers' sales staff. The results of the pilot marketing effort, as well as the paint's technical performance, are described in the next section of this report.

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT

LATEX PAINT RECYCLING

II. FINDINGS

This section evaluates the technical and market performance of four batches of Community Pride recycled latex paint. Latex paint recycling programs elsewhere in the U.S. are also described in this section.

A. PRODUCT PERFORMANCE

Community Pride recycled latex paint was an unqualified technical success. The product's performance was documented in the lab, in the field, and by user surveys.

LAB RESULTS

The first technical test of recycled latex paint is whether it can meet federal restrictions for lead and glycols.

Federal statute and regulations restrict dry lead concentrations to .06% of latex paint, while ethylene glycol and diethylene glycol must fall below 10%. These limits were established by the Consumer Product Safety Act (15 USC 2051 et seq.) and the Federal Hazardous Substance Act (15 USC 1261 et seq.), and by attendant regulations: 16 CFR Part 1303.3 (lead) and 16 CFR 1500.14 (ethylene and diethylene glycol).

All four batches of Community Pride were submitted for testing to Northwest Laboratories, in Seattle. The results were uniformly encouraging.

Each batch of Community Pride falls well below the .06% limit for lead -- ranging from .0025% to .015% (see TABLE 1-2.1 on the next page for details).

This result is significant, since unsorted leftover latex can exceed that limit. Numerous cans of lead-tinted paint were excluded during sorting. The four batches of Community Pride corroborate our findings in "Mother of Paint" that a rigorous sorting protocol can effectively control the lead content in recycled latex paint.

Eight other metals were tested in addition to lead. Of these, zinc, barium and mercury were found in the highest concentration. Zinc is contributed by zinc oxide, a very common white pigment which retards mildew and protects the dried latex from UV damage by sunlight. Barium is also a common pigment.

Mercury is likely contributed by organic mercuric biocides in the paint: phenyl mercuric acetate (PMA), phenyl mercuric oleate (PMO), and phenyl mercuric succinate. The paint industry commonly used these in the past to prevent spoilage of the paint in storage and to discourage the growth of mildew once applied (particularly exterior paints). As of August 20, 1990, mercuric biocides were no longer licensed for addition to make new interior latex paint. PMA may still be added to make exterior latex, however.

Neither the zinc nor barium content in latex paint is regulated.

TABLE 1-2.1
ANALYSIS OF METALS AND ORGANIC SOLVENTS

COMPOUND	ACCEPTABLE VALUE	RESULTS			
		Batch 1	Batch 2	Batch 3	Batch 4
METALS:					
BARIUM ug/g (dry weight)	NOT LIMITED	1,415	723	2,132	1,669
CADMIUM ug/g (dry weight)	NOT LIMITED	2.2	2.6	1.2	2.4
CHROMIUM ug/g (dry wt)	NOT LIMITED	8.6	19.5	18.7	18.0
COPPER ug/g (dry weight)	NOT LIMITED	9.6	5.8	10.5	11.9
LEAD % (dry weight)	0.06% MAX	0.00248	0.00942	0.0147	0.0136
MERCURY ug/g (dry weight)	NOT LIMITED	192	150	151	186
NICKEL ug/g (dry weight)	NOT LIMITED	5.5	6.0	4.3	5.7
SILVER ug/g (dry weight)	NOT LIMITED	< 0.6	< 0.6	< 0.6	< 0.6
ZINC ug/g (dry weight)	NOT LIMITED	2,129	3,311	2,938	2,147
VOLATILE COMPONENTS:					
Volatiles % (including water)	NOT LIMITED	51.3	49.8	51.4	51.1
Ethylene Glycol % (dry wt)	<10%	2.4	2.8	2.6	3.1
Diethylene Glycol % (dry wt)	<10%	0.5	0.5	0.8	0.6
Propylene Glycol % (dry wt)	NOT LIMITED	2.1	3.0	2.9	3.2

DATA SOURCE: Northwest Laboratories of Seattle, Inc; September 12, 1989; Lab No. E 49047; Jeffrey Lo/gren, Chemist.

Community Pride also falls well below the 10% labeling threshold for glycols (see TABLE 1-2.1, above). Indeed, Community Pride's glycol levels were so low that additional ethylene glycol had to be added during reprocessing so the paint could meet federal freeze-thaw specifications. Glycols are used in latex paint as an anti-freeze. Ethylene glycol concentrations ranged from 2.4% - 3.1%. Diethylene glycol ranged from .5% - .8%. These are well below the 10% federal limit.

The second technical test of Community Pride is whether it actually performs well as a paint.

The U.S. General Service Administration's "Federal Standard TT-P-29J" is one widely accepted bench mark for measuring the quality of flat interior latex paints. Each batch of

Community Pride was tested against 25 specifications in TT-P-29J, plus several additional standard industry tests.

The results of these 25 tests are outlined in TABLE 1-2.2, below. Here, as before, Community Pride performed extremely well.

TABLE 1-2.2
LATEX PAINT QUALITY TESTS

TEST	ACCEPTABLE VALUES		RESULTS			
	MIN	MAX	BATCH 1	BATCH 2	BATCH 3	BATCH 4
WEIGHT/GALLON (LBS.)	N/A	N/A	10.87	10.77	10.87	10.87
TOTAL SOLIDS (% BY WEIGHT)	50.0	—	50.1	47.8	50.0	50.3
VISCOSITY (KREBS UNITS)	82	110	86	87	89	86
VISCOSITY STABILITY	—	120	PASSES	PASSES	PASSES	PASSES
FINESS OF GRIND	3	—	4	4	5	4
pH	8	10	8.1	8.3	8.2	8.1
APPLICATION BUBBLING	—	NONE	PASSES	PASSES	PASSES	PASSES
DRY TIME (MINUTES)	—	60	PASSES	PASSES	PASSES	PASSES
ODOR	—	NO OBJECTION	PASSES	PASSES	PASSES	PASSES
SAG (MILS)	10	—	12	12	12	12
FLOW	TO	PASS	PASSES	PASSES	PASSES	PASSES
HIDING CONTRAST RATIO (WET)	93	—	PASSES	PASSES	PASSES	PASSES
HIDING CONTRAST RATIO (DRY)	85	—	PASSES	PASSES	PASSES	PASSES
SCRUB RESISTANCE (CYCLES)	400	—	PASSES	PASSES	PASSES	PASSES
WATER RESISTANCE	TO	PASS	PASSES	PASSES	PASSES	PASSES
WASHABILITY	TO	PASS	PASSES	PASSES	PASSES	PASSES
REFLECTANCE (%)	85	—	PASSES	PASSES	PASSES	PASSES
GLOSS @ DEGREES @ DEGREES	3	10	47	57	55	56
CONDITION IN CONTAINER	TO	PASS	PASSES	PASSES	PASSES	PASSES
WORKING PROPERTIES	TO	PASS	PASSES	PASSES	PASSES	PASSES
FLEXIBILITY (INCH)	14	—	PASSES	PASSES	PASSES	PASSES
FREEZE-THAW RESISTANCE (CY)	—	3	PASSES	PASSES	PASSES	PASSES
APPEARANCE OF DRIED PAINT	TO	PASS	PASSES	PASSES	PASSES	PASSES
COMPATIBILITY	TO	PASS	PASSES	PASSES	PASSES	PASSES
RECOATING	TO	PASS	PASSES	PASSES	PASSES	PASSES
COLOR	TO	PASS	SEE DRAWDOWN FOR COLOR			

* ACCORDING TO FEDERAL SPECIFICATION TT-P-29

DATA SOURCE: Jarvis Paint, August 23, 1989, "OJ" Johnson, Manager.

Community Pride latex paint passes virtually all federal specifications for which it was tested.

All four batches of recycled latex paint met all federal specifications for which they were tested, with the single exception that Batch 2 failed to meet the 50% Total Solids specification. This batch is only 2.2% off the mark. About half of this shortfall was probably caused by the addition of 8 gallons of rinse water into that batch. Total Solids is the fraction of the paint which is non-volatile. However, in this case it is not a critical quality parameter, since the recycled paint performs very well in opacity tests.

[It is interesting to note that "Mother of Paint" failed the same one parameter, and by a similarly small margin. It, too, had excellent opacity.]

Given the diversity of leftover household latex paint which is turned in, it is remarkable how consistent the quality of Community Pride is between all four batches. Even more remarkable is that these results are also virtually identical to those of the very first batch of recycled paint reprocessed for "Mother of Paint" one year earlier (see TABLE 2.3 in Mother of Paint's final report, dated June, 1989). Paint from both programs is of equal quality.

This demonstrates that recycled latex paint can be sorted and reprocessed to produce a good-quality paint which is consistent between batches.

This ability to attain a uniform, good-quality product which is virtually 100% recycled distinguishes Seattle's paint recycling program from others in North America.

Before the paint can be certified to meet all federal specifications, four tests remain to be conducted: Wet Opacity, Fungus Resistance, Anchorage, and Resistance to Alkali. Several of these parameters may be largely irrelevant to the performance of a flat interior latex. Thus, some slight modifications to TT-P-29J may be appropriate as a standard for recycled latex paint. These are outlined in the third section of this report, Recommendations.

The lab results characterize Community Pride as a medium-quality latex paint -- better than many low-end virgin latex paints now on the market.

FIELD RESULTS

The successful performance of Community Pride in the lab is confirmed by field inspections where it has been used by professional painting contractors.

Field inspections were performed to assess a variety of performance parameters, including color evenness, uniformity of sheen and texture, opacity, bubbles, and soiling.

Because the contacts were made with painting contractors, not the building owners, it was difficult to obtain permission to inspect the sites. Two inspections were arranged: one site was a Renton School District maintenance facility, where Community Pride was applied over several different types of paints. This was an excellent test of Community Pride, since the previous paints were of many different colors, glosses and brands. The finished appearance was of a uniform gloss and color, entirely covering the previous coats. The second site was a new office space, with the paint applied to walls, trim and ceiling. Again the paint performed well, imparting a uniform color and gloss to a variety of substrates.

The findings are summarized below, in TABLE 1-2.3.

TABLE 1-2.3
SUMMARY OF FIELD INSPECTIONS OF RECYCLED LATEX PAINT

<u>TEST</u>	<u>FINDINGS</u>
<u>OBLIQUE INSPECTION</u>	
SHEEN AND GRAIN:	GOOD APPEARANCE ON HEAVY TEXTURED SURFACE.
<u>STRAIGHT-ON INSPECTION</u>	
BUBBLES OR PINHOLES:	NONE
COLOR EVENNESS:	VERY UNIFORM, BOTH IN ONE AND TWO COATS
HIDING:	GOOD HIDING, BOTH SPRAY AND ROLLER
FADING NEAR LIGHT SOURCES:	NONE, TOO NEW.
DIRT BY CONVECTION (VENTS, HEATERS, ETC.):	NONE
DIRT BY CONTACT (DOORS, LIGHT SWITCHES):	SOME, NEAR DOORS.
ADHESION:	GOOD, ON TOP OF TEXTURE, WOOD AND MDO
OTHER NOTES:	SOME VARIATION AT BRUSH CUT EDGES WHEN VIEWED AT LOW ANGLE IN STRONG NATURAL LIGHT.
OVERALL EVALUATION:	EXCELLENT

Community Pride performs very well in the field. This is the case regardless of how it is applied (sprayed, rolled or brushed), the number of coats (one or two), or the substrate (painted/unpainted, wood or sheet rock). It has some tendency to show dirt marks in highly trafficked areas. This is because Community Pride is very flat, with a fine, but pronounced, grain to its texture.

In addition to field inspections, a survey of painting contractors who used the paint was also conducted. These contractors generally found that Community Pride exceeded their expectations. A list of 10 contractors was provided to Morley & Associates by the retailers who sold the paint. Of those, four responded to our survey questions on the form found in EXHIBITS. Additional feedback was obtained indirectly through the survey of retail store managers. User survey results are outlined below, in TABLE 1-2.4.

TABLE 1-2.4
SUMMARY OF SURVEY OF RECYCLED PAINT USERS

QUESTION	FINDING
HOW WELL DID THE PAINT COVER OR HIDE?	VERY WELL
DID THE PAINT BUBBLE OR SPLATTER?	NONE
WAS THERE DIFFICULTY WITH DRIPPING ON SURFACE OR APPLICATOR?	NONE
WAS THERE UNIFORM SHEEN OR FLATNESS?	YES
WERE THERE ANY PARTICLES OR SKINS?	NONE
DESCRIBE THE PAINT'S DRYING TIME:	NORMAL FOR LATEX PAINT
DID ITS ODOR DIFFER FROM NEW LATEX?	SEVERAL USERS REPORTED A STRONGER ODOR THAT DISAPPEARED AFTER 3 DAYS.

Painting contractors applied Community Pride for a variety of uses, in a variety of ways. It was used both as a primer/sealer and as a final coat. It was used straight and tinted. One contractor had excellent results mixing Community Pride 50/50 with virgin white latex. This extends the virgin paint, lowering costs, and lightens the color of Community Pride.

Representative comments by users of Community Pride include:

"It's better than a lot of low-end paints," and

"Its coverage was better than expected."

TESTING SUMMARY

In summary, Community Pride recycled interior flat latex performed well in the laboratory, and in actual usage. It is a medium-quality paint which out-performs some low-end virgin latexes.

B. MARKETING

Community Pride was test marketed from January through May, 1990, through 19 retail paint stores which cater to professional painting contractors. Of approximately 2,900 gallons, slightly more than one-fifth (657 gallons) sold at \$5.00 per gallon:

One can extrapolate that by year's end, half of the paint (about 1,575 gallons) would have been sold if sales had been allowed to continue.

In hind sight, the test marketing effort restricted paint sales in several ways:

- The market test was too brief to allow Community Pride to develop a brand identity, user loyalty, or to capitalize on word-of-mouth advertising; and
- Sales were directed towards the most difficult market niche -- sales were not directed at other niches: homeowners and public institutions.

Given these restrictions, a survey was conducted of sales staff at the 19 retail outlets to learn why more contractors did not purchase Community Pride. This issue was important since, as discussed in the preceding few pages, paint contractors who bought and used Community Pride were pleased with its performance.

TABLE 1-2.5 on the next page summarizes the survey results. Store managers and some salespeople were asked questions in three categories: Feedback from Users, Feedback on Sales and Future Sales.

Based on the survey, the most significant impediment to contractor sales was the color of Community Pride's tint base. It was simply too dark for most applications in the commercial market for interior paint.

Those who purchased Community Pride most commonly used it as a primer or sealer over new sheet rock. A number of painting contractors who used Community Pride as a final coat blended it with new white paint to lighten its shade.

Sales volumes at different retail outlets varied significantly. The key seemed to be whether the store had a sales person who took a personal interest in selling Community Pride. Perhaps the strongest lesson about how to improve retail outlet sales is that much more must be done to educate, excite and motivate the sales staff. Several retailers suggested using spiffs, direct commissions to sales staff.

Several stores also noted that inquiries about Community Pride rose and fell with the presence or absence of news coverage about the paint. In the future, a paint recycling program could not depend on continued free news coverage. This underscores the need for regular paid advertising. Our market test had no advertising budget.

And while a number of paint industry representatives have recommended not selling to homeowners, stores where homeowners dominated the customer base had higher sales

volumes. This suggests that Seattle area residents are motivated by a recycling ethic, and may also be attracted by Community Pride's low cost.

This makes sense since the price differential is significantly larger for the residential market (\$2/gallon and more) than for professional paint contractors. Both Parker and Preservative Paint companies offer paint contractors a virgin low-end white latex at a comparable price to Community Pride.

TABLE 1-2.5
SUMMARY OF SURVEY OF RECYCLED LATEX RETAILERS

<u>QUESTION</u>	<u>FINDING</u>
<u>FEEDBACK FROM USERS</u>	Sales staff reported little feedback on Community Pride. Since any feedback tends to be negative, its lack indicated customer satisfaction. Sales staff recalled very few comments from contractors other than general ones that it worked "fine". No comments were reported from a second type of users, homeowners/apartment renters. The most indicative comment there was, "I sold them the paint and I never saw them again."
<u>FEEDBACK ON SALES</u>	
WHAT KIND OF CUSTOMERS WERE BUYING IT?	Primarily contractors, approximately 70-90%.
FOR WHAT USES WAS IT PURCHASED?	Mostly used as a sealer over drywall, or blended with new white paint as a second coat. A minority used it as a top coat.
WHY DIDN'T MORE PEOPLE BUY THE PAINT?	Color. Every respondent cited color as the main drawback. "Seattle Beige" was too dark and a perceived lack of other tint options didn't help. Some prospective buyers who had not used it before also had reservations about whether the paint was of sufficient quality.
WHY DID PEOPLE BUY THE PAINT?	Mainly price. A few bought because of a recycling ethic.
WHAT IS THE CHEAPEST PAINT YOU CARRY?	Range of \$5.25 to \$10, with 12 of 13 between \$6 and \$10.
<u>FUTURE SALES</u>	
HOW SHOULD IT BE SOLD IN THE FUTURE?	Through paint stores. Some suggested direct sales to government agencies, if the paint can be documented to meet government specifications.
WHAT KINDS OF USERS?	Market mainly to contractors, a number advocated sales to government agencies. Some retailers advised not to give much effort to selling to homeowners, while others suggested that they be targeted.
WHAT TYPE OF PRICE RANGE?	Most retailers said to keep price at \$5.00. A few said to lower it to overcome resistance to the color.
WHAT CAN WE DO TO IMPROVE SALES IN A FUTURE PROGRAM?	Make the paint as light as possible, given restrictions of the raw material. Improve advertising and marketing of contractors, and education and incentives to salespeople.

These results suggest that Community Pride can find a market, but that sales efforts must be targeted. Several changes in the market strategy are warranted:

- Aim for specific contractor niches (such as primers and paint blending); and
- Don't just sell to contractors, but also: Governmental Agencies
Homeowners

These and other recommendations for marketing recycled latex are outlined below, in TABLE 1-2.6.

TABLE 1-2.6
RECOMMENDATIONS FOR IMPROVING PAINT SALES

- Lighten the paint's color;
- Provide spiffs or other incentives to sales staff;
- Promote the paint as a primer/sealer;
- Offer it as a blend with white latex;
- Target contractors and applications which use beige, muted tints, or dark colors;
- Consider selling the paint to homeowners; and
- Sell the paint to public agencies.

C. OVERVIEW OF OTHER LATEX PAINT RECYCLING PROGRAMS

To help put Community Pride in context, a survey was conducted of other latex paint recycling programs in the United States.

Recycling leftover latex paint is a relatively new phenomenon. At present, it is concentrated in the western United States; in California, Oregon and Washington, as described below.

CALIFORNIA

MAJOR PAINT COMPANY: A variety of California communities recycle leftover household latex paint using the services of the Major Paints division of the Standard Brands. Major Paint reprocesses the paint provided by each community and returns it (plus 10%) to the agency that supplied it. Major Paints services the cities of San Francisco, Sacramento and Ventura; and the counties of San Bernardino, Ventura, San Diego and Contra Costa. Major Paint provides this service for an "at cost" price, described further, below.

The blending process used by Major Paints yields a blended product which contains only about 10% recycled leftover household latex paint. Major Paint routinely rinses its processing vats with water. This rinse solution is left to settle in a supernatant tank, where the paint solids in the rinse settle to the bottom and much of the water is decanted out, leaving a thin latex paint. This is then mixed with a small amount of leftover household latex paint. Subsequently, new emulsion, pigments and other virgin constituents are added to manufacture a beige latex paint which is about 10% recycled. Advantage: consistent quality paint. Disadvantages: some color variation between batches, low recycled content, processing capacity limited by the volume of rinse water and the 10% blending ratio.

Major Paint reports that they are nearing their capacity limit for recycling paint in this manner. In the past few years there has been a large increase in the amount of leftover household paint sent to them. For example, the city of San Francisco sent 1,000 gallons for reprocessing in all of 1988; but matched this in only the first half of 1989.

Major Paint originally offered recycling for \$2.00 per gallon, at or below true cost, as a community service. Because of the extraordinary volume of paint processing requests, they can no longer afford to do so, and have recently raised the per gallon charge to \$2.83. An additional price hike up to the \$3.00 range may be imminent. Major Paint would like to see other paint companies offer the same service to ease its capacity problem.

SAFETY SPECIALISTS, INC.: This company serves primarily the Santa Clara County area, but its range is significantly larger -- it has even recycled latex paint from Portland, Oregon. In contrast to Major Paint, Safety Specialists is a hazardous waste management firm which contracts with a variety of communities to run household hazardous waste collection events, or to simply handle their wastes. Paint recycling grew out of Safety Specialists' desire to find economical alternatives for disposing of leftover latex. As part of its household hazardous waste services, it sorts the paint, reprocesses it, and arranges sales procedures for the agencies involved.

Safety Specialists charges sponsoring agencies \$2.50 per gallon for collecting and handling the leftover latex, and then sells the recycled paint to volunteer and civic groups for \$1.00 per gallon. The sales price will shortly go to \$3.00 per gallon.

Leftover latex paint is reprocessed in a sort-bulk-filter procedure. The paint is first sorted and bulked into ten different light colors, plus an additional five dark colors set aside to be used as tints. Each color is bulked in 55-gallon drums and then filtered through a coarse 60 mesh screen into 250-gallon batches. Colors vary significantly between batches. The only quality control testing done so far has been UV light exposure to test fading characteristics. Advantages: firm helps market the paint, paint content is 100% recycled, paint is used in exterior applications (e.g. anti-graffiti). Disadvantages: little quality control – color and quality variation between batches; little reprocessing; coarse texture.

Volumes handled by Safety Specialists vary because the firm relies mainly on individual round-up contracts for their paint supply. In the last 14 months Safety Specialists has recycled 15,000 gallons of latex paint, an average of 1,071 gallons a month. Safety Specialists' Gavin Brownlie projects this quantity as increasing over time, but can not quantify, due to the fluctuating nature of the business.

S.E.M. INC.: This company acts as a contractor to San Mateo county to reprocess the county's latex paint. The county sorts and delivers the paint and SEM uses a sort/bulk procedure to produce a low grade paint. The finished product is then returned to the county for internal use.

SAN DIEGO COUNTY: The county has collected and recycled latex paint as part of its household hazardous waste collection program for more than one year, using a combination of round-ups and fixed-site collection sheds. The paint is sorted by color and bulked on site as it is, into 55 gallon drums. The paint is then distributed free to governmental agencies for their graffiti eradication programs. There are no other uses for the paint. Advantages: cheap and easy to do. Disadvantages: inconsistent color from batch to batch and little quality control.

CITY OF SAN FRANCISCO: Norcal, the City's contractor, receives latex paint through a household hazardous waste collection shed at its transfer station. Most of the paint is sent to Major Paint. A moderate amount of unused paint is given away to the public at the site through a paint swap. Reprocessed paint is given away to governmental agencies and civic and volunteer organizations.

CALIFORNIA PAINT RECYCLING TASK FORCE: This program is just starting up and many of its details are not yet finalized. The Task Force is initiating a pilot program to use Major Paint for reprocessing latex collected through local household hazardous waste programs. What is most innovative in this pilot program is a plan to give the recycled paint to the state's General Services Agency. Already, one building has been painted at the State Fair site in Sacramento. One option being explored is having the state's prison population do the reprocessing and this has met with a somewhat positive response from the paint industry. There is also a bill currently pending in the state legislature that would make it possible for household hazardous waste collection sites to accept Small Quantity Generator

wastes on a limited basis.

OREGON

PORTLAND METRO: The Metropolitan Service District (Metro) has planned a pilot program to recycle latex paint gathered at its household hazardous waste round-up in October, 1990. The program is modeled after Seattle's "Mother" and "Son" projects, and will produce a consistent, good quality recycled latex paint for subsequent marketing. Metro staff has already drafted a procurement ordinance to ensure Metro itself will be a major purchaser of the paint. Plans are underway to launch a permanent paint recycling program in 1991, when two permanent collection sheds will open.

Metro's latex recycling program differs from Seattle's in that it will attempt to produce a darker exterior latex paint in addition to the light interior. If successful, this may raise the recycling yield from about 50% of all latex collected, up to as much as 75%.

WASHINGTON

SNOHOMISH COUNTY: This year the county initiated a Paint Swap, in addition to its annual household hazardous waste round-up. The Swap was intended to reduce the volume (and disposal cost) of paint collected at the round-up, by first giving residents an opportunity to donate their paint to be given away to all comers. Approximately 25% of the paint was given away in this manner. After the Swap, any excess (about 75%) was sent to a hazardous waste disposal site.

An interesting note is that the age breakdown shows the majority of users in 1990 to be over 50 years of age (over 65:28%, 51-65:25%, 31-50:42%, 21-30:4.7%, under 21:3%). The paint is inspected, but it is left in its original containers and given away. Advantages: the cheapest and easiest alternative. Disadvantages: space and traffic-intensive; much more paint is collected than is taken away; little control over paint quality.

SEATTLE ANTI-GRAFFITI SQUAD: At the last (ever) Seattle-King County Household Hazardous Waste Round-Up on June 3, 1989, the majority of the latex paint turned in at the Bellevue site was given to the Engineering Department for use on public buildings to cover graffiti. Off-the-cuff estimates of usage rates put the average at 50 gallons per week, and they had not used it all up a year later, by June 1990. Costs were minimal, using volunteer help to collect and sort it.

MINNESOTA

HENNEPIN COUNTY: In the spring of 1990 the county had excluded latex paint from its household hazardous waste collection program, in order to stay within its HHW budget. It had elected to incinerate the latex paint collected by a series of round-ups at an approximate cost of \$10 per gallon, which, due to the large volume of latex paint being collected, would have exceeded the budget for 1990 by approximately 30%. This left no legal disposal option for household latex paint, since it was not legal to dispose of it at a landfill, and householders could not give it to the county. One effect of the latex paint exclusion was that collection quantities of other HHW's decreased. Apparently many people were bringing other HHW's only because they were already bringing latex paint. Consequently the county Board of Commissioners decided to include latex paint in the list of HHW's accepted at the new transfer station at Brooklyn Park, opening August 6, 1990. The county plans to open three more transfer stations over the next four years, continue a program of round-ups and start a wastemobile similar to the one King County in Washington state is using. They are now exploring the possibility of recycling or otherwise recovering latex paint.

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT

LATEX PAINT RECYCLING

III. PROGRAM RECOMMENDATIONS

Based upon Seattle's two successful latex recycling pilots, this section recommends steps for establishing a permanent recycling program at Seattle's two Collection Sheds in 1991.

The pages below describe the technical details of the program, evaluate the market for the paint and its economics, address regulatory issues, and begin to explore whether paint recycling may be extended to include other jurisdictions and leftover paint from commercial sources.

A. DESCRIPTION OF AN ON-GOING PROGRAM

The volume of household-generated leftover latex paint which Seattle may collect is projected for each year through 1995 in TABLE 1-3.1. Residential use of Seattle's north and south Collection Sheds is expected to increase significantly during this period.

Slightly more than 45% of the latex paint turned in at the Collection Sheds is anticipated to be recyclable. Yearly volumes of recyclable latex are projected to amount to 11,000 gallons in 1991, increasing to 56,000 gallons by 1995. The methodology for projecting these volumes is discussed in more detail in the APPENDIX of this report.

TABLE 1-3.1
PROJECTED VOLUMES OF LEFTOVER LATEX PAINT
[As Collected at Seattle's Collection Sheds, 1991-95]

	1991	1992	1993	1994	1995
DRUMS OF LATEX (LOOSE PACK)	1,995	4,242	5,683	7,614	10,201
TOTAL LATEX GALLONS @ 12.27 gal/drum	24,479	52,049	69,730	93,424	125,166
RECYCLABLE GALLONS (45.4% of Total)	11,113	23,630	31,657	42,415	56,825
LANDFILL GALLONS (50.8% of Total)	12,435	26,441	35,423	47,459	63,584
HAZ WASTE GALLONS (3.8% of Total)	930	1,978	2,650	3,550	4,756

In an on-going paint recycling program, all latex would be sorted on-site at the City's north and south Collection Sheds. Leftover household latex will be sorted by Shed staff into three categories (recyclable, disposable, and hazardous). The recommended sorting protocol to segregate the recyclable fraction closely resembles that used in the Son of Paint project, and is outlined in TABLE 1-3.2 and is described in the pages which follow.

TABLE 1-3.2
SORTING PROTOCOL

TYPE OF PAINT	RECOGNITION TRAIT	HANDLING METHOD
Empty/dried cans	Weight, no liquid	Dumpster
Solvent paint, lacquers, stains, unknowns	Label, appearance, odor	Hazardous Waste
Lead latex	Old label, color (white, orange, yellow)	Hazardous Waste
High-mercury latex	Label	Hazardous Waste
Dark latex	Color (darker than paint chip)	Disposable Latex
Sour latex	Odor	Disposable Latex
Frozen latex	Appearance ("sawdust")	Disposable Latex
Physically compromised latex	Appearance	Disposable Latex
White latex	Color	Recyclable Latex (White)
Light latex	Color (lighter than paint chips)	Recyclable Latex (Light)

The revised protocol differs from our recent pilot only in how colors are segregated. First, to lighten the color of the final product, the dividing line for accepting and rejecting colors is raised slightly. Sorters will be given a pastel paint chip which represents the darkest

acceptable shade for each major color group (red, blue, green, yellow, grey, brown, etc.). Second, to prevent the final product from being too yellow, the yellow chip will be especially light. And third, to give the manufacturer more control over color depth, sorters will bulk whites separately from light pastels. This will allow the paint manufacturer to vary the proportion of white-to-pastel in the batching process to achieve the proper color depth.

Necessarily, rejecting more leftover paint to lighten the final product's color will reduce the yield of paint recycling. That is why TABLE 1-3.1 shows only 45.4% of leftover paint as recyclable, while we obtained an actual yield of 47.8% in Son of Paint.

Sorting crews will require specific training in how to conduct the sorting protocol.

Solvent paint, lacquer and stain can be recognized by a number of means. The front panel of the label does not say "latex" and instead may say "alkyd", "lacquer", "stain", or "urethane". The side warning panel will read "combustible", "flammable" or "inflammable". Cleaning instructions say to use paint thinner or mineral spirits. An ingredient list may include mineral spirits or petroleum distillate, not water or glycols. The paint itself may have a skin on top of liquid paint (latex does not). It may look different than latex, and it smells like solvent. Any paint which fits this description is not latex, and should be disposed as a hazardous waste.

Recognizing lead-pigmented paint requires sorters to be very aware of the signs for which to look. Any paint with a label which may predate 1973 is suspect. Read the label to see if it lists lead. Even if it doesn't, any pre-1973 paint which is a white "exterior wood primer" or a "stain resistant primer" is likely to contain lead. Bright orange or yellow paints which predate 1973 should also be rejected. Paints which contain lead can also be recognized by their weight -- they're unusually heavy. Paints which may contain lead should be disposed as a hazardous waste.

Some paint with high levels of mercury can be recognized by its label. Paints which are "mildew resistant" or "anti-fungal" likely contain high mercury levels. Any paint which lists phenyl mercuric acetate (PMA) phenyl mercury oleate (PMO) or phenyl mercury succinate has mercury in it. These paints should be disposed as a hazardous waste.

Dark latex is not inherently non-recyclable, but simply has a low market value. Sorting crews will be provided with paint chips of the darkest acceptable colors for recycling. Any paint darker than this guide should be disposed (as a hazardous waste, or, with testing, as a non-hazardous solid waste).

Sour latex is paint whose biocides have failed, allowing bacteria to grow in the paint. It smells rotten, and its odor is unmistakable. Sour latex should be disposed (as a hazardous waste, or, with testing, as a non-hazardous solid waste).

Frozen latex is paint which has gone through freeze-thaw cycles, causing its emulsion to fail. The paint solids are no longer in suspension, and a precipitate forms which looks grainy. Advanced cases look as though sawdust had been added to the paint. Frozen latex should be disposed (as a hazardous waste, or, with testing, as a non-hazardous solid waste).

Only white and light colored latex which survives all of the rejection criteria above is suitable for recycling. White and light paint will be bulked separately to enable the paint manufacturer to adjust color depth by varying the mix of light and white.

Sorting will be conducted by Collection Shed staff. In order to streamline sorting, an industrial can opener would be purchased for each Shed to reduce time spent prying open can lids. On this basis, it is estimated that it will take 3 1/3 minutes to sort and bulk each full gallon of latex.

Drums of recyclable latex will be accumulated (on site, or at a paint manufacturer) until there is enough to reprocess in a 1,000 gallon batch.

Sorted paint will be shipped to a paint manufacturer for reprocessing. The manufacturer will mix the white and the light latex to attain the proper color depth, mix it, and draw a sample for testing.

Any excess volume of light latex will be held for blending with a subsequent batch. If excess light latex continues to accumulate over successive batches, it can simply be disposed of. Alternately, Collection Shed staff can simply sort paint to a lighter standard.

Basic steps for reprocessing the batched paint are outlined in TABLE 1-3.3.

1.	MIX WHITE & LIGHT PAINT TO ATTAIN COLOR DEPTH
2.	TEST FOR HEAVY METALS AND GLYCOL LEVELS
3.	TEST TO DETERMINE REPROCESSING NEEDS [density, percent solids, contrast ratio, leveling, sag, bubbling, grind, gloss, and color]
4.	PREPARE LABEL AND MSDS
5.	ADD ADDITIVES PER TEST RESULTS
6.	ADD PIGMENTS TO ADJUST COLOR
7.	MIX USING A HIGH SPEED DISPERSER
8.	FILTER WITH A VORTI-SIEVE (100 MESH)
9.	QUALITY CONTROL TESTS
10.	CAN PAINT

The concentrations of lead, mercury, and ethylene and diethylene glycols must be tested to determine whether the paint is recyclable, and to meet labeling and Material Safety Data Sheet (MSDS) requirements.

Additional tests by the manufacturer are necessary to determine which adjustments must be made to the paint to bring it to quality specifications. These tests include density, percent solids, contrast ratio, leveling, sag, bubbling, grind, gloss, and color.

Before the paint is reprocessed, a label and MSDS must be prepared. It is anticipated that these could be prepared once and reused for successive batches. [Please see §E, below, for more information about preparing an MSDS.]

Based on results from initial testing, the manufacturer could add a variety of additives to bring the paint to specification. These may include ethylene glycol to raise freeze resistance, hydroxy ethyl cellulose to adjust viscosity, odor masks, biocides, and a variety of other additives. Pigments (titanium dioxide or tints) would also be added as needed to bring the color to specification.

Additives and pigments will be thoroughly mixed into the paint using a high speed disperser. The final product will be filtered using a 100 mesh (rather than the 150 mesh originally used) screen. Using a coarser mesh will increase the paint's grind size somewhat, but will greatly speed reprocessing efficiency.

The paint will be retested to assure quality control, and consistency between batches. The paint will be canned and labeled in 5- and 1-gallon containers, and will be ready for sale.

TABLE 1-3.4 proposes specifications for an on-going program to recycle flat interior latex paint.

TABLE 1-3.4
RECOMMENDED SPECIFICATIONS
FOR RECYCLED FLAT INTERIOR LATEX PAINT

CHARACTERISTIC	ACCEPTABLE VALUES	
	MIN	MAX
QUANTITATIVE:		
CONSISTENCY (KREBS UNITS)	82	110*
TOTAL SOLIDS (% BY WEIGHT)	45	—†
DRY HARD (MINUTES)	—	60*
85° SPECULAR GLOSS	1	10*
FINESS OF GRIND	1	—†
LEAD CONTENT (% BY DRY WEIGHT)	—	0.06%*
HIDING CONTRAST RATIO (REWRITTEN)	93	—†
HIDING CONTRAST RATIO (DRY)	85	—†
QUALITATIVE:		
CONDITION IN CONTAINER	TO	PASS*
STORAGE (VISCOSITY) STABILITY (EU)	77	115*
COLOR	TO BE DETERMINED†	
FLEXIBILITY (INCH)	1/4	—†
WORKING PROPERTIES	TO	PASS*
APPEARANCE OF DRIED PAINT	TO	PASS*
ANCHORAGE (INCH)	—	1/16*
SCRUB RESISTANCE (CYCLES)	400	—†
WASHABILITY	—	10%*
WASHABILITY AT 85°	—	20%*
REFLECTANCE (%)	85	—†
FREEZE-THAW RESISTANCE (EU)	—	—†
WATER RESISTANCE	TO	PASS*
ALKALI RESISTANCE	—	—†
RESISTANCE TO BIOLOGICAL GROWTH	TO	PASS*
RESISTANCE TO REFLECTANCE VARIATION	TO	PASS*
RECOATING	TO	PASS*
ODOR	TO	PASS*
OTHERS:‡		
pH	8	10*
APPLICATION BUBBLING	—	NONE*
SAG (MILS)	10	—†

* Per TT-P-291

† Deviation from TT-P-291

‡ Addition to TT-P-291

B. MARKETING

To be successful, a latex paint recycling program must be accompanied by three conditions:

- A waste supply of leftover latex paint;
- A technology to reprocess the paint; and
- A market to purchase and use the recycled paint which results.

In Seattle, the first two conditions clearly are met. A continuing supply of leftover latex paint is readily available through the City's two Household Hazardous Waste Collection Sheds. Likewise, as described by this report, the technology for sorting and reprocessing the paint is clearly available. This has been as documented in the Findings section, above.

This leaves the third condition – the availability of a market – as the remaining issue to resolve. Section II, Findings, described the results of a five month effort to test market painting contractors.

On one hand, the 650 gallons which were sold, and the product satisfaction among the contractors who bought it, suggests that developing a viable market niche in the future among painting contractors is feasible. On the other hand, the market test also demonstrated that this niche is not yet sufficiently developed to support a full-scale paint recycling program.

Section II identified two other potential markets: homeowners and public agencies.

Like the market with painting contractors, the homeowner market shows good potential, but is not yet realized. Without further development, it is not sufficient to support an on-going paint recycling program.

It therefore is apparent that sales to public agencies will play a critical role if an on-going recycling program is to be launched.

Based upon discussions with a number of public agencies, it appears feasible to establish sufficient agency sales to support a full-scale paint recycling program.

The sales potential of the City of Seattle, the Seattle and King County Housing Authorities, King County, and Washington State were assessed, and are described below. In each case, the timing for establishing a market for recycled latex paint is excellent.

CITY OF SEATTLE

As the jurisdiction which has taken the lead in recycling leftover latex paint, it is logical that the City of Seattle should wish to help sustain an on-going program by purchasing and using Community Pride.

The time is ideal for establishing a City market for recycled latex: the City's Purchasing

Department recently drafted a procurement ordinance for adoption by the Seattle City Council.

Entitled the "Seattle Recycled Product and Hazardous Waste Reduction Procurement Policy", its purpose is to,

"promote market development of recycled ... products derived from waste streams that City government manages for City residents or businesses, and products that reduce the use of hazardous substances and/or generation of hazardous wastes by establishing preferential purchase programs applicable to City departments and City contractors" [Emphasis added]

The ordinance also states that no bid specifications may discourage the use of recycled products unless a waiver is granted by the City Purchasing Agent. It also establishes a price preference for designated commodities.

The policies adopted in the ordinance establish a sound basis by which the City can begin a procurement program for recycled latex paint. Because the ordinance does not specifically address recycled latex, the Seattle Solid Waste Utility will have to work with the Purchasing Office to ensure the ordinance is implemented effectively in this endeavor.

If the City's paint procurement practices are altered by the ordinance, it has the opportunity to become a major purchaser of recycled latex paint. Several City departments are large users of latex paint. For example, Seattle City Light's operations within Seattle use 50 - 100 gallons of interior latex paint each month. Additional paint is used at City Light's Skagit facility.

Other major users of latex paint include the Department of Administrative Services, the Department of Parks and Recreation, and Seattle Center. Unfortunately, these agencies did not furnish information about how much paint they use -- but the volume is significant.

SEATTLE HOUSING AUTHORITY

The bulk of the paint that the Seattle Housing Authority uses is latex paint, both interior and exterior. Solvent-based paints are used only on exterior trim and doors.

In 1989 the Authority used approximately 13,500 gallons of interior latex paint, of which 98% was the color described as "eggshell white", a popular off-white color. Records for the use of exterior latex are not clear, but staff estimates the use of 6,000 gallons in 1989 for the miscellaneous light colors.

KING COUNTY HOUSING AUTHORITY

The King County Housing Authority is an independent public agency, separate from King County. It provides low-income housing throughout the area. The Housing Authority uses large quantities of flat interior latex paint to maintain its housing units.

Housing Authority staff estimates that the Authority uses 5,000-6,000 gallons of interior latex per year. 70-80% (3,500-4,800 gallons) is a "Cuban Sand" color, which is similar to the color of Community Pride recycled latex, though slightly more yellow.

The Housing Authority has purchased its interior latex paint through a H.U.D. contract for \$7.00 per gallon. To reduce this cost, the Housing Authority plans to begin procuring paint directly through an open bid process. Staff reports that the bid request will probably be for a one-year contract to supply paint to the agency. They expect to publish a request for bids late summer or early fall, 1990.

Housing Authority staff reports that Community Pride would have to meet three criteria before the agency would consider purchasing it. The first criterion is that the paint must meet acceptable limits for lead content. The Housing Authority tests for lead levels using an X-ray test of dried paint film, with a limit of 1 mg of lead per square centimeter. Based on Community Pride's measured lead content of 0.00248 - 0.0136%, it is anticipated that this test can be met with ease.

A second Housing Authority criterion is that the paint must be acceptable to the paint crew. During the first pilot recycling program ("Mother of Paint") recycled latex was tested at the Housing Authority's Springwood Apartments. Since then, the product has been further improved. Additional discussions with Housing Authority staff should be conducted to ensure the paint receives their approval. Issues of particular interest to staff will be color, hiding and coverage, and handling properties.

The agency's third criterion is that the paint be competitive in price. In large volumes, Community Pride paint has sold for \$4.50 per gallon, compared to the \$7.00 price the agency currently pays through HUD.

The projected production of Community Pride recycled latex in 1991 is 11,113 gallons. If the agency used Community Pride, the King County Housing Authority alone could consume 32-43% of the year's total production of recycled latex paint. Moreover, in doing so, the Housing Authority could save between \$8,750 and \$12,000 as compared to current expenditures.

KING COUNTY

King County has already adopted a Procurement Policy to promote the purchase of recycled products like Community Pride. Like Seattle's, King County's ordinance establishes a price preference for recycled products.

However, the major hurdle which obstructs purchase of recycled latex is not price, but product specifications (such as color, freeze-thaw resistance, or others) which might arbitrarily preclude its use.

King County Solid Waste Division staff has signaled its desire to develop purchasing practices which encourage use of recycled latex, rather than discriminate against it. Staff has identified several means (such as Executive Order) for mandating specifications which

eliminate these barriers and which establish an affirmative policy to use recycled latex.

If this policy is put in place, King County too will become a major market for recycled latex paint.

WASHINGTON STATE

At present, Washington State procures paint through a variety of means. For example, the Department of General Administration takes bids and issues contracts for two types of paint: one is traffic line paint only; and the other is a wide variety of architectural coatings. The state holds contracts for these paints with "various vendors". The contracts are usually for one year and can be extended by mutual agreement between the state and the vendor.

In addition, each state agency also has a limited ability to buy paint on its own, outside of the General Administration contract. Each agency has its own specifications and procurement process. General Administration exerts little control over these purchases, and does not even track the quantity of paint procured in this manner.

In 1988, the Washington State Legislature passed a law authorizing the General Administration to use price preference to encourage the purchase of recycled products. The Department of General Administration and Department of Ecology are presently drafting a "Rule on Bid Preference" to put the law into practice. The rule should be ready for the Governor's signature by the end of September, 1990.

As presently drafted, the rule would establish a 10% price preference for all paint containing at least 15% recycled material (including processing waste from manufacturing). As currently drafted, the policy provides virtually no preference for increasing the recycled content above 15%. Only in the event of an even price tie would a 100% recycled paint receive preference over a 15% recycled paint.

In addition, the proposed rule does not address changing State paint specifications which might arbitrarily preclude recycled paint.

Morley & Associates has been invited to review the draft rule and recommend changes to improve how it applies to recycled latex paint. If the rule is revised to effectively promote recycled paint procurement, Washington State could become a major user of recycled latex.

Additional legislation addressing these issues may also be a possibility in the 1991 Legislative Session. However, a number of procurement bills were introduced in the last few years and died.

SUMMARY

In summary, the five jurisdictions described above appear to have the capacity to consume all latex produced through an on-going paint recycling program. Moreover, there are many more jurisdictions to turn to than these.

TABLE 1-3.5 lists more than fifty agencies that are potential users of Community Pride.

TABLE 3.4
POTENTIAL MARKETS IN
GOVERNMENTAL AGENCIES IN WASHINGTON STATE

City of Seattle:	Department of Administrative Services Purchasing Office City Light Division (& Skagit Project) Parks and Recreation Department Seattle Center
Housing Authorities:	Seattle Housing Authority King County Housing Authority Renton Housing Authority
King County:	Executive Administration Department Facilities Management Division Public Works Department Natural Resources & Parks Division Department of Human Services Department of Health Services Kingdome Stadium
Suburban Cities	
Washington State:	Department of General Administration
Metro:	Transit Division Water Quality Division
Port of Seattle	
School Districts:	Seattle Other districts within King County
Community Colleges	
University of Washington	

A reliable mechanism for selling Community Pride to these public agencies must be put in place. Indeed, a permanent recycling program should not commence until this mechanism is established and the market is secured.

Such a market to public agencies would allow the paint recycling program to get off the ground successfully. Once operating in this manner, there will be an opportunity to develop ancillary markets with painting contractors and homeowners. It is these additional markets which will accommodate future growth.

In the future, Community Pride should be marketed to painting contractors as a primer and as a low-cost paint extender which can be blended with new white paint. Community Pride

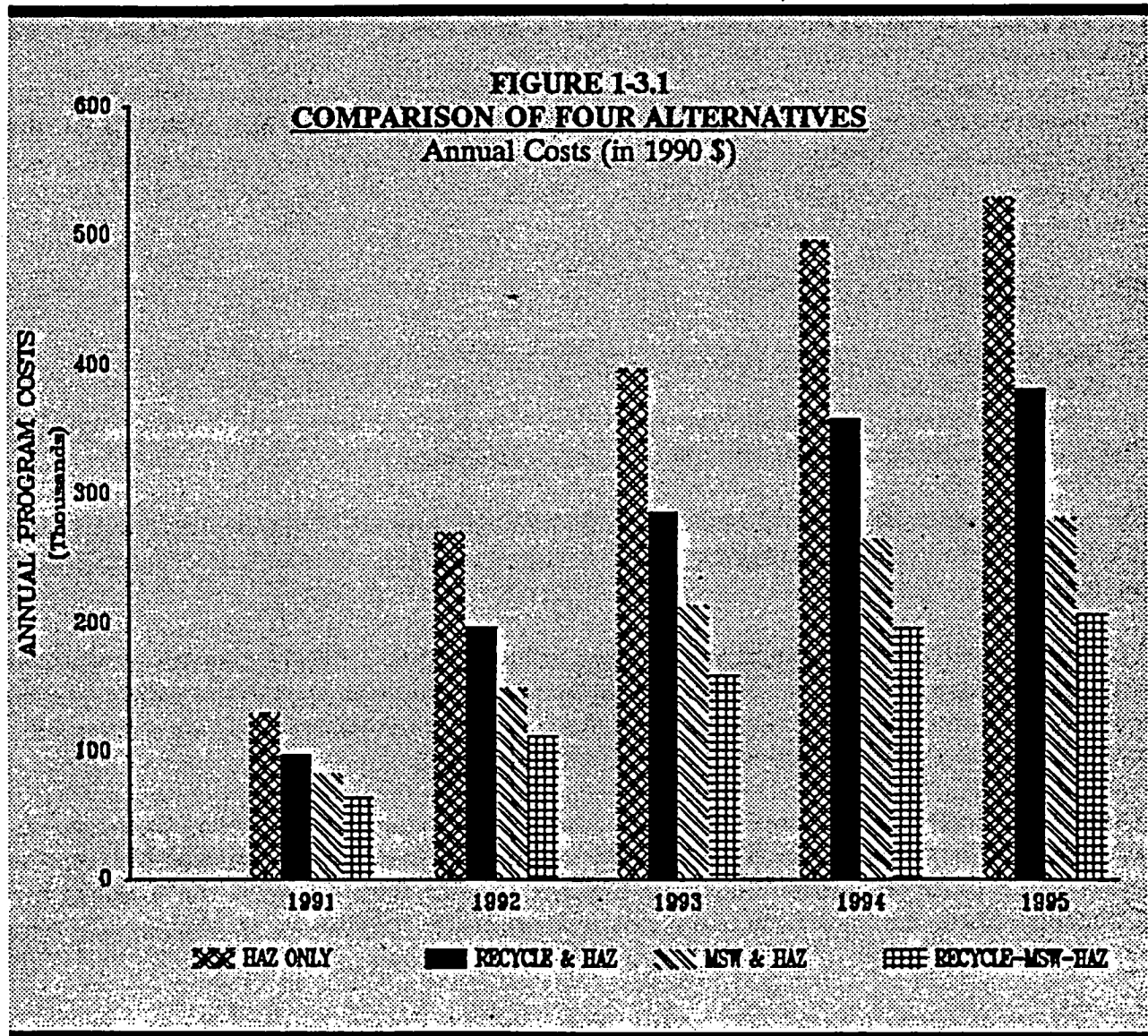
should be offered to homeowners as a low-cost, environmentally-sound latex paint. It should be offered through homeowner-oriented retailers which target cost-conscious and/or environmentally-concerned consumers. Examples might include large retailers such as Fred Meyer, Pay 'N Save, Pay 'N Pak, and Ernst; and smaller retailers such as City People's Mercantile.

A latex paint recycling program can be successfully launched, provided that a market to public agencies is put in place first. Because many agencies are currently revising their procurement policies to promote recycling, the timing is ideal for establishing this public agency market. In the future, additional markets can be developed for painting contractors and homeowners which will accommodate significant future growth.

C. ECONOMIC ANALYSIS

The economics of an on-going latex paint recycling program appear to be excellent. FIGURE 1-3.1 compares the cost of four latex paint management alternatives in years 1991-1995:

- Hazardous Disposal only (100%);
- Recycling a portion (45.4%), and Haz. Disposing the rest (54.6%);
- Landfilling a portion as MSW (96.2%), and Haz. Disposing the rest (3.8%); and
- Recycling a portion (45.4%), Landfilling a portion (50.8%), and Haz Disposing the rest (3.8%)



The fourth option (recycling 45% of the paint, landfilling 51% of the paint as MSW, and disposing of the remaining 4% as hazardous waste) is the most economical. It cuts current disposal costs by 60%.

Starting next year, this combined recycling and disposal program could net savings for the City of Seattle which are worth \$67,500 in today's dollars. By 1995, the present value of the program's savings could be \$322,000 for that year alone.

This combined recycling option is 25% less expensive than landfilling a majority of the paint and disposing of the rest as hazardous waste.

In the event that latex paint can not be landfilled as a municipal solid waste, a program which recycles 45% of the paint and disposes the remainder as a hazardous waste would cut current disposal costs by about 25%.

This analysis demonstrates that there would be a significant cost to the City in not recycling leftover latex.

Detailed spreadsheets which project the costs for each option are included in the APPENDIX of this report.

D. INSTITUTIONAL ISSUES

STRUCTURE

An on-going latex paint recycling program potentially places both local government and the paint manufacturing industry into new, unaccustomed roles.

As operator of the Household Hazardous Waste Collection Shed, the Seattle Solid Waste Utility is not accustomed to creating a manufactured product, one which must subsequently be marketed.

Similarly, local paint manufacturers are not accustomed to working with blended waste materials instead of new raw materials. And because sorting is the key to the paint's quality, the manufacturers would be dependent on those who sort the paint -- the City -- for quality control over the product they would manufacture and sell.

Given their preferences, both local government and the paint industry would likely wish to stick to what they are used to. Thus, the City would likely prefer paint recycling to resemble other waste management methods, wherein a contractor simply collects the waste at the Collection Shed, assumes ownership, and independently handles its treatment and final disposition.

In turn, paint companies would likely shy away from assuming ownership and risk for a waste material over which they have little quality control, and for which there is no proven market. At present, paint companies are comfortable reprocessing the material to City specifications, but on a contracted basis, wherein the City retains ownership.

Ultimately, the City of Seattle would like to contract with a company to assume ownership

of the waste paint, recycle it, and sell it. In the immediate future, the paint industry is not prepared to assume that role. However, it would likely do so once the program has operated successfully and a dependable market has been established.

In order to launch a paint recycling program and allow the paint industry to gain more confidence in this new product, an interim operating arrangement will be necessary.

During the program's first one or two years of operation paint reprocessing and sales should be conducted under contract for the City, whereby the City would retain ownership of the paint until its final sale. In addition to contracting for paint reprocessing, the City would also contract with a distributor to manage its sales. This arrangement will allow the program to establish that: 1) the City can exercise consistent quality control during paint sorting; and 2) stable public agency markets for the paint are in place.

After demonstrating these two conditions to the paint industry through one or two years of operation, it should be possible to negotiate a favorable contract with a paint manufacturer wherein they take responsibility and ownership for the paint as soon as it is picked up from the City's Collection Sheds.

FINANCING & BUDGET

An unrelated implementation issue is how the Seattle Solid Waste Utility can finance the start-up of a paint recycling program.

The Seattle Solid Waste Utility projects a 1991 budget for disposing of household hazardous waste turned in at its two Collection Sheds of \$367,600. This figure is for disposal only, and does not include labor. Based on past years, 36% of this expenditure will go for latex paint if it is disposed as a hazardous waste. This means the Seattle Solid Waste Utility will likely have \$132,000 with which to launch and operate an on-going latex paint recycling program in 1991.

As detailed in a spreadsheet in the APPENDIX to this report, a combined recycling and disposal program for latex paint is expected to have a net operating cost of \$64,000. This leaves the Utility \$68,000 to finance any start-up costs (such as firming up purchases by public institutions) or to absorb poor sales (sales revenues are currently projected at \$50,000 for the year).

E. REGULATORY ISSUES

MATERIAL SAFETY DATA SHEETS (MSDSs)

Federal and State regulations require that a Material Safety Data Sheet (MSDS) be prepared for any manufactured product which may contain hazardous constituents. The MSDS is intended to promote worker safety by listing hazardous ingredients along with pertinent safety and health information.

The ability to meet requirements for a recycled paint MSDS was initially researched in "Mother of Paint". Both Federal staff (Occupational Safety and Health Administration) and State staff (Washington Department of Labor and Industry) then stated that MSDS requirements could be met without extensive testing of each batch. They cited regulatory text to suggest that manufacturers of mixtures (like leftover latex) need only list those hazardous ingredients of which they are aware. Staff suggested that there is no legal responsibility for the manufacturer to conduct tests on a mixture to discover other ingredients which may be unknown. Such tests, if required of each paint batch, would be prohibitively expensive.

This interpretation hinged on regulations for procedures to determine if a mixture is a "physical hazard" [29 CFR 1910.1200(d)(5)(iii) and WAC 296-62-05407(5)(c)].

Subsequently, staff with Washington Department of Ecology questioned the import of "physical hazard". Additional research revealed additional regulatory language which describes testing requirements to measure the health hazards of mixtures.

Federal and State language on health hazards are virtually identical [see 29 CFR 1910.1200(d)(5)(i) and (ii), and WAC 296-62-05407(5)(a) and (b)]. The first section [i and a] outlines procedures (such as bioassays) for testing a mixture to determine whether it poses a health hazard – these tests are time consuming and very expensive. The second section [ii and b] instead allows the manufacturer to construct an MSDS based on the properties of known constituents of the mixture. It reads in part,

"If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazard as do the components which comprise one percent (by weight or volume) or greater of the mixture, except that the mixture shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1 percent or greater which is considered to be a carcinogen under WAC 296-62-05407(4)." [WAC 296-62-05407(5)(b)]

Two issues required resolution before an on-going paint recycling program would be feasible. First, which method must be used to develop an MSDS: conducting bioassays on the blended paint, or building an MSDS based on known constituents? Bioassay tests would be very expensive and time consuming; and would likely jeopardize the viability of a paint recycling program.

Both state and federal agency staff now state that an MSDS can be prepared without bioassays. An MSDS can be prepared based on the components in the paint. No bioassay is required.

The second issue is whether extensive testing is required to identify all components that are 1% or even 0.1% of the paint formulation. Conducting chemical assays to identify all of these compounds would be prohibitively expensive.

Both state and federal agency staff state that a list of paint components may be developed based available sources, without extensive chemical tests to identify every component comprising 0.1% or more of the paint.

A list of components for developing an MSDS would be drawn from five sources:

1. The City of Seattle has already conducted tests to identify many constituents in seven samples of blended leftover latex paint. Three samples were tested for during Mother of Paint (total metals, E.P. toxicity, and BNA). Thirteen volatile and semi-volatile organic compounds were identified, as well as the concentrations of eight heavy metals (see the Final Report for Mother of Paint, dated June, 1989). Four other samples of leftover latex have been tested through the disposal portion of Son of Paint (total metals, E.P. toxicity, BNA and VOC). In this case, 24 volatile and semi-volatile organic compounds have been identified, along with the concentrations of twelve heavy metals (see test results in PART 2 of this report).
2. As part of an on-going latex disposal program, it is proposed in PART 2 that similar tests be run once each year on at least one batch of leftover latex. If this practice is adopted, any additional compounds identified would be added to the MSDS annually.
3. Each batch of recycled latex paint will be tested upon manufacture to measure total metals (including lead and mercury) and selected glycols.
4. The list of components developed by the first three means would be supplemented by information drawn from the MSDSs for several brands of new latex paint currently being manufactured.
5. A list of other common latex ingredients drawn up by paint industry technicians.

The list of constituents compiled from these five sources would be researched in the literature to identify health and safety concerns and precautions. Recent EPA data on mercuric fungicides would be included (see below). From this, an MSDS will be prepared.

Staff from both the U.S. Occupational Safety and Health Administration and the Washington Department of Labor and Industry have indicated that an MSDS prepared in this manner would meet regulatory requirements for preparing an MSDS based on the paint's components.

MERCURY

Until recently, mercuric biocides in latex paint have not been regulated. Instead, the paint industry has voluntarily been shifting toward non-mercuric fungicides.

In 1989, a Detroit-area family was exposed to toxic levels of mercury after painting their home's interior. The family's 4-year-old son developed acrodynia, a reaction to toxic levels of mercury in the body.

Their house had recently been involved in a fire, and had been repainted with a latex containing excessive amounts of mercuric fungicides (mercury was present at 930 parts per million, three times the 300 ppm level which is the limit of what has generally been accepted in interior latex).

Concern over this incident has triggered renewed efforts by the U.S. Environmental Protection Agency to regulate or otherwise reduce mercuric biocides in new latex paints.

On June 29, 1990, the U.S. EPA published a notice in the Federal Register entitled "Pesticide Products Containing Phenylmercury and Other Mercury Compounds; Receipt of Requests for Voluntary Cancellation and Amendments to Delete Uses."

In response to the Detroit incident and additional information on the health effects of mercuric fungicides, the EPA approached the four manufacturers of mercuric fungicides, and was able to convince them to voluntarily amend their FIFRA registrations for phenyl mercuric acetate (PMA), di(phenylmercuric) dodecanyl succinate (PMDS), phenylmercuric oleate (PMO) and 3-(chloromethoxy)propylmercuric acetate (CMPA), such that they may no longer be added to new interior latex paints. EPA may seek a similar restriction for mercuric fungicides in exterior paint within the next two years.

EPA staff reports that the change in FIFRA registration only restricts new additions of mercuric fungicides to paint -- it has no direct impact on recycling old leftover latex which already contains mercuric fungicides.

Thus, according to the EPA, producing and marketing a recycled interior latex paint fully complies with the change in FIFRA registration for mercuric fungicides.

According to a recent news release by the agency,

"EPA prefers that consumers use paints which do not contain mercury when painting indoor surfaces. To deal with existing stocks of paint containing mercury, the National Paint and Coatings Assn. is working with paint manufacturers to relabel all paints with higher mercury levels (over 200 parts per million) for exterior use only. EPA believes that consumers may continue to use interior paint with lower mercury levels (200 part per million or less) without unreasonable risk if they follow all label directions, which include ventilating thoroughly during and after use and minimizing exposure to children." [emphasis added] (EPA news release; June 29, 1990; page 1).

For an on-going latex paint recycling program, EPA staff recommends that the label be modified to indicate that mercury is present and to emphasize proper precautions.

EPA is sending the City of Seattle a copy of its environmental fact sheet on mercuric fungicides. The environmental fact sheet reviews studies and journal articles on the health risks of mercuric fungicides. It is recommended that the City review the fact sheet and the available literature to confirm that exposure to mercuric fungicides below 200 parts per million in interior latex paint poses an insignificant health risk.

F. APPLICABILITY TO OTHER JURISDICTIONS

Latex paint recycling programs can be established in communities which neighbor Seattle, and in many jurisdictions which collect leftover latex with household hazardous waste elsewhere in Washington and the United States.

A community must meet three criteria in order to successfully initiate a paint recycling program which produces a quality, marketable, paint like Community Pride.

- There must be a ready supply of leftover householder latex paint collected on a regular basis;
- Paint manufacturers must be available with the capability to reprocess the paint; and
- There must be a reliable market to purchase and use the recycled paint.

Many communities can meet these criteria. For example, King County's Household Hazardous Wastemobile will probably collect about 13,000 gallons of leftover latex in 1990 - a ready supply if ever there was one. About 6,000 gallons of this could be recycled, a cost savings to the County. As demonstrated by Seattle's two pilot paint recycling projects, there are several local manufacturers with interest and the capability to reprocess King County's paint. And as discussed in the Marketing portion of this section, reliable public agency markets for the paint can likely be put in place -- King County and other local jurisdictions simply need to do so.

Nearby communities (like Seattle and King County) should pool together to operate combined paint recycling programs. It is especially important for smaller communities to combine programs since there are real economies of scale, and recycling small volumes can be prohibitively expensive.

Combining neighboring paint recycling programs also simplifies marketing efforts (there is only one recycled paint to sell and for consumers to get used to) and prevents neighboring recycling programs from competing against one another to sell the paint. Because the market for using recycled latex is not yet firmly established, the confusion generated by competing product lines would likely jeopardize the programs' success.

A combined Seattle and King County latex paint recycling program could be organized in a number of different ways. Each jurisdiction would be individually responsible for collecting, sorting and bulking the paint (with its own staff, in the case of Seattle, or as a contracted service, in the case of King County). Reprocessing and marketing could be organized along several different lines:

- Each jurisdiction could contract independently with the same paint manufacturer and marketer, using identical work scope language to create a uniform product and sales program;
- The jurisdictions could enter into an interlocal agreement assigning one of them lead responsibility for contracting for reprocessing and marketing on behalf of both of them. Issues of ownership of the paint, liability, revenues and payments would also be addressed in the agreement;
- Both jurisdictions could assign their paint and responsibility for managing the recycling program to a third entity, such as the King County Marketing Commission, or the Technical Committee of the Moderate Risk Waste Plan. Both jurisdictions would enter into an interlocal agreement or contract with the third entity.

By initiating a latex paint recycling program as an alternative to disposing the paint as a hazardous waste, a community promotes environmental protection and reduces its disposal costs. And by purchasing and using the inexpensive recycled paint that results, a community may also reduce its expenditures to purchase paint.

G. APPLICABILITY TO COMMERCIAL PAINT

This report has focused on recycling leftover latex paint collected from households. Yet householders are not the only generators. Businesses also use and dispose of latex paint.

In 1989, the Local Hazardous Waste Management Plan for Seattle-King County estimated that small quantity commercial generators (SQGs) in Seattle and King County generated about 12,700 tons of hazardous waste, 2% (about 46,700 gallons) of which was latex paint.

This is a lot of leftover latex paint. A program to recycle commercially-generated leftover latex could match or surpass the size of a household paint recycling program. Here too, the benefits would be both environmental and economic.

TABLE 1-3.6 highlights several issues which must be resolved before a commercial paint recycling program can be established.

TABLE 1-3.6	
<u>COMMERCIAL PAINT RECYCLING ISSUES</u>	
■	How would leftover commercial paint be collected and sorted?
■	Do sites where the paint is collected and reprocessed need to be permitted as hazardous waste TSDs?
■	Can a market be established to purchase and use the recycled commercial paint?

The first issue is significant, since Seattle and most local governments do not collect commercially generated hazardous wastes. Leftover commercial latex could be collected through existing hazardous waste management companies, through paint retailers, or by several other means. Setting up this "reverse distribution" network, and establishing a way for it to pay for itself is a task which has yet to be accomplished.

The collection facility could not accept any paints which might be considered hazardous from a regulated commercial generator. In that case, the collection facility would have to be permitted as a hazardous waste Storage Facility.

Because the majority of latex paint is non-hazardous, this situation can be avoided by sorting the paint as it is collected, and immediately returning to the generator any paint which appears to be hazardous.

The third issue, establishing a market for recycled commercial paint, could probably be met by requiring painting contractors to purchase as much paint as they turn in for recycling.

H. NEXT STEPS

To initiate a latex paint recycling program, two tasks should first be accomplished. These are outlined below:

- Examine available literature on the potential health risks posed by residual levels of mercuric biocides in recycled interior latex paint (less than 200 PPM); and
- Line up recycled paint procurement with the City of Seattle and other public agencies.

Once these steps are in place, the City can move forward to establish a contract with a paint manufacturer to reprocess the paint according to the specifications outlined in this report in TABLE 1-3.4; train staff at the City's two Collection Sheds; and begin sorting and reprocessing latex paint in 1991.

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT

LATEX PAINT RECYCLING

CONCLUSION

In conclusion, Seattle's pilot paint recycling project has been a distinct success.

The project has demonstrated that a good quality 100% recycled latex paint can be produced which is remarkably consistent between batches. Seattle is the first community in the country to achieve this result.

A pilot marketing effort and subsequent research shows that public agencies could easily consume all the recycled latex which the City may produce -- it is simply necessary to put the proper procurement system in place. Recycled latex also shows potential as a primer and paint extender for professional painting contractors, and as an inexpensive, environmentally enhancing, paint for individual homeowners.

Moreover, a paint recycling program can cut current latex disposal costs by as much as 60%.

It remains necessary to confirm that the paint's mercury content does not pose a health risk, and to line up procurement guarantees with public agencies.

On this basis, it is recommended that the City of Seattle work to initiate a permanent latex paint recycling program in 1991. In doing so, the City will reduce its reliance on hazardous waste landfills, and promote recycling, while reducing its household hazardous waste management costs.

SEATTLE PAINT RECYCLING & DISPOSAL PROJECT
LATEX PAINT RECYCLING

EXHIBITS

- **Paint Label**
- **Paint Brochure**
- **Direct Mail Piece**
- **Articles**
- **Survey Forms**



INTERIOR PAINT

SEATTLE
BEIGE
TINT BASE

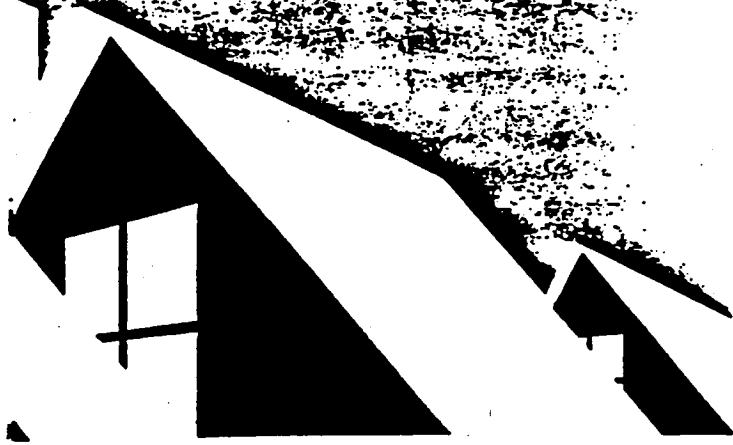
1 U.S. GAL - 3.785 LITERS



RECYCLED
INTERIOR
FLAT

Latex Paint

HIGH QUALITY
OUTSTANDING
VALUE
A COMMUNITY
ASSET





Dear Painting Contractor,

"Community Pride" brand Recycled Latex Paint is now on sale at 19 paint stores in the greater Seattle area. It is manufactured for Seattle's Solid Waste Utility, and is being sold through retail outlets by Daly's Paint, Daniel Boone Paint, Jarvie Paint, Parker Paints and Preservative Paint.

A paint brochure is enclosed. I encourage you to give it a try.

Community Pride is an interior flat latex. It has superior stain resistance, adhesion and hiding. It is excellent for residential office and warehouse applications -- as a final coat or as a primer. The paint sells for \$5/gallon (\$4.50/gal for 100 gallons or more).

Community Pride is made from leftover latex paint which the public has turned in through household hazardous waste collection programs. Extensive sorting and testing are done to reprocess the paint. The Puget Sound Paint & Coatings Association has been working closely with the City to make sure that Community Pride is of high quality. It meets all federal, industry and ASTM standards for a flat interior latex.

The paint's base color is a pastel beige. The paint can be custom tinted at the store. Sample colors include peacock blue, coral pink and tamarack, among others. Community Pride comes in five and one-gallon containers. It is intended for conventional and airless spray and roller application -- without dilution.

Community Pride will be available through the end of April.

The Puget Sound Paint & Coatings Association encourages you to try Community Pride Recycled Latex Paint. It is a good paint at a great price -- and it promotes recycling and protects the environment.

Sincerely,

A handwritten signature in cursive script that reads "Bob Eaton".

BOB EATON
President

SECTION E

Monday, February 5, 1990
The Seattle Times

An idea that should stick: recycled paint

by Hill Williams
Times science reporter

Remember the unused latex paint you dropped off at a hazardous-waste collection site last summer? In a project that has attracted national attention, your old paint has been recycled and is now for sale.

The project, a first in the United States, converted old latex paint, once considered a hazardous waste, into a useful product. Instead of paying to get rid of it, Seattle is selling it for \$5 a gallon.

If the paint sells well, the city's solid-waste utility hopes to continue the project, which is projected to yield net benefits of \$1 million in 20 years. That would include savings to the city in disposal costs and profits to the paint industry, which processes and markets the paint.

Philip Morley, a Seattle consultant who proposed the idea, estimates the yield would jump to \$3 million over 20 years if King County joined the city project.

The city and the state Department of Ecology provided money for the project. Metro contributed laboratory services that showed the recycled paint met federal standards for contaminants. The Puget Sound Paint and Coatings Association, an arm of the paint industry, cooperated in processing and preparing the paint for marketing.

The paint, with a brand name of "Community Pride," is available in both 1- and 5-gallon containers. Chris Luboff, project manager for the city's solid-waste utility, said the paint will be sold through the end of April at 19 Seattle-area paint stores operated by Daly's

Paint, Daniel Boone Paint, Jarvie Paint, Parker Paints and Preservative Paint.

"If sales meet expectations," Luboff said, "the city hopes to continue recycling latex paint on an ongoing basis."

Community Pride is an interior flat latex suitable for use by both professionals and paint-it-yourselfers. Morley said testing has shown the recycled paint has superior qualities for resisting stains, sticking to walls and hiding previous paint coatings.

Paint and paint-related products make up 84 percent of household hazardous waste received at the city's south transfer station. In the recycling process, oil-based paint is separated and treated as hazardous waste as before. Cans of latex, or water-based, paint are inspected individually. Paint that has hardened or spoiled is rejected.

Another cost-saving bonus came when Metro's lab work revealed that even the rejected latex could be treated as nonhazardous waste and discarded through usual channels.

When the reclaimed latex is poured together and mixed in large quantities, the resulting color is beige, which project workers have named "Seattle beige." It's a popular color for both home and offices. Seattle beige can also be tinted to customers' specifications at the paint stores.

OVERSPRAY

Parker Paint Teams With Community Pride

Community Pride brand paint is now available through five Parker Paint locations. This pilot project sponsored by the City of Seattle is the first of its kind in the United States. *Community Pride* paint was inspired by the necessity to dispose of household hazardous waste products. *Community Pride* is a 100% recycled flat interior latex paint made from old latex paint which the public turns in through household hazardous waste collection programs.

This pilot program has received national attention for its state-of-the-art paint recycling process which turns a paint disposal problem into a marketable product. The project is being conducted for the City of Seattle by Morley & Associates. Philip Morley, project consultant, explains that through a sorting process at the collection site there is the ability to make a product that meets Federal and Industry paint standards for interior flat latex paint.

Community Pride has been field tested and was used by the King County Housing Authority, Seattle City Light and the Department of Ecology in Olympia. Although geared toward the painting contractor, it is available to the public. The base color of this product is Seattle Beige which can be tinted at the store level to Slate, Light Olive, Peacock Blue, Pink Coral, Tamarack and Mocha Cream.

Chris Luboff, project manager, reports that the paint will be available through the end of February. If sales meet expectations, she said the City hopes to continue recycling latex on an on-going basis.



Three thousand gallons (1100 of which are available through Parker Paint) were recycled and are available during this pilot project. "The ultimate goal," says Morley, is for *Community Pride* to become a permanent on-going program not only in Seattle but in other areas where the local governments can set up and staff household hazardous waste collection sites."

The potential gallonage available for recycling is about 10,000 gallons this year increasing to 20,000 in 1991 and as much as 70,000 by the year 2000 in King County alone. Currently the recyclable products are from households only. But, as Morley states, should this project prove to be successful it could be a much needed avenue for the commercial painters to dispose of their excess latex paint.

Available in five and one gallon containers, *Community Pride* is selling for \$5.00 per gallon.

TECHNICAL INFORMATION

Product Description: A flat interior latex paint with superior stain resistance, adhesion and hiding. It has good one-coat coverage.

Suggested Application: Best for interior walls and ceilings, all surfaces.

Surface Preparation: Surface must be clean, dry and free from dust and oil. Glossy surfaces must be sanded until dull. Fill all cracks and patch as required. New plaster or wood should be primed. Metal surfaces must have metal primer applied before using latex.

Application: Intended for airless and conventional spray and 3/4 inch nap roller. Not recommended for exterior use or surfaces with high exposure to soiling. Once dry, *Community Pride* recycled latex paint can be washed gently with water and detergent.

Volume Solids: 30-40%

Coverage: Approximately 250 square feet per gallon.

Drying Time: Set in 30 minutes. Hard in 2 hours. Recoat in 24 hours.



The Latest Edition

Parker Paint - Longview
909 Washington Way
Longview, WA 98632
578-0904

Bill Shaw - Manager

Paint Pilot Project

Mention "hazardous waste" to most people and it conjures up visions of barrels of vile chemicals. Few people consider the half-gallon of leftover paint sitting in the garage as hazardous waste.

But oil-base paints contain solvents and other hazardous chemicals, some old latex paints contain lead and mercury, and even relatively "clean" latex paint is a free liquid, which can be a problem in a landfill.

Almost 5,000 gallons of latex paint and 6,800 gallons of oil-base paint were collected from three sites in King County during the June 1989 Hazardous Waste Roundup and from Seattle's fixed collection facility.

Proper disposal of all that is expensive, but what else can be done?

How about using it as paint? Seattle is doing just that with a \$50,000 grant from the Department of Ecology's Hazardous Waste Pilot Project program and additional money from the Urban Consortium.

Seattle will reprocess and market latex paint turned in at household hazardous waste collection events. The grant also pays for research into ways to recycle the solvents and pigments in oil-base paint and to dispose of unrecyclable latex and oil-base paint.

Recycling paint is an idea that appeals to many familiar with waste reduction and recycling efforts. "We're really excited because we realize paint is the single largest component of the substances collected at these events," said Cheryl Strange of Ecology's Waste Management Grants Section.

"If Seattle is successful in their effort to produce, package and market a recycled paint product, then we may be able to change the way we plan for and think of household hazardous waste collection."

Sally Toteff of Ecology's Hazardous Waste Information and Planning Section agrees. As the Department's coordinator for these pilot projects,



After the paint is collected and sorted, it is "bulked" in 55 gallon barrels for shipment to the paint reprocessor, who will mix, strain and test it in batches, then tint the batches for color consistency. The resulting light tan paint is called "Seattle Beige."

she thinks the project can help other communities take waste management steps beyond collection.

"Son of Paint," as it's whimsically called, builds on a previous research project funded by Seattle which showed latex paint collected as household hazardous waste could be reprocessed into a usable product — a light-colored, low grade interior paint dubbed "Seattle Beige."

The new project expands into distributing and selling latex paint generated by the collection events. It will be marketed through a paint manufacturer at more than 20 wholesale outlets in the Puget Sound area. The city worked with the Puget Sound Paint and Coatings Association in developing the contacts needed for a successful project.

Chris Luboff is Seattle's coordinator for the paint recycling project. "The paint doesn't require much processing, just mixing and straining," Luboff said. "It's not a very expensive, fancy paint. It's what they call a contractor's grade." But at \$5 per gallon the paint costs less than any other on the market. The market-

ing plan targets building contractors looking for an inexpensive paint that covers well.

Phillip Morley and Associates coordinated and researched both the original test run and this pilot project. They learned that the sorting process is the key step in obtaining a good quality product. Using frozen, soured or dark-colored paint produces an unmarketable product that doesn't mix well, smells bad, and is a muddy color. Letting paint with lead, mercury, or other contaminants slip by could result in liability problems.

Workers trained to identify usable and non-usable paint inspected the latex paint for the project as it was brought in, sorting it into three types:

- *Recyclable*—good quality, light-colored latex paint.
- *Non-recyclable*—frozen, dried out, dark colored paint.
- *Hazardous waste*—paint containing lead or other contaminants.

The sorting process yielded approximately 3,000 gallons of recyclable latex paint, 2,000 gallons that could not be recycled, and little hazardous waste. Luboff said the non-recyclable paint is being tested for toxicity and heavy metals or organic chemicals. If the paint proves to be safe for disposal, it will be solidified and placed in a regular landfill.

The good paint will be packaged in five- and one-gallon cans, labeled as "Community Pride" brand recycled interior flat latex paint, and distributed to select outlets.

Toteff says marketability is the key question. "We need to find out if there'll be enough demand for this type of product, today as well as five and ten years from now," she said.

Toteff sees the grant-funded paint recycling project as demonstrating Ecology's commitment to assist local governments with moderate risk waste management. She noted that we have built a "four-prong" approach for this commitment, combining planning, financial, education, and technical assistance.

The Hazardous Waste Pilot Project grant program is part of this financial assistance. It is funding projects in Seattle and Thurston County to expand fixed household hazardous waste collection facilities and in Island County to build a fixed facility. Island County will also try out an exchange program for household hazardous waste.

The Intergovernmental Resource Center in Vancouver is using a pilot project grant to help establish a small business assistance program, providing informational and educational services for small quantity generators so they can better manage and recycle the waste they produce.

The Hazardous Waste Pilot Project grant program was designed as a one-time use of \$500,000 from the Local Toxics Control Account. Strange explained that future grants will come from a program designed to help local governments implement their hazardous waste plans.

"Local governments have voiced a need for more information-sharing from these projects. We are requiring specific reports from these pilot projects and we will be sharing the results," she said.

She added that local governments can help themselves in applying for the implementation grants by focusing on their planning process, developing a program of action in their hazardous waste plan that they intend to implement.

"In the future we're only going to be interested in funding projects that are recommended in the plans," Strange said.

Ecology also supports two hazardous (moderate risk) waste management hotlines:

Hazardous Substance Information Hotline, 1-800-633-7585 (for businesses that generate small quantities of hazardous waste).

Recycling Hotline, 1-800-RECYCLE, (for household hazardous waste).



This messy job is one of the most important in recycling paint—inspecting and sorting the paint collected to make sure only usable, light-colored paint is mixed as the basis for the recycled paint.

Waste Management Grants

Calendar - First Quarter 1990

January 23 Public hearing in Spokane on the proposed Remedial Action Grants rule, Chapter 173-322 WAC

January 25 Public hearing in Seattle on the proposed Remedial Action Grants rule, Chapter 173-322 WAC

February 28 Application deadline for Household Hazardous Waste Collection Events (for events to be held between July 1 and December 31, 1990)

Organization

When local governments need a grant to help set up curbside recycling, clean up a contaminated landfill, or plan for managing solid wastes they all send their applications to the same place—the Waste Management Grants Section of the Department of Ecology. We administer grants for three separate programs:

- Solid and Hazardous Waste Management.
- Hazardous Waste Investigations and Cleanup.
- Waste Reduction, Recycling and Litter Control.

The grants section functions as a stand-alone unit under the Waste Management Assistant Director.

We offer financial assistance for: Hazardous waste planning, zoning and implementation; Household hazardous waste collection events; Solid waste planning and enforcement; Groundwater monitoring wells; Citizen/proponent negotiations; Waste-to-energy facilities; Remedial action; Public participation; Waste reduction and recycling; Litter control and recycling; Vehicle tire recycling.

New grant programs will start soon for composting and public information and education in waste reduction and recycling. Watch for them in upcoming issues of *Sources*.

LATEX PAINT RECYCLING PILOT
QUESTIONNAIRE FOR USERS OF RECYCLED PAINT

PLEASE HAVE YOUR PAINT FOREMAN FILL OUT THIS QUESTIONNAIRE.

NAME OF ORGANIZATION:
ADDRESS

NAME OF PAINT FOREMAN:
TELEPHONE:

METHOD OF APPLYING RECYCLED PAINT (circle): spray / roller / brush
NUMBER OF COATS:

HOW WELL DID THE PAINT COVER OR HIDE?
WAS THERE DIFFICULTY WITH BUBBLING, SPATTERING, ETC (specify):

WAS THERE DIFFICULTY WITH DRIPPING ON SURFACE OR APPLICATOR? (specify):

WAS THERE UNIFORM SHEEN OR FLATNESS? (describe):

WERE THERE ANY PARTICLES OR SKINS IN THE PAINT? (describe):

DESCRIBE PAINT'S DRYING TIME:

DID ITS ODOR DIFFER FROM OTHER LATEX PAINT? (how?):

PLEASE MAKE ANY OTHER EVALUATION OF THE PAINT:

TYPE OF STRUCTURE PAINTED WITH RECYCLED PAINT (circle one):
residential / commercial / industrial

WHAT DID YOU PAINT?

IS THIS AN INTERIOR OR EXTERIOR SURFACE (circle one)?

WHICH SURFACES DID YOU PAINT (circle):

wall / ceiling / floor / trim

HOW MUCH AREA WAS PAINTED (in square feet)?

HOW MANY GALLONS OF RECYCLED PAINT DID YOU USE?

HOW DID YOU PREPARE THE SURFACE? (circle):

wiped

washed (how?) _____

scraped

sanded

spackled

primed (with what?) _____

WAS SURFACE PAINTED FOR THE FIRST TIME, OR REPAINTED? (please see reverse side)

RECYCLED PAINT QUESTIONNAIRE (continued)

FIRST TIME PAINTED:

TYPE OF SURFACE (circle):

sheet rock / plaster / cement / wall paper / wood /
other (specify) _____

REPAINTED:

OLD COATING COLOR:

OLD COATING TYPE (circle):

_____ latex / solvent based paint / varnish / urethane /
other (specify) _____

OLD COATING SHEEN (circle): flat / semi-gloss / gloss

THANK YOU FOR FILLING OUT THIS QUESTIONNAIRE!

[IF YOU HAVE ANY QUESTIONS, PLEASE CALL PHILIP MORLEY, AT 324-5405.]

**PLEASE USE THE ENCLOSED ENVELOPE AND RETURN
QUESTIONNAIRE TO:**

MORLEY & ASSOCIATES

SUITE 402, PIONEER BUILDING
600 - 1ST AVENUE
SEATTLE, WASHINGTON 98104

PHILIP MORLEY

(206) 628-0657

STORE MANAGER SURVEY

RETAIL OUTLET _____ PHONE _____

CONTACT PERSON _____

DID YOU HAVE ANY FEEDBACK FROM USERS:

ANY COMPLAINTS (SPECIFY):

HOW WELL DID IT PERFORM:

COMMENTS ABOUT COLOR, ODOR, PRICE?

FEEDBACK ON SALES:

WHAT KIND OF CUSTOMERS WERE BUYING IT?

WHAT ARE PEOPLE USING IT FOR? (TYPES OF SPACE, USED AS SEALER (PVA), BLENDED WITH OTHER PAINT?)

WHY DID PEOPLE NOT BUY THE PAINT? (E.G. COLOR, PRICE, ETC)

WHY DID PEOPLE BUY THE PAINT? (E.G. PRICE, RECYCLING ETHIC, ETC.)

WHAT IS THE CHEAPEST-PRICED PAINT YOU CARRY THAT IT WAS COMPETING AGAINST?

FUTURE PROSPECTS:

WHO SHOULD WE BE SELLING TO IN FUTURE?

WHAT KINDS OF USES?

WHAT TYPE OF PRICE RANGE?

WHAT CAN WE DO TO IMPROVE SALES IN A FUTURE PROGRAM? (E.G. COLOR CHANGES -- would a few shades lighter make a difference, PRICE, SALES SPIFFS)

ATTACHMENT 2

Proposed Specifications for Reprocessed Paint

**SPECIFICATIONS FOR RECYCLED LATEX PAINT:
INTERIOR LIGHT**

TEST	ACCEPTABLE VALUES	
	MIN	MAX
QUANTITATIVE		
1. Total Solids (% by weight)	45.0	--
2. Weight per Gallon (pounds)	10	12
3. Consistency (Krebs units)	90	110
4. Dry Opacity	0.95	--
5. Reflectance (%)	75	--
6. Gloss @ 85° (%)	3	10
7. Fineness of Grind	3	--
8. Sag (mils)	10	--
9. Anchorage (inches)	--	1/16
10. Flexibility, Mandrell (inches)	1/8	--
11. Freeze Thaw Resistance (cycles)	3	--
12. Scrub Resistance (cycles)	400	--
13. Washability		
a. Reflectance After Washing (%)	95	--
b. Gloss @ 85° (%)	--	20
14. Drying Time, hard (hours)	--	1
15. Recoating Time (hours)	--	4
16. pH	8	10
17. Lead Content (%)	--	0.06
18. Mercury Content (parts per million)	--	50
QUALITATIVE		
19. Condition in Container	pass	--
20. Working Properties	pass	--
21. Bubbling	pass	--
22. Appearance of Dried Paint	pass	--
23. Fungus Resistance	pass	--
24. Resistance to Water	pass	--
25. Resistance to Alkalai	pass	--
26. Odor	pass	--
27. Storage Stability	pass	--
28. Recoatability	pass	--
29. Color match to Federal Color # 37778, or other acceptable color standard	pass	--

The testing shall be done in accordance with the latest ASTM test or the Federal Test Method Standard No. 1419 when applicable. The method for testing Bubbling is attached to this specification.

**SPECIFICATIONS FOR RECYCLED LATEX PAINT:
EXTERIOR LIGHT**

TEST	ACCEPTABLE VALUES	
	MIN	MAX
QUANTITATIVE		
1. Total Solids (% by weight)	50.0	--
2. Weight per Gallon (pounds)	10	12
3. Consistency (Krebs units)	90	105
4. Dry Opacity	0.95	--
5. Reflectance (%)	75	--
6. Gloss @ 85° (%)	5	15
7. Fineness of Grind	4	--
8. Sag (mils)	10	--
9. Anchorage (inches)	--	1/16
10. Flexibility, Mandrell (inches)	1/8	--
11. Freeze Thaw Resistance (cycles)	3	--
12. Recoating Time (hours)	--	4
13. pH	8	10
14. Lead Content (%)	--	0.06
15. Mercury Content (parts per million)	--	200
QUALITATIVE		
16. Condition in Container	pass	--
17. Working Properties	pass	--
18. Bubbling	pass	--
19. Appearance of Dried Paint	pass	--
20. Fungus Resistance	pass	--
21. Resistance to Water	pass	--
22. Resistance to Alkalai	pass	--
23. Odor	pass	--
24. Storage Stability	pass	--
25. Accelerated Weathering @ 500 hours	pass	--
26. Recoatability	pass	--
27. Color match to Federal Color # 37778, or other acceptable color standard	pass	--

The testing shall be done in accordance with the latest ASTM test or the Federal Test Method Standard No. 1419 when applicable. The method for testing Bubbling is attached to this specification. Accelerated Weathering should be conducted in parallel with a standard commercial paint for sake of comparison -- this paint shall be specified by Metro.

**SPECIFICATIONS FOR RECYCLED LATEX PAINT:
EXTERIOR DARK**

TEST	ACCEPTABLE VALUES	
	<u>MIN</u>	<u>MAX</u>
QUANTITATIVE		
1. Total Solids (% by weight)	50.0	--
2. Weight per Gallon (pounds)	10	12
3. Consistency (Krebs units)	90	105
4. Dry Opacity	0.97	--
5. Reflectance (%)	--	15
6. Gloss @ 85° (%)	3	10
7. Fineness of Grind	3	--
8. Sag (mils)	10	--
9. Anchorage (inches)	--	1/16
10. Flexibility, Mandrell (inches)	1/8	--
11. Freeze Thaw Resistance (cycles)	3	--
12. Recoating Time (hours)	--	4
13. pH	8	10
14. Lead Content (%)	--	0.06
15. Mercury Content (parts per million)	--	200
QUALITATIVE		
16. Condition in Container	pass	--
17. Working Properties	pass	--
18. Bubbling	pass	--
19. Appearance of Dried Paint	pass	--
20. Fungus Resistance	pass	--
21. Resistance to Water	pass	--
22. Resistance to Alkalai	pass	--
23. Odor	pass	--
24. Storage Stability	pass	--
25. Accelerated Weathering @ 500 hours	pass	--
26. Recoatability	pass	--
27. Color match to Federal Color # <u>30117</u> or other acceptable color standard	pass	--

The testing shall be done in accordance with the latest ASTM test or the Federal Test Method Standard No. 1419 when applicable. The method for testing Bubbling is attached to this specification. Accelerated Weathering should be conducted in parallel with a standard commercial paint for sake of comparison -- this paint shall be specified by Metro.

BUBBLE TEST
FOR APPLICATION-INDUCED BUBBLING

1. On a sealed Pen-O-Pac or Leneta chart, apply moderate wet coat of the sample paint (4-8 mils).
2. Shear by brushing with a 1-inch synthetic bristle brush (Purdy or equivalent).
3. Immediately after brushing, dab the surface of the wet paint with the bristle tips until bubbles are raised.
4. Allow to dry fifteen minutes at room temperature and humidity.
5. Examine the surface for craters or pock marks caused by bubbles.
6. Visual evidence of defects caused by the failure of the bubbles to break and "flow out" constitutes failure of the test.

ATTACHMENT 3

Metro Standard Contract

PUBLIC CONTRACT

THIS Contract is entered into between the METROPOLITAN SERVICE DISTRICT, a municipal corporation, whose address is 2000 S.W. First Avenue, Portland, Oregon 97201-5398, hereinafter referred to as "METRO," and _____, whose address is _____ 97____, hereinafter referred to as the "CONTRACTOR."

THE PARTIES AGREE AS FOLLOWS:

ARTICLE I

SCOPE OF WORK

CONTRACTOR shall perform the work and/or deliver to METRO the goods described in the Scope of Work attached hereto as Attachment A. All services and goods shall be of good quality and, otherwise, in accordance with the Scope of Work.

ARTICLE II

TERM OF CONTRACT

The term of this Contract shall be for the period commencing _____, 19__ through and including _____, 19__.

ARTICLE III

CONTRACT SUM AND TERMS OF PAYMENT

METRO shall compensate the CONTRACTOR for work performed and/or goods supplied as described in Attachment B. Metro shall not be

responsible for payment of any materials, expenses or costs other than those which are specifically included in Attachment B.

ARTICLE IV

LIABILITY AND INDEMNITY

CONTRACTOR is an independent contractor and assumes full responsibility for the content of its work and performance of CONTRACTOR's labor, and assumes full responsibility for all liability for bodily injury or physical damage to person or property arising out of or related to this Contract, and shall indemnify and hold harmless METRO, its agents and employees, from any and all claims, demands, damages, actions, losses, and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Contract. CONTRACTOR is solely responsible for paying CONTRACTOR's subcontractors. Nothing in this Contract shall create any contractual relationship between any subcontractor and METRO.

ARTICLE V

TERMINATION

METRO may terminate this Contract upon giving CONTRACTOR seven (7) days written notice. In the event of termination, CONTRACTOR shall be entitled to payment for work performed to the date of termination. METRO shall not be liable for indirect or consequential damages. Termination by METRO will not waive any claim or remedies it may have against CONTRACTOR.

ARTICLE VI

INSURANCE

CONTRACTOR shall maintain such insurance as will protect CONTRACTOR from claims under Workers' Compensation Acts and other employee benefits acts covering all of CONTRACTOR's employees engaged in performing the work under this Contract; and from claims for damages because of bodily injury, including death and damages to property, all with coverage limits satisfactory to METRO. Liability insurance shall have minimum coverage limits of at least the dollar amounts listed in ORS 30.270. Additional coverage may be required in the Scope of Work attached hereto. This insurance must cover CONTRACTOR's operations under this Contract, whether such operations be by CONTRACTOR or by any subcontractor or anyone directly or indirectly employed by either of them. CONTRACTOR shall immediately increase the amounts of liability insurance required to reflect any changes in Oregon Law so that the insurance provided shall cover, at a minimum, the maximum liability limits under the Oregon Tort Claims Act.

If required in the Scope of Work attached hereto, CONTRACTOR shall provide METRO with a certificate of insurance complying with this article and naming METRO as an insured within fifteen (15) days of execution of this Contract or twenty-four (24) hours before services under this Contract commence, whichever date is earlier.

CONTRACTOR shall not be required to provide the liability insurance described in this Article if an express exclusion relieving CONTRACTOR of this requirement is contained in the Scope of Work.

ARTICLE VII

PUBLIC CONTRACTS

All applicable provisions of ORS chapters 187 and 279, and all other terms and conditions necessary to be inserted into public contracts in the State of Oregon, are hereby incorporated as if such provision were a part of this Agreement, including, but not limited to, ORS 279.310 to 279.320. ORS Chapter 279 states, in part, that the Contractor, its subcontractors, if any, and all employers working under this agreement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage to all their subject workers. Specifically, it is a condition of this contract that Contractor and all employers working under this Agreement are subject employers that will comply with ORS 656.017 as required by 1989 Oregon Laws chapter 684.

ARTICLE VIII

ATTORNEY'S FEES

In the event of any litigation concerning this Contract, the prevailing party shall be entitled to reasonable attorney's fees and court costs, including fees and costs on appeal to any appellate courts.

ARTICLE IX

QUALITY OF GOODS AND SERVICES

Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of the highest quality.

All workers and subcontractors shall be skilled in their trades. CONTRACTOR guarantees all work against defects in material or workmanship for a period of one (1) year from the date of acceptance or final payment by METRO, whichever is later. All guarantees and warranties of goods furnished to CONTRACTOR or subcontractors by any manufacturer or supplier shall be deemed to run to the benefit of METRO.

ARTICLE X

OWNERSHIP OF DOCUMENTS

All documents of any nature including, but not limited to, reports, drawings, works of art and photographs, produced by CONTRACTOR pursuant to this agreement are the property of METRO and it is agreed by the parties hereto that such documents are works made for hire. CONTRACTOR does hereby convey, transfer and grant to METRO all rights of reproduction and the copyright to all such documents.

ARTICLE XI

SUBCONTRACTORS; DISADVANTAGED BUSINESS PROGRAM

CONTRACTOR shall contact METRO prior to negotiating any subcontracts and CONTRACTOR shall obtain approval from METRO before entering into any subcontracts for the performance of any of the services and/or supply of any of the goods covered by this Contract.

METRO reserves the right to reasonably reject any subcontractor or supplier and no increase in the CONTRACTOR's compensation shall result thereby. All subcontracts related to this Contract shall include the

terms and conditions of this agreement. CONTRACTOR shall be fully responsible for all of its subcontractors as provided in Article IV.

If required in the Scope of Work, CONTRACTOR agrees to make a good faith effort, as that term is defined in METRO's Disadvantaged Business Program (Section 2.04.160 of the Metro Code) to reach the goals of subcontracting _____ percent of the contract amount to Disadvantaged Business Enterprise and _____ percent of the contract amount to Women-Owned Business Enterprise. METRO reserves the right, at all times during the period of this agreement, to monitor compliance with the terms of this paragraph and METRO's Disadvantaged Business Program.

ARTICLE XII

RIGHT TO WITHHOLD PAYMENTS

METRO shall have the right to withhold from payments due CONTRACTOR such sums as necessary, in METRO's sole opinion, to protect METRO against any loss, damage or claim which may result from CONTRACTOR's performance or failure to perform under this agreement or the failure of CONTRACTOR to make proper payment to any suppliers or subcontractors.

If a liquidated damages provision is contained in the Scope of Work and if CONTRACTOR has, in METRO's opinion, violated that provision, METRO shall have the right to withhold from payments due CONTRACTOR such sums as shall satisfy that provision. All sums withheld by METRO under this Article shall become the property of METRO and CONTRACTOR shall have no

right to such sums to the extent that CONTRACTOR has breached this Contract.

ARTICLE XIII

SAFETY

If services of any nature are to be performed pursuant to this agreement, CONTRACTOR shall take all necessary precautions for the safety of employees and others in the vicinity of the services being performed and shall comply with all applicable provisions of federal, state and local safety laws and building codes, including the acquisition of any required permits.

ARTICLE XIV

INTEGRATION OF CONTRACT DOCUMENTS

All of the provisions of any bidding documents including, but not limited to, the Advertisement for Bids, General and Special Instructions to Bidders, Proposal, Scope of Work, and Specifications which were utilized in conjunction with the bidding of this Contract are hereby expressly incorporated by reference.

Otherwise, this Contract represents the entire and integrated agreement between METRO and CONTRACTOR and supersedes all prior negotiations, representations or agreements, either written or oral. This Contract may be amended only by written instrument signed by both METRO and CONTRACTOR. The law of the state of Oregon shall govern the

construction and inter-pretation of this Contract.

ARTICLE XV

ASSIGNMENT

CONTRACTOR shall not assign any rights or obligations under or arising from this Contract without prior written consent from METRO.

_____ METROPOLITAN SERVICE DISTRICT

By:

By:

Title:

Title:

Date:

Date:

AMH:BL:
CONTRACT.FOR
4/29/91

ATTACHMENT 4

DBE/WBE Compliance and Utilization Forms

DISADVANTAGED BUSINESS PROGRAM COMPLIANCE FORM
(To be submitted with proposal)

Name of Metro
Project: Latex Paint Reprocessing

Name of Bidder: _____

Address: _____

Telephone: _____

In accordance with Metro's Disadvantaged Business Program, the above-named Bidder has accomplished the following:

- _____ 1. Has fully met the Contract goals and will subcontract _____ percent of the Contract amount to DBEs and _____ percent to WBEs.
- _____ 2. Has partially met the Contract goals and will subcontract _____ percent of the Contract amount to DBEs and _____ percent to WBEs. The Contractor has made good faith efforts prior to proposal submission date to meet the full goals and will submit documentation of the same to Metro within two working days of proposal submission date.
- _____ 3. Will not subcontract any of the contract amount to DBEs or WBEs but has made good faith efforts prior to proposal submission date to meet the contract goals and will submit documentation of such good faith efforts to Metro within two working days of proposal submission date.
- _____ 4. Will not subcontract any of the contract amount.

Authorized Signature

Date

DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION FORM

1. Name of Metro Project Latex Paint Reprocessing

2. Name of Bidder _____

Address of Bidder _____

3. The above-named bidder intends to subcontract _____ percent of the Total Bid Price to the following Disadvantaged Business Enterprises (DBEs):

**Names, Contact Persons,
Addresses and Telephone Numbers
of DBE Firms Bidder
Anticipates Utilizing**

**Nature of
Participation**

**Dollar
Value of
Participation**

Names, Contact Persons, Addresses and Telephone Numbers of DBE Firms Bidder Anticipates Utilizing	Nature of Participation	Dollar Value of Participation

Total _____

Amount of Total Bid Price _____

DBE Percent of Total Bid Price _____

Authorized Signature

Date: _____

WOMEN-OWNED BUSINESS ENTERPRISES UTILIZATION FORM

1. Name of Metro Project Latex Paint Reprocessing

2. Name of Bidder _____

Address of Bidder _____

3. The above-named Bidder intends to subcontract _____ percent of the Total Bid Price to the following Women-Owned Business Enterprises (WBEs):

Names, Contact Persons, Addresses and Telephone Numbers of WBE Firms Bidder Anticipates Utilizing	Nature of Participation	Dollar Value of Participation
--	----------------------------	-------------------------------------

Total _____

Amount of Total Bid Price _____

WBE Percent of Total Bid Price _____

Authorized Signature _____

Date: _____

ATTACHMENT 5

Metro Code Section 2.04 Covering DBE/WBE Requirements

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 91-1481, FOR THE PURPOSE OF AUTHORIZING THE EXECUTIVE OFFICER TO EXECUTE A CONTRACT WITH TRANS INDUSTRIES FOR PROCESSING AND TRANSPORTING YARD DEBRIS FROM THE METRO CENTRAL STATION

Date: August 7, 1991

Presented by: Gardner

Committee Recommendation: At the August 6 meeting, the Committee voted unanimously to recommend Council adoption of Resolution No. 91-1481. Voting in favor: Councilors Gardner, McLain and Wyers.

Committee Issues/Discussion: Ray Barker and Sam Chandler, Solid Waste Department, reviewed the staff report. The Department sought bids for a one-year contract to handle and process yard debris at the Metro Central and Metro South Stations, either separately or collectively. Initially, only Trans Industries submitted a bid to process debris at Metro Central only. A subsequent RFB resulted in bids for Metro South yard debris that will be considered by the council at a later date.

Under the contract, up to 1,800 tons of debris will be processed. The material will be ground at Metro Central and then transported to other facilities for processing into resaleable products, such as hog fuel or compost. Barker and Chandler indicated that the Trans Industries bid is \$4.50 less per ton than the existing contracts. The amount of the contract will be \$63,000 versus a budgeted amount of \$81,000.



METRO

Memorandum

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

DATE: August 1, 1991

TO: Metro Council
Interested Parties

FROM: Paulette Allen, Clerk of the Council *PA*

RE: RESOLUTION NO. 91-1487

Resolution No. 91-1487 Exhibit A, Agreement between Metropolitan Service District and Laborers International Union, Local No. 483 (attached) has been published separately from the agenda packet due to the volume of the document. Supplemental packets will be distributed in advance to Councilors and available at the Council meeting August 8.



METRO

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

Memorandum

RECEIVED

JUL 24 1991

TIME: 2:50 PM
METRO SERVICE DISTRICT
OFFICE GENERAL COUNSEL

Date: July 24, 1991
To: Mike Brock, Labor Relations Analyst
From: *LSH* Larry Shaw, Senior Assistant Counsel
Regarding: TENTATIVE LABORERS' AGREEMENT COMMENTS

1. Table of Contents seems to have been part of the previous Agreement, and it is helpful.
2. Probationary Period is buried at 25.3 under Discipline, and it could be repeated as a definition to help clarify the change from "Permanent" to "Regular" employee.
3. "Regular Employee" in 1.1 is a full-time, year-round employee which is different from Metro Code 2.02.030(57) which is a nonprobationary full-time or part-time employee. New 1.1 clearly includes probationary employees as "regular" for 1.1 and 1.2.
4. "Temporary" employee working less than 720 hours at 1.4 differs from Metro Code 2.02.030(62) at 1,040 hours and AFSCME 2.2 at 1,044 hours.
5. "Regular" is a change from "Permanent" in 1.1 and 1.2. Metro Code 2.02.030(44) defines permanent as appointed for more than six months in the budget. Therefore, the definitional change needs to be reflected throughout the contract. The following are the places I noted:

- 1.6, line 2
- 4.1, line 1
- 9.1, line 1
- 9.1.1, line 1
- 9.2.1, line 1
- 10.1, line 1
- 10.5, line 5 "permanent status"
- 10.8, line 12 "permanent job"
- 10.10.3, line 5 "permanent classification"
- 11.1.2, line 2
- 11.4.5, line 9
- 12.3.3

These changes must be made prior to signing the Agreement.

Final Draft; Tentative Agreement, July 18, 1991

AGREEMENT

between

METROPOLITAN SERVICE DISTRICT (METRO)

and

LABORERS INTERNATIONAL UNION, LOCAL NO. 483

THIS AGREEMENT, made and entered into this 1st day of July 1989, by and between METROPOLITAN SERVICE DISTRICT (Metro), Portland, Oregon, its successors and assigns, hereinafter called the "Employer," and LABORERS INTERNATIONAL UNION, LOCAL NO. 483, hereinafter called the "Union."

PREAMBLE

The provisions of this Agreement shall be applied equally to all employees in the bargaining unit without discrimination as to age, sex, marital status, sexual orientation, race, color, creed, national origin, handicap or political affiliation. The Union shall share equally with the Employer the responsibility for applying this provision of the Agreement. Nothing in this section,

however, shall be construed to prohibit actions taken because of bona fide job qualifications.

Upon notification to the Union of filing for redress of any item in this preamble in another recognized legal forum, any grievance filed by that same employee or Union under this Article will be withdrawn.

1. DEFINITIONS

1.1 **REGULAR EMPLOYEE:** Any employee who works full-time on a yearly basis in a job classification contained in Schedule A.

1.2 **REGULAR PART-TIME EMPLOYEE:** Any employee, other than on-call employees, whose employment is part-time and lasts longer than **720 hours** in any calendar year, or in the case of on-call employees 720 hours in a calendar year, but works less than full-time, in a job classification contained in Schedule A, and such employment re-occurs each year.

1.3 **EMERGENCY EMPLOYMENT EMPLOYEE:** Any employee employed full-time through an emergency public employment

program in a job classification in Schedule A. The tenure for an Emergency Employment employee will be no longer than the period for which their employment is funded.

1.4 TEMPORARY EMPLOYEE: Any employee, other than on-call Typists/Receptionists, Cashroom Clerks for the period of March 1 through September 30, and Stationmasters, whose period of employment will last no longer than 720 hours in any calendar year. On-call Typists/Receptionists, Cashroom Clerks for the period of March 1 through September 30, and Stationmaster's period of employment may last 720 hours in any one calendar year. Temporary/on-call employees are not entitled to vacation pay, health and welfare, sick leave, and personal holidays. Temporary/on-call employees working consecutive years shall not be entitled to accumulate time for purposes of personal holidays or for any other purpose under this Agreement. Employees hired to fill temporary positions shall be notified by the Employer, upon hiring, that the employee will be employed in the temporary position for no more than 720 hours for those on-call, in any calendar year.

1.5 SUPERVISOR: The head of one of the Offices, Divisions or Departments established by the Employer.

1.6 Before a Temporary or Emergency Employment employee can become a Permanent or Permanent Part-Time employee, he/she must have gone through the same job selection process as any other applicant.

2. MANAGEMENT RIGHTS

2.1 The Employer shall have and retain sole responsibility for the management and operation of the Zoo and direction and control of its work force, facilities, properties, programs and activities, except as expressly limited by the terms of this Agreement.

3. RECOGNITION

3.1 The Employer recognizes the Union as the sole collective bargaining agent for all members of the Bargaining Unit employed by the Employer at the Washington Park Zoo, excluding confidential employees, supervisory employees including first line supervisors, administrative employees, and employees whose primary duties consist of security or guard functions.

3.2 No supervisor nor salaried employee shall perform any of the work covered under this Agreement, except in cases of emergency. Emergency is defined as a situation beyond the control of the Employer which the Employer could not anticipate, including but not limited to:

- (a) Unanticipated situations where bargaining unit employees were contacted but were not available for work, or:
- (b) The Employer has made an unsuccessful attempt to contact bargaining unit employees at their current home number as listed with the Employer.

Emergencies shall not include those day-to-day situations which require immediate action which have been normally performed by Bargaining Unit employees. A supervisor may use tools or equipment and perform work when the objective is to show, explain or train employees in the proper performance of their work assignments.

3.3 No first line supervisor shall perform the work covered under this Agreement except under the following circumstances:

- 3.3.1 In cases of emergency as defined in paragraph 3.2.

3.3.2 When the objective is to show, explain or train employees in the proper performance of their work assignments.

3.3.3 As long as he/she does not replace a regular employee of the Bargaining Unit.

3.4 Except as provided in this Article, work performed under classifications covered by this Agreement shall be performed at rates and conditions herein established. Any work which is performed by Bargaining Unit employees shall not be contracted out. This does not, however, restrict the Employer from contracting out work previously subcontracted.

4. UNION MEMBERSHIP

4.1 All Permanent, Permanent Part-Time and Emergency Employment employees who are covered by this Agreement shall, not later than thirty-one (31) ~~calendar~~ days from the date of this Agreement or from the date of employment, as the case may be, join and remain members of the Union, by tender of regular dues and initiation fees, or tender

to the Union his/her fair share which shall be equivalent to regular dues and initiation fees. Temporary employees shall not be required to become or remain members of the Union, but as a condition of employment shall pay a monthly fee for each calendar month following the first thirty (30) calendar days of employment.

4.2 If any employee is a member of a church or religious body which has bona fide religious tenets or teachings which prohibit such employee from being a member of or contributing to a labor organization, such employee shall pay an amount of money equivalent to regular Union dues and initiation fees and assessments, if any, to a non-religious charity or to another charitable organization mutually agreed upon by the employee and the Union. The employee shall furnish written proof to the Employer that this has been done.

4.3 The Union will defend and hold harmless the Employer, its directors, officers, administrators, and agents from any liability arising out of the application or administration of the Union Membership provisions of this Agreement.

5. DUES CHECKOFF

5.1 The Employer agrees to deduct from the paycheck of each employee, who has so authorized it, the regular initiation fee and regular monthly dues uniformly required of members of the Union and fair share according to ORS 243.650. The amounts deducted shall be transmitted monthly to the Union on behalf of the employees involved. Authorization by the employee shall be on forms furnished by the Employer and may be revoked by the employee upon written request. The performance of this service is at no cost to the Union.

5.2 The Employer will not be held liable for check-off errors but will make proper adjustments with the Union for errors as soon as is practicable but no later than the end of the following pay period.

5.3 The Union agrees to defend and hold the Employer harmless against any and all claims, suits, orders or judgments brought against the Employer which are based upon the provisions of this Article.

6. STANDARD DAY SHIFT HOURS

6.1 Forty (40) hours shall constitute the normal workweek, eight (8) hours per day, five (5) consecutive days per week with two (2) consecutive days off. Notice of change in shift starting times or days off will be given prior to the end of the work week before the work week in which the change becomes effective, and such change will be effective for not less than one (1) work week.

6.2 Except in cases of emergency, all employees' work schedules shall provide for a fifteen (15) minute rest period during each one half (1/2) shift. Rest periods shall be scheduled near the middle of each one half (1/2) shift whenever feasible.

6.3 Notwithstanding the workweek set forth in 6.1 and 6.2 above, the Employer and the Union may, by mutual agreement, initiate a workweek consisting of four (4) consecutive ten (10) hour days with three (3) consecutive days off. Overtime rates will be paid for all hours over ten (10) hours worked in any one day, for any work performed on the employee's three (3) scheduled days off, and holidays. If a 4-10 work schedule is implemented, and

found to be less favorable after discussion by Management and the Union, either party may elect to return to the 5-8 schedule.

7. SHIFTS

Shift work shall be permitted in all classifications, without restrictions, on the following basis:

7.1 The day shift is any full shift which begins between 6:00 a.m. and 11:59 a.m.. Part-time work which is commenced after 11:59 a.m. and completed by 6:59 p.m. is day shift work.

7.2 Employees transferred from one shift to another, unless relieved from work at least a full shift before starting their new shift, shall be paid the overtime rates for the first such new shift worked.

7.3 The second or swing shift shall be defined as any full shift which begins between 12:00 Noon and 6:59 p.m. An employee scheduled on the second shift shall receive a forty cents (\$.40) per hour shift differential

in addition to his/her regular hourly rate (as set forth in Schedule A).

7.4 The third or graveyard shift shall be defined as any full shift which begins between 7:00 p.m. and 5:59 a.m. Employees scheduled on the third shift shall receive a shift premium of forty-five cents (\$.45) per hour in addition to the regular hourly rate (as set forth in Schedule A).

7.5 Relief shifts shall be defined as:

7.5.1 Any work week schedule which includes multiple shifts with a maximum of three (3) day shifts.

7.5.2 Employee regularly assigned to relief shifts shall be paid fifty-five cents (\$.55) per hour premium for all hours worked.

7.5.3 Employees working relief shifts shall not receive shift premium authorized in Sections 7.3 and 7.4 above.

7.6 The shift premium provided for by 7.3, 7.4 and 7.5 above shall not apply during hours when earning overtime or when on vacation, sick leave, or any other paid leave of absence and shall not be included in an employee's regular hourly rate for purposes of computing overtime or other premium or holiday pay of any kind.

8. OVERTIME

8.1 Overtime at the rate of one and one-half (1-1/2) times an employee's established hourly rate exclusive of shift premium, shall be paid for all work performed outside of or in excess of an employee's established shift hours and on the employee's sixth and seventh day of work in any week and on holidays, provided, however, that the Employer may compensate for such overtime by time off (at a time mutually agreed upon) at the rate of one and one-half (1-1/2) hours off for each hour of overtime to a maximum of sixty (60) hours in one (1) year worked.

8.2 A record of overtime hours worked or offered to each employee shall be maintained in each work unit for each month and such information shall be posted. An

employee who wishes additional or less available overtime shall review the matter with his/her immediate supervisor and Union representative.

8.3 Employees required to work around the clock (three shifts) and required to continue work through their regular assigned shift shall continue to receive pay at the overtime rate.

8.4 An employee who is required to work more than four (4) hours before, or two (2) hours beyond his/her regular shift shall be allowed a thirty (30) minute lunch period on the Employer's time, to be taken not later than the expiration of such four (4) or two (2) hour overtime period. In the event such employee works for more than four (4) hours, or more than two (2) hours before or beyond such four (4) or two (2) hour overtime period, he/she shall receive an additional thirty (30) minute lunch period on the Employer's time for each additional four (4) or two (2) hour overtime increment as the case may be.

8.5 Lunch periods may be scheduled by the Employer, provided only that no lunch period will be scheduled

before three and one-half (3-1/2) or after five (5) hours from the beginning of an employee's shift except in emergency situations. No employee shall be required to take his/her lunch period later than five (5) hours after the beginning of his/her shift. In the event it is not possible to allow a lunch period during such five (5) hours, the employee shall receive time and one-half for his/her one-half (1/2) hour lunch period and shall also be allowed a reasonable opportunity to eat his/her lunch on the Employer's time. For purposes of this Section, a "reasonable opportunity" shall include, with respect to Railroad employees, eating lunch at their duty stations.

9. REPORTING PAY AND MINIMUM PAY

9.1 Any Permanent and Emergency Employment employee who is scheduled to report for work on his/her scheduled shift and who presents himself/herself for work as scheduled, but where work is not available or made available for him/her, shall be paid at his/her regular rate for eight (8) hours.

9.1.1 9.1 above shall not apply to Permanent Part-Time or Temporary employees whose minimum guarantee shall be four (4) hours.

9.2 Any employee called to return to work immediately, or before the employee's next work shift, and such call is after the employee has left the Employer's premises at the end of his/her last shift, shall be paid for a minimum of four (4) hours at the rate of one and one-half (1-1/2) times the regular rate. However, when any employee is required to work in excess of eight (8) hours in any workday, and the excess time is adjacent to the employee's regular work schedule, the employee will be

paid time and one-half (1-1/2) only for the time worked in excess of eight (8) hours.

9.2.1 If a Permanent Part-Time or Temporary employee is called to work on the Railroad and circumstances make it unfeasible to operate the trains and the employee is sent home, and then later on this same day is called to return to work, he/she shall be guaranteed only two (2) hours pay for the second call.

9.3 Any employee required to work a split shift shall be paid at the rate of time and one-half (1-1/2) for not less than eight (8) hours of such shift (exclusive of any overtime worked in addition thereto). Time worked on the employee's sixth (6th) or seventh (7th) day shall not be covered by this paragraph.

9.4 Upon determination by the Zoo Director, or the Zoo Director's designee, of inclement weather conditions and such determination results in the decision to close the Washington Park Zoo and to send the staff home before the end of their normal shift, those employees required by

Final Draft; Tentative Agreement, July 18, 1991

Management to stay on the job shall receive one (1) hour travel pay.

10. WORK OPPORTUNITIES AND SENIORITY

10.1 Permanent Part-Time employees shall have seniority only within their job classifications and such seniority shall accrue only on the basis of actual time they are employed. Emergency Employment employees shall have seniority only within their own group during their limited term of employment. Temporary employees shall accrue no seniority rights under this Article.

10.2 Except as provided in 10.1, in the matter of lay-off and recall of employees, as well as in the matter of promotion, selection of jobs or opportunities to work on new jobs, processes, or a preferred job within the Bargaining Unit and the selection of work shifts and vacation periods, the Employer shall prefer those employees with the greatest length of service with the Employer in accordance with the following sections.

10.2.1 All employees, who transferred to the employment with the Employer from the Portland Zoological Society, seniority

dates shall be such dates as their original employment with the Society.

- 10.2.2 If two or more employees were employed in any classification on the same day, seniority shall be determined by their order of hire by the Employer's records.

10.3 Seniority of an employee as used in this Agreement shall be based upon his/her continuous length of employment with the Employer. Any employee who voluntarily quits, is discharged, or who doesn't return to work from a leave of absence, as provided for in this Agreement, will forfeit all seniority rights with the Employer. Seniority shall continue and accumulate on the following basis:

10.3.1 During a lay-off.

10.3.2 Any authorized leave of absence in which an employee continues his/her pay status.

10.3.3 During a military leave of absence as provided for by law.

10.3.4 Up to one (1) year because of leave of absence caused by personal sickness or injury. The employee's seniority will be frozen after such leave provided he/she has requested to return to work as provided in 14.3.

10.3.5 Up to eighteen (18) months for an industrial accident.

10.3.6 Up to ninety (90) working days for a personal leave of absence.

10.3.7 Up to one (1) year for an educational leave of absence.

10.4 The Employer shall provide the Union a seniority list showing the continuous service of each employee. This list will be furnished to the Union on July first (1st) of each year and the Employer shall notify the Union by written communication immediately upon any change therein.

10.5 Reductions in force shall be accomplished by removing from the classification in which the over-supply exists the junior person in that classification. An employee so removed shall be entitled to work in a lower classification in which he/she has held Permanent status in the order of his/her seniority in that classification in the Zoo.

10.5.1 No lay-offs or reduction to a lower classification shall be executed as long as there are Temporary employees, volunteers, or work release employees serving within the affected classifications covered by this Agreement.

10.5.2 The Employer shall re-employ laid-off employees on a strict seniority basis for the classification from which the employee was laid off.

10.5.3 On re-employment of laid-off employees, the Employer shall notify the employee

by certified letter, with a copy to the Union, mailed to his/her last known address. The employee shall have five (5) days to report his/her intentions to the Employer and shall report to work within two (2) weeks after notification by the Employer, or, as mutually agreed. Failure to accept recall to work will terminate any rights for re-employment.

10.5.4 The rights to re-employment conferred by sections 10.5.2 and 10.5.3 shall continue for two years from the date of lay-off and then be terminated.

10.6 Work Unit, as discussed in the following Sections, shall be defined as Animal Management, Visitor Services, Administration, and Facilities Management, which will be subdivided into Gardener, Maintenance, Custodial and Railroad for the purpose of vacation selection only.

10.7 Vacation selections shall be by classification on the basis of seniority within the Work Unit in which employees are employed:

10.7.1 Each employee will be entitled to exercise his/her seniority for only one (1) vacation selection each year. For purposes of this section "selection" means one or more consecutive days.

10.7.2 Such selection shall be made by bid posting between January 15 and February 15, of each year for vacations between April 1 of that year and March 31 of the next year in accordance with the following:

10.7.2.1 Any employee wishing to submit a bid concerning preferred vacation scheduling shall do so in writing not later than February 15. Employees on the top third of the seniority list will submit their preferred vacation bid in writing no later than January 25. Employees on the middle third of the seniority list will submit their preferred vacation bid in writing no later than February 5.

Employees on the bottom third will submit their bids no later than February 15. Failure to submit a bid on a timely basis means that seniority vacation bidding rights are forfeited for that year.

10.7.2.2 Any duplication in preferred vacation scheduling shall be worked out between employees submitting such duplicate bids and the supervisor involved in accordance with 10.7.2.1.

10.7.2.3 In the event duplicate bids cannot be worked out to the satisfaction of the employees involved and the Employer in accordance with 10.7.2.1, seniority shall control subject only to the overall staffing needs of the Zoo operation.

10.7.2.4 Requests for vacation after the preferred vacation has been satisfied shall be on a first come first served

basis and shall not be unreasonably denied.

10.8 For the purposes of this Article, a qualified employee is an employee who is qualified by knowledge, skill and experience, and is physically able to perform the job. The parties recognize the desirability of preferring qualified employees. In the selection process for promotion, the Employer shall award one (1) percent of the total possible score to each qualified employee for each full year of continuous employment at the Zoo up to a maximum of ten (10) percent. In the event two or more qualified employees have the same final score, the employee with the greater length of service shall receive preference. When a vacancy occurs in a permanent job, present employees shall be given the first opportunity on the following basis:

10.8.1 If the vacancy involved is a new job process or a preferred job within a classification first opportunity shall be given to qualified employees in that classification within the Work Unit where the vacancy occurs.

10.8.2 Whenever a vacancy occurs which creates promotional opportunities within the unit, or transfer to a vacancy, qualified employees within the Work Unit where a promotional opportunity exists shall be given first opportunity to fill such vacancy, and second opportunity to fill promotional opportunity shall be afforded to any qualified employee covered by this Agreement.

10.8.1 An employee filling a promotional opportunity or filling a vacancy shall work the work schedule specified for such job.

10.8.2 Promoted employees shall serve a ninety (90) working day probationary period. The probationary period shall be used by the Employer as an evaluation period in which the Employer will make written evaluation to the employee at the completion of thirty (30), sixty (60)

and eighty-five (85) working days of his/her probationary period.

10.8.3 Any employee who is promoted and fails to qualify for the new position shall be returned to his former classification with all rights and conditions of employment he/she had in his/her former classification.

10.8.4 Within ninety (90) calendar days of promotion, any employee may elect to return to his/her former classification with no loss of rights and conditions of employment; provided a vacancy exists in the employee's former classification within six (6) months of the promotion.

10.9 All vacancies which create job opportunities within the Bargaining Unit under Article 10 shall be posted in the work location of the affected employees. Such job opportunities shall be posted for a period of seven (7) working days. Employees shall bid in writing on such opportunities according to the provisions of this

section and such bid shall be made no later than the eighth (8th) working day after the first day of posting.

~~The Employer will make a good faith effort to promote from within prior to advertising for outside candidates.~~

10.9.1 If the Employer makes an assignment from within the Bargaining Unit, the assignment will normally be made within seven (7) working days after the bid is closed. The name and seniority of the employee assigned to the job shall be posted and a copy given to the Union. Upon request of any senior applicants, the Employer shall submit in writing to applicants concerned the reasons for the choice with a copy to the Union.

10.10 Whenever a vacancy occurs in any regular job, the Employer may temporarily fill it by appointment. ~~Qualifications and seniority~~ shall be the governing factor in such appointments. Employees on temporary assignments shall retain their seniority in their permanent job classification. Temporary appointments shall not exceed ~~720 hours.~~

10.10.1 The Employer shall pay an employee assigned to a higher classification the rate for that classification.

10.10.2 If assigned to the classification at the beginning of the employee's shift, he/she shall receive the higher rate for a minimum of four (4) hours, but if more than four (4) hours he/she shall receive eight (8) hours. If an employee is assigned after the beginning of the shift and works four (4) hours or less he/she shall receive a minimum of four (4) hours at the higher rate, and if he/she works more than four (4) hours he/she shall be paid the higher rate for the balance of the shifts.

10.10.3 When it is necessary to work employees in a lower classification, the Employer shall

pay the employee his/her regular rate for his/her permanent classification.

10.11 It is hereby recognized the desirability of full-time Zoo employees being trained in all phases of Railroad operations and as such employees are trained, they shall, in the next season, replace those part-time Railroad employees then employed by the Zoo. Such Railroad employees will be replaced on the basis of their seniority within their classification with the Zoo.

11. HOLIDAYS

11.1 Holiday eligibility will be pro-rated based on actual scheduled hours worked within the preceding pay period, with the exception that personal holiday eligibility will be pro-rated based upon the employee's full-time equivalent (FTE) status. The following holidays shall be recognized and observed as guaranteed paid holidays:

11.1.1 New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day, and additional days designated by the President and confirmed by the Congress of the United States or by the Governor and confirmed by the Legislature of the state of Oregon as legal holidays for all citizens. After completion of six (6) months' service, each employee covered by the terms of this Agreement shall have two (2) personal holidays per fiscal year. The personal holidays

shall be arranged upon reasonable notice and by mutual agreement between the employee and the supervisor. Personal holidays not taken within the year accrued will be forfeited. Personal holiday time must be utilized prior to use of any vacation time, and will be monitored by Payroll.

11.1.2 A Permanent Part-Time employee shall be entitled to receive Personal Holiday pay only upon completion of six (6) consecutive calendar months in which such employee works eighty (80) hours or more per month.

11.2 Whenever one of the above-listed holidays falls on Saturday, the Friday before or the Monday following said holiday shall be considered as a holiday and paid for as such. The Employer shall have the option to schedule employees off for that holiday on either of such days in accordance with operational needs. As to any employee who is not given either the preceding Friday or the following Monday off as a holiday, the preceding Friday shall be

deemed the holiday. Notwithstanding the foregoing, those jobs which operate seven (7) days per week and/or twenty-four (24) hours per day will observe Christmas on December 25, New Year's on January 1, and Independence Day on July 4th.

11.3 Whenever a holiday falls on Sunday, the following Monday shall be deemed a holiday and paid for as such. Whenever a holiday falls on an employee's regularly scheduled day off, the employee may, prior to such holiday, choose the first work day preceding or following such holiday, subject to overall staffing needs of the Zoo operation, and such day shall be considered a holiday and paid for as such.

11.4 Eligible employees shall receive eight (8) hours regular pay for each of the holidays set forth above on which they perform no work. Eligible employees who work a 4-10 schedule shall receive ten (10) hours regular pay for each of the holidays set forth above on which they perform no work. In addition to an employee's holiday pay he/she shall be paid the overtime rate for any holiday he/she is required to work. However, if an employee is regularly scheduled to work on a holiday, he/she will be permitted

to defer the holiday with regular pay until a later date. An employee under this section can accumulate no more than five (5) deferred or postponed holidays. Deferred or postponed holidays will be taken at a time mutually agreeable to the supervisor and the employee. Prior to the use of any vacation time, any deferred or postponed holiday time must be taken. The employee will endeavor to schedule the deferred or postponed holiday within the fiscal year it accrues.

11.4.1 An eligible employee shall be any employee who has been an employee of the Employer at least ten (10) days prior to the holiday.

11.4.2 No employee shall receive holiday pay if the employee is absent on his/her scheduled work day either immediately preceding or immediately following the holiday, unless he/she was on pay status for the entire such day before and day after, or unless he/she has previously applied to his/her supervisor in writing for permission to be so absent and such

written request has been approved by the Director. However, in emergency situations where an employee is unable to procure prior approval for such absence he/she may submit a written request for holiday pay, stating the reason for his/her absence, to the Director. If the Director considers the reason for the absence excusable, the holiday pay shall be paid. Should the Director either question the validity of the request or consider the reason for the absence insufficient cause for being absent, he/she shall contact the Union, discuss the case with them, and together shall render a decision. The deliberation and decision shall be based upon both the following considerations:

11.4.2.1 Whether the absence would have been granted had prior approval been sought, and, in addition

11.4.2.2 Whether the reason for not seeking prior approval was a valid one. Such decision shall be final and binding and not subject to the grievance procedure.

11.4.3 If a holiday is observed during an employee's vacation period, he/she may have his/her vacation lengthened (either before or after) for one (1) day with pay or he/she may choose a deferred holiday with pay.

11.4.4 If an eligible employee is on sick leave and a holiday is observed, he/she shall be paid for such holiday and it shall not count against his/her accumulated sick leave.

11.4.5 Notwithstanding any other provision of this Article, Permanent Part-Time employees shall be eligible for paid

holidays only if working on a regularly
scheduled basis, holiday pay for
eligible Regular Part-Time employees
will be computed on the basis of hours
worked in accordance with Article 11.1.

Permanent Part-Time employees who accept
on-call work on holidays will be paid,
at the overtime rate, only for time
worked.

12. VACATIONS

All employees except Temporary employees shall receive vacations with pay as follows:

12.1 Annual vacation leave for employees shall be computed on the basis of hours worked during each calendar year. The rate that annual vacation leave accrues shall depend on the number of years of total service for the Employer, whether or not total service was broken. If in a calendar year an employee hired before July 1, 1978 will have attained the following number of years of total service, then on the employee's anniversary date, annual vacation leave shall accrue at the following rates. For employees hired after July 1, 1978, their anniversary date for the purpose of accruing annual vacation leave shall be their date of hire.

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Total Years of Service	Accrual Rate per		Maximum Accrual (2x Annual)
	Semi-Monthly Pay Period	Vacation Leave Per Year	
0 through 4	3.333 hours	80 hours	160 hours
5 through 9	5.000 hours	120 hours	240 hours
10 through 14	5.833 hours	140 hours	280 hours
15 through 19	6.666 hours	160 hours	320 hours
20 through 24	7.500 hours	180 hours	360 hours
25 years or more	8.333 hours	200 hours	400 hours

12.2 An employee's vacation is deemed earned at the end of each pay period pursuant to Article 19.

12.3 In computing vacation "years of total service" as used in 12.1 above:

12.3.1 Includes time taken while on leave of absence with pay or military service without pay.

12.3.2 Includes absence because of an on-the-job injury up to eighteen (18) months.

12.3.3 For Permanent Part-Time employees, total length of service shall constitute the accumulative number of months in which such employee actually worked eighty (80) hours or more. Such employee will accrue vacation leave on the basis of time actually worked each month.

12.4 Employees shall continue to earn vacation credit for:

12.4.1 A period of one year because of an absence caused by an on-the-job injury.

12.4.2 Any authorized leave of absence where an employee continues his/her pay status.

12.4.3 Any authorized personal leaves of absence not to exceed thirty (30) days in a fiscal year.

12.5 The total number of vacation hours accrued at the end of the first payroll period in January cannot exceed an employee's vacation accrual for the preceding twenty-four (24) month period. Except, however, if during the month of December, the Employer requires an employee to work his/her vacation period that was previously scheduled, and approved, the amount of vacation worked may be carried over in addition to two year's accumulation.

12.6 Whenever an employee with more than ninety (90) working days service is layed off or terminated, his/her accrued and unused vacation hours shall be paid in accordance with state law.

12.7 Employees shall be permitted to choose either a split or entire vacation. Employees shall have the right to determine their vacation time on the basis of seniority as provided in Article 10.

13. HEALTH AND WELFARE

13.1 The Employer shall pay into the Oregon Laborers-Employers Trust Fund on behalf of each permanent and emergency employment employee who works eighty (80) hours or more per month, the required monthly premium under the Health

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Maintenance Medical Plan. New employees who work eighty (80) hours or more by the twentieth (20th) day of a month, will be eligible to use their health and welfare one month earlier than is provided in the Oregon Laborers-Employers Health and Welfare Trust Fund Handbook as it reads of this date. For detailed eligibility requirements check the Oregon Laborer-Employee Health and Welfare Trust Fund Handbook. Such sum shall be applied to purchase monthly medical, psychiatric, dental, eye care, insurance and sick leave benefits under such Fund for each eligible employee and his or her eligible dependents in accordance with the Health Maintenance Medical Plan of the Fund. Payments shall be submitted each month on behalf of eligible employees and dependents for the preceding month to Oregon Laborers Trust Funds, 2929 N. W. 31st Avenue, Portland, Oregon 97210, the administrators of the Fund. The parties recognize the administrative desirability of a single health and life insurance program for all employees. Employees of the Employer who are employed at the Washington Park Zoo and who are outside the Bargaining Unit covered by this Agreement may, at Employer option, be covered by such insurance on the same terms as specified above under uniform rules of eligibility and qualification as specified in the applicable plan. Permanent Part-Time employees, after they have worked ninety (90) working

days and work eighty (80) hours or more per month, will be provided health and welfare coverage.

13.2 Any eligible employee who does not work the required eighty (80) hours per month during the preceding month shall have the option to self-pay, by payroll deduction or by direct payment. Payroll deduction shall be contingent upon and operative only in the event an employee works a sufficient number of hours during a subject month to cover the required payment. Temporary employees are not eligible for health and welfare coverage as provided by this Agreement.

13.2.1 During the term of this Agreement the Employer will pay the following amounts for health insurance coverage provided by the Oregon Laborers Trust Fund pursuant to Article 13.1.

(a) Effective July 1, 1991 to June 30, 1992, the Employer shall pay into the Oregon Laborers-Employers Trust Fund an amount not to exceed 112.5% of the \$308.81 composite rate paid during 1990-91.

(b) Effective July 1, 1992 to June 30, 1993 the Employer shall pay into the Oregon Laborers-Employers Trust

Fund an amount not to exceed 122.5% of the \$308.81 composite rate paid during 1990-91.

(c) Effective July 1, 1993 to June 30, 1994, the Employer shall pay into the Oregon Laborers-Employers Trust Fund an amount not to exceed 132.5% of the \$308.81 composite rate paid during 1990-91.

(d) Effective July 1, 1994 to June 30, 1995, the Employer shall pay into the Oregon Laborers-Employers Trust Fund an amount not to exceed 142.5% of the \$308.81 composite rate paid during 1990-91.

13.3 Effective July 1, 1991, all regular employees, and regular part-time employees who work 20 hours or more per week may enroll in the Metro sponsored health and welfare plan. Metro sponsored health coverage will include medical, dental and vision coverage for the employee and his/her dependents. Metro sponsored Welfare coverage will include long term disability, accidental death and dismemberment, life and dependent life insurances, pursuant to Article 13.5.

13.4 During the term of this Agreement Metro will pay the following amounts for medical, dental and vision coverages:

(a) Effective July 1, 1991, Metro shall contribute an amount not to exceed 112.5% of the composite rate of \$308.81 that Metro paid during 1990/91 per employee for an equivalent medical, dental and vision plan provided by an HMO and/or indemnity carrier.

(b) Effective July 1, 1992 Metro shall contribute an amount not to exceed 122.5% of the composite rate of \$308.81 that Metro paid during 1990/91 per employee for an equivalent medical, dental and vision plan provided by an HMO and/or indemnity carrier.

(c) Effective July 1, 1993, Metro shall contribute an amount not to exceed 132.5% of the composite rate of \$308.81 that Metro paid during 1990/91 per employee for an equivalent medical, dental and vision plan provided by an HMO and/or indemnity carrier.

(d) Effective July 1, 1994 Metro shall contribute an amount not to exceed 142.5% of the composite rate of \$308.81 that Metro paid during 1990/91 per employee for an equivalent medical, dental and vision plan provided by an HMO and/or indemnity carrier.

13.5 Life insurance, dependent life, accidental death and dismemberment, and long term disability coverages shall be provided to all employees who enroll in the Metro plan. Such coverages will be provided at no cost to the employee unless adjustments are made by the joint committee, to keep medical, dental and vision costs below the cap for that coverage, pursuant to Article 13.6 of this Agreement.

13.6 No later than July 1, 1991 or within thirty (30) days from the signing of this agreement, a joint eight (8) member committee comprised of four (4) members appointed by the Union and four (4) members appointed by Metro shall be formed. Metro shall make available to the committee current information regarding insurance premium rates and projected increases as such information becomes available to Metro. The committee shall meet to consider adjustments to benefits or coverages to stay below the specified Employer contributions for each year of the Agreement. Each employee may contribute the remainder of the actual composite premium cost greater than the Employer contribution, if necessary.

A lawful meeting shall be comprised of an equal number of Union and Metro Committee members with not less than two of each group. The Committee shall make recommendations to the Executive Officer

to keep health care costs under the amounts set forth in Sections 13.2.1 through 13.5 of this article.

The Executive Officer shall consider the committee's recommendations and have the authority to make Plan modifications as necessary. In the event that the parties do not agree, the union has the right to utilize the remedies available under ORS 243.712-243.732 including mediation and factfinding.

13.7 The Employer will not be liable for payroll deduction or premium payment errors, but will make proper adjustment for errors as soon as practicable, upon knowledge of the error.

14. SICK LEAVE

14.1 Employees shall earn sick leave at the rate of four (4) hours per biweekly payroll period or 4.333 hours per semimonthly pay period; provided, Permanent Part-Time employees shall earn sick leave at the rate of four (4) hours for each eighty (80) hours worked. Qualified employees shall be eligible for use of earned sick leave after ninety (90) calendar days service with the Employer.

The parties agree that in those instances where the provisions of this article are in conflict with current Workers' Compensation law and administrative rules, said laws and administrative rules will prevail.

14.2.1 An employee shall be entitled to use a maximum of four (4) consecutive calendar days sick leave without a doctor's certificate if the employee has accumulated not less than four hundred (400) hours of sick leave. Otherwise, the employee will be entitled to use a maximum of three (3) consecutive calendar days sick leave without a doctor's certificate. If an employee is on sick leave prior to his/her regular weekly scheduled days off, the scheduled days off will not be counted for the purpose of requiring a doctor's certificate. When a doctor's certificate is required, it will contain the date of treatment and the date the employee may return to work. Pregnancy shall be considered an illness for the purpose of this Article. Employees may accumulate unlimited sick leave. Employees

may use up to five (5) days in any fiscal year for illness in her/her immediate family; (immediate family means spouse, children, father, mother) if supported by a statement from the attending physician. Notwithstanding the foregoing, any employee who is considered to be misusing sick leave may be subject to discipline and/or may be required to furnish a doctor's certificate for each day of illness.

14.2.2 In addition, employees using sick leave shall notify or cause to be notified, his/her immediate supervisor or his/her designee within one (1) hour of commencement of his/her shift. Sick leave with pay may not be allowed unless such report has been made.

14.3 Upon application, supported by a statement of the attending physician, a leave of absence will be granted without pay for a period not to exceed one (1) year in cases of pregnancy, personal illness or physical disability that is non-job-related. Any employee requesting such a leave shall file such request in writing with the Director and attach thereto a

statement of the attending physician. Such leave shall also be granted for critical illness in the immediate family if supported by a statement of the attending physician and by proof that the illness requires the employee's attendance. Employees upon ceasing work, shall use such vacation and sick leave as may have been earned, except that such vacation time must have been regularly available to him or to her during the calendar year and the sick leave shall not exceed the amount which has been earned up to the time the employee ceases work. The leave of absence without pay shall commence immediately, or if used, upon exhaustion of earned sick leave and vacation. After a leave of absence of ninety (90) working days or longer, an employee desiring to return to work must give the Employer ten (10) days written notice of their intent to return. However, if a vacancy does not exist at the time such employee decides to return from a leave, he/she shall be placed on the appropriate layed-off list in accordance with seniority which list shall be subject to the provision of section 10.5.4. Pregnant employees who continue to work after knowledge of their pregnancy shall sign a release of liability in favor of the Employer concerning possible harm to the fetus from animal-related diseases.

14.4 Temporary employees shall accrue no sick leave benefits.

14.5 Sick pay is provided in a specified amount per week as of the execution of this Agreement, as a consequence and as a part of the Health and Welfare coverage provided under Article 13 of this Agreement. It is mutually agreed that there will be no duplication of sick leave benefits paid by the Oregon Laborers-Employers Trust Fund and sick leave provided under this Agreement. As a consequence, any such leave benefits paid by the Oregon Laborers- Employers Trust Fund shall be credited against any sick leave payments which would otherwise be payable by the Employer under this Article 14 and shall not be payable by the Employer. Any sick leave payments from the Health and Welfare Fund with which the Employer is credited shall (not) be charged against the employee's accumulated sick leave under section 14.1 of this Article 14. Employees eligible for sick pay from the Trust Fund must apply for said pay, and shall not be paid by Metro for amounts which should have been received from the Trust Fund.

14.6 During an absence due to an industrial accident which is accepted by Workers' Compensation, any employee covered by this Agreement shall be entitled to receive an income supplement from the Employer for as many days as he/she had accrued sick leave on the day of the accident. The Employer and the Union

agree that the daily supplement will be 1/3 of the normal gross daily wages. Both parties agree to the principle that the employee should suffer no financial penalty nor should the employee have a financial advantage by being in a disability status. Medical progress reports and an independent medical examination may be required as a condition of all such payments. The cost of an independent medical examination will be paid by the Employer.

14.6.1 On an employee's date of hire, he/she shall be credited with a total of fifteen (15) days of industrial accident leave. Such leave shall be available for time lost because of industrial injury for two (2) years from the employee's date of hire and shall be used prior to the supplement outlined in 14.6 above.

14.6.2 Payments made by the Employer under subsections 14.6 and 14.6.1 above shall not be charged to accrued sick leave.

14.6.3 If an employee exhausts all benefits in 14.6 and 14.6.1 above, and remains employed with

Employer, the Employer shall maintain the employee's health and welfare insurance benefits for a period not to exceed three (3) months, providing he/she was eligible for Employer-paid benefits at the time of the accident.

14.6.4 Any employee who suffers an industrial accident shall have the right for a period of eighteen (18) months to return to the position he/she held at the time of his/her accident if he/she is physically capable of performing the duties of such position.

14.6.5 If an injured employee has become medically stable and is physically unable to return to the position he/she held at the time of injury, or the eighteen (18) month period in 14.6.4 has expired, then he/she will be re-employed in accordance with applicable State law.

14.6.6 Employees whose benefits under 14.6 have expired will automatically be placed on an

Industrial Accident Leave of Absence.

However, an employee who has not returned to work within the eighteen (18) month period in 14.6.4 shall have his/her seniority frozen and shall accumulate no further seniority until they return to work.

14.6.7 Employees hired as replacements for persons on Industrial Accident Leave, in accordance with 14.6.4, 14.6.5 and 14.6.6, will be informed as to the right of an injured worker to return to his/her job.

14.7 The Employer agrees to convert sick leave pay, upon retirement, to a PERS Supplement, as contemplated by ORS 237.153.

14.8 The Employer agrees to convert sick leave pay upon retirement, for those employees covered under the Employer's private retirement program on the same basis as those employees under PERS.

14.9 No sick leave pay shall be paid for injuries related to outside employment.

14.10 Employer and Union agree to work together during the period of the Agreement to identify and curb abuse of sick leave and industrial accident benefits.

14.11 An employee using twenty-four (24) hours or less sick leave in a fiscal year, shall be credited with one (1) day of additional vacation or pay (to comply with Letter of Understanding).

14.12 Parental leave as provided under this Article shall be no less than provided for in ORS 659.360.

15. OTHER LEAVES

15.1 An employee absent from duty by reason of the death of his or her spouse, parents, children, sister, brother, grandparent, grandchildren, father-in-law, mother-in-law, sister-in-law, brother-in-law, daughter-in-law or son-in-law shall be allowed not to exceed two (2) days time off duty without deduction of pay on account of such absence.

15.2 An additional two (2) days leave shall be allowed an employee for necessary funeral travel time in the event of a

death in his/her immediate family. Approval for such travel time shall be made by the Director.

15.3 Under exceptional circumstances, leave for death may be granted by the Director upon the death of a person other than the employee's immediate family.

15.4 When an employee attends a funeral ceremony for a fellow employee within his/her own Department, he/she will be granted four (4) hours time off with pay to attend such funeral ceremony, subject to the needs of the operation.

15.5 With reasonable advance notice and with consent of the Employer, employees may be permitted other unpaid leaves of absences under the following conditions:

15.5.1 Personal leaves of absence, where the employee will return to work within ninety (90) working days. Personal leaves of absence shall not be granted for other outside employment.

15.5.2 Job related educational leaves of absence may be granted for a period not to exceed one (1) year.

Educational leave privileges will be rescinded in those instances where an employee is found to be engaged in other employment not directly related to the pre-approved education program.

The return to work criteria shall be that used in 14.3, except that accrued sick leave may not be used during an educational leave of absence.

16. JURY DUTY

16.1 All employees shall be granted leave with pay and without loss of any benefits of his/her employment, to serve as a juror or witness in response to a subpoena or similar service issued out of a state or federal court, subject to the following provisions:

16.1.1 The employee granted such leave shall pay all money received for his/her service as juror or witness to the Employer, less any travel allowance received.

16.1.2 Where the employee is required to serve as a juror or witness on a scheduled day off or vacation days, and such day cannot reasonably be rescheduled, he/she may retain the fee paid for service as a juror or witness on his/her day off or vacation day.

16.1.3 If an employee granted leave under this Article is excused from service as juror or witness with more than two (2) hours remaining in his/her workshift, he/she shall notify

his/her supervisor and shall report to work the remainder of his/her shift if his/her supervisor requests him/her to do so. For the purpose of this Article, the employee shall be considered as working the day shift.

17. SAFETY-SANITATION

17.1 The Employer will exert every reasonable effort to provide and maintain safe working conditions, and the Union will cooperate to that end and support the Employer when discipline is reasonably required in the case of safety regulation violations.

17.2 The Union will encourage their members to work in a safe manner. Metro agrees to provide a safe and healthful workplace, as required by law. Metro also agrees to provide and maintain all clothing, tools and equipment required by Metro for use by the employee.

Metro and the Union will establish joint labor-management safety committees in compliance with current Oregon law and administrative rules. Joint Safety committees will be established to represent the following primary places of employment:

1. Metro Center
2. Metro Washington Park Zoo
3. All Solid Waste facilities under Solid Waste Department and control

Metro and the Union will each elect or appoint an appropriate number of representatives and alternates to the committees specified above in accordance with the statute. Metro and the Union agree to establish new committees as required by expansion or reorganization.

Each safety committee shall inquire into and make recommendations to Metro on all safety issues in the work area.

17.2.1 Each month each supervisor shall hold a safety meeting with his/her crew. The supervisor will report on the action or disposition of any recommendations or complaints of the safety committee that would have an effect on his/her crew.

17.3 All work performed by the employees shall be governed by the provisions set forth in the Oregon State Safety Codes.

17.4 No employees shall operate any vehicle or machinery which does not comply with the Safety Codes or the laws of the State of Oregon.

17.4.1 Whenever any automotive or other equipment is taken out of service for safety or mechanical

reasons, the Employer shall place a tag on the equipment stating the equipment is out of service. A record of service will be maintained and be available for review by the operator of such equipment.

17.5 Any employee who believes that any working condition or machinery is unsafe, shall immediately call it to the attention of the safety committee or his/her supervisor.

17.6 No employee shall be disciplined for refusal to violate the Safety Code or the laws of the State of Oregon.

17.7 Any condition which the Union believes a violation of reasonable sanitation practices may be taken up through the Grievance procedure under Article 26.

17.8 Where noxious or poisonous gases may accumulate, the Employer shall provide proper protection and ventilation. Proper lighting and ventilation shall be provided for all enclosed working spaces.

17.9 No employee shall be required to work alone in a situation in which working alone is hazardous. In the

determination of whether it is hazardous to work alone, the Employer's safety officer, the Union, and the safety committee of the operation involved shall meet to discuss and make recommendations as to what constitutes such a hazardous condition when the question arises.

17.10 Each employee shall be required to wear such safety and protective apparel and devices as furnished by the Employer.

18. UNION REPRESENTATIVE

18.1 The Business Representative of the Union shall have access to the Zoo facility, provided he/she does not interfere or cause employees to neglect their work.

18.2 It is recognized by the Employer that shop stewards are desirable for the proper administration of the terms of this Agreement. The parties also recognize that it is desirable that the person designated as steward shall perform his/her fair share of the work that he/she is qualified to perform. In no event shall the Employer discriminate against a steward in the matter of layoffs or rehires or discharge him/her on account of the proper performance of his/her steward's duties.

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18.3 The Union shall have a right to take up any disciplinary action brought against a shop steward by the Employer as a grievance at Section 26.1.2 of the Grievance Procedure, and the matter shall be handled in accordance with this procedure through arbitration, if deemed necessary by either party.

19. PAY

19.1 Payday shall be either biweekly or semimonthly. Payday shall be within **ten calendar** days of the close of each pay period. Employees shall be paid prior to the end of their assigned shift.

19.2 The Employer shall account to the employee on his/her paycheck stub for overtime hours, straight time hours, and vacation and sick time earned and accumulated in the same manner such accounting is made to all other Metro employees.

19.3 Work time shall be reflected on time cards provided by the Employer. Employees reporting after the scheduled reporting time shall be paid as of the nearest one-tenth (1/10) of an hour.

20. STRIKES AND LOCKOUTS BARRED

There shall be no lockouts on the part of the Employer, nor suspension of work on the part of the employees. This Agreement is a guarantee that for the duration of the Agreement there will be neither strikes nor lockouts, and that all complaints, grievances or disputes arising under its provisions will be settled pursuant to its grievance procedure.

21. MAINTENANCE OF STANDARDS

21.1 The Employer agrees that all conditions of employment in its individual operations relating to wages, hours of work, overtime differentials and general working conditions directly related to job performance shall be maintained at not less than the highest standards in effect at the time of the signing of this Agreement, except where those standards have been modified through collective bargaining. It is agreed that the provisions of this Article shall not apply to inadvertent or bona fide errors made by the Employer or the Union in applying the terms and conditions of this Agreement, if such error is corrected with ninety (90) days from the date of the error. Any disagreement between the local Union and the Employer with respect to this matter shall be subject to the grievance procedure.

21.2 As of the effective date of this Agreement, Personal Holiday accrual (§11.1.1), defined holiday scheduling (§11.4), vacation accrual during leaves (§12.4.3), vacation carryover (§12.5) and sick leave for family illness (§14.2) are to be based upon fiscal rather than calendar years. It is agreed that such conversion from a calendar to a fiscal year basis shall not cause any employee to lose or gain any benefit to which the employee

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would or would not have otherwise been entitled pursuant to the previous calendar year basis for such benefits.

22. WAGE SCALES

22.1 Wages shall be paid in accordance with the provisions of Schedule A attached hereto, as follows:

(a) Effective July 1, 1991, the rates and ranges of all employees shall not be increased, but employees shall receive in lieu of a wage increase, a 6% contribution to PERS pursuant to Article 27.

Effective July 1, 1992, the rates and ranges of all employees shall be increased by eighty-five percent (85%) of the increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers, (CPI-W) (January to January) for the City of Portland, Oregon, published by the Bureau of Labor Statistics, U.S. Department of Labor. However, in no event shall the salary increase be less than three percent (3%) or greater than six percent (6%).

Effective July 1, 1993, the rates and ranges of all employees shall be increased by eighty-five percent (85%) of the increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers, (CPI-W) (January to January) for the City of Portland, Oregon, published by the Bureau of Labor Statistics, U.S. Department of Labor. However, in no event shall the salary increase be less than three percent (3%) or greater than six percent (6%).

Effective July 1, 1994, the rates and ranges of all employees shall be increased by eighty-five percent (85%) of the increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers, (CPI-W) (January to January) for the City of Portland, Oregon, published by the Bureau of Labor Statistics, U.S. Department of Labor. However, in no event shall the salary increase be less than three percent (3%) or greater than six percent (6%).

22.2 Before classifying a newly created position or reclassifying or merging an existing position or positions, the Employer shall notify the Union and discuss the effect thereof.

The Union agrees that the Employer has the sole authority to classify, reclassify and merge positions. The above does not preclude the Union from monitoring the Employer's classification and reclassification of positions in Schedule A.

22.3 Whenever the Employer creates a new classification which comes under the jurisdiction of the Union, or modifies the job duties of existing classifications, the Employer and the Union shall meet immediately to negotiate a wage scale as a result of such changes. If agreement is not reached, the Employer may implement the wage scale on an interim basis. Final wage scale determination will be made by a three (3) person panel consisting of one (1) Employer selected representative, one (1) Union-selected representative, and one (1) neutral party to be selected by mutual agreement between the Employer and the Union.

22.4 All job classifications covered by this Agreement shall have a description of the duties and responsibilities made up by the Employer and available for inspection. It is agreed that if the Employer intends to modify existing job descriptions,

both parties shall meet and discuss such changes prior to such changes taking effect.

23. CLOTHING

23.1 Where the Employer now furnishes, launders and requires specified working clothing for employees in its various operations, such practice will continue. Employees shall be required to wear such clothing. The Employer may expand this policy to any of its operations covered by this Agreement.

23.2 The Employer will furnish raincoats and rainpants in those cases where the nature of the work requires employees to work out-of-doors in inclement weather.

23.3 Any employee with ninety (90) working days of service or more, working in a position where the Employer requires safety shoes, shall be reimbursed upon proof of purchase, up to \$75.00 annually and may accumulate two (2) years annual allowance for the purchase of safety shoes. Purchase of safety shoes shall be on the employee's time. Such safety shoes must be worn when on duty. Proof of purchase shall be on authorization forms issued by the Employer.

24. UNION BULLETIN BOARDS

The Employer shall furnish bulletin boards in places mutually satisfactory to the Employer and the Union. Such bulletin boards shall be used by the Union to post notices of interest to the employees.

25. DISCIPLINE AND DISCHARGE

25.1 Disciplinary actions shall include only the following: oral reprimand, written reprimand, demotion, suspension or discharge in writing.

25.1.1 Disciplinary action or measures may be imposed only for just cause. Disciplinary actions imposed upon an employee may be processed as a grievance through the regular grievance procedure. If the Employer has reason to reprimand an employee, it shall be done in a manner that will not embarrass the employee before other employees or the public.

25.2 The Employer shall not discharge any non-probationary employee without just cause. If, in any case, the Employer feels

there is just cause for such discharge, the employee involved will be suspended for five (5) working days without pay or accrual of benefits. The employee and his/her Union representative will be notified in writing that the employee has been suspended and is subject to discharge. Such notification shall state the reason in detail for the suspension and discharge specifying dates, locations, and the particular nature of the reason for the suspension and discharge.

25.2.1 The Union shall have the right to take up the suspension and/or discharge as a grievance as specified at 26.1.2 of the Grievance procedure, and the matter shall be handled in accordance with this procedure through arbitration, if deemed necessary by either party.

25.2.2 Any employee found to be unjustly suspended or discharged shall be reinstated with full compensation for all lost time and with full restoration of all other rights and conditions of employment, or as otherwise stipulated by mutual agreement or by an arbitrator under the grievance procedure hereinafter set forth.

25.3 The first ninety (90) working days of an employee's employment shall constitute a probationary period. During the probationary period an employee may be terminated for any reason without recourse under the Grievance and Arbitration procedures of this Agreement.

25.4 If the Employer has reason to discuss any disciplinary action with an employee, the employee shall be given the option of having a Union representative present at any such discussion.

25.5 Upon request of an employee records of reprimands shall be removed from an employee's personnel file after one (1) year, provided, however, that the employee has taken corrective action, and has received no other disciplinary actions.

26. GRIEVANCES, COMPLAINTS AND ARBITRATION

26.1 A grievance for the purpose of this Agreement is defined as a dispute regarding the meaning or interpretation of a particular clause of this Agreement or regarding an alleged violation of this Agreement. Grievances shall be processed in the following manner:

26.1.1 Any employee with a grievance shall refer the matter orally within 7 calendar days or in writing within 14 calendar days of the date upon which the alleged grievance occurred. The employee may be accompanied by a Union representative in any discussion following such reference to the supervisor. The Union may take up any grievance with or without the consent of the employee.

26.1.2 If the matter is not settled within ten (10) calendar days of reference to the supervisor, the matter may be referred to the Director, provided that such reference shall be in writing, shall state the nature of the grievance, the section of the Agreement allegedly violated, and the remedy requested, and shall be presented to the Director or his/her designated representative within fifteen (15) calendar days of the expiration of the ten (10) calendar day period for settlement with the supervisor. The Director, or his/her designate, and such assistants as

he/she may select shall meet promptly to attempt to settle such grievance with the grievance committee of the Union.

26.1.3 Should the grievance committee and the Director fail to effect a settlement of the dispute within ten (10) calendar days of its submission to the Director, the Union shall have the right to perfect and submit the grievance in writing to the Executive Officer, provided that such submission shall be within twenty (20) calendar days from the date of submission to the Director.

26.1.4 Should the parties fail to settle the dispute with the Executive Officer within fifteen (15) calendar days from the date of submission to him/her, it may be referred in writing within ten (10) calendar days thereafter to a Board of Adjustment, or mediation upon mutual agreement of parties which shall convene to hear the matter. The Board of Adjustment shall consist of two (2) members designated by the Executive Officer and two (2) members

designated by the union involved. Members of the Board of Adjustment designated by the Executive Officer and the Union shall not be from the Department or local union involved. The Board of Adjustment shall convene within ~~twenty (20) calendar days~~ following referral of the grievance to hear evidence submitted by the Union involved, the grievant, the Department involved, or the Executive Officer. The Board of Adjustment shall decide the issue by majority vote of its members within ~~five (5) calendar~~ days following the hearing. The decision of the Board of Adjustment shall be final and binding on all parties.

26.1.5 If the grievance remains unresolved ~~after mediation or~~ by reason of a Board of Adjustment deadlock, the Union shall have the right to submit the matter to arbitration. In the event the Union elects to do so, it must notify the Executive Officer of its decision in writing within twenty-one (21) calendar days from the date ~~of the decision of the Board of Adjustment.~~ After the grievance has

been so submitted, the parties or their representatives shall jointly request the State Mediation and Conciliation Service for a list of names of seven (7) arbitrators. The parties shall select an arbitrator from that list by such method as they may jointly select or, if they are unable to agree upon a method, then by the method of alternate striking of names under which the grieving party shall strike the first name objectionable to it, and the Employer shall then strike the first name objectionable to it. The final name left on the list shall be the arbitrator.

26.2 The arbitrator's decision shall be final and binding, but he/she shall have no power to alter, modify, amend, add to or detract from the terms of this Agreement. His/her decision shall be within the scope and terms of this Agreement and shall be given in writing forty-five (45) days after the hearing.

~~However, nothing in this section prohibits the parties from attempting to resolve the grievance through mediation.~~

26.3 The Employer and the Union shall divide equally and pay the arbitrator's fee, the cost of any hearing room and cost

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of reporting if requested by the arbitrator. All other expenses shall be borne by the party incurring them.

27. RETIREMENT

27.1 Effective July 1, 1991, and during the term of this Agreement, all eligible unit employees shall participate in the Oregon Public Employees Retirement System (PERS), as provided in the Oregon Revised Statutes. The extent of PERS membership shall include prior eligibility service, and the unused sick leave option, which shall become effective July 1, 1992. PERS membership shall not include prior benefit service or the unused sick leave option.

27.2 Metro agrees to pay the employee's contribution to the Oregon Public Employees Retirement System in the amount of six (6%) percent of the employee's base salary, in addition to required employer contributions.

27.3 Employer may alter or amend the plan or plans provided in paragraph 27.1, change the insurance carrier or funding agent or consolidate, adopt and execute a substitute plan or plans provided that the total employer contribution to such plan or plans shall not be less than eleven (11) percent of earned wages and that current vesting practices shall not change in any way which would result in a decrease in retirement

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benefits to any given employee. Employer and Union will meet and confer prior to any such action by Employer.

28. SAVING CLAUSE

Should any part hereof or any provision herein contained be rendered or declared invalid by reason of any existing or subsequently enacted legislation or by any decree of a court of competent jurisdiction, such invalidation of such part or portion of this Agreement shall not invalidate the remaining portions hereof; provided, however, upon such invalidation the parties agree immediately to meet and negotiate such parts or provisions affected. The remaining parts or provisions shall remain in full force and effect.

29. TERMINATION - RE-OPENING

29.1 This Agreement shall be in full force and effect from July 1, 1991, until June 30, 1995, and it shall cease and expire on that date.

29.2 The Union will notify the Employer, not later than January 15, 1995, that it intends to reopen this Agreement for the purpose of negotiating all or part of this Agreement.

29.3 If notice is given as herein provided, representatives of the Employer and the Union shall meet and shall negotiate proposed changes without unnecessary delay. In the event that agreement is not reached prior to the expiration of this contract, the contract shall remain in effect during the continued good faith negotiations.

LABORERS INTERNATIONAL UNION
LOCAL NO. 483

METROPOLITAN SERVICE DISTRICT

By: _____

Glen Feuerborn

By: _____

Rena Cusma

Date: _____

Date: _____

SIDE LETTER: CLASSIFICATION STUDY

Metro will complete a classification study of the following classes no later than October 1, 1991:

- (a) Gardener 1, Gardener 2, Senior Gardener
- (b) Master Mechanic, Maintenance Mechanic, Maintenance Technician (HVAC)
- (c) Maintenance Electrician
- (d) Typist-Receptionist

The purpose of the study will be:

- (a) To determine whether the duties of the studied classifications are accurately described by the current classification descriptions, and to revise the classifications descriptions if necessary.
- (b) To determine if the studied positions are accurately classified.
- (c) To determine whether the studied positions are accurately compensated when compared with similar positions in comparable agencies.

Metro and the Union will meet within ten calendar days of the completion of the study to negotiate any adjustments to wages that may result from the completed study.

Metro reserves the right to review other classifications as deemed appropriate.

For Metro

Date

For the Union

Date

SIDE LETTER: CALL-BACK PAY FOR ANIMAL KEEPERS

Effective upon the signing of this Agreement, and pursuant to Article 9.2, Metro and the Union will meet on a case by case basis to establish the amount of call-back pay to be paid to Animal Keepers who are scheduled in advance to report back to the Employer's premises to perform routine duties outside of their normal work schedule.

For Metro

Date

For the Union

Date