

METROPOLITAN SERVICE DISTRICT  
BOARD OF DIRECTOR'S MEETING MINUTES  
OF  
FEBRUARY 19, 1971

ATTENDANCE

Eldon Hout, Chairman  
Lloyd Anderson  
Robert Schumacher  
Gus Mohr  
Harold Ruecker  
Sidney Bartels  
Homer C. Chandler, Executive Director  
Herbert Hardy, Attorney

There being a quorum present, the Board considered the following:

A. LEGAL REPORT

Mr. Hardy reported on legal and fiscal matters that may affect MSD. He emphasized that the question has been raised as to the legality of the provision in the State Pollution Bond Act which indicates a local agency can secure a loan from the State to finance anti-pollution facilities, secure the loan by imposing service charges and that this can be done without a vote of the people. Mr. Hardy stated that the Attorney General has determined that a declaratory judgment clarifying this point should be obtained from the Supreme Court and that MSD should be a party to that action.

Mr. Anderson moved that Mr. Hardy be authorized to proceed with seeking the declaratory judgment; Mr. Bartels seconded the motion; motion carried unanimously.

B. SOLID WASTES ENGINEERING REPORT

Mr. Chandler stated that in response to a request of the Board, the MSD Public Works Advisory Committee has developed a conceptual design of a solid wastes disposal system that MSD could implement now if funds are available. The Committee has based this concept on the declared policies of the MSD Board. He emphasized that, what is suggested is minimal in scope, is based on present technology and would have to have considerably more detailed development before it can be implemented, however, it should be detailed enough to provide the Board with a program that can be used in negotiating with the State for MSD financing.

Homer Tunks, CRAG Engineer, presented the Advisory Committee report (attached).

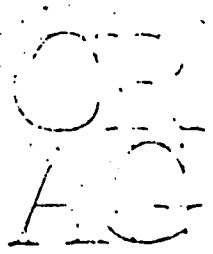
The Board accepted the report for consideration.

C. FINANCIAL REPORT

Mr. Ed Wells of the firm of Bartle-Wells presented his company's capabilities in assisting the Board in developing a financial plan for a solid wastes disposal operation.

There being no further business, the meeting adjourned at 2:45 p.m. Next meeting is set for March 12, 1971.

11. 1971



COLUMBIA REGION ASSOCIATION of GOVERNMENTS

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CLATSOP COUNTY, OREGON    CLATSOP COUNTY, WASHINGTON    MULTNOMAH COUNTY, OREGON    WASHINGTON COUNTY, OREGON  
Cities in Clatsop County    Cities in Clatsop County    Cities in Multnomah County    Cities in Washington County

*Presented  
@ MSD Mtg  
Feb. 19.*

MEMORANDUM

TO: Metropolitan Service District Board  
FROM: Homer C. Chandler                      DATE: February 19, 1971  
SUBJECT: Solid Wastes Budget

Pursuant to your instructions, the Solid Wastes Advisory Committee has, during the past week, considered a work program and budget that might be used by the District in the District's attempts to get State Bond money earmarked for developing a Solid Wastes Disposal System.

In submitting the attached suggestion, the Committee would like it emphasized that this is only a conceptual plan of a Solid Wastes Disposal System that is based on the Board's policy of providing a regional disposal site or sites and transfer stations.

The Committee also wishes to emphasize that this proposal represents a minimal program reflecting current technology. It does not consider such disposal processes as incineration and recycling. The Committee's intent is to portray a conceptual program that the District could employ as a means of getting started in developing a regional services.

The Committee recognizes that much study needs to be done before the District will have a fully developed Solid Wastes Disposal System. It has also been portrayed to them that there are no State funds available to finance studies; therefore, the Committee has endorsed the Solid Wastes Element of the CRAG work program for 1971-72 as being vital to the District's ability to provide a well-prepared Regional Solid Wastes Disposal System.

In conclusion, the Committee suggests that the District present to the State officials as the basis of making bond monies available a package program consisting of:

- a. A conceptual plan of a regional system based on MSD policies.

February 19, 1971

- b. A revenue plan as suggested by your attorney. ✓
- c. The CRAG Solid Wastes Planning Program for 1971-72.

This package provides a short-range approach, a financial plan to accomplish the short-range objectives, and a planning program that will develop a long-range system.

# CRAG PROGRAM

## F. SOLID WASTES PLANNING

'71-'72

In concert with the Metropolitan Service District, CRAG will identify and develop methods needed to implement the declared policy of the MSD Board to provide a regional disposal system featuring a regional disposal site or sites, transfer stations, and a variety of disposal methods.

### PROPOSED BUDGET

Salaries	\$28,700
Consultants	2,500
Reproduction	3,500
Travel	
Data Processing	
Overhead	<u>5,000</u>
TOTAL	\$39,700

Dec 11, 1970

Portland

VII. SOLID WASTE DISPOSAL

A. GOALS OF ELEMENT

Some of the problems of solid waste disposal in the region are identified below:

- a. The problem of solid waste disposal is not limited to city, county, and state boundaries. It is a regional problem and solutions to waste disposal within the Portland metropolitan area should be considered on a metropolitan basis. Independent action by city and counties is not the type of action which will lead to effective, acceptable and economic solutions.
- b. Current disposal sites within the Portland metropolitan area have a limited life, generally less than ten years.
- c. The City of Portland has disposal capacity in their total site to serve the City for an estimated thirty years or approximately half of this if the site serves the entire area. The present site has capacity for the City for five years or three years for the area.
- d. All disposal sites restrict the type of material disposed. Unacceptable material is disposed in an unacceptable manner or disposed of surreptitiously.
- e. Vehicle disposal is fast becoming a major disposal problem.
- f. Oil disposal is a major problem. However, efforts are being made by industry and government to solve this problem.
- g. The extent of the industrial solids waste problem is being assessed. Information is being collected.
- h. Demolition and construction waste is currently being

disposed of without control. A means of reducing this waste to a waste acceptable for landfill is needed.

Recommendations by the Metropolitan Service District solids waste subcommittee follow:

Quote in part:

"We believe that the District should immediately proceed to accomplish among other things the following specific items:

1. Select one or more regional sites where various systems of solid waste disposal will be developed and operated.
2. Locate transfer stations throughout the three Oregon counties. Solid waste hauled to these stations by private or local government collectors will be carried to the disposal sites in large vehicles under the control of the district.
3. Recycle or reclaim when feasible solid waste for other uses. An example of recycling is the separation of paper from other solid waste for resale to paper manufacturers.
4. Cooperate with all persons and groups in working out the best available disposal systems.
5. Assist the cities and counties in perfecting collection of solid wastes."

Thus, CRAG's goals for this work program are listed:

- I. Continue coordination of area-wide disposal planning.--43MD
  - a. Continue a library of existing studies.

- b. Continue inventory of existing facilities.
- c. Continue mapping existing facilities.
- d. Conduct meetings with involved agencies.
- e. Prepare progress reports on the work.

II. Continue predicting future requirements.--14MD

- a. Waste loads.
- b. Land Requirements
  - 1. Add detail on soils, typography, water table, drainage, etc.

III. Review of Disposal Methods.--30MD

- a. Current
- b. Long Range

IV. Continue Review.--29MD

- a. Criteria
- b. Location
- c. Review transfer sites (Added to 1970-71 Program)
- d. Cost Information (Added to 1970-71 Program)

V. C. Transfer Sites.--103MD

- 1. Evaluate Possible sites with transfer stations.



2. Interim site selection
  3. Evaluate sites only
  4. Interim transfer station locations
- D. Continue cost information from Item 4d
- E. 1. Site Selection future
2. Transfer Selection future

Note: The above to be evaluated with land use, zoning, neighborhoods, community goals and objectives.

VI. Conduct public information programs involving:--53MD

- A. League of Women Voters
- B. Chamber of Commerce
- C. City Club
- D. Private contractors and other
- E. Incorporate Feedback

VII. Study and Outline--142MD

- A. Collection Systems Existing
  1. Routes
  2. Collection Equipment
  3. Economics

VIII. Analyze and combine conclusions.--132MD--from V, VI, VII for for compatible and economical area solutions.

A. Finalize short- and long-range sites

1. Domestic

B. Continue study as necessary regarding:

2. Sludge

3. Oil

4. Tires

5. Cars and metals

6. Special industrial

7. Building wastes

8. Brush, etc.

9. Paper

10. Other

C. Select transfer sites (domestic and other)

1. Major

2. Deposit and pickup stations

D. Outline Salvage Systems

1. Initial

2. Future

IX. Review and Summarize--23VD

- A. Laws
- B. Organization
- C. Contract
- D. Suggest improvements

- X. Draft and assemble and print preliminary report--103MD  
Item 1-10

STRATEGY OR PROCEDURE

A.1. Continue Coordinating Area-wide Disposal Planning

This sub-element involves the collection of all information available on solid waste disposal and the establishment of a complete reference library on the subject.

In addition, all existing facilities will be inventoried, mapped, and local technicians and groups will be called together to assist in the planning and to facilitate coordination.

A.2. Continue Predicting Future Requirements

Future requirements will be determined upon the basis of expected waste loads, as well as land area needed for disposal.

A.3. Continue Reviewing Disposal Methods

Disposal methods as they are now in use will be analyzed as well as new and innovative methods of disposal being developed.

A.4. Continue to Determine Criteria for Area Selection

CRAG proposed to develop, with the assistance of advisory committees, and local technicians, some criteria for the selection of possible solid waste disposal sites.

Recommendation during 1970 broaden this item to include criteria and review possible transfer station location and develop some basic cost information in the 1970-1971 program.

The previous year's study will be continued along with some items added as indicated and Items 6-10 are added for completion of the fundamentals of an area-wide plan as follows:

- A.5. Continue to evaluate sites. After sub-elements A-1 through A-4 have been completed for recommending sites and transfer stations by analyzed evaluated both short- and long-range possibilities.
- A.6. The public cannot support programs without some knowledge of needs and methods. A minimum program relying on citizens groups to distribute information is proposed. Meetings will be conducted with groups indicated for the purpose of presenting information and obtaining feedback.
- A.7. A. Outline knowledge of the major collection systems including routes, collection equipment, and general economics involved will be used in evaluating transfer stations and hauls, etc.
- B. Alternatives to the existing system will be studied emphasizing recycling and salvage, economics of and the effects on the systems considered will be studied where feasible.
- A.8. The results of parts 5, 6, 7, will be analysed and conclusions reached for economical and compatible area-wide recommendations

for site or sites for disposal and transfer of domestic wastes. Some consultants time for analyzing results by computer programming is allowed for. Study time may not permit complete recommendations and the many other special wastes. In this case these portions of the study will be continued in the following year's program. Recommendations on detail routings and collection systems are planned to be continued in ongoing programs.

A.9. A brief review of laws, organizations, and contracts will be initiated.

A.10. The report of Items 1 through 10 will be drafted, assembled, and printed.

#### RELATIONSHIP TO PREVIOUS WORK

The first year of the study provided basic information, inventory, and possible site selection with emphasis on domestic wastes. This year's study is to continue upon this, apply engineering criteria, and get the data into a plan. This year will devote time to such items as re-cycling, and salvage as can be justified in the study results, and begin the study of disposal of other wastes. The third or following year and it is anticipated to devote additional time to methods for reducing waste volume by re-cycling, salvage, re-use, etc. and apply this information to the study and enlarge plans for disposal methods of other industrial and special wastes.

#### FINAL PRODUCT

A report plan of items 1-10.

#### PERSONNEL

This element will be under the direction of Homer V. Turks, CRAG's Engineer. He will be assisted by Doran A. Houston, Project Engineer; Mark Christianson, Draftsman; Homer G. Chander, Executive Director:

Merle Irvine, Engineering Technician; the Planning and Economic Departments by checking input and reports; and the secretarial staff.

COSTS

<sup>1</sup>Salaries  
Consultants  
Travel  
Reproduction and Miscellaneous  
Maps, Etc.  
Office Overhead  
ELEMENT TOTAL

~~\$34,700~~  
~~2,500~~  
~~1,000~~  
~~5,700~~ - 2100  
~~400~~  
~~9,600~~ - 5100  
~~\$53,900~~  
~~11,5700~~

*may be low*  
*act up*  
*Void*  
*Budget*  
*Revised*  
*See sheet 1*  
*Disput*  
*#6052*

Appears

<sup>1</sup>This includes payroll costs and employees benefits.

Review of Solid Waste Committee Report

Presented to  
Rec: Milk  
Jan 1, 1968

In April of 1968, the Environmental Standards Committee appointed an Ad Hoc Committee known as the Solid Waste Subcommittee. The purpose of this committee was to examine the problems of solid waste disposal in the Portland metropolitan area and to arrive at such conclusions and recommendations as its study indicated. Although this committee contained a number of members experienced in the problems of solid waste disposal, the committee was not expected to provide technical solutions for solid waste disposal. Rather, the Committee identified its responsibility to be one of defining the scope and magnitude of the problem in the area, its future growth, and, to the extent possible, a general approach or plan which will contribute to the long-range solution of solid waste disposal in the Portland metropolitan area.

The Committee prepared a 56-page report which was submitted to the Chamber Board and approved January of this year. A summary of the recommendations of this Committee is as follows:

1. It is recommended that the sanitary land fill method be adopted as most acceptable and practical approach for disposal of solid waste in the Portland metropolitan area until such time as new techniques or circumstances make other methods more acceptable.
2. Criteria for sanitary land fill site selection should be broad in concept and utility. Sanitary land fills must be compatible with the needs and desires of industry and the public.
3. Public awareness of the solid waste disposal problems in the metropolitan area must be made a part of any waste disposal program.
4. Special treatment process must be developed for the disposal of septic sewage sludge, oil wastes, automobile refuse and other large volume wastes which are not acceptable in sanitary land fills.
5. Responsibility for disposal of solid wastes should remain with the City or County, except private enterprise should be encouraged to enter into the business of waste disposal through franchise.
6. Collection of solid waste should remain under the direction of local units of government.

7. Cities and counties jointly create and adopt uniform standards for the collection and disposal of solid waste. ✓
8. Comprehensive and long-range program for the collection and disposal of solid waste should be developed for the Portland metropolitan area by a planning board consisting of existing agencies involved in solid waste collection and disposal in the metro district.
9. CRAG (Columbia Region Association of Governments) serves as the vehicle or catalyst for bringing all agencies concerned with the collection and disposal of solid wastes for the above-stated purpose. A metro service district could serve in the same capacity.
10. Immediate steps should be taken for the formation of the above-mentioned planning board.

4/14/70

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RECOMMENDATIONS TO METROPOLITAN SERVICE DISTRICT

DECEMBER 11, 1970

- I M.S.D GAIN SUPPORT OF DEQ FOR THEIR SOLID WASTE PROGRAM AND JOINTLY REQUEST THE 1971 LEGISLATURE TO AUTHORIZE THE USE OF STATE POLLUTION BONDS IN SUFFICIENT AMOUNT TO ACCOMPLISH THE OBJECTIVE.
- II M.S.D IMMEDIATELY EMBARK ON A COORDINATION AND IMPLEMENTATION PROGRAM - AN ACTION PROGRAM.
- III M.S.D COMMENCE IMMEDIATE NEGOTIATIONS WITH THE CITY OF PORTLAND AND OWNERS OF OTHER ACCEPTABLE SITES FOR THE INITIAL PROGRAM.
- IV M.S.D ESTABLISH STANDARDS FOR THE OPERATION OF SOLID WASTE DISPOSAL SITES WITHIN ITS BOUNDARIES FOR THE PROTECTION OF THE PUBLIC HEALTH AND WELFARE.
- V M.S.D ESTABLISH A STANDING TECHNICAL ADVISORY COMMITTEE COMPOSED OF PARTICIPATING AGENCY STAFF MEMBERS ENGAGED IN THE FIELD OF SOLID WASTE.

*Adopted, as recommended, by M.S.D. Board Dec. 11, 1970*

*Board also authorized Chairman to: appoint 1) Tech. Adv. Comm. and 2) Comm. of Rep. and  
for negotiating with Portland and others.*

SOLID WASTES CONCEPTUAL PROPOSAL  
PRELIMINARY ESTIMATE-CAPITOL COSTS  
TRI-COUNTY AREA

SPACE REQUIREMENTS

Approximate total space requirements by year 2000 considering fills approximately 30 ft. in depth.

Scheme 1

Population Forecast  
 Disposal Forecast  
 1400 Acres

Scheme 2

Citizens Participation  
 in Salvage and Recycling  
 1200 Acres

PORTLAND SITE

Assume using the Portland site with a developable acreage of approximately 470<sup>±</sup> acres.

ADDITIONAL SITE OR SITES REQUIRED

In addition to Portland's site, 930<sup>±</sup> acres will be required for land fill area. The total acreage requirement will be larger to accommodate site screening, buildings, etc. Say approximately 20% additional or 1100<sup>±</sup> acres.

SUMMARY COSTS DISPOSAL SITES

Portland:

Land 500 acres x \$2000	=	\$1,000,000
Site improvements (Rds., slopes, lagoon, dikes, etc.)	=	\$1,000,000
New Equipment (from B & V <sup>1</sup> )		500,000
Total		\$2,500,000

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<sup>1</sup> From Black & Vetch

ASSUME 1 ADDITIONAL SITE

Site 1100 Acres x \$2000 for site	\$2,200,000
** Equipment 1 unit \$400,000, 1 unit \$330,000	730,000
Site Improvements	<u>1,000,000</u>
	\$3,930,000

OR

ASSUME 2 ADDITIONAL SITES

Sites 2 @ 550 acres each x \$2000	\$2,200,000
** 2 units Equipment	800,000
Site Improvements	<u>1,100,000</u>

Cost per acre:  $\frac{4,000,000}{1,100} = \$3,650^*$  \$4,100,000

DISPOSAL SITE COST

Land requirement for year 2000 and equipment capable of processing 1980 quantities.

Portland site	\$2,500,000
Additional site or sites	<u>4,100,000</u>
	\$6,600,000

Adding a 20% contingency factor increases this estimate to \$7,900,000

The above estimate does not include capacities of smaller disposal sites now in existence.

ANNUAL OPERATION AND MAINTENANCE & DEBT SERVICE

is from B & V and City of Portland @ \$3.20/ton†

\*This figure is close to that calculated by C & G Engineers for Washington County.

\*\*Studies indicate that equipment must be capable of handling approximately 1.5 x average day using a base year of 1980 for equipment design criteria of 2400 to 3000 tons/day. A unit of equipment as calculated can handle 800 to 1200 tons per day.

## SUMMARY COSTS TRANSFER & TRANSPORTATION

A guided estimate of amount of refuse tonnage handled by transfer stations is approximately 2/3 of that going to sanitary land fill sites.

## CAPITAL COSTS TRANSFER AND TRANSPORTATION

Comparison of 2 systems capable of handling 1975 quantities:

	Large Transfer Stations		Small Transfer Stations
*Trucks & 16 ton trailers 24 & 40	1,056,000	21 &	1,828,000
**Transfer stations 3	<u>3,000,000</u>	100	<u>600,000</u>
	4,056,000		2,428,000

For estimating purpose use 4,000,000 x 1.2 contingency factor or approximately \$4,800,000.

## ANNUAL OPERATION MAINTENANCE AND DEBT SERVICE

Is approximated at \$4.50 per ton.

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\* Based on 1 or 2 major disposal sites and average one way haul distance approximately 22.5 miles.

\*\* Economical transfer stations should be capable of handling minimum of 250 to 500 tons per day each.

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## MINOR DEPOSIT, SALVAGE AND RECYCLING STATIONS

In addition to the major site or sites and the major transfer stations smaller public convenience deposit, salvage and recycling stations are needed.

These are needed to fill in the voids between sites and major stations and the rural outer areas and provide convenient access to the public, and relieve congestion at major sites.

For estimating purposes, we assume 6 public convenience deposit, salvage, and recycling stations.

Only a very rudimentary shotgun estimate of the cost can be made at this time. For the first estimate, we assume approximately 2/3 cost of small transfer stations or \$70,000 each.

6 x 70,000 = 420,000  
with contingency of 20% = 500,000+

SUMMARY OF CAPITOL COSTS NEEDED NOW

For domestic and commercial refuse.

Major site or sites and equipment	\$ 7,900,000
Major transfer stations and equipment	4,800,000
Minor public convenience, deposit, salvage, and <del>refuse</del> <sup>recycling</sup> stations	<u>500,000</u>
	<u>\$13,200,000</u>

Above estimate does not include allowance for small existing sites or provide for means of disposal of special wastes or toxic wastes or auto disposal, etc.

Approximate annual operation costs Example:

Disposal site 550,000 tons @ \$3.20+	=	\$1,760,000
Transfer 2/3 x 550,000 tons @ \$4.50+	=	1,650,000
Minor stations	Unknown	Unknown