



METROPOLITAN SERVICE DISTRICT

6400 S.W. CANYON COURT PORTLAND, OREGON 97221 (503) 297-3726

METROPOLITAN SERVICE DISTRICT
BOARD OF DIRECTORS

MSD Office
6400 SW Canyon Ct.

February 22, 1974
2:00 P.M.

S P E C I A L M E E T I N G

A G E N D A

- I. MINUTES
- II. RECEIVE PHASE I SOLID WASTE FINANCIAL REPORT -
BARTLE WELLS ASSOCIATES
- III. REVIEW AND RECOMMENDATIONS REGARDING TRI-COUNTY SOLID
WASTE MANAGEMENT COUNCIL REPORT - COR-MET
- IV. JOHNSON CREEK DRAINAGE MANAGEMENT PRELIMINARY WORK PLAN
- V. MSD DIRECTION COMMITTEE - MEMBERSHIP SELECTION
- VI. DISCUSSION OF MSD/TRI-MET ACTIVITIES
- VII. NEW BUSINESS



TO: Metropolitan Service District Board
FROM: MSD Staff
SUBJECT: STAFF REPORT FOR FEBRUARY 22, 1974 BOARD MEETING

Presented to the Board for transmittal, information, recommended action are the following items:

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- | | |
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| 1 | I. MINUTES
Action - <u>Approval</u> |
| 8 | II. RECEIVE PHASE I SOLID WASTE FINANCIAL REPORT -
BARTLE-WELLS ASSOCIATES
Action - <u>Accept</u> the report and authorize staff
to return within one month with review
and comments so that the MSD Board
can approve the Solid Waste Plan in
concept. |
| 9 | III. REVIEW AND RECOMMENDATIONS REGARDING TRI-COUNTY
SOLID WASTE MANAGEMENT COUNCIL REPORT - COR-MET
Action - <u>Accept</u> the report and <u>approve</u> the
TAC and CAC recommendations. |
| 23 | IV. JOHNSON CREEK DRAINAGE MANAGEMENT PRELIMINARY
WORK PLAN
Action - <u>Direct</u> that the proposal be reviewed by
local jurisdictions represented by the |

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the MSD Board before the next Board meeting. Further, direct the MSD Advisory Committees to return to the Board at the earliest date with recommendations.

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V. MSD DIRECTION COMMITTEE - MEMBERSHIP SELECTION

Action - Authorize establishment of the MSD Direction Committee and select members.

VI. DISCUSSION OF MSD/TRI-MET ACTIVITIES

Action - None

I. MINUTES

The following pages contain the minutes of the Board meeting of February 8, 1974. The staff recommends approval of the minutes.

II. PHASE I SOLID WASTE FINANCIAL REPORT - BARTLE-WELLS ASSOCIATES

The MSD solid waste financial consultants are scheduled to present the Phase I Solid Waste Financial Pre-final Submittal Report. The MSD staff recommends the Board accept the report and authorize staff to return within one month with review and comments. Further, it is recommended the Board authorize staff to return at the next meeting with appropriate financial questions that need immediate action.

III. REVIEW AND RECOMMENDATIONS REGARDING TRI-COUNTY WASTE
MANAGEMENT COUNCIL REPORT - COR-MET

The MSD Technical and Citizens Advisory Committees met in joint session on February 19, 1974 to hear the COR-MET response to industry's proposed amendments. The attached pages contain the COR-MET response requested by the Board and provide the Committees' action.

The MSD staff recommends the MSD Board accept the COR-MET report and approve the TAC and CAC committee recommendations.



CORNELL, HOWLAND, HAYES & MERRYFIELD
METCALF & EDDY

1600 S.W. FOURTH AVENUE, SUITE 601

PORTLAND, OREGON 97201

503/224-9190

February 14, 1974

Metropolitan Service District Board
6400 S.W. Canyon Court
Portland, Oregon 97221

Subject: "A Viewpoint of the Solid Waste Industry," Tri-County
Solid Waste Management Council, February 5, 1974

Gentlemen:

We have received and reviewed the report, "A Viewpoint of the Solid Waste Industry," in which private industry has suggested modifications to our recommended solid waste management action plan. At your request, we have evaluated the suggested changes for their effect on the recommended system, and our observations are presented herein.

The suggestions presented by the Tri-County Solid Waste Management Council in the subject report are certainly valid ones, which result from the day-to-day involvement of Council members in solid waste handling. Many of their suggestions are, in fact, options that we considered in the course of our initial study but rejected for reasons that will subsequently be presented.

Before proceeding with our evaluation, we wish to emphasize that there is no single "best" system to answer the solid waste management needs of the tri-county area. Any system is dependent on the assumptions and evaluative criteria used to develop it, and different groups will make different assumptions and trade-offs--depending upon their own values and degree of objectivity. This makes careful documentation of the development of a plan, or suggested modifications to it, a critical requirement for subsequent appraisal.

In reviewing the Council's report, we found that there was not enough background data and substantiating information for us to conduct a detailed analysis of the suggested modifications. We shall, therefore, present our best judgment as to the overall impact of the modifications.

In general, we feel that the suggested modifications will result in a total system cost that exceeds the total cost of the originally recommended system. It would require a

detailed system analysis to produce the actual costs for the modified system, but our experience indicates that the suggested relocation of the milling-transfer stations would result in increased transportation costs for that portion of the system that we were charged with studying (from the centroids of the collection areas through transfer, processing, and disposal). It appears that any savings in capital costs would be offset, throughout the 25-year study period, by increased transportation costs.

Our specific comments on the Council's report are presented in the following sections.

Comments on "Criteria and Assumptions"

Although there are several points in the criteria and assumptions with which we do not fully agree, it appears that there is only one that might have a widespread impact on the system. The meaning is not totally clear, but it appears from items 1, 3, and 4 that there is some intent for processible waste disposal sites to accept unprocessed and nonprocessable wastes. In the originally recommended system, the sites for processible and nonprocessable wastes were generally separate. The primary reason for this is the fact that processible waste sites are regional facilities which, in conjunction with local transfer stations, can serve a large geographic area whereas nonprocessable waste sites are smaller, localized sites located close to the source of the heavier, generally nontransferrable wastes they are intended to accept. It is, of course, possible that the MSD staff may, upon assessment of alternative non-processible waste disposal sites, decide in a particular instance to set aside a portion of a processible waste site to accept nonprocessable wastes; but as a general rule the originally recommended system included separate sites for these functions.

Regarding the suggested acceptance of unprocessed (or raw) refuse at processible waste disposal sites, there was no need for this in the originally recommended system. Sufficient emergency refuse storage space and back-up equipment were provided at the milling stations to ensure that raw wastes could be accepted at the stations at all times. All processible wastes were to be milled, with the economically recoverable portions to be salvaged and the remaining milled residue to be taken to sanitary landfills to accomplish land reclamation. To allow vehicles carrying raw refuse to dump directly at the disposal sites would complicate disposal operations and would also make enforcement of the system difficult.

Comments on "Recommended Modifications"

Comparing the COR-MET analysis with the Tri-County Solid Waste Management Council analysis for a recommended system, there are two fundamental differences in assumptions that should be highlighted: (1) whereas the COR-MET project was specifically exempted from considering collection routes and therefore began all analyses at the centroid of a refuse generation center, the Council not only relates its recommendations to collection routes but further asserts that urban transfer stations should "accommodate present collection routes," apparently without any route modification; and (2) (2) whereas the COR-MET project was specifically charged with a 25-year system analysis, the Council appears to premise its recommendations on the "early years of operation" without any detailed consideration to long-term economics or effects. Neither of these approaches is necessarily better than the other, but it is important to recognize that they will produce different results.

Responses to the Council's individual recommendations are presented in the following paragraphs, with item numbers corresponding to those on pages 2, 3, and 4 of the Council's report.

1. In the original analysis, we considered the Frank site as a potential location for a regional sanitary landfill. From an engineering standpoint, the site would probably be acceptable, although it would accomplish only marginal land reclamation in that the final site use would be the same as the original site use (farming). Our reasons for rejecting the site as a regional landfill were political, rather than technical, and are enumerated as follows: (1) the Frank site is a nonconforming prior land use, and our discussions with representatives of the Washington County Planning Commission indicated that the Commission is opposed to any expansion of the site; (2) in 1973, the owner of the site attempted to expand his facilities (by adding truck storage) and was denied a permit by the County Planning Commission; (3) the present DEQ and County permits specifically exclude all additional site users by stating that only the commercial collection trucks serving Frank's franchised area shall use the site; (4) traffic volume on Beef Bend Road leading to the site is already a problem, and expanded use of the site by additional haulers would increase the traffic loads; (5) opposition among residents of the area is organized and vocal. Considering these political drawbacks and adding to them the relative small capacity and marginal reclamation aspects of the site, it was decided,

that the Frank site should not be recommended as a regional landfill but should continue to operate as at present until the regional Durham site is ready for operation.

Because the Council's report proposes the Frank site as an alternative to Durham in the early years, the following advantages to the Durham site should be considered: (1) land reclamation is of paramount importance; (2) the access from adjacent I-5 is excellent; (3) the property is already owned by Washington County; (4) representatives of the Washington County Planning Commission have indicated that landfilling of the pits would be a conforming land use; (5) of all the three sites originally recommended for development in Washington County, Durham appears to have the best County support.

From a technical standpoint, it would probably be possible to develop Frank's site as a regional landfill and then, upon its completion, to develop the Durham site. But the unit cost for developing a small site is high, and with the apparent political opposition to the Frank site, its only minor reclamation benefits, and the traffic problems there, careful consideration should be given to the desirability of developing this site as a regional landfill.

Decision Point: *Does the MSD Board wish to utilize the Frank site as a regional landfill?*

2. The originally recommended Durham milling-transfer station was not intended to be an integral part of the Durham landfill--only to be located in the same general area. Its existence would therefore be independent from the existence of the landfill. Regarding the potential relocation of the Durham milling-transfer station to a site in Beaverton, we agree that a location in Beaverton would offer more transportation economies to the haulers than would the Durham site, if a politically acceptable location can be found in Beaverton. In our initial investigations, we considered a location along Route 217, near Route 8, to be the most desirable from a transportation standpoint, but City representatives indicated that it would be politically very difficult to obtain clearance for a milling-transfer station in any

commercial-industrial area there. Our alternative choice was Durham.

Decision Point: *Does the MSD Board wish to locate a milling-transfer station in Beaverton rather than in Durham?*

Regarding the issue of providing a service center for the storage and servicing of collection trucks at milling-transfer stations (item 2, p. 3, and also item 8, p. 1), we agree that this would be an important convenience for the haulers. But the question is whether or not MSD should assume the responsibility for providing this convenience. At the joint TAC/CAC meeting on February 5, the Council's engineering consultant stated that approximately 15 additional acres would be required for this convenience. The originally recommended milling-transfer stations require about 5 acres, so addition of the truck storage area would require finding a site four times the size of the site originally recommended. Our experience in site investigations has indicated that the need for such a large site would significantly compound the difficulties of finding acceptable locations for milling-transfer facilities.

Decision Point: *Does the MSD Board wish to provide a center for the storage and servicing of collection vehicles at the milling-transfer stations?*

3. If the Durham milling-transfer station is to be relocated to the Beaverton area, then there definitely should not be a station at Hillsboro-Cornelius, and the compacting-type transfer station suggested by the Council for Forest Grove would be a possibility. It should be emphasized, however, that this station would be of the same general size as the small, rural stations analyzed in our original study and thus would not be economically self-supporting if it were to be operated by MSD and open to the public; direct haul would be more economical. The same is true of the small stations suggested by the Council to be located in Mulino, Estacada, and Sandy. In each of these cases, the MSD Board might wish to allow the local jurisdictions to provide these small convenience stations for the haulers and the public, or else a collector may choose to provide one for his own operations. It is possible that the Council intended this, for its cost estimates include no provision for these stations.

Decision Point: *Does the MSD Board wish to assume the responsibility for providing rural convenience stations?*

4. In our initial analyses, we considered the option of locating a milling-transfer station at the St. Johns landfill, but subsequent analysis indicated that the Columbia Boulevard location would provide better savings in haul costs. Our reasons for selecting the Columbia Boulevard site were as follows: (1) there is excellent access directly off the I-5 interchange; (2) the site is nearer the high-density refuse producing areas than is the St. Johns site; (3) there are already some private refuse transfer operations in this industrial area. The disadvantages that we considered for a site at or near St. Johns were the following: (1) it creates a greater haul distance for most collection vehicles than would the Columbia Boulevard site; (2) the further the station is located from the I-5 interchange, the greater the impact of collection vehicles on local roads leading to the site; (3) local opposition to the traffic caused by refuse activities in the St. Johns area is already organized and vocal; (4) when the St. Johns landfill is completed, it will be used as a park, and we did not consider the continued use of a milling-transfer in a park area to be a desirable condition; (5) once the St. Johns landfill has been completed, use of the suggested St. Johns milling-transfer station to service other landfills would require a significant backhaul.

An important difference in our assessment and the Council's assessment of the suitability of a milling-transfer station at St. Johns appears to be the projected life of the landfill there. In computing the capacity of the St. Johns site, we utilized information supplied to us by the City's engineering consultant, and our computations reflect expansion into the future area east of the present site. With this capacity and the quantities of refuse that we routed to the landfill, the site would be filled in about 10 years and a replacement site would be required at that time. In the Council's report, none of the facilities is related to a time frame, but the Council has eliminated any replacement site for St. Johns and shows only St. Johns serving its area on the map entitled "Long Range Implementation," so it appears

that they assume the St. Johns landfill will last until the year 2000. For this to be true, the Council would have either to have assumed a much larger capacity for St. Johns than we did or to have reduced significantly the quantity of wastes that we had routed to St. Johns. If the St. Johns landfill is to continue to the year 2000, then there is some justification for locating a milling-transfer station there, but we feel that public opposition would still be a significant obstacle. The increased costs for the suggested private access road must also be taken into consideration.

Decision Point: *Does the MSD Board wish to locate a milling-transfer station near the St. Johns landfill instead of near I-5 and Columbia Boulevard?*

5. The variables are so complex and the information in the Council's report so incomplete that we cannot readily assess the effects of the suggested replacement of the two stations at S.E. Portland and at Killingsworth and 82nd with a single station in East Portland. There is no explanation for how two stations with a combined capacity of 6,912 tons per week could be replaced by a single station of 3,840 tons per week. What happens to the rest of the refuse? In our initial analyses, it proved more economically advantageous to provide the two stations at the locations recommended than to provide a single station, because the two stations provided a significant savings in haul costs.

Decision Point: *Does the MSD Board wish to locate a single milling-transfer station in East Portland rather than two stations at Southeast Portland and at Killingsworth and 82nd?*

Regarding the suggested installation of air classification equipment at the suggested East Portland station, we do not necessarily concur unless the Council has defined a market there for the light combustible wastes. Our choice of the Hillsboro-Cornelius station as the initial location for air separation facilities was based upon a nearby market for the light combustible materials.

Regarding the suggested use of milled wastes to reclaim gravel pits in East Portland, we considered that possibility in our initial analysis. As explained in our report, we concluded that these sites

would better be reclaimed with nonprocessible wastes. The pits that we identified have a capacity equal to the projected needs for nonprocessible wastes throughout the study period. If these sites are used for milled wastes, then new sites must be found for nonprocessible wastes.

Decision Point: *Does the MSD Board wish to utilize the gravel pits in East Portland for milled wastes?*

6. If the Rossman milling-transfer station can be located on or next to Rossman's property, then the concept of using off-road transport vehicles is valid. This system will not necessarily eliminate the need for a stationary compactor, however, for when air separation equipment is added to the Rossman station a compactor will be required for the light combustible wastes. In addition, the off-road equipment will become obsolete when the Rossman landfill is completed and the Rossman station begins to serve another landfill; at that time, stationary compaction and over-the-road equipment will be essential. (These comments also apply to the suggested use of off-road equipment at St. Johns.) It would appear that this is a matter that could be decided in preliminary design and thus does not warrant the present action of the Board.

Additional Comments

In the table "Comparison of Available Capacity for Milling-Transfer Stations between MSD Alternative Plan B and Industry Plan B as Ammended" (sic), the cumulative total capacity of the initial "Industry Plan B" is 14,592 tons per week compared to 18,432 tons per week for the initial "MSD Plan B." The fact that the industrial plan eliminates the Hillsboro-Cornelius station with no replacement for it would explain a difference of 1,536 tons per week, but there is no explanation for the arbitrary exclusion of the remaining 2,304 tons per week.

Decision Point: *Does the MSD Board wish to use a different set of solid waste quantity estimates than was derived in the COR-MET study? If so, what should be the basis for those estimates?*

In reviewing the tabular information presented in the Council's report, we would caution the Board against accepting an overly simplified picture of the effects of the suggested changes on the originally recommended system. The collection-transfer-disposal system is a dynamic one, and changing any part of it causes ramifications throughout the system. For example, we note that in relocating milling-transfer stations the Council has generally assumed the same capacities for those stations as in their original locations--even though changing the location would change the service area and thereby change the quantity of wastes received. In addition, the Council shows initial capital costs for its suggested system but includes no operation and maintenance costs at all--even though operation and maintenance costs represent about 60 percent of the total annual costs in the originally recommended system. We realize that the Council's report was assembled rapidly and thus could not be very comprehensive, but we consider it important for the Board to recognize that the report presents only a partial assessment of the suggested changes.

If the Board wishes to modify the system that was originally recommended in our report, then it will require a detailed analysis of the modified system to determine the size of each facility, the capital costs, and the operation and maintenance costs for the entire system. We estimate that it will require \$10,000 total to rerun the computer model and derive the cost estimates for a specific modified system that the Board would select and direct us to analyze. (There is no allowance in this sum for comparing alternative modifications; neither does it include the additional work that would be required by Bartle Wells Associates to reassess the financing for the system.) It would be possible to extract the \$10,000 from our present \$40,000 contract for Phase II work, if the Board wishes to approve a modification to the scope of work for that contract.

Decision Points: *Does the MSD Board wish to implement a modification of the system originally recommended by COR-MET? If so, what shall the specific modifications be? Does the Board wish to direct COR-MET to prepare a detailed cost analysis of the modified system?*

We commend the Tri-County Solid Waste Management Council for its genuine interest in contributing to a sound and equitable solid waste management action plan, and we look forward to the full cooperation of the Council in implementing whatever system the MSD Board may select.

We trust that our review comments will be of assistance to the Board in selecting appropriate modifications to the recommended plan. There will be COR-MET representatives at the February 19 TAC/CAC meeting and the February 22 MSD Board meeting to respond to further questions.

Sincerely,

COR-MET

J. Melissa Brown

J. Melissa Brown
Project Manager

JMB:jsb

ACTION OF MSD TECHNICAL AND CITIZEN ADVISORY COMMITTEES REGARDING
"A VIEWPOINT OF THE SOLID WASTE INDUSTRY" BY COR-MET

After review of the COR-MET response to "A Viewpoint of the Solid Waste Industry", the MSD Advisory Committees took the following action:

Decision Point A: Does the MSD Board wish to utilize the Frank site as a regional landfill?

Committee Action A: The MSD Board direct that the Frank site be kept under consideration as a Washington County site; and that Washington County provide a report to the MSD Board after Washington County and industry meet together to determine its feasibility.

Decision Point B: Does the MSD Board wish to locate a milling-transfer station in Beaverton rather than in Durham?

Committee Action B: The MSD Board include the location of this milling and transfer station question in the discussion with Washington County people, as is appropriate (See Action A).

Decision Point C: Does the MSD Board wish to provide a center for the storage and servicing of collection vehicles at the milling-transfer stations?

Committee Action C: It is recommended that this point not be made a necessary part of MSD Board action regarding the Solid Waste Management system.

Decision Point D: Does the MSD Board wish to assume the responsibility for providing rural convenience stations?

Committee Action D: It is recommended that this point not be considered at this time.

Decision Point E: Does the MSD Board wish to locate a milling-transfer station near the St. Johns Landfill instead of near I-5 and Columbia Boulevard?

Committee Action E: It is recommended that COR-MET re-evaluate the St. John location for a milling transfer station instead of near I-5 and Columbia Boulevard.

Decision Point F: Does the MSD Board wish to locate a single milling-transfer station in East Portland rather than two stations at Southeast Portland and at Killingsworth and 82nd?

Decision Point G: Does the MSD Board wish to utilize the gravel pits in East Portland for milled wastes?

Committee Actions F and G: It is recommended that the East Multnomah County gravel pits be utilized for milled refuse and the entire East Portland proposal by industry be evaluated by COR-MET with the stipulation that industry specify which gravel pits are to be utilized.

Decision Point H: Does the MSD Board wish to use a different set of solid waste quantity estimates than was derived in the COR-MET study? If so, what should be the basis for those estimates?

Committee Action H: The consultant be allowed to make some arbitrary adjustments in waste generation data to see whether it affects COR-MET's plan that was derived on the basis of that data and to report the results to the MSD Advisory Committees.

Decision Point I: Does the MSD Board wish to implement a modification of the system originally recommended by COR-MET? If so, what shall the specific modifications be? Does the Board wish to direct COR-MET to prepare a detailed cost analysis of the modified system?

Committee Action I: It is recommended that the Board direct COR-MET to evaluate industry's plan using industry's waste generation figures for volume and cost those portions of the plan that we support in our point by point discussion. Further, it is recommended that this work be accomplished by April 1, 1974 and include an update of financing by Bartle-Wells Associates. (Industry's waste generations figures must be provided by March 1, 1974 in order to make this date.)

IV. JOHNSON CREEK DRAINAGE MANAGEMENT - PRELIMINARY WORK PLAN

As you remember at the last MSD Board meeting, the Board authorized staff to prepare a work plan including estimated costs for review by the Board. The attached document is a result of that work.

The MSD staff recommends the MSD Board direct that the proposal be reviewed by local jurisdictions represented by the MSD Board before the next Board meeting. Further, the Board should direct the MSD Advisory Committees to return to the Board at the earliest date with recommendations.

V. MSD DIRECTION COMMITTEE - MEMBERSHIP SELECTION

The following pages contain the Board directed action regarding the MSD Direction Committee and suggested names for that committee.

The MSD staff recommends the Board authorize establishment of the MSD Direction Committee and select members.

MEMO

February 8, 1974

TO: Metropolitan Service District Board

FROM: Lloyd Anderson

I recommend establishment of a committee to the MSD Board to be made up of 3 citizen members, 3 administrative members, 2 MSD Board members, and 2 CRAG Board members, and to be charged with the following:

1. Define the roles of MSD in a policy statement to be used as an evaluation mechanism for defining areas of metropolitan public service which should be provided under MSD jurisdiction.
2. Apply this statement of role to specific metropolitan public services which MSD is currently performing or could perform. Provide a recommendation for or against MSD participation in each area.
3. Recommend a structure for the MSD Board.
4. Recommend an organizational structure for MSD.
5. Summarize the processes required in bringing about the recommendations made above, and provide an action plan and timetable for accomplishing those recommendations, including necessary legislation, financing, etc. Submit these findings in a report to the Board by June 1, 1974.

PS:bg

MEMBERSHIP CONSIDERATION FOR THE MSD DIRECTION COMMITTEE

MSD BOARD

Robert Schumacher
Lloyd Anderson

CRAG BOARD

Bill Young
Mel Gordon

ADMINISTRATION (3 members)

John McIntyre
Dan Potter
Bud Kudurer
Bob McWilliams
Larry Sprecher
Don Carlson[†]

CITIZENS (3 members)

Wanda Mays
Ed Winter
Pete Snedecor
Chuck Frost
Ruth Hagenstein
John Huisman
Alden Krieg
Ron Cease
Jerry Tippins
Dennis West