METROPOLITAN SERVICE DISTRICT BOARD

MEETING MINUTES OF

SEPTEMBER 29, 1972

ATTENDANCE

Eldon Hout, Chairman
Mel Gordon
Lloyd Anderson
Harold Ruecker
Bob Schumacher
Gus Mohr
Homer Chandler, Executive Director

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

I. SOLID WASTE MANAGEMENT PROPOSAL

Commissioner Hout stated that since the Board's last meeting the proposed Solid Waste Proposal previously submitted to the Board had been reevaluated by the MSD Board members and the revisions suggested by the Executive Board have been included in a redraft of the proposal.

Mr. Chandler stated that the report emphasized two elements: an immediate short-range program, and a long-range approach.

SHORT-RANGE PROGRAM

Mr. Chandler stated that the short-range program would include:

(1) The basic type of disposal will remain as land-fill and land reclamation. The study will look at existing disposal sites in the area to determine the feasibility of each site to serve as a regional site.

(2) Look at supporting facilities needed to make the disposal system work, such as transfer stations, drop boxes, etc.

(3) Develop a financial plan by which the solid waste management system will be financed.

LONG-RANGE APPROACH

Mr. Chandler stated that the long-range approach would recognize the need and desirability of looking beyond the land-fill method of disposal and would:

(1) Look at alternative methods of disposal: recycling, composting, etc.

(2) Determine financial plan to finance a more sophisticated type of system.

Mr. Chandler further stated that in conducting this study the Department of Environmental Quality will provide environmental guidelines; the CRAG staff will develop the study while utilizing the advice and counsel of the city and county Public Works Directors, the citizens advisory committee, and the solid waste industry leaders.

Mr. Chandler stated that the estimated cost of the study had been increased from $255,000 to $325,000 to include the needed impact statements.

In conducting the study, Commissioner Anderson asked what role CRAG will play in developing the study. Mr. Chandler responding to the question stated that MSD should contract with CRAG for staff and that the product should be included in CRAG's planning in order to meet Federal Certification requirements.

Mayor Ruecker moved that the MSD Board accept responsibility for the study; contract with CRAG for staff; and will submit the solid waste plan to the CRAG Executive Board for approval prior to sending the proposal on to DEQ. Commissioner Gordon seconded the motion; the motion carried unanimously.

Commissioner Anderson moved that under "Problems and Challenges" the 5th paragraph should be replaced by the law adopted by the State regarding disposal sites in Multnomah County. Motion seconded by Commissioner Schumacher; motion carried.

Mr. Anderson requested that under "Program Objectives" paragraph A, second sentence should be changed to read "Establish what role individual governments and private industry should play in the solid waste management program." The Chairman ordered that this change be made. Mr. Anderson also suggested that under "Solid Waste Planning Program Objectives" I.C. should be changed to read: "C. Develop public information program."

Commissioner Gordon reuqested that under IV. Special Solid Waste Problems" and add as H. Wood waste.

ORGANIZATION CHART

Commissioner Anderson moved that a dotted line show the relationship between MSD-TAC and TAC-CRAG as a line of communication. Motion seconded by Commissioner Schumacher. Motion carried with Commissioner Gordon voting no on the basis that he would support the TAC's recommendation that this line remain solid.

Commissioner Schumacher moved that under "MSD Solid Waste Planning Program Work Tasks IV. Special Solid Waste Problems that "wood wastes" be included.

Commissioner Anderson stated that in the investigation of alternative methods of disposal that if the study shows that a particular method provides tremendously expensive and not worth their effort then a great amount of time should not be given to that method and that a statement to that effect be entered into the report.

Commissioner Anderson moved that the Solid Waste Planning Program as amended be approved. Motion seconded by Commissioner Schumacher. Motion carried unanimously.

There being no further business, the meeting adjourned at 3 p.m.

COLUMBIA REGION ASSOCIATION of GOVERNMENTS

6400 S.W. CANYON COURT

PORTLAND, OREGON 97221

(503) 297-3726

September 19, 1972

TO: MSD Technical Advisory Committee

FROM: Charles C. Kemper

SUBJECT: Cost and Staff Proposal for MSD Solid Waste Planning Program

The Solid Waste Planning Proposal prepared for MSD in conjunction with the DEQ Regional Solid Waste Management Planning Program estimated planning costs to be administered by MSD at $255,000. This proposal provides a detailed cost breakdown and alternative methods of staffing this planning effort. It is proposed that the MSD Technical Advisory Committee review these details and provide comments and direction to CRAG Staff so that backup cost data will be available at the MSD Board Meeting on September 29, 1972.

ASSUMPTIONS

1. Work Tasks described I. Citizen Understanding, II. Regional Landfill Planning, III. Regional Transfer Station Planning, V. Interim to Long Range Planning objectives and report preparation will be performed by MSD Solid Waste Planning Staff.

2. Work Tasks described IV. Special Solid Waste Problems Studies, VI. Financial, Organizational and Operational Planning, and Environmental - site engineering will be performed by consultants. It is recognized that the extent of environmental and site engineering studies must be scoped to match available funds.

3. The administrative and overhead contingency was reduced to 20% or $50,000 of which $20,000 will be earmarked for staff salaries.

4. Costs to carry the Program from planning to implementation are not included. Funding for this part of the Program should be made available.

5. This effort assumes the Planning Program will occur over a 12 month time period with a majority of expenditures occuring over a 9 month period starting January 1973.

COST BREAKDOWN

1. Staff Expenditures

Work Task I - Citizen Participation	$11,000
Work Task II - Regional Landfill Planning	22,000
Work Task III - Regional Transfer Station Planning	11,000
Work Task V - Interim to Long-Range Planning Objectives	30,000
	$74,000.
Other: Report Preparation	10,000
TOTAL	$84,000.

2. Consultant Expenditures

Work Task IV - Special Solid Waste Problems Studies	$35,000
Work Task VI - Financial, Organizational and Operations Planning	56,000
Environmental and Site Engineering	40,000
TOTAL	$131,000.

3. Other Costs

Printing	10,000
Contingency	30,000
TOTAL	$40,000.
GRAND TOTAL	$255,000.

STAFFING PROPOSAL 1

This approach assumes that the County and City Public Works Departments provide four full time engineers/sanitarians for a 12 month period. Fifty percent of these individuals salaries will be payed by MSD. In addition, a Coordinating Engineer and two supporting people will be provided by MSD as outlined below:

		MSD Funds
1	- Coordinating Solid Waste Engineer	$18,000
1/2 + 1/2	- Clackamas Engineer/Sanitarian	9,000
1/2 + 1/2	- Multnomah Engineer/Sanitarian	9,000
1/2 + 1/2	- Washington Engineer/Sanitarian	9,000
1/2 + 1/2	- Portland Engineer/Sanitarian	9,000
1/4	- CRAG Regional Engineer	5,000
2	- Technician/Draftsman	25,000
		$84,000

Total staff equals 7¼ men.

STAFFING PROPOSAL 2

This staffing approach assumes that the County and City Public Works Departments provide two full time engineering personnel for a 12 month period. Salaries of those individuals will be payed by MSD. In addition, a Coordinating Engineer and two supporting people will be provided by MSD as outlined below:

		MSD Funds
1	- Coordinating Solid Waste Engineer	$18,000
2	- County/City Engineers	36,000
1/4	- CRAG Regional Engineer	5,000
2	- Technician/Draftsman	25,000
		$84,000

Total Staff equals 5¼ men.

In either Staffing Proposal, the Solid Waste Advisory Committee would provide technical direction through regularly scheduled meetings. Administration of the Planning Program would be accomplished by CRAG Staff, as approved by the Executive Board, through MSD Board.

SOLID WASTE PLANNING PROGRAM

FOR
THE METROPOLITAN SERVICE DISTRICT
PORTLAND, OREGON

Submitted by:
The C. R. A. G. Staff
September 1972

SOLID WASTE PLANNING PROGRAM PROPOSAL

INTRODUCTION

The Metropolitan Service District Solid Waste Advisory Committee has directed the CRAG Staff to develop a Regional Solid Waste Planning Proposal. In response to the Regional Solid Waste Management Planning Program prepared by the DEQ, this planning program proposal was prepared. Included in this document are Proposed Program Challenges and Objectives, Program Outline, Detailed Work Tasks, Cost Estimates, Schedule, and Recommended Work Task Responsibilities.

This Planning Program will include a four county area consisting of Clackamas, Columbia, Multnomah and Washington Counties. It is proposed that the CRAG Staff coordinate Regional Solid Waste Planning under the direction of the MSD Technical Advisory Committee.

The planning task ahead is the most unique in Oregon. It is estimated that this four county region presently generates 693,800 tons of refuse that will increase to 800,000 tons by 1980. Proper planning at this time is necessary to stave off the impending deluge of refuse. Only close cooperation between governmental officials and the public can hope to preclude these problems and make this plan reality.

PROBLEMS AND CHALLENGES

In evaluating the problems and challenges facing this region in the area of solid waste, considerations must be given to present environmental conditions and future environmental goals. Some pertinent challenges are presented here to be considered prior to finding solutions.

- Few sites in this region can be classified as desirable as landfill sites, due to annual precipitations of 40 - 70 inches and high ground water tables.
- Air pollution potential is high due to Metropolitan Basin conditions and inversion history.
- Leachate potential is great in most landfill sites due to ground water and precipitation.
- The City of Portland Sanitary Landfill is scheduled for deactivation by 1975, thus placing a heavy burden on this Metropolitan Region.
- Sophisticated processing methods of the bulk of solid waste are presently not cost effective and for this reason will deter immediate implementation.
- Cooperation between the government agencies involved will be beneficial to successful adoption of this plan.
- Many open pit mining sites are and will be ready for filling. Optimum land use of these sites must be considered as land reclamation.
- Proximity of the population to potential regional processing sites necessitates local transfer facilities.
- Without solid support from the public, planning efforts will be futile. A strong public involvement program will be established early.
- Recycling is viewed as an acceptable solution to a major portion of solid waste problems. Utilizing solid waste as a resource is a priority of the highest magnitude. Initial recycling goals of 25% of the solid waste will be pursued.

During the planning periods, existing facilities under permit from the DEQ must be maintained and upgraded in order to provide continuous solid waste service.

PROGRAM OBJECTIVES

1. Develop a Solid Waste Plan that provides for a project management implementing organization and authority at the regional level that utilizes previous studies and planning efforts.

2. Develop a workable physical system of collection, transfer, processing, recycling and disposal.

3. Develop a Comprehensive Solid Waste Plan and the implementation schedule of transition from interim to ultimate system planning.

4. Develop a specific legal and finance program to establish and perpetuate solid waste facilities and services.

5. Develop a program of public education, resulting in public acceptance and implementation of the Solid Waste Plan through citizen and local official involvement.

6. Develop tools for solid waste planning by establishing a viable legal entity to coordinate planning activities.

SOLID WASTE PLANNING PROGRAM OUTLINE

The following is an outline of work tasks that are further developed in this document. It should be noted that recommended detail work task responsibilities are expanded in the following section. All solid waste planning tasks will be performed by the Metropolitan Service District as primary planning authority. (See Figure 1 Organization Chart.)

I. CITIZEN UNDERSTANDING OF SOLID WASTE PLAN

- A. Establish Citizen Advisory Committee to coordinate with State Solid Waste Citizen Committee
- B. Utilize CRAG's citizen committees, i.e., Public Works, Area Development, Transportation, and Social Services
- C. Develop Public Relations Program.

II. REGIONAL SANITARY LANDFILL

- A. Site improvements - existing sites
- B. Landfill site duration
- C. Site selection criteria
- D. Locations - new sites
- E. Environmental impact statement
- F. Social-Economic impact

III. REGIONAL TRANSFER STATIONS

- A. Need
- B. Locations
- C. Site selection criteria
- D. Economic impact
- E. Environmental impact

IV. SPECIAL SOLID WASTE PROBLEMS

A. Sewage sludge

B. Septic tank pumping

C. Tires

D. Dead Animals and hospital wastes

E. Acids and bases

F. Oils, etc.

G. Industrial sludges

V. INTERIM TO LONG-RANGE PLANNING OBJECTIVES

A. Evaluate existing sanitary landfill techniques

B. Evaluate presently available solid waste disposal techniques:

1. Incineration
2. Energy conversion
3. Composting
4. Hydropulping

C. Evaluate long-haul solid waste disposal method.

1. Boeing - Boardman Project
2. Railhaul to Centralia processing
3. Barge
4. Trucks

D. Investigate potential long-range processing techniques.

1. Pyrolysis
2. Piping
3. Pretreatment and sorting

E. Investigate recycling and reuse processing techniques.

1. Existing recycling efforts
2. Available recycling programs
3. Feasibility of long-range recycling goals

VI. SOLID WASTE ORGANIZATIONAL AND FINANCIAL PLAN

A. Sources of revenues

B. Operational implementation costs

C. Operating and maintenance costs

D. Administrative costs

E. Organization Plan

F. Legal enactments

G. Evaluate regulations and authorities.

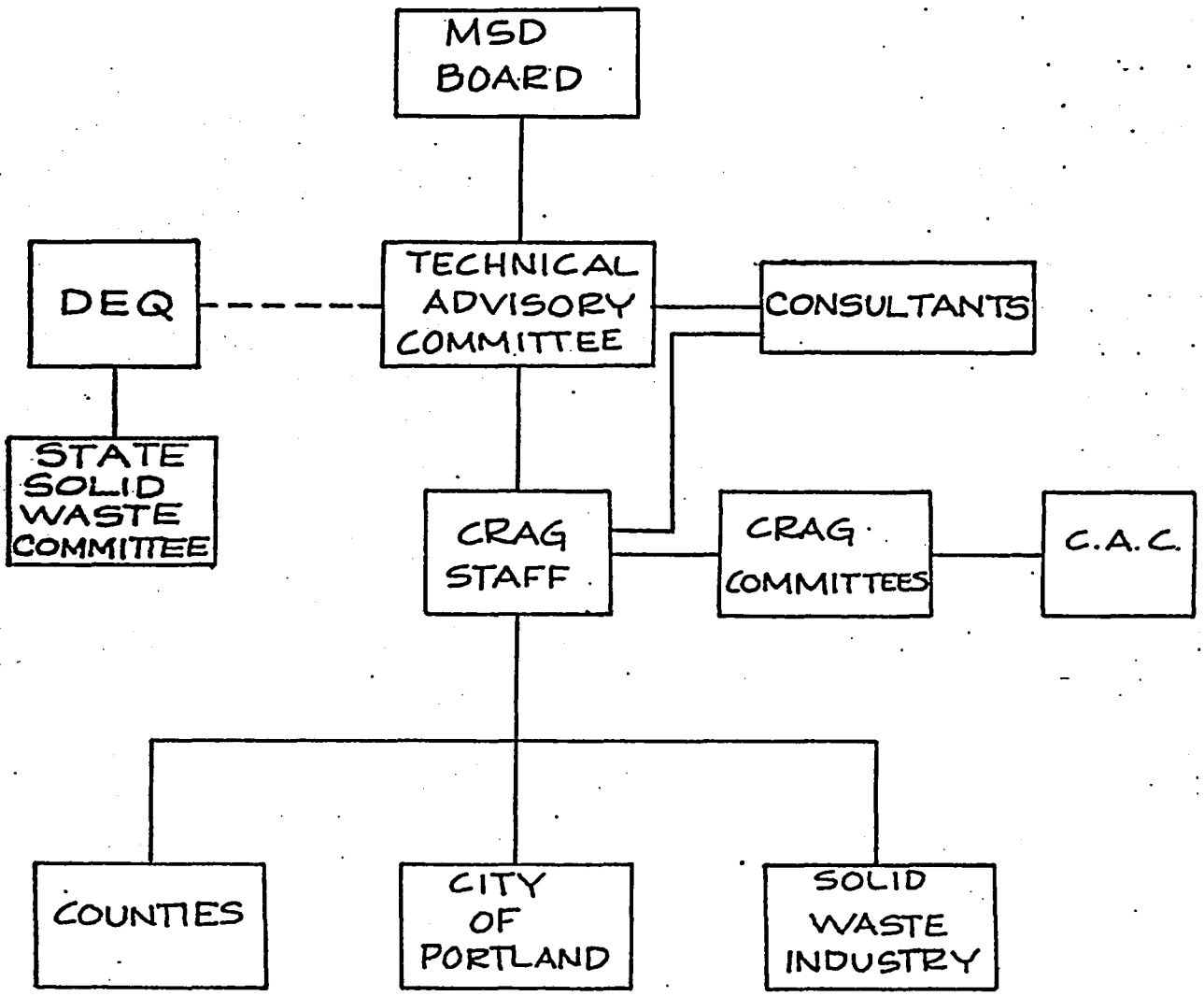
H. Develop inter-jurisdictional agreements.

I. Develop operational plan.

1. Equipment procurement.
2. Operating processes.
3. Management techniques.

ORGANIZATION CHART
SOLID WASTE PLANNING PROGRAM

FIGURE. 1



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MSD SOLID WASTE PLANNING PROGRAM WORK TASKS

This section proposes specific work tasks to be accomplished in coordination with the Department of Environmental Quality's Statewide Action Plan. The previous section defined recommended work task outline to be performed, while this section expands the outline into viable work tasks.

I. CITIZEN UNDERSTANDING OF SOLID WASTE PLAN

A. A Citizen Advisory Committee (CAC) will be established in order to coordinate, advise and finally adopt the Solid Waste Plan. Specifically, the Regional Solid Waste CAC will coordinate with the existing Statewide Solid Waste Committee, provide recommendations to the Regional Plan, and finally adopt the final report. This committee will include citizens from the region that can contribute time and effort to this planning effort.

B. The existing CRAG committees in the areas of Public Works, Area Development, Transportation, and Social Services will be used to provide citizen advice and recommendations. These existing committees consist of both professional people and citizens that would provide successful citizen inputs and comments.

C. The MSD Board should provide public hearings at 10%, 60%, and 100% completion of the Solid Waste Plan. This technique, in addition to public relations coverage, should provide a reasonable place for public remonstrance.

II. REGIONAL SANITARY LANDFILL

A. It is proposed that existing sanitary landfill sites be studied to determine potential improvements that would adapt the facility for regional uses. This would include performing engineering evaluations of existing sites; studying methods of upgrading the facility, landscaping to reduce dust blowing and erosion; and evaluating final land use potentials of landfill sites. Further, the studies should develop techniques to reduce leachate problems in existing landfill sites.

B. The plan should determine sanitary landfill useable life for recommended sites that accept demolition wastes, garbage and other refuse. For the long term, it should consider the possibility of filling the many gravel pits in the region with demolition wastes.

C. Sanitary landfill site selection criteria will be established and used in site evaluations. Examples of criteria to be studied are shown below:

1. Location fulfills public health standards.

   - Air and water pollution
   - Fire protection
   - Nuisance prevention
   - Disease prevention

2. Location provides for economical construction and operation.

   - Suitable cover material available
   - Suitable road material available
   - Minimal drainage facilities needed
   - Minimal diking or protection needed
   - Soils geology and topography suitable

3. Location will be benefited by landfill

   - Low cost housing
   - Golf course
   - Parks
   - Public land use

4. Location accessible to economic transportation

5. Location will minimize public objection

6. Located for minimal effects on adjacent land uses

D. The Solid Waste Plan should study and evaluate potential sanitary landfill sites so that their locations will provide optimum economic impact.

E. It is proposed the plan will define in detail environmental impact statement requirements (see Addendum 1). In addition, methods of providing funds for environmental impact statements will be studied.

F. Economic impact studies will be developed for all existing and potential sanitary landfill sites. These studies will include evaluation of capital costs, operating and maintenance costs and service charges.

III. REGIONAL TRANSFER STATIONS

A. Evaluation of the need for Regional Transfer Stations is necessary. Consideration of similar Metropolitan Areas and their uses of Transfer Stations should be considered.

B. Investigations of Transfer Station locations should be performed, keeping in mind the remote areas of the CRAG Region and eventual location of the Regional population centroid. Further, locations should consider public acceptability.

C. Transfer Station site selection criteria will be established and used in site evaluations. Examples of these criteria to be studied are shown below:

1. Location fulfills public health standards

   - Air and water pollution
   - Fire protection
   - Nuisance prevention

2. Location provides for economical construction and operation

   - Soils, geology and topography suitable
   - Service available
   - Close proximity to cities

3. Location accessible to economic transportation.

4. Location will minimize public objection.

5. Located for minimal effects on adjacent land uses.

D. Social-economic impact studies will be developed for candidate sanitary landfill sites. These studies will include evaluation of capital costs, operating and maintenance costs, service charges and social impacts of the proposed facilities.

E. Environmental impact statements will be required. These standards outlined in Addendum 1 should be evaluated.

IV. SPECIAL SOLID WASTE PROBLEMS

This task must consider the following special man-made wastes and determine realistic and economic methods of disposal:

- Sewage sludge
- Septic tank pumping
- Tires
- Dead animals and hospital wastes
- Acids and bases
- Oils
- Industrial sludges

Further, considerations of these wastes should include air pollution and other long range environmental circumstances.

V.. INTERIM TO LONG RANGE PLANNING OBJECTIVES

A. A detailed investigation should be performed of existing sanitary landfill techniques. Literature surveys should be accomplished evaluating existing landfill solid waste operations against preferred methods. Trade-offs should then be studied with firm recommendations resulting.

B. Presently available solid waste disposal techniques that could be implemented on a long term basis will be studied. These methods include incineration, energy conversion, composting, and hydropulping. Consideration should be given to the needs of this Metropolitan Area and not advancing the state of the art of solid waste.

C. An evaluation of long haul solid waste disposal methods should be accomplished and will include barging, trucking, rail haul, etc. The Boeing-Boardman Technique should be studied for present and future applicability. Consideration should be given to other remote site disposing schemes.

D. An evaluation of potential processing techniques including pyrolysis, piping, pretreatment and sorting should be made. Consideration for realistic economic impacts should be developed. In addition, potential metropolitan processing methods should be proven and documented prior to acceptance in this region.

E. A brief investigation of recycling and reuse techniques should be made with specific consideration given to economic feasibility and implementation methods. In addition, a literature survey should be accomplished to document existing and potential efforts.

VI. SOLID WASTE INTERIM ORGANIZATIONAL AND FINANCIAL PLAN

A. This study should consider the basic financial capability of MSD and availability of revenue sources. In addition, consideration should be given to existing capital investments of the counties and City of Portland.

B. The capital and activation costs of this plan should be thoroughly studied and evaluated. Cost comparisons should be made for different alternatives with debt service considerations discussed.

C. Studies of existing facility operations can be used in developing operating and maintenance cost factors. This plan should consider operating and maintenance cost impacts and benefits for various alternatives.

D. Administrative costs will be detailed with specific recommendations being developed as to type and extent of these costs expected. This specific study should be tied directly to Part A and basic financial capability of MSD.

E. An organizational plan will be prepared with proposed implementation recommendations and costs detailed for staff salaries. This plan will encompass overall organizational relationships from collection through processing, including systems management. Further, recommended operating procedures will be developed and their organizational implementation defined.

F. This plan will also consist of recommendations for legal and legislative support necessary to make this effort work. It shall include legal enactments necessary from collection to MSD Administration.

G. Regulations and responsibilities of concerned jurisdictions should be investigated by a consultant to determine applicability for operating a solid waste system.

H. As a result of the above, inter/intra-jurisdictional agreements should be agreed upon. Concise and clear results should be the goals so that the solid waste system can operate within well defined guidelines.

I. An operational plan should be developed that includes capital procurement regulations, ultimate operating procedures, and good resource management techniques.

COST ESTIMATE

The estimated costs for solid waste planning are presented in this section. It should be emphasized that for planning, the MSD will provide primary coordination and contract through the CRAG Staff. Options will be left open by contracting to other staffs (county or city), utilizing state personnel, or contracting to private consultants.

Estimated costs include overhead, administration and contingency.

INTERIM PLANNING ESTIMATED COSTS

I.	Citizen Understanding of Solid Waste Plan	$11,010
II.	Regional Sanitary Landfill Planning	21,875
	Environmental Impact and Site Engineering	35,000
III.	Regional Transfer Stations - Planning	10,955
	Environmental Impact and Site Engineering	25,000
IV.	Special Solid Waste Problems	40,000
V.	Interim to Long Range Planning Objectives	29,984
VI.	Solid Waste Financial, Organizational and Operations Planning	62,000
	Additional Costs:	
	Report Preparation	19,176
	TOTAL SOLID WASTE PLANNING COSTS	$255,000.

SOLID WASTE PLANNING CHART M. S. D.

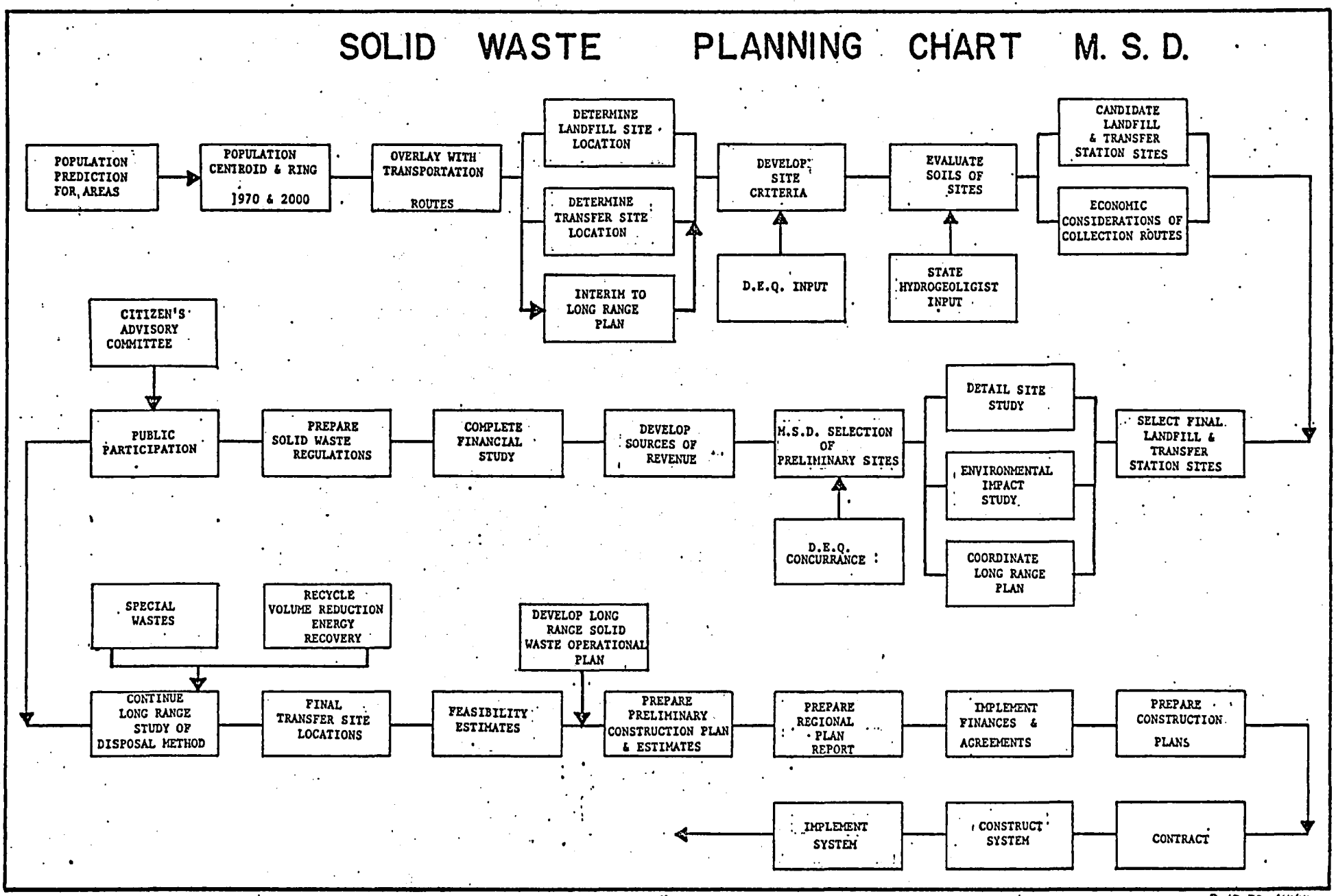

FIGURE 2

8-18-72 NWW
REVISED 9-5-72 NWW

SCHEDULE

The proposed Solid Waste Planning Schedule is presented in Figure 3. This Schedule shows an eight month planning program with a one year immediate implementation time period. These time frames are based on proper staffing and appropriation of funds by January 1, 1973. A brief planning flow chart is presented in Figure 2.

SOLID WASTE PLANNING SCHEDULE

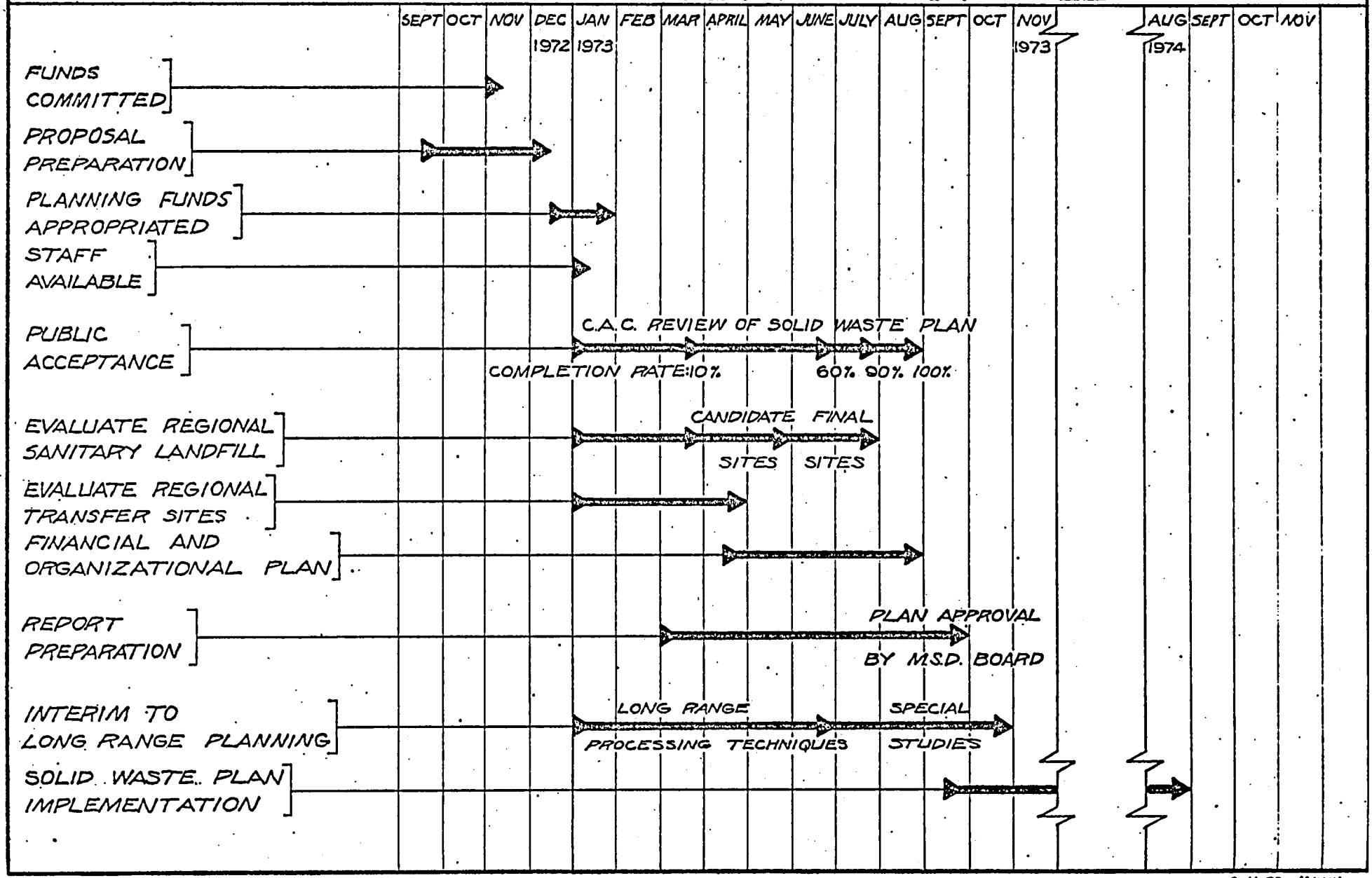

FIGURE 3

9-11-72 N.W.W.

ADDENDUM 1

ENVIRONMENTAL IMPACT

A. Air Pollution -

Investigate air pollution and possible solutions to problems at existing sites; investigate potential hazards that may arise from different disposal alternatives, assuring accordance with future air quality qualities.

B. Water Pollution -

Investigate leachate and run-off pollution of ground and surface water at dump sites, landfill and sanitary landfill sites, and incineration sites; devise standards and assure adherence to standards for land form, ground water level, soil type for disposal sites.

C. Visual Pollution -

Investigate landscaping potential for existing sites to reduce visual blight, dust and litter, erosion; establish design standards for future facilities.

D. Noise Pollution -

Protection of both surrounding area and employees should be of importance. Noise level limitations should be established and adhered to through proper equipment of facilities.

E. Odor Pollution -

Investigate odor pollution prevention methods, i.e. proper cover material, landscaping.

F. Land Pollution -

Use of land with intention of reclamation and final use, rather than use of land as disposal site.

G. Ecological Pollution -

Investigate the balance of the life cycles of the area of site consideration - will the facility created endanger species of animals, interrupt the food chain?

H. Resource Pollution -

Investigate resources of site area to prevent making inaccessible any depletable resource mineral.