



# CITY OF SACRAMENTO

## DEPARTMENT OF PUBLIC WORKS

ENGINEERING DIVISION

June 17, 1985

THOMAS M. FINLEY  
Engineering Division Manager

Transportation and Community Development Committee  
Sacramento, California

Honorable Members in Session:

SUBJECT: Solid Waste Disposal Planning

### SUMMARY

Council has directed the Department of Public Works staff to provide recommendations for a long-term solid waste disposal program. (See Table One for a list of potential alternatives). A contract has been approved to evaluate new landfill alternatives (Jones & Stokes Associates, et. al.), and work is under way to develop a request for proposal for a full-services waste-to-energy contract. Council has also been approached by several vendors/project developers to entertain proposals for other solid waste disposal options, such as composting, transfer, etc.

The Department of Public Works has reviewed the current activities for solid waste disposal planning. Several modifications and additions to the planning process are recommended to allow comparison of all options in a reasonable time frame. The revised planning process includes the following major components:

1. Proceed with the Landfill Alternatives Study/EIR approved by Council. A preliminary landfill alternatives evaluation will be completed in October. Detailed study of preferred alternatives, completion of the EIR, and design/permit/construction of the chosen project could be completed in 1987/88.
2. Issue an RFP immediately soliciting proposals from vendors/developers for transfer, composting and resource recovery options. These would be options which are already well defined and could be financed during 1985. Proposed tax law revision could have a major impact on the costs for these projects. Proposals would be returned by October, 1985 for evaluation against and comparison with landfill options and waste-to-energy feasibility.
3. Postpone issuance of an RFP for waste-to-energy until 1986. There are several major issues which should be researched prior to commitment to a waste-to-energy facility. Department of Public Works staff will prepare a feasibility evaluation focusing on the issues of markets, tax laws, and air emission control. After this is completed the City can issue a better defined RFP and receive improved proposals.

A more detailed outline of the above summarized process is given on Table Two.

DISCUSSION

The City must commit to a strategy in the near future which will provide long-term capacity for solid waste processing and disposal. In response to this need, the Public Works Department has initiated two parallel activities, details of which have been presented to the Committee:

- \* Landfill Alternatives Study and Environmental Assessment (Jones & Stokes Associates/Cooper Engineers);
- \* Waste-to-Energy RFP (Brown, Vence Associates/Smith-Barney)

In order to obtain a comprehensive long-range solid waste disposal program for the City, the Public Works Department has prepared a rational process to evaluate all alternatives and present specific implementation recommendations to Council. This evaluation process incorporates the Landfill Alternatives Study and modifies the waste-to-energy planning component. Initial results will be presented to the Council by the end of 1985, including recommendations for the preferred course and recommendations on implementation of specific components. The evaluation process includes the following major elements:

1. Landfill Alternatives Study

This study will focus on providing the City with a basic solid waste disposal system which will be needed when the 28th Street Landfill closes. The City must be in a position to provide basic disposal capacity if other alternatives prove infeasible, and/or to provide residue/bypass disposal for waste-to-energy composting, or materials recovery alternatives. This study has been approved by Council and work has been started by the firms of Jones & Stokes Associates and Cooper Engineers. Major project milestones include the following:

- |  |                |
|--|----------------|
| * Preliminary evaluation of landfill options   | October, 1985  |
| * Detailed evaluation of preferred options     | February, 1986 |
| * Completion of Environmental Assessment (EIR) | June, 1986     |
| * Design, Permits, Construction                | 1987 - 1988    |

2. Solid Waste Disposal Alternatives RFP:

Several vendors/project developers have approached Council to submit proposals for solid waste disposal/transfer/processing. Costs for these projects may be influenced severely if financing is not in place by the end of this year due to proposed changes in Federal tax policy. It is recommended that a request for proposals be issued immediately to allow submittal of proposals which are technically sound and are sponsored by stable, financially strong organizations which can provide reasonable guarantees to the City.

The following time frame for RFP activities will allow comparison of proposals with other potential alternative courses of action, and could meet the financing deadlines:

- |  |                 |
|--|-----------------|
| * Issue RFP  | July, 1985      |
| * Receive proposals  | September, 1985 |
| * Evaluate proposals   | October, 1985   |
| * Negotiate contract (if valid and desirable proposals are received) | December, 1985  |

3. Evaluate Waste-to-Energy Feasibility

The potential for a successful waste-to-energy project depends on several issues which need further investigation. Therefore, issuance of a request for proposal from full service vendors should be delayed until a study is completed focusing on the major issues. Such a study could be completed before the end of this year. Delaying the RFP and completing this study will yield the following benefits:

- a. Clearer understanding of proposed Federal Tax changes and their impact (could raise tip fee by \$15-\$25/ton);
- b. Clearer definition of potential energy markets and revenues;
- c. Clearer understanding of air emission control requirements and EPA policy as it impacts projects to be built in the Sacramento area;
- d. Resolution of status of viable competing non-combustion proposals;
- e. Availability of a review of waste-to-energy feasibility to allow comparison with other options under investigation; and
- f. Responses from a wider range of responsible bidders with better defined guarantees.

The following schedule is proposed for waste-to-energy planning:

- |  |                |
|--|----------------|
| * Waste-to-energy feasibility update       | October, 1985  |
| * Evaluation of all waste disposal options | January, 1986  |
| * Issue RFP                                | March, 1986    |
| * Receive proposals                        | June, 1986     |
| * Negotiate contract                       | December, 1986 |

The above outlined process will allow solid waste disposal options to be selected in an informed and structured manner. By October, 1985, staff plans

to have the results of the following activities available for comparison and evaluation:

- \* Landfill Alternatives Study - preliminary assessment;
- \* Solid Waste Disposal Alternatives - proposals; and,
- \* Waste-to-Energy Feasibility - issues analysis.

Based on this, firm recommendations will be made regarding the future of the City's solid waste disposal system. This could be in the form of a recommendation to sign contracts for transfer, composting, or other options. Alternatively, a firm commitment to waste-to-energy could be made with issuance of a well-defined RFP.

#### FINANCIAL

This report has no additional financial implications beyond the Landfill Alternative Study/EIR which has been authorized by the Council (\$135,000) and budgeted Engineering Division support services for the Solid Waste Division.

#### RECOMMENDATION

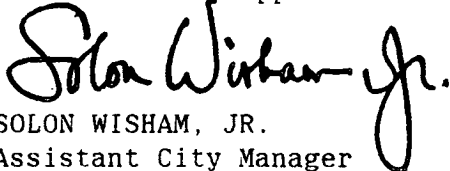
1. Authorize the Department of Public Works to proceed with the process as outlined in this report, and direct the Department to present an overall evaluation of all solid waste disposal alternatives in October, 1985.
2. Authorize the Department of Public Works to issue an RFP for alternate solid waste disposal options according to a time schedule allowing receipt of proposals in September, 1985.
3. Forward the report to Council for information.

Respectfully submitted,



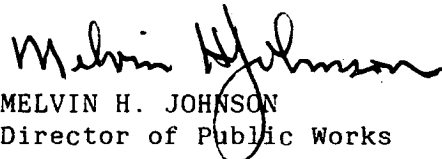
JOHN F. BOSS  
Supervising Engineer - Waste Management

Recommendation Approved:



SOLON WISHAM, JR.  
Assistant City Manager

Approved:



MELVIN H. JOHNSON  
Director of Public Works

JFB:vr  
JB111Cd2

Attachment

TABLE 1  
WASTE DISPOSAL/PROCESSING ALTERNATIVES

1. Landfill
  - o Granite quarry New
  - o West of McClellan New
  - o East of Regional Sewer Plant New
  - o Next to County Landfill New
  - o Sacramento County Existing
  - o Yolo County Existing
  - o Western Regional (Placer) Existing
  
- Transfer
  - o 28th Street site New
  - o Granite quarry New
  - o North B Street (SAWDCO) New
  - o County Transfer Station Expand
  - o Could be other potential sites  
many were reviewed by Brown and Caldwell New
  
- Balefill
  - o Granite quarry (w/bale station at quarry)
  
2. Private proposals
  - o Transfer Station
    - Empire Disposal
    - Waste Management
    - Browning Ferris Industries (BFI)
    - Genstar
  - o Compost/Freeway barrier
  - o Landfill (site, develop, and operate)
  
- Partial alternatives
  - o Compost vegetal waste
    - Sam Hart
    - State Heating and Cooling Plant
  - o Materials Recovery/Hand
    - @ Transfer Station
    - @ Landfill
    - @ Compost
    - @ Waste-to-Energy Plant
  - o Materials Recovery/Mechanical
    - @ Transfer Station
    - @ Landfill
    - @ Compost
    - @ Waste-to-Energy
  
3. Waste-to-Energy
  - o Mass Burn
  - o Refuse Derived Fuel (RDF)
  - o Pellets/cubes/etc. (solid fuel)

TABLE 2  
SOLID WASTE DISPOSAL PLAN

1. EVALUATE CONVENTIONAL DISPOSAL OPTIONS
  - o Preliminary Landfill Alternatives Study to identify up to four (4) preferred options 10/85
  - o Detailed Evaluation/EIR on chosen alternatives (draft) 2/86
  - o Design/Permit Approvals 6/87-12/87
  
2. EVALUATE PROPOSALS FOR SOLID WASTE DISPOSAL ALTERNATIVES
  - o RFP 7/85
  - o Evaluate responses 10/85
  - o Negotiate, if valid and desirable proposal received 12/85
  
3. EVALUATE WASTE-TO-ENERGY
  - o Prepare staff/consultant report on current feasibility of WTE 10/85
    - Technology (RDF vs Mass Burn, etc.)
    - Cost range
    - Financing/Tax proposals
    - Markets-Revenues
    - Anticipated Tip Fee
  
  - o Issue RFP 3/86