



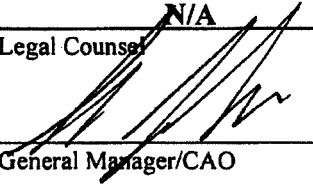
**SALINAS VALLEY
SOLID WASTE AUTHORITY**

Report to the Board of Directors

ITEM NO. 10


Finance Manager/Controller-Treasurer

~~N/A~~
Legal Counsel


General Manager/CAO

Date: December 14, 2006
From: Michael Brown, HDR, Inc.
Title: Long Term Waste Management Plan – Selection Of Overall Approach to Diversion and Disposal

STAFF RECOMMENDATION

Staff recommends that the Board direct staff to focus on an approach which combines Scenarios A and B.

BACKGROUND

The Authority has undertaken a comprehensive evaluation and development of a Long Term Waste Management Plan to determine how to achieve 75% diversion by 2015 and maintain a minimum of 50 years of sustainable waste management and disposal capacity. The Board considered three different approaches to meeting the diversion targets:

- Scenario A - Intensive Source Reduction, Recycling and Education Programs
- Scenario B - Non-combustion Conversion Technology
- Scenario C - Combustion Based Waste to Energy

The Board also considered three different disposal alternatives for long-term disposal of the Authority's residual waste:

- Alternative I - Use of Crazy Horse and Johnson Canyon Landfills
- Alternative II - Use of the Marina Landfill
- Alternative III - Development of a New Landfill Along Highway 198

The Board developed a criteria and scoring process designed to evaluate the scenarios and disposal alternatives based on several weighted non-economic criteria.

Criteria	Weights
1. Public Acceptance	8
2. Effect on Public Accountability	8
3. Risk of Litigation Exposure	8
4. Obtaining Sites & Permits	8
5. Impact on Public Education Efforts	7
6. Environmental Consequences	7
7. Greenhouse Gas Impact	7
8. Disposal Needs & Obligations	6
9. Diversion Potential	5
10. Economic Benefits & Impacts	3
11. Operating History	2

The Board then scored each scenario and disposal alternative based on a scale of 1 (low) through 5 (high). These scores are presented in Attachment 1.

Based on the scores and the weights, the total score for each scenario and disposal alternative was calculated. These calculations are presented in Attachment 2 and summarized below.

Scenario	Disposal Alternative	Total Score
Scenario A: Intensive Recycling	Residuals: Alt I. Crazy Horse & Johnson Canyon	245
	Residuals: Alt II. Marina landfill	258
	Residuals: Alt III. 198 landfill	192
Scenario B: Non-combustion conversion technology	Residuals: Alt I. Crazy Horse & Johnson Canyon	306
	Residuals: Alt II. Marina landfill	248
	Residuals: Alt III. 198 landfill	183
Scenario C: Combustion based waste to energy	Residuals: Alt I. Crazy Horse & Johnson Canyon	216
	Residuals: Alt II. Marina landfill	191
	Residuals: Alt III. 198 landfill	182

Based on this analysis, the highest scoring scenario is Scenario B Non-Combustion Conversion Technology with residual disposal at Crazy Horse and Johnson Canyon. The second highest scoring scenario is Scenario A Intensive Recycling with residual disposal at the Marina Landfill.

The Board previously reviewed the costs of several disposal alternatives and determined that the most cost-effective disposal alternative was to direct waste to the Johnson Canyon Landfill for a 50-year term. The Board directed staff to negotiate with the City of Gonzales and other affected parties to develop a capacity enhancement cooperative agreement for expanding Johnson Canyon beyond its currently planned limits.

The Board reviewed the expected diversion rates and costs of each scenario as summarized below.

Scenario	Diversion Rate		Net Present Value (40 Years) \$Millions
	2015	2017	
Scenario A: Intensive Recycling	75.9%	76.1%	\$331.8
Scenario B: Non-combustion conversion technology	75.7%	77.5%	\$298.4
Scenario C: Combustion based waste to energy	80.3%	82.2%	\$614.5

Based on the cost and diversion analysis, the preferred scenario would be Scenario B Non-Combustion Conversion Technology.

At the November meeting the Board accepted the cost comparisons for the three scenarios and directed staff to exclude Scenario C from further consideration.

DISCUSSION & ANALYSIS

Scenario B Non-Combustion Conversion Technology scored the highest in the Board evaluation process. It is also potentially the most economical choice for the Authority. However, conversion technologies are somewhat unproven for large-scale processing of municipal solid waste. The Authority is developing a pilot conversion technology project using the CR3 autoclave, as well as researching other conversion systems. This technology is promising, but requires testing and evaluation prior to investment in full-scale development. Scenario A Intensive Recycling scored second highest in the Board's evaluation process and is the second most economical of the three scenarios. Many of the programs and projects included in Scenario A are compatible with Scenario B, including increasing outreach and technical assistance and rolling out recycling programs to all generators.

Full implementation of Scenario A will require the member agencies to enact mandatory recycling ordinances requiring generators to recycle.

If the Authority starts down both a path to scenarios A and B the progress of the pilot project can be evaluated before fully committing to either the mandatory aspects of Scenario A or the capital investment required in Scenario B. If conversion technology is proven to be successful through the pilot plant operation and other conversion technology investigations, the member agencies would not have to require generators to recycle. If conversion technology is not feasible, the Authority and member agencies can continue to pursue Scenario A programs including mandatory recycling.

FISCAL IMPACT

Funding for this implementation of any of the scenarios is not included in the current budget. Costs for funding the programs identified in the Long Term Waste Management Plan will be included in the implementation plan and funding authorization for these programs will be considered in the mid-year budget or future Authority annual budget cycles, depending on when the Board direction is given.

ATTACHMENT(S)

1. Attachment 1 - Evaluation of Non-Economic Criteria
2. Attachment 2 - Weighted Analysis of Non-Economic Criteria

Attachment 1 - EVALUATION OF NON-ECONOMIC CRITERIA

	Public Acceptance	Public Accountability	Risk of Litigation Exposure	Feasibility of Obtaining Sites & Permits	Impact on Public Education & Environmental Consequences	Greenhouse Gas Impact	Disposal Needs & Obligations	Diversification Potential	Distribution of Economic Benefits & Impacts	Operating History
1										
2										
3										
4										
5										
6										
7										
8										
9										

Scenario A: Sun St., Intensive Programs, C&D, Organics
 Residuals: Alt I. Crazy Horse & Johnson Canyon

Residuals: Alt II. Marina landfill

Residuals: Alt III. Hwy 198 landfill

Scenario B: Sun St., Programs, C&D, Organics, & Non-combustion Technology
 Residuals: Alt I. Crazy Horse & Johnson Canyon

Residuals: Alt II. Marina landfill

Residuals: Alt III. Hwy 198 landfill

Scenario C: Sun St., Programs, C&D, Organics, & Combustion Technology (WTE)
 Residuals: Alt I. Crazy Horse & Johnson Canyon

Residuals: Alt II. Marina landfill

Residuals: Alt III. Hwy 198 landfill

Attachment 2 - WEIGHTED ANALYSIS OF NON-ECONOMIC CRITERIA

Criteria Weight	Public Acceptance	Effect on Public Accountability	Risk of Litigation Exposure	Feasibility of Obtaining Sites & Permits	Impact on Public Education Efforts	Environmental Consequences	Greenhouse Gas Impact	Disposal Needs & Obligations	5 Diversion Potential	Distribution of Economic Benefits & Impacts	Operating History	Total Scenario Score
Scenario A: Sun St., Intensive Programs, C&D, Organics	8	32	16	32	35	28	28	30	15	15	6	245
	24	24	32	40	35	28	21	24	15	9	6	258
	8	32	8	8	35	21	14	30	15	15	6	192
Scenario B: Sun St., Programs, C&D, Organics, & Non-combustion Technology	40	32	40	32	28	35	35	30	20	12	2	306
	32	16	32	32	28	28	28	24	20	6	2	248
	8	32	8	8	28	21	14	30	20	12	2	183
Scenario C: Sun St., Programs, C&D, Organics, & Combustion Technology	8	32	16	16	28	28	14	30	25	9	10	216
	8	16	16	16	28	28	14	24	25	6	10	191
	8	32	8	8	28	21	7	30	25	9	6	182