

DEPARTMENT: Public Works

By: Thomas J. Starling Phone: 966-5356  
Solid Waste Coordinator

RECOMMENDED ACTION AND JUSTIFICATION: (Policy Item: Yes\_\_ No\_X)

Presentation of the State-mandated Closure/Post Closure Plan (C/PC Plan) prepared by James A. Wyse, Inc. Public Works recommends that the Board of Supervisors approve this document for submittal.

The C/PC Plan is mandated by the California Integrated Waste Management Board (CIWMB), the Regional Water Quality Control Board (RWQCB) and the Department of Toxics. The report focuses on the estimated life of the landfill, closure methodology and costs and postclosure care and costs.

Jim Wyse, P.E. will present the C/PC Plan and answer questions.

**BACKGROUND AND HISTORY OF BOARD ACTIONS:**

This issue was first brought before the Board on March 8, 1994, with a recommendation to proceed with the plan preparation, but was not passed as the C/PC Plan was not to be provided to the State until 1995.

The Board approved the award of the contract for the C/PC to James A. Wyse, Inc. on October 10, 1994.

Copies of the draft plan have been available at the Board offices for review since April 25.

**LIST ALTERNATIVES AND CONSEQUENCES OF NEGATIVE ACTION:**

- 1) Direct that revisions to the C/PC Plan be made as may be determined by the Board during discussion.
- 2) Do not approve the C/PC Plan and direct staff to request another professional services solicitation.

**COSTS:** (X) Not Applicable

A. Budgeted current FY \$ \_\_\_\_\_

B. Total anticipated costs \$ \_\_\_\_\_

C. Required additional funding \$ \_\_\_\_\_

D. Internal transfers \$ \_\_\_\_\_

**SOURCE:** ( ) 4/5th Vote Required

A. Unanticipated revenues \$ \_\_\_\_\_

B. Reserve for contingencies \$ \_\_\_\_\_

C. Source description: \$ \_\_\_\_\_

Balance in Reserve Contingencies, if approved: \$ \_\_\_\_\_

**SPECIAL INSTRUCTIONS:**

List the attachments and number the pages consecutively:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CLERK'S USE ONLY**

Res. No.: 95-235 Ord. No. \_\_\_\_\_

Vote - Ayes: three Noes: \_\_\_\_\_

Absent: none Abstained: none

Approved  Denied

Minute Order Attached  No Action Necessary

The foregoing instrument is a correct copy of the original on file in this office.

Date: \_\_\_\_\_

ATTEST: MARGIE WILLIAMS, Clerk of the Board  
County of Mariposa, State of California

By: \_\_\_\_\_  
Deputy

**ADMINISTRATIVE OFFICER'S RECOMMENDATION:**

This item on agenda as:

Recommended

Not Recommended

For Policy Determination

Submitted with Comment

Returned for Further Action

Comment: \_\_\_\_\_

A.O. Initials: TS

**PRELIMINARY CLOSURE AND POSTCLOSURE MAINTENANCE PLAN  
MARIPOSA COUNTY LANDFILL**

**1) REGULATION REQUIRED DOCUMENT**

- RWQCB WDR ORDER NO. 93-200 §E.4 REQUIRED BY 10/9/93
- MARIPOSA COUNTY LEA/CIWMB TITLE 14 REQUIRED AT NEXT SOLID WASTE FACILITIES PERMIT UPDATE -- 1996

**\* THIS PRELIMINARY CLOSURE AND POSTCLOSURE MAINTENANCE PLAN MEETS BOTH REGULATORY REQUIREMENTS.**

**2) UPDATED FINAL COVER DESIGN**

- PREVIOUS DESIGNS WERE SIMILAR TO FIGURE 4 (ATTACHED) EXCEPT 1-FOOT OF CLAY SOIL WAS DESIGNED INSTEAD OF GEOSYNTHETIC CLAY LINER
- UPDATED FINAL COVER DESIGNS ACCOUNTS FOR LIMIT CLAY SOIL & REGULATORY REQUIRED COMPOSITE FINAL COVER OVER COMPOSITE LINED MODULES (SEE FIGURES 4 & 5 ATTACHED)

**3) CLOSURE AND POSTCLOSURE MAINTENANCE COST ESTIMATES**

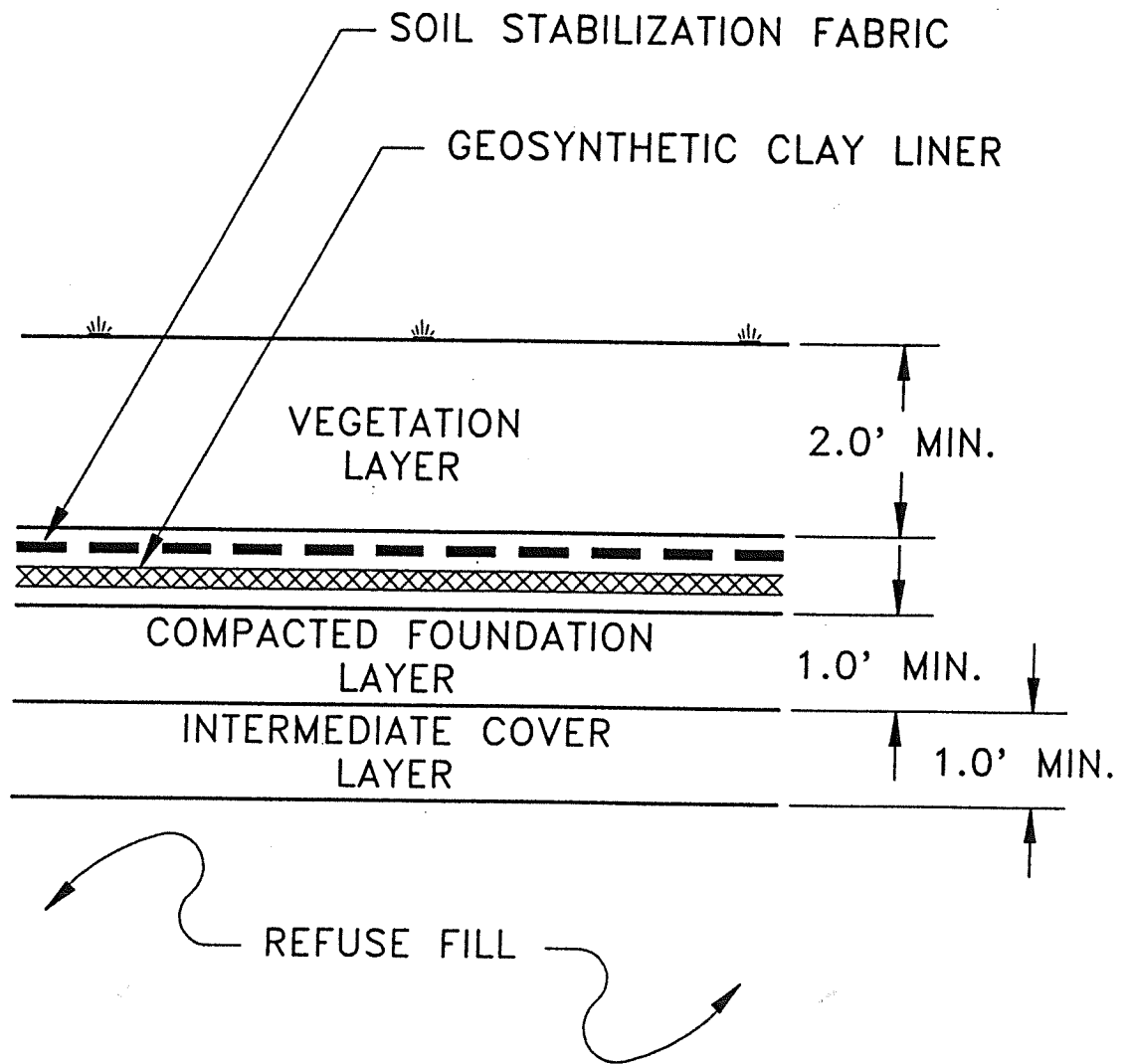
- UPDATE ORIGINAL COST ESTIMATES THAT WERE PREPARED IN 1989
- UPDATED COST ESTIMATES INCLUDING NEW FINAL COVER DESIGN
- INCREASED POSTCLOSURE FINANCIAL ASSURANCE PERIOD FROM 15 TO 30 YEARS

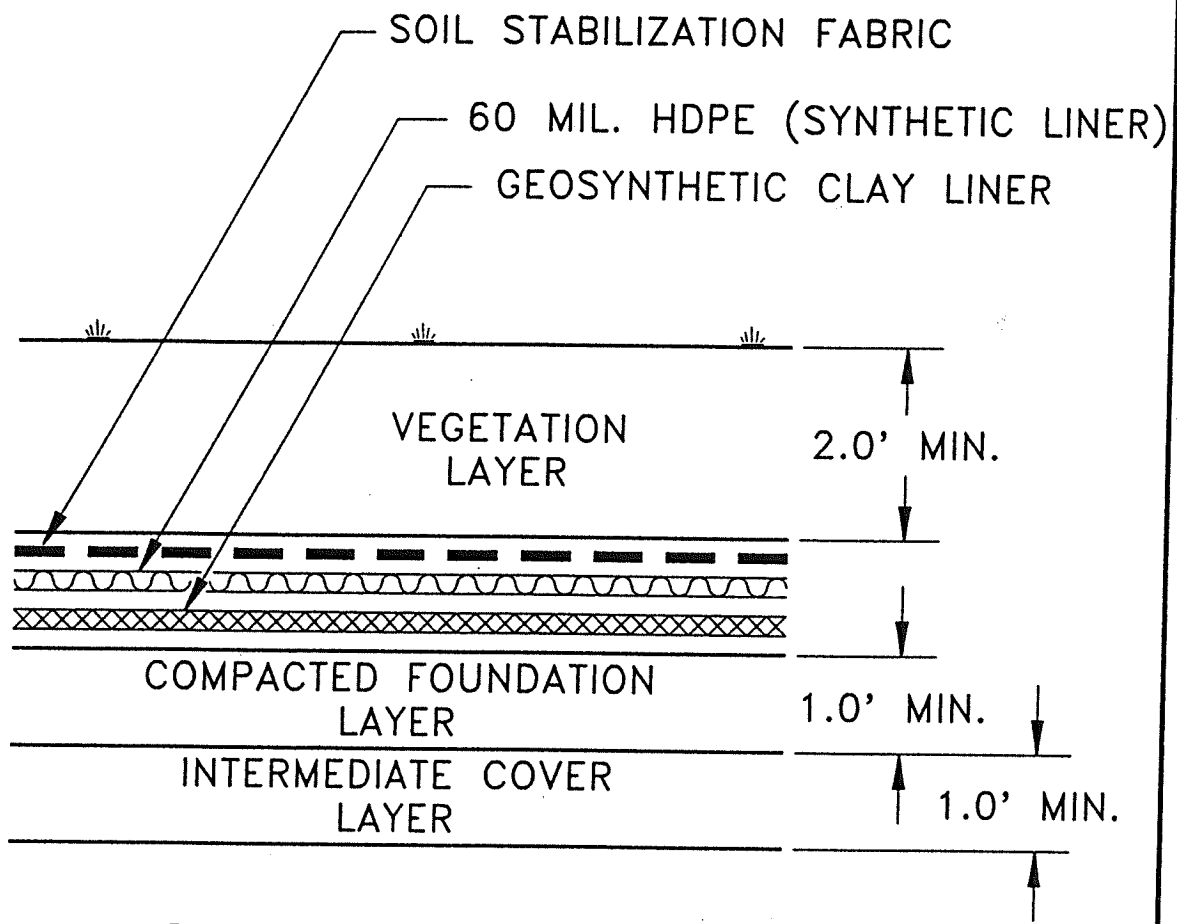
**4) FINANCIAL ASSURANCE**

- PREVIOUSLY A TRUST FUND FOR BOTH CLOSURE AND POSTCLOSURE MAINTENANCE COSTS
- MODIFY TRUST FUND FOR ONLY CLOSURE COSTS
- ESTABLISHED A PLEDGE OF REVENUE FOR FUTURE POSTCLOSURE MAINTENANCE COSTS (SAVED APPROXIMATELY \$3,000 PER YEAR)
- ANNUAL DEPOSITS TO TRUST FUND OF \$19,000 TO \$24,000 OVER NEXT 20 YEARS (SEE ATTACHED TABLE)

**5) UPDATE SITE LIFE AND CAPACITY ESTIMATES**

- SITE LIFE ORIGINALLY WAS 38 YEARS IN 1988 MASTER PLAN BASED ON A 5% WASTE GENERATION GROWTH RATE
- CURRENT SITE LIFE ESTIMATE OF 86 YR. USED AB939/SRRE REPORT
- \* BACKGROUND OF SITE LIFE AND WASTE GENERATION GROWTH RATE (SEE ATTACHED TABLE)**





**SUMMARY OF INITIAL COST ESTIMATES**

Facility Name	MARIPOSA COUNTY LANDFILL	SWIS #	22-AA-0001
<b>Closure</b>			
Final Cover (Line 23)		\$	2,131,193
Revegetation (line 29)		\$	13,325
Landfill Gas Monitoring and Control (line 32)		\$	0
Groundwater Monitoring Installations (line 34)		\$	0
Drainage Installation (line 35c)		\$	0
Security Installation (line 36d)		\$	0
Other (Line 37)		\$	0
<b>I. SUBTOTAL (Closure)</b>		\$	<b>2,144,518</b>
<b>Monitoring and Postclosure Maintenance</b>			
Revegetation (Line 40)		\$	0
Leachate Management (line 46)		\$	5,650
Monitoring (line 50)		\$	3,540
Drainage (line 51)		\$	2,000
Security (Line 52)		\$	250
Inspection (Line 53b)		\$	1,000
Other (Line 54)		\$	0
<b>II. SUBTOTAL (Postclosure)</b>		\$	<b>12,440</b>
<b>III. SUBTOTAL II x 30 YEARS POSTCLOSURE CARE</b>		\$	<b>373,200</b>
<b>IV. CONTINGENCY COSTS(Sum I X 20%)</b>		\$	<b>503,544</b>
<b>V. TOTAL CLOSURE COST (I + IV)</b>		\$	<b>2,648,062</b>
<b>TOTAL COST (Item III + Item V)</b>		\$	<b>3,021,262</b>

MARIPOSA COUNTY LANDFILL  
 MARIPOSA COUNTY  
 CLOSURE CONSTRUCTION SCHEDULE AND CLOSURE FUND DISBURSEMENT SCHEDULE  
 CLOSURE FUND ACCRUAL MULTIPLIER 2.0

ACTIVITY	CLOSURE FUND DEPOSITS	CLOSURE FUND ACCRUED	DISBURSEMENT	CLOSURE FUND BALANCE	COST ESTIMATE TO BE FUNDED	TONS/YR	REMAINING CAPACITY, C
1995-1994							
1995	FILL PLACEMENT	\$41,362	\$41,362	\$41,362	\$2,606,700	13,049	1,385,911
1996	FILL PLACEMENT	\$24,000	\$66,189	\$65,382	\$2,392,700	12,530	1,374,142
1997	FILL PLACEMENT	\$23,584	\$91,098	\$88,947	\$2,559,115	12,498	1,359,612
1998	FILL PLACEMENT	\$23,524	\$116,444	\$114,471	\$2,335,991	12,617	1,347,114
1999	FILL PLACEMENT	\$23,748	\$142,521	\$136,219	\$2,511,845	10,563	1,334,497
2000	FILL PLACEMENT	\$19,882	\$165,253	\$156,101	\$2,491,981	9,997	1,323,934
2001	FILL PLACEMENT	\$18,817	\$187,375	\$174,918	\$2,473,144	10,188	1,313,937
2002	FILL PLACEMENT	\$19,176	\$210,399	\$194,094	\$2,453,998	10,341	1,303,749
2003	FILL PLACEMENT	\$19,464	\$233,969	\$213,558	\$2,434,504	10,860	1,293,408
2004	FILL PLACEMENT	\$19,929	\$258,378	\$233,488	\$2,414,374	10,588	1,282,820
2005	FILL PLACEMENT	\$20,441	\$284,190	\$253,929	\$2,394,133	11,174	1,271,960
2006	FILL PLACEMENT	\$21,032	\$310,906	\$274,901	\$2,373,101	11,399	1,260,786
2007	FILL PLACEMENT	\$21,242	\$338,367	\$296,203	\$2,351,859	11,286	1,249,500
2008	FILL PLACEMENT	\$21,455	\$366,389	\$317,658	\$2,330,404	11,513	1,238,589
2009	FILL PLACEMENT	\$21,669	\$395,590	\$339,328	\$2,308,734	11,628	1,228,217
2010	FILL PLACEMENT	\$21,886	\$425,388	\$361,214	\$2,286,848	11,744	1,218,961
2011	FILL PLACEMENT	\$22,105	\$456,001	\$383,319	\$2,264,743	11,861	1,209,356
2012	FILL PLACEMENT	\$22,326	\$487,447	\$405,645	\$2,242,417	11,980	1,199,376
2013	FILL PLACEMENT	\$22,549	\$519,745	\$428,194	\$2,219,868	12,100	1,189,278
2014	FILL PLACEMENT	\$22,775	\$552,915	\$450,969	\$2,197,093	12,221	1,179,055
2015	FILL PLACEMENT	\$23,003	\$586,976	\$473,971	\$2,174,091	12,343	1,168,712
2016	FILL PLACEMENT	\$23,233	\$621,948	\$497,204	\$2,150,838	12,466	1,158,246
2017	FILL PLACEMENT	\$23,465	\$657,852	\$520,669	\$2,127,393	12,591	1,147,655
2018	FILL PLACEMENT	\$23,700	\$694,709	\$544,348	\$2,103,694	12,717	1,136,938
2019	FILL PLACEMENT	\$23,937	\$732,539	\$568,305	\$2,079,757	12,844	1,126,093
2020	FILL PLACEMENT	\$24,176	\$771,366	\$592,481	\$2,055,581	12,973	1,115,121
2021	FILL PLACEMENT	\$24,418	\$811,211	\$616,899	\$2,031,163	13,102	1,104,018
2022	FILL PLACEMENT	\$24,662	\$852,097	\$641,560	\$2,006,502	13,233	1,092,785
2023	FILL PLACEMENT	\$24,908	\$894,047	\$666,469	\$1,981,593	13,366	1,081,419
2024	FILL PLACEMENT	\$25,158	\$937,086	\$691,628	\$1,956,436	13,501	1,070,000
2025	FILL PLACEMENT	\$25,409	\$981,237	\$717,036	\$1,931,026	13,634	1,058,514
2026	FILL PLACEMENT	\$25,663	\$1,026,325	\$742,699	\$1,905,363	13,771	1,046,984
2027	FILL PLACEMENT	\$25,920	\$1,072,925	\$768,619	\$1,879,443	13,908	1,035,419
2028	FILL PLACEMENT	\$26,179	\$1,120,614	\$794,798	\$1,853,264	14,048	1,023,820
2029	FILL PLACEMENT	\$26,441	\$1,169,467	\$821,238	\$1,826,824	14,188	1,012,188
2030	FILL PLACEMENT	\$26,705	\$1,219,561	\$847,944	\$1,800,118	14,330	1,000,514
2031	FILL PLACEMENT	\$26,972	\$1,270,925	\$874,916	\$1,773,146	14,473	988,798
2032	FILL PLACEMENT	\$27,242	\$1,323,585	\$902,158	\$1,745,904	14,618	977,041
2033	FILL PLACEMENT	\$27,514	\$1,377,571	\$929,672	\$1,718,390	14,764	965,249
2034	FILL PLACEMENT	\$27,790	\$1,432,912	\$957,462	\$1,690,600	14,912	953,419
2035	FILL PLACEMENT	\$28,067	\$1,489,638	\$985,530	\$1,662,532	15,061	941,554
2036	FILL PLACEMENT	\$28,346	\$1,547,779	\$1,013,878	\$1,634,184	15,211	929,654
2037	FILL PLACEMENT	\$28,628	\$1,607,366	\$1,042,509	\$1,605,553	15,364	917,719
2038	FILL PLACEMENT	\$28,918	\$1,668,432	\$1,071,427	\$1,576,633	15,517	905,749
2039	FILL PLACEMENT	\$29,207	\$1,731,007	\$1,100,634	\$1,547,428	15,672	893,734
2040	FILL PLACEMENT	\$29,499	\$1,795,127	\$1,130,134	\$1,517,928	15,829	881,679
2041	FILL PLACEMENT	\$29,794	\$1,860,823	\$1,159,928	\$1,488,134	15,987	869,584
2042	FILL PLACEMENT	\$30,092	\$1,928,132	\$1,190,020	\$1,458,042	16,147	857,444
2043	FILL PLACEMENT	\$30,393	\$1,997,088	\$1,220,413	\$1,427,649	16,309	845,259
2044	FILL PLACEMENT	\$30,697	\$2,067,726	\$1,251,110	\$1,396,952	16,472	833,029
2045	FILL PLACEMENT	\$31,004	\$2,140,085	\$1,282,114	\$1,365,948	16,637	820,754
2046	FILL PLACEMENT	\$31,314	\$2,214,201	\$1,313,428	\$1,334,634	16,803	808,429
2047	FILL PLACEMENT	\$31,627	\$2,290,112	\$1,345,055	\$1,303,007	16,970	796,054

MARIPOSA COUNTY SITE LIFE BACKGROUND

REFERENCE DOCUMENT	SITE LIFE (YEARS)	WASTE GENERATION GROWTH RATE	IN-PLACE WASTE DENSITY(#/CY)
JULY 1988 MASTER PLAN	38	5%	1000
APRIL 1989 REPORT OF DISPOSAL SITE INFORMATION	40.5	5%	1200
JUNE 1990 REPORT OF WASTE DISCHARGE	80	1990-2000 @ -1% 2000-CLOSURE @ +2%	1200
DECEMBER 1993 SOURCE REDUCTION RECYCLING ELEMENT	41 89	ALT.1 @ +3% ALT.2(1991-2000) @ -.33% 2001-CLOSURE @11,400TPY	1200
MARCH 1995 PRELIMINARY CLOSURE AND POSTCLOSURE MAINTENANCE PLAN	86	1995-2005 USED SRRE TABLE 2-7 2006-CLOSURE @ +1%	1200