

February 13, 2004

Mr. Michael Hoover Chicago Grade Landfill, Inc. Route 1, Box 440 Templeton, California 93465

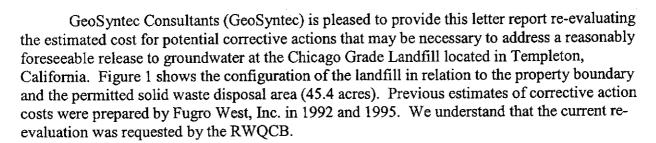
Re:

Cost Estimate

Financial Assurance for Corrective Action

Chicago Grade Landfill Templeton, California

Dear Mr. Hoover:



In preparing this estimate, we have reviewed the previous Fugro West, Inc. estimates as well as recent groundwater monitoring data for the site. In addition, we have reviewed our (GeoSyntec's) work on the site geology conducted as part of a fault investigation in 2002. It is our understanding that Module 1 is an unlined cell, Module 2 is lined and Modules 3, 4, and 5 are under construction and will be lined. We conclude that a reasonably foreseeable release to groundwater would occur from the unlined portions of the landfill. Such a release could affect the shallow groundwater beneath the site and would be detected through the routine detection monitoring program in place at the landfill.

Responses to such a release (corrective actions) would reasonably include the following:

1. Design and installation of an interceptor trench placed across the drainage course downgradient of the landfill. The purpose of the trench would be to capture shallow groundwater flow in the canyon bottom in the most likely location of flow (the drainage course). A likely location for the trench is shown on Figure 1. Based on site geologic conditions, we assume the trench would be on the order of 200 feet long and up to 30 feet deep. The trench would be backfilled with gravel with a recovery well and sump pump would be installed to collect flow into the trench. Based on purge data for nearby monitoring wells, we estimate that flow into the trench from the low-permeability materials present in the area would average on the order of 100 to 200 gallons per day.



- 2. Install 3 new monitoring wells at locations to be determined after the release is identified by the perimeter detection monitoring program. We assume that these new monitoring well locations would likely be downgradient of the trench.
- 3. Install a tank to store collected groundwater. A 10,000 gallon tank is proposed in order to store at least 30 days of pumping.
- 4. Install a booster pump, piping network, and sprinkler system to use the recovered groundwater as irrigation water and/or dust control for the landfill or surrounding areas. It is not anticipated that treatment of the recovered groundwater would be necessary prior to irrigation/dust control. The 10,000 gallon tank would allow for storage of at least 30 days pumping of groundwater in the event of prolonged wet weather which precluded irrigation/dust control in the wet season.
- 5. Operation and maintenance of the system for a period of 10 years from date of release.
- 6. Groundwater sampling and testing at 4 new locations not currently monitored (3 new wells and the trench itself) on a quarterly basis for a period of 10 years from the date of release.
- 7. Report preparation to meet RWQCB requirements.

Responses to a release are NOT anticipated to include:

- 1. Expansion of the landfill gas monitoring/recovery network. Such costs were already incurred for Modules 1-3 and will be incurred as part of Module 4 and 5 expansion.
- 2. Groundwater sampling and testing of the existing monitoring network. Such costs were already accounted for in the 2002 Initial Closure and Post-Closure Maintenance Cost Estimate for the landfill.

The estimated costs for the above-described reasonably foreseeable corrective actions are \$410,228 as shown on Table 1. This figure, which includes both capital and operation/maintenance costs in 2004 dollars, would not likely increase after construction of Modules 3, 4 and 5 are complete.

Thanks you very much for the opportunity to assist Chicago Grade Landfill, Inc. If you have any questions regarding this estimate, please do not hesitate to call.

Sincerely,

GeoSyntec Consultants

Mark Grivetti

Principal Hydrogeologist, R.G. 4272

Sux For:

John McMains

Senior Engineer





TABLE 1

## CORRECTIVE ACTION COST ESTIMATE CHICAGO GRADE LANDFILL

CAPITAL COSTS				
#	ITEM	QTY	UNIT COST	COST
1	Design & Permitting	1	\$30,000	\$30,000
	Interceptor Trench. 100' long by 30' deep. 1			
2	well, 1 100-200 gpd pump	200	\$200/FT	\$40,000
	Piping & Controls to 1 10,000 gallon storage			
3	tank	1	\$5,000	\$5,000
4	10,000 gallon storage tank (Poly)	1	\$20,000	\$20,000
5	Tank pad w anchors (12 x 12 x 6")	144	\$12/SF	\$1,728
6	Submersible pump (SS)	1	\$3,500	\$3,500
7	Booster pump (SS)	1	\$4,500	\$4,500
8	1000' of 2" PVC	1000	\$20/FT	\$20,000
9	Sprinklers (3) with mounts	3	\$500	\$1,500
10	Power Drop/ Installation	1	\$5,000	\$5,000
11	Install 3 Monitoring wells with pumps	3	\$15,000	\$45,000
			SUBTOTAL	\$176,228
O&M COSTS				
#	ITEM	YEARS	UNIT COST	COST
1	Annual System O&M	10	\$5,000	\$50,000
2	Groundwater Sampling and Testing*	10	\$6,400	\$64,000
3	Reporting	10	\$12,000	\$120,000
			SUBTOTAL	\$234,000
			TOTAL	\$410,228.00

<sup>\*</sup> Assumes 4 samples collected & analyzed quarterly (3 new wells & 1 trench). (\$400/sample x 4 samples x 4 quarters = \$6,400/year)

