

Public Service Company
of New Mexico
Alvarado Square MS 0408
Albuquerque, NM 87158

September 22, 1999

SEP 1999
RECEIVED



CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Carl Will
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo
P.O. Box 26110
Santa Fe, NM 87502

Dear Mr. Will:

Subject: Revised Cost Estimate, Person
Generating Station, NMT 360010342

Per our telephone conversation yesterday I am enclosing an updated cost estimate for use in your determination of excess funds available for release from the Person Station Post Closure trust fund. This updated cost estimate incorporates requested changes made by HRMB after their initial review of the estimate submitted in May 1999. In addition, PNM has made some changes to the cost estimate associated with operation and maintenance costs for the groundwater treatment system. The estimate was revised to be more in line with actual costs PNM has incurred for this expense during the first five years of operation.

If you have any questions, please contact me at (505) 241-2998.

Sincerely,

A handwritten signature in cursive script that reads "Ron Johnson".

Ron D. Johnson
Technical Group Leader

Enclosure

Cc: Dave Kasparek - PNM Mail Stop 2710

Person Generating Station
Post Closure Cost Estimate for 1999 Permit Reapplication

Line Item	Description	Cost
1a	RCRA Permit - Yearly Administration, Inspections, Regulatory fees and Reporting (thru 2018)-See Detail 1a	\$ 22,232.00
1b	Shallow GW Sampling Program, annual cost for next 20 total years, (thru 2018)-See Detail 1b	\$ 53,166.00
1c	Deep GW Sampling Program, annual cost for next 20 total years, (thru 2018)-See Detail 1c	\$ 45,748.00
1d	Increased Sampling Frequency to Demonstrate Technical Infeasibility - See Detail 1d	\$ 106,332.00
2	RCRA Permit - Non-recurring costs for 1999: Natural Pit Remediation, Permit Modification-See Detail 2	\$ 205,903.00
2a	Future NMED Permit Fees, associated PNM labor and Contractor Costs - See Detail 2a	\$ 626,400.00
3	Shallow GW Corrective Action Program - CAP equipment installation costs for 1999 - See Detail 3	\$ 420,000.00
4	Shallow GW Corrective Action Program (thru 2004) - Annual Operation Costs - See Detail 4	\$ 43,040.00
5	Deep Groundwater Assessment Program, Completion Costs for 1999 - See Detail 5	\$ -
6	Deep Groundwater Corrective Action Program - Installation Costs - See Detail 6	\$ -
7	Deep Groundwater Corrective Action Program - Annual Operation Costs - See Detail 7	\$ -
8	Estimated Cost for 11th year (1999) of permit (line items 1a+1b+1c+2+3+4+5+6)	\$ 790,089.00
9	Estimate for next 20 years (PC period): line 8 + line 1d + line 2a + 19*(line 1a) + 19*(line 1b) + 19*(line 1c) + 17*(line 4) + 10*(line 7)	\$ 4,556,275.00
Date of Cost Estimate:		09/03/1999
Notes:		
1. Lines 5, 6 and 7 are set to zero and assumes no engineered corrective action will be needed for deep GW.		
2. Line 4. CAP program for Shallow GW estimated to require 17 additional years of active pumping to complete (Last 3 years of permit would require sampling verification only).		
3. All labor costs are calculated at \$73 per hour.		

← \$ 24,232,000?

← 102,424?

Detail 2
RCRA Permit - Non-Recurring Costs For 1999, Including Permit Modification

Assumed Average Labor Rate For All Hourly Activities:		\$73.00				
<u>Line Item</u>	<u>Description</u>	<u>Labor or Unit Rate</u>	<u>Hrs/item or 1 Unit</u>	<u>Items Per Year</u>	<u>Annual Cost (\$)</u>	<u>Group Subtotal</u>
Permit Modification (Renewal of PC Permit)						
1	NMED Permit Modification Fee	NA	0	0	\$0.00	
2	Consultant Fee: Preparation of permit mod, pub participation, etc.	\$75,000.00	1	1	\$75,000.00	
3	Administration-PNM review and involvement in mod process	\$73.00	300	1	\$21,900.00	
4	Miscellaneous-non labor PNM costs	\$5,000.00	1	1	\$5,000.00	
5	Soil CAP - Documenting Completeness (See Details Below)	\$69,585.00	1	1	\$69,585.00	
6	SVE 1999 Operation	\$5,498.00	1	1	\$5,498.00	
						\$176,983.00
Natural Pit Remediation - Completion of Activities						
6	PNM Administrative Costs	\$73.00	40	1	\$2,920.00	
7	PNM Miscellaneous Costs	\$1,000.00	1	1	\$1,000.00	
8	NMED Permit Modification Fee (NFA-Class III)	\$25,000.00	1	1	\$25,000.00	
9	Lab Analysis: To support Risk Based Closure	\$0.00	0	0	\$0.00	
						\$28,920.00
	Detail 2 Total:					\$205,903.00
Soil CAP - Documenting Completeness						
	Drill 2 auger holes, head space analysis, soil samples at 10' intervals	\$ 7,500.00	1	1	\$7,500.00	
	Design/fabricate/Install up to 5 Vapor Probes in each hole	\$ 6,000.00	1	1	\$6,000.00	
	Lab Analysis - On soil cores Collected During Probe Installation	\$ 225.00	1	25	\$5,625.00	
	Lab Analysis - TOC and moisture	\$ 30.00	1	15	\$450.00	
	Miscellaneous Costs: En core sampler, cuttings disposal, etc.	\$ 20,500.00	1	1	\$20,500.00	
	Lab Analysis - Vapor Probe gas sampling (5 probes x two samples)+SVE	\$ 400.00	11	1	\$4,400.00	
	Data Analysis and Reporting (Contractor)	\$ 20,000.00	1	1	\$20,000.00	
	Administration-PNM review and involvement	\$73.00	70	1	\$5,110.00	
						\$ 69,585.00
Vapor Extraction System - Operation (1999 Only)						
	PNM Labor	\$73.00	1	26	\$1,898.00	
	Compliance Sampling - TO-14 Analysis	\$400.00	2	2	\$1,600.00	
	Carbon Disposal	\$2,000.00	1	1	\$2,000.00	
						\$5,498.00

Detail 3

CAD - Shallow Groundwater Corrective Action Program - Additional Equipment Installation Costs

Assumed Average Labor Rate For All Hourly Activities:		\$73.00				
<u>Line Item</u>	<u>Description</u>	<u>Labor or Unit Rate</u>	<u>Hrs/Item or 1 Unit</u>	<u>Items Per Year</u>	<u>Annual Cost (\$)</u>	<u>Group Subtotal</u>
1	New extraction well near PSMW-10	\$30,000.00	1	1	\$30,000.00	
2	New extraction well near VEW	\$20,000.00	1	1	\$20,000.00	
3	New extraction well near PSMW-22	\$40,000.00	1	1	\$40,000.00	
4	Engineering Design/Piping and Trenching to GWTP	\$50,000.00	1	1	\$50,000.00	
5	Plug and abandonment of 2 in. shallow wells	\$800.00	15	1	\$12,000.00	
6	Plug and abandonment of 4 in. shallow wells	\$1,000.00	20	1	\$20,000.00	
7	Plug and abandonment of 4 in. deep wells	\$2,000.00	3	1	\$6,000.00	
8	Plug and abandonment of cluster wells	\$8,000.00	7	1	\$56,000.00	
9	Plug and abandonment of EW-1 and VEW	\$2,000.00	2	1	\$4,000.00	
10	Plug and abandonment of PSMW-16,24,25,26	\$3,000.00	4	1	\$12,000.00	
11	Additonal/Replacement extraction wells	\$40,000.00	3	1	\$120,000.00	
12	Engineering Design/Piping and Trenching to GWTP	\$50,000.00	1	1	\$50,000.00	
						\$420,000.00
	Detail 3 Total:				\$420,000.00	

Detail 5

CAD - Deep Groundwater Assessment Program, Completion Costs For 1999

The NMED has given preliminary indication that it is in agreement with the findings of the Deep Groundwater Assessment							
work. Based on that it is unlikely that any additional assessment work will be needed for the deep groundwater.							
CAD Deep Groundwater Assessment Completion (1999 only)					\$0.00		

Detail 7

CAD - Deep Groundwater Corrective Action Program - Annual Operation Costs

The cost estimate for operation of a deep groundwater remediation program is based on very limited data at this time. It currently assumes that no engineered remediation program will be needed, contaminant levels will be monitored only. Monitoring costs are shown in Detail 1.										
CAD - Deep Plume Corrective Action Program - Annual Operation Costs:							\$0.00			