

Public Service Company
of New Mexico
2401 Aztec NE
MS Z160
Albuquerque, NM 87107

July 12, 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Robert Warder, EI
Environmental Engineer
New Mexico Environment Department
Hazardous Waste Bureau
4131 Montgomery NE
Albuquerque, NM 87109

NM ENVIRONMENT DEPARTMENT
RECEIVED

JUL 18 2001

DISTRICT 1 OFFICE



**RE: Person Generating Station (NMT 360010342) – Post Closure Cost Estimate, Trust Fund
Schedule A, and Actual Post Closure/Closure Costs**

Dear Mr. Warder:

Per your request, I have enclosed copies of the following items:

- Cover Letter to Mr. Carl Will, NMED/HWB, Regarding Above-Referenced Submittals (dated May 15, 2001)
- Cover Letter to First Security Bank of New Mexico Modifying Schedule A of the Trust Agreement
- Revised Schedule A for the Trust Agreement
- Calculation of Payment for the Trust Agreement
- 2001 Post Closure Cost Estimate
- Actual Post Closure Costs Through 2000
- Actual Closure Costs Through 2000

If you have any questions, please contact me at (505) 855-6392.

Sincerely,

A handwritten signature in cursive script that reads 'John Hale'.

John Hale, P.E.
Technical Project Manager

Enclosures

7099 3220 0004 0006 4332

Public Service Company
of New Mexico
2401 Aztec NE
MS Z160
Albuquerque, NM 87107

May 15, 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NM ENVIRONMENT DEPARTMENT
RECEIVED

JUL 18 2001

DISTRICT 1 OFFICE



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

RE: Person Generating Station (NMT 360010342) – Post Closure Cost Estimate, Trust Fund
Schedule A, and Actual Post Closure/Closure Costs

Dear Mr. Will:

I have enclosed copies of the following items:

- Cover Letter to First Security Bank of New Mexico Modifying Schedule A of the Trust Agreement
- Revised Schedule A for the Trust Agreement
- Calculation of Payment for the Trust Agreement
- 2001 Post Closure Cost Estimate
- Actual Post Closure Costs Through 2000
- Actual Closure Costs Through 2000

If you have any questions, please contact me at (505) 855-6392.

Sincerely,

A handwritten signature in cursive script that reads "John Hale".

John Hale, P.E.
Technical Project Manager

Enclosures

Public Service Company
of New Mexico
Alvarado Square MS-2204
Albuquerque, NM 87158

March 23, 2001



Cynthia E. Avent
Assistant Vice President and Trust Officer
Wells Fargo Bank
P.O. Box 1305
Albuquerque, New Mexico 87103

Subject: PNM Person Station Post-Closure Trust

Dear Ms. Avent:

Enclosed please find a revised SCHEDULE A to the Trust Agreement which is required to be recomputed annually to reflect the most current post-closure cost estimate, which is \$4,242,265. This is the value used in determining if a seventh payment to the Trust is required to be deposited in the Trust not later than June 26, 2001. This year, since the current market value of the Trust exceeds the post-closure cost estimate, no additional contribution is required. The calculation of these values, which is not part of SCHEDULE A, is also enclosed for your information. This letter is authorization for you to change SCHEDULE A to reflect the new current estimate.

Thank you for your kind consideration. If there are any questions please call me at 241-4543.

Sincerely yours,


Ed Jeung
Director, Trust & Corporate Investments

Enclosures:

Schedule A
Effective March 19, 2001

EPA ID Number	NMT 360010342
Name:	Person Generating Station
Address:	Broadway Blvd. at Rio Bravo Blvd. Albuquerque, NM
Current post-closure cost estimate:	\$4,242,265.

Person Generating Station
Post Closure Cost Estimate for 2001

Line Item	Description	Cost
1a	RCRA Permit - Yearly Administration, Inspections, and Reporting (thru 2018)-See Detail 1a	
1b	Shallow GW Sampling Program - Annual Cost for Next 17 Years, (thru 2018)-See Detail 1b	\$ 24,220.00
1c	Deeper GW Sampling Program - Annual Cost for Next 17 Years, (thru 2018)-See Detail 1c	\$ 53,570.00
1d	Increased Sampling Frequency to Demonstrate Attainment of GW Goals - See Detail 1d	\$ 48,380.00
2	RCRA Permit - Non-recurring Costs for 2001 - Natural Pit Remediation, Permit Modification-See Detail 2	\$ 107,140.00
2a	Future NMED Permit Fees, Associated PNM Labor and Contractor Costs - See Detail 2a	\$ 115,455.00
3	Shallow GW Corrective Action Program - Additional Equipment Installation Costs for 2001 - See Detail 3	\$ 609,240.00
4	Shallow GW Corrective Action Program (thru 2014) - Annual Operation Costs - See Detail 4	\$ 210,000.00
5	Deeper Groundwater Assessment Program - See Detail 5	\$ 50,200.00
6	Deeper Groundwater Corrective Action Program - Installation Costs - See Detail 6	\$ -
7	Deeper Groundwater Corrective Action Program - Annual Operation Costs - See Detail 7	\$ -
8	Estimated Cost for 13th Year (2001) of Permit (line items 1a+1b+1c+2+3+4+5+6)	\$ -
9	Estimate for Next 17 Years (PC Period): line 8 + line 1d + line 2a + 17*(line 1a) + 17*(line 1b) + 17*(line 1c) + 14*(line 4)	\$ 501,825.00
		\$ 4,242,265.00
	Date of Cost Estimate:	03/15/2000
	Notes:	
	1. Lines 5, 6 and 7 are set to zero and assumes no engineered corrective action will be needed for deeper GW.	
	2. Line 4. CAP program for shallow GW estimated to require 14 additional years of active pumping to complete (Last 3 years of permit would require sampling verification only).	
	3. All labor costs are calculated at \$80 per hour.	

**Trust Fund
Calculation of Payment
2001**

206.D.3.f.1(e) If the owner operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in 206.D.3.f or 206.C.3.f. his first payment must be in at least the amount the fund would contain if the trust fund were established initially and annual payments made in according to specifications in 206.D.3.f.(1) and 206.C.3.f.(1), as applicable.

206.D.3.f.(1) The first payment must be at least equal to the current post-closure estimate, except as provided in 206.C.3.f.(7) divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after the anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{\text{CE}-\text{CV}}{\text{Y}}$$

Therefore:

$$\frac{\$4,242,265 - \$4,672,016}{\text{N/A}}$$

Next Payment: = \$0.00

Payment not required because current value (CV) exceeds current estimate (CE)

Person Generating Station
Post Closure Cost Estimate for 2001

Line Item	Description	Cost
1a	RCRA Permit - Yearly Administration, Inspections, and Reporting (thru 2018)-See Detail 1a	\$ 24,220.00
1b	Shallow GW Sampling Program - Annual Cost for Next 17 Years, (thru 2018)-See Detail 1b	\$ 53,570.00
1c	Deeper GW Sampling Program - Annual Cost for Next 17 Years, (thru 2018)-See Detail 1c	\$ 48,380.00
1d	Increased Sampling Frequency to Demonstrate Attainment of GW Goals - See Detail 1d	\$ 107,140.00
2	RCRA Permit - Non-recurring Costs for 2001 - Natural Pit Remediation, Permit Modification-See Detail 2	\$ 115,455.00
2a	Future NMED Permit Fees, Associated PNM Labor and Contractor Costs - See Detail 2a	\$ 609,240.00
3	Shallow GW Corrective Action Program - Additional Equipment Installation Costs for 2001 - See Detail 3	\$ 210,000.00
4	Shallow GW Corrective Action Program (thru 2014) - Annual Operation Costs - See Detail 4	\$ 50,200.00
5	Deeper Groundwater Assessment Program - See Detail 5	\$ -
6	Deeper Groundwater Corrective Action Program - Installation Costs - See Detail 6	\$ -
7	Deeper Groundwater Corrective Action Program - Annual Operation Costs - See Detail 7	\$ -
8	Estimated Cost for 13th Year (2001) of Permit (line items 1a+1b+1c+2+3+4+5+6)	\$ -
9	Estimate for Next 17 Years (PC Period): line 8 + line 1d + line 2a + 17*(line 1a) + 17*(line 1b) + 17*(line 1c) + 14*(line 4)	\$ 501,825.00
		\$ 4,242,265.00
Date of Cost Estimate:		03/15/2001
Notes:		
1. Lines 5, 6 and 7 are set to zero and assumes no engineered corrective action will be needed for deeper GW.		
2. Line 4. CAP program for shallow GW estimated to require 14 additional years of active pumping to complete (Last 3 years of permit would require sampling verification only).		
3. All labor costs are calculated at \$80 per hour.		

Detail 1
RCRA Permit - Yearly Administration, Inspections, GW Sampling, Maintenance, Reporting
(2001 Through 2018)

Assumed Average Labor Rate For All Hourly Activities:										
Line Item	Description					Annual Cost (\$)	Group Subtotal			
		Labor or Unit Rate	Hrs/Item or 1 Unit	Items Per Year						
Permit Inspections										
1	Closure Cap Inspection									
2	Security Fence Inspection	\$80.00	1	2	\$ 160.00					
		\$80.00	1	2	\$ 160.00					
							\$ 320.00			
Program Administration/Reporting										
3	Administrative Activities, Meetings, Regulatory Contact									
4	Annual Data Report Preparation	\$ 80.00	120	1	\$ 9,600.00					
5	Miscellaneous Costs: copies, binders, supplies, reference materials	\$ 80.00	160	1	\$ 12,800.00					
6	RESERVED	\$ 1,500.00	1	1	\$ 1,500.00					
Subtotal for Detail 1a:							\$ 23,900.00			
							\$ 24,220.00			
Shallow GW Sampling Program (38 wells)										
7	Preparation - Equipment checkout, planning, set up.	\$ 80.00	12	2	\$ 1,920.00					
8	Water Level Measurements (2 operators, WL readings at 42 wells)	\$ 80.00	16	2	\$ 2,560.00					
9	Purge and Sampling of 38 Wells (2 operators)	\$ 80.00	72	2	\$ 11,520.00					
10	Data Review/Evaluation	\$ 80.00	40	2	\$ 6,400.00					
11	Administration	\$ 80.00	24	2	\$ 3,840.00					
12	Well Replacement/Maintenance (assume 1 well replaced/yr)	\$ 10,000.00	1	1	\$ 10,000.00					
13	Sampling Supplies/Equipment	\$ 750.00	1	2	\$ 1,500.00					
14	Lab Analysis (8021halo x 45)	\$ 100.00	45	2	\$ 9,000.00					
15	Lab Analysis (App. IX)	\$ 1,765.00	2	1	\$ 3,530.00					
16	Lab Analysis (Pb & Cr at 8a) - Discontinued	\$ -	0	0	\$ -					
17	Non Labor Costs: vehicles, gas cylinders, miscellaneous	\$ 1,650.00	1	2	\$ 3,300.00					
Subtotal For Detail 1b:							\$ 53,570.00			
								Cylinders: 1.0 per well, \$17 per cyl., = 38 * 1.0 * \$17 = \$646		
								Vehicles: 100 hrs * \$5/hr = \$500		
								Misc: \$500		
								Estimate per sampling event	\$ 1,650	
Deeper GW Sampling Program (15 wells)										
18	Preparation - Equipment checkout, planning, set up.	\$ 80.00	12	2	\$ 1,920.00					
19	Water Level Measurements (2 operators, WL readings at 42 wells)	\$ 80.00	16	2	\$ 2,560.00					
20	Purge and Sampling of 15 Deep CAD Wells (2 operators)	\$ 80.00	84	2	\$ 13,440.00					
21	Data Review/Evaluation	\$ 80.00	40	2	\$ 6,400.00					
22	Administration	\$ 80.00	24	3	\$ 5,760.00					
23	Well Maintenance	\$ 10,000.00	1	1	\$ 10,000.00					
24	Sampling Supplies/Equipment	\$ 500.00	1	2	\$ 1,000.00					
25	Lab Analysis (8021halo x 19)	\$ 100.00	19	2	\$ 3,800.00					
26	Non Labor Costs: vehicles, gas cylinders, miscellaneous	\$ 1,750.00	1	2	\$ 3,500.00					
Subtotal For Detail 1c:							\$ 48,380.00			
								Cylinders: 1.5 per well, \$17 per cyl., = 15 * 1.5 * \$17 = \$382		
								Misc: \$500		
								Vehicles: 84 hrs * \$5/hr x 2 = \$840		
								Estimate per sampling event	\$ 1,750	
Increased Sampling To Demonstrate Attainment of GW Goals										
28	Add'l Sampling at Shallow Groundwater Wells	\$ 26,785.00	1	4	\$ 107,140.00					
Subtotal For Detail 1d:							\$ 107,140.00			
Note: Sampling will need to be increased from biannual to quarterly one time during program. This will be done to demonstrate asymptotic behavior of GW analytical results as a trigger to evaluate system for Technical Infeasibility or Alternate Abatement Standard.										

Detail 2
RCRA Permit - Non-Recurring Costs For 2001, Including Permit Modification

Assumed Average Labor Rate For All Hourly Activities:		\$80.00				
Line Item	Description	Labor or Unit Rate	Hrs/Item or 1 Unit	Items Per Year	Annual Cost (\$)	Group Subtotal
Permit Modification (Renewal of PC Permit)						
1	NMED Permit Modification Fee	NA				
2	Consultant Fee: preparation of permit mod, public notice, etc.	NA	0	0	\$0.00	
3	Administration - PNM review and involvement in mod process	NA	0	0	\$0.00	
4	Miscellaneous - Non labor PNM costs	\$80.00	100	1	\$8,000.00	
5	Soil CAP - Documenting completeness (see details below)	\$2,500.00	1	1	\$2,500.00	
6	SVE 2001 Operation	\$70,075.00	1	1	\$70,075.00	
		\$5,680.00	1	1	\$5,680.00	
Natural Pit Remediation - Completion of Activities						\$86,255.00
6	PNM Administrative Costs					
7	PNM Miscellaneous Costs	\$80.00	40	1	\$3,200.00	
8	NMED Permit Modification Fee (NFA-Class III)	\$1,000.00	1	1	\$1,000.00	
9	Lab Analysis: to support risk based closure	\$25,000.00	1	1	\$25,000.00	
		\$0.00	0	0	\$0.00	
Detail 2 Total:						\$29,200.00
						\$115,455.00
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 - En-core soil samples 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	\$80.00	70	1	\$5,600.00	
						\$ 70,075.00
Vapor Extraction System - Operation (2001 Only)						
	PNM Labor					
	Compliance Sampling - TO-14 Analyses	\$80.00	1	26	\$2,080.00	
	Carbon Disposal	\$400.00	2	2	\$1,600.00	
		\$2,000.00	1	1	\$2,000.00	
						\$5,680.00

Detail 2a - NMED Permit Fees

The estimate below takes into account the current NMED fee structure against an assumed number of permit actions over the life of the permit.

Activity	Number	Fee	Total For This Activity
Permit Renewal (circa 2008)	1	\$ 90,000.00	\$ 90,000.00
HSWA Module Fee	1	\$ 7,500.00	\$ 7,500.00
Class I Modifications	17	\$ 1,000.00	\$ 17,000.00
Class II Modifications	10	\$ 10,000.00	\$ 100,000.00
Class III Modifications	2	\$ 25,000.00	\$ 50,000.00
Annual NMED PC Business Fee	17	\$ 2,000.00	\$ 34,000.00
Hearing Fees	4	\$ 5,000.00	\$ 20,000.00
			\$ 318,500.00
Other Costs	Labor/Unit Rate	Hrs/item or 1 unit	Total For This Activity
PNM Labor Toward Permit Renewal	\$80.00	600	\$ 48,000.00
Contractor Labor for Renewal	\$ 150,000.00	1	\$ 150,000.00
Labor for Class I Mods (24hrs x 17)	\$80.00	408	\$ 32,640.00
Labor for Class II Mods (48hrs x 10)	\$80.00	480	\$ 38,400.00
Labor for Class III Mods (120hrs x 2)	\$80.00	240	\$ 19,200.00
Contractor Labor for PC Certification	\$2,500.00	1	\$ 2,500.00
			\$ 290,740.00
Detail 2a Total:			\$ 609,240.00

Detail 3

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

Assumed Average Labor Rate For All Hourly Activities:		\$80.00				
Line Item	Description	Labor or Unit Rate	Hrs/item or 1 Unit	Items Per Year	Annual Cost (\$)	Group Subtotal
1	New Extraction Well to Replace PSMW-16	\$15,000.00	1	1	\$15,000.00	
2	New Extraction Well to Replace PSMW-24	\$15,000.00	1	1	\$15,000.00	
3	Engineering Design/Piping and Trenching to GWTP for Above Extraction Wells	\$3,000.00	2	1	\$6,000.00	
4	Plug and Abandonment of 2 in. Shallow Wells	\$800.00	15	1	\$12,000.00	
5	Plug and Abandonment of 4 in. Shallow Wells	\$1,000.00	18	1	\$18,000.00	
6	Plug and Abandonment of 4 in. Deep Wells	\$2,000.00	3	1	\$6,000.00	
7	Plug and Abandonment of Cluster Wells	\$8,000.00	7	1	\$56,000.00	
8	Plug and Abandonment of PSMW-16 and PSMW-24	\$2,000.00	2	1	\$4,000.00	
9	Plug and Abandonment of PSMW-25,26,EW-1,EW-2,EW-3,VEW,PSMW-16R, PSMW-24R	\$3,000.00	8	1	\$24,000.00	
10	Additional/Replacement Extraction Wells	\$15,000.00	3	1	\$45,000.00	
11	Engineering Design/Piping and Trenching to GWTP for Future Extraction Wells	\$3,000.00	3	1	\$9,000.00	
						\$210,000.00
	Detail 3 Total:				\$210,000.00	

Detail 4 CAP For Shallow Groundwater - Annual Operation and Maintenance Costs

Assumed Average Labor Rate For All Hourly Activities:		\$80.00				
Line Item	Description	Labor or Unit Rate	Hrs/item or 1 Unit	Items Per Year	Annual Cost (\$)	Group Subtotal (\$)
Groundwater Treatment System - Operation						
1	Electric Utilities	\$850.00				
2	Compliance Sampling - 8021 Analysis, 13/month	\$100.00	1	12	\$10,200.00	
3	Compliance Sampling - Sulfate, 1/month	\$20.00	13	12	\$15,600.00	
4	Compliance Sampling - Labor	\$80.00	1	12	\$240.00	
	Routine Inspections	\$80.00	3	12	\$2,880.00	
5	Data Review and Evaluation	\$80.00	1	52	\$4,160.00	
6	Compliance Reporting	\$80.00	2	12	\$1,920.00	
7	Administration	\$80.00	8	4	\$2,560.00	
8	Training	\$80.00	16	1	\$1,280.00	
9	Miscellaneous (chemicals and supplies, acid, carbon)	\$1,000.00	1	1	\$1,000.00	
		\$3,500.00	1	1	\$3,500.00	
						\$43,340.00
Groundwater Treatment System - Maintenance						
10	Routine Maintenance - Labor	\$80.00				
11	Equipment Parts - Maintenance	\$2,200.00	1	52	\$4,160.00	
12	Training	\$500.00	1	1	\$2,200.00	
				1	\$500.00	
						\$6,860.00
Detail 4 Total:						\$50,200.00

Detail 5

CAD - Deep Groundwater Assessment Program, Completion Costs

The NMED has given preliminary indication that it is in agreement with the findings of the deeper groundwater assessment. Consequently, it is unlikely that any additional assessment work will required for the deeper groundwater.

CAD Deep Groundwater Assessment Completion							\$0.00	

Detail 6

CAD - Deep Groundwater Corrective Action Program - Installation Costs

Currently, PNM is assuming that no engineered remediation program will be needed. Contaminant levels will be monitored only. Monitoring costs are shown in Detail 1.

CAD - Deep Groundwater Corrective Action Program - Installation Costs:						\$0.00					

Detail 7

CAD - Deep Groundwater Corrective Action Program - Annual Operation Costs

Currently, PNM is assuming 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							

Actual Post-Closure Costs
 Public Service Company of New Mexico
 Person Generating Station (NMT 360010342)

Costs Through 2000

Routine Permit Activities	
• Labor	\$ 527,665
• Other	<u>\$ 963,676</u>
Subtotal for Routine Activities	\$ 1,491,341
Corrective Action Directive	
Shallow Groundwater Assessment	
• Labor	\$ 105,554
• Other	<u>\$ 834,085</u>
Subtotal Shallow Groundwater Assessment	\$ 939,639
Shallow Groundwater Remediation (Installation)	
• Labor	\$ 152,253
• Other	<u>\$ 1,930,589</u>
Subtotal	\$ 2,082,842
Deep Groundwater Assessment	
• Labor	\$ 45,040
• Other	<u>\$ 2,018,080</u>
Subtotal	\$ 2,063,120
Production Well Closure	
• Labor	\$ 9,855
• Other	<u>\$ 88,908</u>
Subtotal	\$ 98,763
CAP Operation	
• Labor	\$ 56,354
• Other	<u>\$ 168,987</u>
Subtotal	\$ 225,341
Subtotal for CAD Activities:	\$ 5,409,705
Total for all Post-Closure Costs:	\$ 6,901,046

Actual Closure Costs
Public Service Company of New Mexico
Person Generating Station (NMT 360010342)

Costs Through December 2000

• PNM Labor, Loads, and Overhead	\$ 343,888
• Drillers and Consultants	\$ 404,556
• Laboratory Analytical Fees	\$ 83,548
• Legal Fees	\$ 39,177
• Hazardous Materials Disposal	\$ 5,212
• Employee and Travel Expenses	\$ 4,969
• Blueprints, Printing, Copying, and Photos	\$ 2,667
• Reference Materials and Miscellaneous Supplies	<u>\$ 2,063</u>
Total	\$ 886,080