

**MK015PR**

**MARQUEZ**

**MINE**

September 29, 1995

Mr. Tim J. Leftwich  
Santa Fe Pacific Gold Corporation  
Box 6200 Uptown Blvd. NE  
Suite 400  
Albuquerque, NM 87110

**RE:  
Prior Reclamation Inspections**

Dear Mr. Leftwich:

The Mining and Minerals Division (MMD) has completed inspection of reclamation measures as requested by Santa Fe Pacific Gold Corporation.

Based on findings in the enclosed inspection reports, reclamation measures at the following mines satisfy the requirements of the New Mexico Mining Act (NMMA) and the substantive requirements for reclamation pursuant to the NMMA Rules. Santa Fe Pacific Gold, therefore, is hereby released from further requirements of the NMMA on the following mines:

Faith Mine (Section 29, T 13N R 9W)  
Section 13 (T 1N R 6W)  
Haystack Mine (Section 19, T 13N R10W)

Reclamation measures at the following mines do not satisfy the requirements of the New Mexico Mining Act (NMMA) and the substantive requirements for reclamation pursuant to the NMMA Rules. However, since Santa Fe Pacific Gold has completed most reclamation measures at the following mines, Santa Fe may apply for a variance from the provisions of the NMMA Rules pursuant to Rule 10. Otherwise, pursuant to NMMA Rule 5.10.B Santa Fe Pacific Gold must submit permit applications and closeout plans for existing mining operations within six months of receipt of this letter.

Isabella Mine (Section 7, T 13N R 9W)  
Marquez Mine (Section 23, T13N R9W)  
Poison Canyon Mine (Section 19, T 13N R 9W)  
Section 1 (T 13N R 9W)  
Section 31 (T 13N R 9W)  
Section 25 Mine (Section 25, T 13N R 10W)  
SW 1/4 Section 13 (T 13N R11W)

The location of the mine on Section (T 13N R 9W) was not adequately identified by Santa Fe Pacific Gold for inspection by MMD. The Mining and Minerals Division attempted to locate the site, but was unable to do so. Therefore, no inspection for prior reclamation was made. If reclamation measures have been performed, this site may also be addressed under a variance.

The enclosed prior reclamation inspection report details the findings of the inspection but does not include the photos/slides contained in the MMD file copy.

MMD appreciates your efforts to comply with the NMMA and commends you for your safeguarding and reclamation efforts. If you have any questions please contact Holland Shepherd of the Mining Act Bureau, (505) 827-5971.

Sincerely,



Kathleen A. Garland, Director  
Mining and Minerals Division

cc: Ms. Maxine Goad, Environment Department  
Mr. Sonny Marquez  
S. Farthree and McKingen  
S. Berryhill Ranch

Enclosures

**PRIOR RECLAMATION INSPECTION REPORT  
AND  
RECOMMENDATION FOR RELEASE OR PERMIT  
REQUIREMENT**

**Santa Fe Pacific Gold Corporation**

**Submitted in Partial Fulfillment of New Mexico Mining Act  
Section 69-36-7 U., Prior Reclamation**

**New Mexico Energy, Minerals and Natural Resources Department  
Mining and Minerals Division  
Mining Act Reclamation Bureau**

**September 29, 1995**

## **Introduction**

The purpose of this study was to determine if reclamation measures at 11 mines, for which Santa Fe Pacific Gold Corporation requested prior reclamation inspections, satisfy the requirements of the New Mexico Mining Act and substantive requirements for reclamation pursuant to the New Mexico Mining Act Rules. The sites are tabulated in Table I. Figures 1 and 2 are maps showing the locations of the mine sites.

Santa Fe Pacific Gold Corporation (Santa Fe) is the owner of the mineral rights at all the mine sites mentioned above, with the possible exception of the mine on Section 17 T13N R9W. Santa Fe Pacific Gold was not the operator any of the sites, but has reclaimed the sites (Santa Fe, 1994) in an effort to remove any further liabilities relative to the New Mexico Mining Act. Neither is Santa Fe the surface owner of any of the sites. This has hindered reclamation activities because Santa Fe cannot restrict grazing by surface owners on reclaimed areas. The known surface owners are listed in Table I.

Table I  
Santa Fe Pacific Gold Corporation Prior Reclamation Inspection Sites

Name of Mine	Location of Mine	Operator	Surface Owner	Inspected
Unknown	SW1/4 Section 13 T13N R11W	Todilto Exploration	Cerrillos Land Company	Aug. 31, 1995 Young & Tierney
Unknown	Section 13 T1N R6W	M. P. Grace	Unknown	Sept. 21, 1995 Young & Shepherd
Unknown	Section 1 T13W R9W	Kerr-McGee	Sonny Marquez	Sept. 13, 1995 Young & Martinez
Unknown	Section 17 T13N R9W	United Nuclear Corp.	Unknown	Could not be located in field
Haystack	Section 19 T13N R10W	Todilto Exploration	S. Farthree and McKingen	Aug. 31, 1995 Young & Tierney
Section 25 Mine	Section 25 T13N R10W	Reserve Oil and Minerals	S. Berryhill Ranch	Aug. 31, 1995 Young & Tierney
Unknown	Section 31 T13N R9W	United Nuclear Corp.	Unknown	Aug. 31, 1995 Young & Tierney
Faith Mine	Section 29 T13N R9W	Ranchers Exploration	Unknown	Aug. 31, 1995 Young & Tierney
Isabella Mine	Section 7 T13N R9W	Ranchers Exploration	Unknown	Aug. 31, 1995 Young & Tierney
Marquez Mine	Section 23 T13N R9W	United Nuclear Corp.	Sonny Marquez	Aug. 31, 1995 Young & Tierney
Poison Canyon Mine	Section 19 T13N R9W	Reserve Oil and Minerals	Cerrillos Land Company	Aug. 31, 1995 Young & Tierney

### Inspection Procedures

On August 31, 1995 Santa Fe Pacific Gold escorted MMD personnel on a quick inspection of 8 of 11 sites for which Santa Fe submitted prior reclamation inspection requests. Ms. Denise Gallegos, Manager-Environmental Compliance and Audits, Mr. Paul Eby, Director-Field Operations, Mr. Lee Simpkins and Mr. Larry Taylor, Contractor, represented Santa Fe Pacific Gold Corporation. Mr. Robert Young, Environmental Engineer and Dr. Robyn Tierney, Reclamation Specialist represented the New Mexico Mining and Minerals Division. On September 12 Mr. Robert Young and Mr. Fernando Martinez, Reclamation Specialist revisited six of the above sites to take additional measurements. The site on Section 1 T13W R9W was inspected on September 13 by Mr. Robert Young and Mr. Fernando Martinez, Reclamation Specialist. Another site on Section 13 T1N R6W was inspected September 21, 1995 by Robert Young and Holland Shepherd, Mining Act Bureau Chief. Santa Fe Pacific Gold did not attend the inspections of the sites on

Sections 1 T13W R9W or Section 13 T1N R6W. Another site on Section 17 T13N R9W, for which a prior reclamation inspection was requested (Santa Fe, 1994), was searched for, but could not be found. Without an inspection of the site, no evaluation could be made regarding prior reclamation status.

Inspections of each mine site consisted of a review of information submitted by the mine operator, subsequent discussion with the operator pertaining to mining and reclamation at each site, inspection of the condition of the reclaimed mine sites, line-intercept sampling for estimates of vegetative cover, compilation of plant species lists, measurement of reclaimed soil depths, and photo-documentation. Each of the mine sites were visually inspected for erosion features and hydrologic stability. During a walkover of each site, all slopes, areas of water concentration (ponds, diversions and areas where disturbed areas enter undisturbed lands) were visually inspected for stability. Topsoil placement and distribution also was evaluated at each site. Sampling for topsoil depth consisted of randomly digging a series of holes to identify the depth of topsoil and the presence or absence of potentially toxic wasterock at rooting depth. Grading of all wasterock piles and borrow areas was visually inspected. Placement and closure of portals and vent shafts was verified in the field.

The establishment and relative percent cover of reseeded and native plant species were evaluated in randomly placed transects. Fifty foot transects were evaluated at each mine site using the line intercept method (Bonham 1989). These transects were used to estimate the relative percent cover of each plant species intercepted at 3' intervals along a transect. A total of 17 points per transect were recorded. In addition, a list of species present within a 50' X 6' belt transect adjacent to each transect was compiled. These sampling procedures, however, do not meet sample adequacy. Rather, these procedures were conducted to estimate the relative percent cover and to evaluate the diversity of species present at each of the eight mine sites. Additional resources would be needed to fully evaluate the vegetation of these prior reclamation sites to a level of sample adequacy and would require at least 24 additional man-hours of inspection time per site. Where it was obvious that sufficient vegetation existed on site, or insufficient vegetation existed, no transect evaluations were made. Photos were taken, in these situations, to document the vegetation cover.





	BG
	<i>Oryzopsis hymenoides</i>
	Rock

Average Perennial Cover = 12%  
Rock Cover = 6%

### Section 13 T1N R6W

This was a surface mine, located approximately 36 miles north west of the City of Magdalena, New Mexico. The site is within a mile of the Alamo Navajo Indian Reservation. Uranium bearing sandstone was contoured along an outcrop in the side of Jaralosa Creek Canyon. The operator, M.P. Grace, operated the mine under a lease from then Santa Fe Pacific Minerals Corporation. The lease was terminated in 1979 and the site was reclaimed in 1980 (Santa Fe, 1994). The total area of disturbance was about 2 acres.

While it was difficult to locate the mine site, there were several small waste piles. Natural vegetation had successfully reestablished itself such that the waste piles were nearly indistinguishable from the natural mounds and ridges along the canyon. The location of the mine was located by a red clay that had been uncovered in one pit and was out of place. There was moderate erosion, but the erosion was consistent with that of the surrounding area. A powder magazine, circa 1970's, was left as a mining relic. All other structures, trash and junk had been removed. There were no piles or accumulations of toxic or waste material. There were no apparent hazards that could effect public health or safety.

The site and surrounding area showed signs of grazing impacts. Plant diversity, however, was good with more than 21 native plant species identified on the site. It was very difficult to distinguish this site from the adjacent undisturbed areas, so no transect evaluation was deemed necessary. Photographs documenting vegetation and the general condition of the site are presented in Appendix B. Because of the quality of cover and diversity of plants found on the site, it qualifies for release.

### Section 1 T13W R9W

This mine site is located on a shelf in a canyon wall about 50 feet above the canyon floor. The canyon was eroded into Dakota Sandstone. The mine had been operated by Kerr-McGee under a lease agreement with Santa Fe Pacific Gold and was safeguarded by Kerr-McGee upon termination of that agreement (Santa Fe, 1994). All structures, trash or junk had been removed from the site. There were no piles or accumulations of toxic or waste material on the site. A vertical shaft had been backfilled with nontoxic mine waste material.

Essentially, the site had been safeguarded but not topsoiled or reseeded. The site is characterized by white fine grained sandstone covered by a few inches of fine white sand. The sand is subsequently being eroded away by wind and water. A mine access road had significant erosion. An impoundment had been constructed to impound sediment from the mine site, however, erosion from the access road was bypassing the impoundment and was entering the mine site. Photographs documenting vegetation and the general condition of the site are presented in Appendix C.

Some native plant species from adjoining areas were invading the disturbance area. Line-intercept transects indicated vegetation cover to be approximately 29 percent (Young, 1995). Vegetation measurements are presented in Table III. Vegetation on this site is dominated by hairy goldenaster (*Heterotheca villosa*), an unpalatable increaser. Indian ricegrass (*Oryzopsis hymenoides*), was also found growing sparsely on the site. Given the sandy nature of these soils, stands of Indian ricegrass and sand dropseed (*Sporobolus cryptandrus*) should be more prevalent here. Because of the overall lack of diversity and the poor establishment of perennial grasses and forbs, this site does not qualify for release.

TABLE III  
Section 1 T13W R9W Vegetation Measurements

Visual	Transect #1	Transect #2
<i>Gutierrezia sarothrae</i>	BG	<i>Heterotheca villosa</i>
<i>Atriplex canescens</i>	BG	BG
<i>Oryzopsis hymenoides</i>	BG	<i>Heterotheca villosa</i>
<i>Heterotheca villosa</i>	BG	<i>Oryzopsis hymenoides</i>
	BG	<i>Heterotheca villosa</i>
	BG	<i>Heterotheca villosa</i>
	BG	BG
	<i>Heterotheca villosa</i>	BG
	BG	<i>Oryzopsis hymenoides</i>
	BG	BG
	<i>Heterotheca villosa</i>	BG
	BG	<i>Heterotheca villosa</i>
	BG	Bedrock
	BG	Bedrock
	Rock	BG
	<i>Heterotheca villosa</i>	BG
	Rock	BG

Average Vegetative Cover = 29%

#### Section 17 T13N R9W

This site was not shown to MMD staff by Santa Fe Pacific Gold personnel and could not be located in the field. Presumably, the site has been reclaimed (Santa Fe, 1994). However, without a formal inspection of this mine site, no evaluation could be made by MMD personal regarding the mine's prior reclamation status.

This site cannot be released at this time.

### Haystack Mine (Section 19 T13N R10W)

This mine was the original Paddy Martinez discovery. It was a surface mine located approximately 27 miles north west of Grants, New Mexico. The mine was operated under an agreement with Santa Fe Pacific Minerals Corporation. The uranium mineral was found in the Todilto Limestone. Santa Fe Pacific Gold began reclamation of this site in 1990 under an Environmental Protection Agency (EPA) action that concluded in 1991 (Santa Fe, 1994). At the time of this inspection, Santa Fe claimed to have a letter of release from the EPA (Gallegos, pers. comm.), and indicated that a copy would be sent to MMD. However, MMD never received this copy.

A barbed wire fence surrounded the site. All structures, trash or junk had been removed from the site. There were no piles or accumulations of toxic or waste material on the site. There were no apparent hazards that could effect public health or safety. There were no erosion features. Photographs documenting the vegetation and the general condition of the site are presented in Appendix E. Topsoil depths across the site ranged from four to six inches.

Grazing by domestic livestock and wildlife have had some impact on the vegetative cover of this reclaimed site. Most of the reclaimed area had been heavily grazed and showed signs of drought stress. Line-intercept transects showed perennial cover to be approximately 32 percent and litter cover 18 percent (Tierney, 1995). Vegetation measurements are presented in Table IV. Because of the perennial quality of plant cover and diversity on this site, staff recommends it for release.

TABLE IV  
Haystack Mine Vegetation Measurements

Visual	Transect #1 North side of	Transect #2 On Wasterock
<i>Atriplex canescens</i>	BG	BG
<i>Chrysothamnus nauseosus</i>	<i>Bouteloua gracillis</i>	<i>Bouteloua gracilis</i>
<i>Sporobolus cryptandrus</i>	<i>Bouteloua gracillis</i>	Litter
<i>Juniperus monsperma</i>	BG	<i>Atriplex canescens</i>
<i>Ambrosia dumosa</i>	<i>Bouteloua gracilis</i>	BG
<i>Kochia scoparium</i>	<i>Oryzopsis hymenoides</i>	<i>Oryzopsis hymenoides</i>
<i>Mirabilis</i> sp.	<i>Oryzopsis hymenoides</i>	BG
<i>Phlox</i> sp.	Litter	BG
<i>Mentzelia pungens</i>	<i>Salsola kali</i>	BG
<i>Salsola kali</i>	Litter	BG
<i>Bouteloua gracilis</i>	BG	BG

<i>Oryzopsis hymenoides</i>	BG	BG
	Litter	<i>Bouteloua gracilis</i>
	<i>Agropyron</i> sp.	<i>Sporobolus cryptandrus</i>
	<i>Oryzopsis hymenoides</i>	<i>Oryzopsis hymenoides</i>
	Litter	Litter
	Litter	Litter

Average Perennial Cover = 32%

Litter Cover = 21%

### Section 25 Mine

The Section 25 mine is located 14 miles northwest of Grants, New Mexico. This 8-acre site was a surface mine operated by Reserve Oil and Minerals. It was reclaimed and reseeded by Santa Fe Pacific Gold in 1993. Additional reclamation activities were performed in 1994. A barbed wire fence surrounded the site. All structures, trash or junk had been removed from the site. There were no piles or accumulations of toxic or waste material on the site. There were no apparent hazards that could effect public health and safety. There were several topsoil mounds left by Santa Fe because small mammals had extensively burrowed into them and were using them for habitat. Photographs documenting the vegetation and the general condition of the site are presented in Appendix F. The regrading included construction of three large depressions that impounded rainwater for livestock. There was one significant erosion feature and several areas of minor erosion on the sides of these depressions. Topsoil depths across the site were greater than 12 inches. An earthworm found while measuring soil depths at this site is a good sign that the soils are generally non-toxic.

Portions of the reclaimed vegetation have heavily grazed by wildlife and domestic livestock. However, native plant species were invading the area. Twenty-six native species of plants were identified. Line-intercept transects showed average perennial vegetation cover to be approximately 22 percent (Young, 1995). Vegetation measurements are presented in Table V. Despite the slight increase in the number of perennial species invading this site from adjacent areas, there was poor establishment of the perennial grasses, forbs, and shrubs on the slopes of the depressions and topsoil mounds. Because of the lack of adequate cover, this site does not qualify for release at this time.

TABLE V  
Section 25 Mine Vegetation Measurements

Visual	Transect #1 West Depression (Soil Depth +1')	Transect #2 Middle of Site (Soil Depth +1')	Transect #3 East Side of Site (Soil Depth +1')
<i>Mirabilis multiflora</i>	BG	BG	<i>Oryzopsis hymenoides</i>
<i>Aster</i> sp.	<i>Erigeron</i> sp.	BG	BG
<i>Lepidium</i> sp.	BG	BG	Rock
<i>Cleome serrulata</i>	<i>Senecio longilobus</i>	BG	BG



<i>Sphaeralcea incana</i>	BG	<i>Mentzelia</i> sp.	BG
<i>Senecio longilobus</i>	BG	BG	BG
<i>Chrysothamnus nauseosus</i>	<i>Oryzopsis hymenoides</i>	BG	Rock
<i>Sporobolus cryptandrus</i>	Litter	BG	BG
<i>Gutierrezia sarothrae</i>	Litter	BG	<i>Oryzopsis hymenoides</i>
<i>Boutelloua gracilis</i>	<i>Cleome serrulata</i>	BG	Rock
<i>Agropyron smithii</i>	<i>Oryzopsis hymenoides</i>	BG	BG
<i>Mentzelia decapetala</i>	<i>Oryzopsis hymenoides</i>	BG	BG
<i>Oryzopsis hymenoides</i>	BG	<i>Agropyron smithii</i>	BG
<i>Atriplex canescens</i>	BG	BG	BG
<i>Sparganium</i> sp.	<i>Cleome serrulata</i>	<i>Agropyron smithii</i>	BG
<i>Atriplex canescens</i>	BG	BG	Rock
Fleabane	BG	BG	BG

Average Vegetative Cover = 22%

### Section 31 T13N R9W

This was a surface mine located 14 miles northwest of the Grants, New Mexico. The mine was operated by United Nuclear Corporation until termination of the lease in 1975. Open adits and shafts were backfilled and otherwise safeguarded in 1987. The site was reclaimed and reseeded by Santa Fe the fall of 1994 (Santa Fe, 1994). All structures, trash or junk had been removed from the site however, trespass dumping has since taken place. There were no piles or accumulations of toxic or waste material on the site. There were no apparent hazards that could effect public health or safety. There were minor erosion features where water had flowed into depressions. Twenty foot slopes of limestone cobble were left on the south side of the reclaimed area to blend in with a natural limestone outcropping. Several 6 foot high, 50 foot long topsoil stockpiles were left because small animals were burrowing into them and were using them for habitat. Photographs documenting vegetation and general condition of the site are presented in Appendix G.

There was evidence of grazing by livestock and wildlife on this site. Vegetation also showed signs of drought stress. Line-intercept transects showed vegetation cover to be approximately 12 percent (Young, 1995). The results of these vegetation measurements are presented in Table VI. Because of the lack of cover and diversity, staff does not recommend this site for release.

TABLE VI  
Section 31 T13N R9W Vegetation Measurements

Visual	Transect #1	Transect #2	Transect #3
<i>Mirabilis multiflora</i>	Rock	<i>Oryzopsis hymenoides</i>	BG
<i>Sphaeralcea incana</i>	Rock	Rock	BG
<i>Oryzopsis hymenoides</i>	BG	BG	BG
<i>Senecio longilobus</i>	Rock	BG	BG
<i>Ceratoides lanata</i>	Rock	BG	BG
<i>Salvia</i> sp.	Rock	BG	BG
<i>Gutierrezia sarothrae</i>	BG	BG	BG
<i>Atriplex canescens</i>	BG	BG	<i>Oryzopsis hymenoides</i>
<i>Lycium pallidum</i>	<i>Salvia</i> sp.	BG	BG
<i>Sporobolus airoides</i>	Rock	BG	BG
<i>Bouteloua gracilis</i>	Litter	BG	BG
<i>Mentzelia decapetala</i>	Rock	BG	BG
<i>Agropyron smithii</i>	Rock	BG	Rock
	Rock	<i>Oryzopsis hymenoides</i>	<i>Oryzopsis hymenoides</i>
	Rock	BG	<i>Oryzopsis hymenoides</i>
	Rock	Litter	BG
	Rock	BG	Rock

Average Vegetative Cover = 12%

### Faith Mine (Section 29 T13N R9W)

This underground mine was reclaimed in 1986 (Eby, 1995). Native vegetation from adjoining undisturbed lands had invaded the site and it was difficult to tell that a mine had previously existed on this site. Approximately one acre had recently been regraded and reclaimed, the only other indication of the mine presence was a revegetated mound where a vertical shaft had been backfilled with nontoxic mine waste material (Eby, 1995). All structures, trash or junk had been removed from the site. There were no piles or accumulations of toxic or waste material on the site. Similarly, there were no erosion features. Photographs documenting vegetation and general condition of the site are presented in Appendix H. Topsoil depths across the site ranged from 4 to 6 inches.

As with the other mines, the vegetation had been grazed by wildlife and domestic livestock. The vegetation also showed signs of drought stress. However, the adequate plant cover and diversity deemed it unnecessary to perform transect evaluations of the plant community. Staff recommends this site of release. The plant



community has been documented by photographs (See Appendix H).

### Isabella Mine

This was a 2-acre site consisting of a head frame for underground mining. Ranchers Exploration conducted limited operations on this section under a lease from Santa Fe Pacific Minerals Corporation. The site was reclaimed in 1987, but is still accessed by a two-track road from the Old Wilcoxon Ranch. All structures, trash or junk had been removed from the site. The mine shaft had been backfilled with nontoxic mine waste material (Eby, 1995). There were no piles or accumulations of toxic or waste material on the site. There was one erosion feature, 200 feet south of the shaft site, which threatens to head cut across from an unnamed ephemeral tributary of Arroyo del Puerto running adjacent to the site. This head cut if left unchecked will eventually intercept the closed shaft. Mr. Paul Eby said that Santa Fe Pacific Gold would repair it. Photographs documenting the vegetation and the general condition of the site are presented in Appendix I. Topsoil depths across the site ranged from 4 to 6 inches.

Again, the mine site had been grazed by livestock and wildlife. Similarly, vegetation showed signs of drought stress. Line-intercept transects indicated that vegetation cover was approximately 15 percent (Young, 1995). Results of vegetation measurements are presented in Table VII. Because of the lack of plant cover, this site is not recommended for release.

TABLE VII  
Isabella Mine Vegetation Measurements

Visual	Transect #1	Transect #2
<i>Oryzopsis hymenoides</i>	BG	BG
<i>Bouteloua gracilis</i>	Litter	BG
<i>Atriplex canescens</i>	BG	BG
<i>Juniperus sp.</i>	BG	BG
<i>Cleome serrulata</i>	<i>Kochia scoparia</i>	BG
<i>Agropyron smithii</i>	BG	BG
	BG	<i>Salsola iberica</i>
	BG	BG
	BG	BG
	BG	BG
	<i>Salsola iberica</i>	BG
	Litter	BG
	BG	<i>Salsola iberica</i>
	BG	<i>Kochia scoparia</i>

	BG	BG
	BG	BG
	BG	BG

### Marquez Mine

This site is reached by a two-track road from a ranching complex known as the Marquez Old Home Place. It was the site of a decline shaft adit below a cliff outcropping of the Dakota Sandstone. United Nuclear leased the section from Santa Fe Pacific Minerals Corporation. Open mine features were backfilled in 1987. The site is characterized by the sand dune appearance of a mine waste pile backfilling a declined shaft adit. The site lies within San Mateo Creek Canyon, however, and the high and constant winds move soils to form sand dunes. Further, San Mateo Creek is ephemeral at this location and windblown sand from the streambed forms dunes against the cliff face. All structures, trash or junk had been removed from the site with the exception of some pipe and lumber (left at the request (Eby, 1995) of the surface lessee, Sonny Marquez). There were no piles or accumulations of toxic or waste material on the site. Photographs documenting the vegetation and general condition of the site are presented in Appendix J. The decline shaft had been backfilled with nontoxic mine waste material. Regrading of the site also included construction of terraces to break up slopes.

Topsoil depths across the site were greater than 12 inches, but consisted entirely of windblown sand. This area was essentially barren with most of the seed and mulch blown away before vegetation could be established. Native species such as Indian ricegrass (*Oryzopsis hymenoides*), from adjoining areas were starting to invade the disturbance area (Young, 1995). Because of the obvious lack of plant cover at the site no transects were attempted. Staff does not recommend release of this site.

### Poison Canyon Mine

This site is characterized by an abundance of sunflowers and locoweed. The locoweed is probably a selenium accumulator for which the canyon (also known as 'Sheep Kill Canyon') was named. Reserve Oil and Minerals operated the mine under a lease from Santa Fe Pacific Minerals Corporation. Open mine features were backfilled and the mine reclaimed in 1987 upon termination of the lease. Additional reclamation of the site was conducted in 1993 and 1994 (Santa Fe, 1994). A barbed wire fence surrounded the site. All structures, trash or junk had been removed from the site. There were no piles or accumulations of toxic or waste material on the site. There were a few erosion features including one that was significant. Photographs documenting vegetation and general condition of the site are presented in Appendix K. An inclined shaft portal had been backfilled with nontoxic mine waste material (Santa Fe, 1994). The regrading of this site included construction of mounds, berms, terraces and depressions that impounded rainwater for livestock.

Topsoil depths across the site were approximately 4 inches. Line-intercept transects indicated that perennial vegetative cover was approximately 31 percent. The results of these vegetation measurements are presented in Table VIII.



TABLE VIII  
Poison Canyon Vegetation Measurements

Visual	Transect #1	Transect #2	Transect #3
<i>Agropyron</i> sp.	Rock	Rock	BG
<i>Aster bigolovii</i>	BG	BG	Rock
<i>Agropyron smithii</i>	<i>Helianthus</i> sp.	BG	<i>Helianthus</i> sp.
<i>Oxytropis lambertii</i>	<i>Helianthus</i> sp.	BG	BG
<i>Mentzelia decapetala</i>	Rock	BG	BG
<i>Gutierrezia sarothrae</i>	BG	<i>Atriplex canescens</i>	Rock
<i>Linum perenne lewisii</i>	BG	<i>Agropyron smithii</i>	Rock
<i>Cleome serrulata</i>	BG	Litter	<i>Helianthus</i> sp.
<i>Melilotus officinalis</i>	BG	<i>Atriplex canescens</i>	<i>Agropyron smithii</i>
<i>Sphaeralcea coccinea</i>	<i>Oryzopsis hymenoides</i>	<i>Salsola iberica</i>	BG
<i>Helianthus</i> sp.	BG	BG	BG
<i>Oryzopsis hymenoides</i>	BG	<i>Atriplex canescens</i>	BG
<i>Hordeum jubatum</i>	<i>Helianthus</i> sp.	<i>Kochia scoparia</i>	BG
<i>Senecio longilobus</i>	Rock	<i>Oryzopsis hymenoides</i>	BG
<i>Sphaeralcea incana</i>	Rock	BG	<i>Helianthus</i> sp.
<i>Atriplex canescens</i>	BG	BG	<i>Helianthus</i> sp.
	BG	Litter	BG

Average Vegetative Cover = 27 %

### Conclusions and Recommendations

Based on the inspection of the 11 mine sites, review of inspection information with Mining and Minerals Division staff and MMD's resources to conduct these inspections, it is recommended that:

the Haystack (Section 19 T13N R10W), Section 13 (T 1N R 6W) and Faith (Section 29 T13N R9W) Mines

be released from further requirements of the New Mexico Mining Act. The other mine sites:

SW1/4 of Section 13 (T 13N R11W), Section 1 (T 13W R 9W), Section 31 (T 13N R 9W), Section 7 (T13N R 9W, a.k.a. Isabella Mine), Section 23 (T 13N R 9W, a.k.a. Marquez Mine), Section 25 (T 13N R 10W), and Section 19 (T 13N R9W, a.k.a. Poison Canyon Mine)

staff has determined do not meet the environmental conditions that allow for the development of a 'self-sustaining ecosystem' as defined in Rule 1. and put forth in Rule 5.7A of the New Mexico Mining Act. Some of these site were reclaimed in July 1994, so present a situation where it is difficult to determine vegetation success. One season of growth in the areas under evaluation does not provide sufficient time to make this kind of a determination. The sites remain at a very early successional stage and contain mostly weedy species or no species.

However, based on oral communications with the operator, and on the inspected condition of these remaining reclaimed sites as documented by this inspection report, it is clear that the operator has made an effort to complete the required reclamation of these remaining sites. It is therefore recommended that the Director of MMD give a variance to Santa Fe Pacific Gold Corporation from meeting the deadline of September 30, 1995 for prior reclamation under the New Mexico Mining Act and Rules for: the SW1/4 of Section 13 (T 13N R11W), Section 1(T 13W R 9W), Section 31 (T 13N R 9W), Section 7 (T13N R 9W, a.k.a. Isabella Mine), Section 23 (T 13N R 9W, a.k.a. Marquez Mine), and Section 19 (T 13N R9W, a.k.a. Poison Canyon Mine) mine sites. This variance would stipulate that inspections will be conducted by MMD during the late summer of 1997 at each of these remaining sites to determine if the conditions necessary for development of a 'sustainable ecosystem' are then present on-site, and if any further actions including (but not limited to) reseeding or interseeding by the operator are necessary.

The Section 17 (T 13N R 9W) mine site was not adequately identified by Santa Fe Pacific Gold for inspection by MMD. The Mining and Minerals Division attempted to locate the site, but was unable to do so. Therefore, no inspection for prior reclamation status was made. This site could also be addressed under a variance.

## References

- Bonham, C. D. 1989. Measurements for Terrestrial Vegetation. Wiley-Interscience. 338 pp.
- Eby, Paul G. 1995. Director-Field Operations, Santa Fe Pacific Gold Corporation, Personal Communication.
- Santa Fe (Santa Fe Pacific Gold Corporation) 1994. Prior Reclamation Request.
- Tierney, Dr. Robyn 1995. Reclamation Specialist, MMD, Field Notes.
- Young, Robert S. 1995. Environmental Engineer, MMD, Field Notes.

## **Appendix A**

**Photo Documentation**  
**SW1/4 Section 13 T13N R11W**  
(no photo documentation)

## **Appendix B**

**Photo Documentation  
Section 13 T1N R6W**



Section 13 T1N R6W, Mine Site from East, September 21, 1995



Section 13 T1N R6W, Powder Magazine, September 21, 1995



Section 13 T1N R6W, Mine Site From East



Section 13 T1N R6W, Mine Site From South

## **Appendix C**

**Photo Documentation  
Section 1 T13N R9W**





Section 1 T13N R9W, Shaft Site looking South, 9/13/95



Section 1 T13N R9W, Shaft Site Looking West, 9/13/95



Section 1 T13N R9W, Sediment Pond, 9/13/95



Section 1 T13N R9W, Looking Up at Mine Site, 9/13/95



Section 1 T13N R9W, Access Road, 9/13/95



Section 1 T13N R9W, South Side Looking North, 9/13/95



Section 1 T13N R9W, North Side Looking South, 9/13/95

## **Appendix D**

**Photo Documentation**  
**Section 17 T13N R9W**  
(no photo documentation)

# **Appendix E**

## **Photo Documentation Haystack Mine**

# **Appendix F**

## **Photo Documentation Section 25**



Section 25 Mine, West Side Looking West, 9/12/95



Section 25 Mine, Middle Looking East, 9/12/95





Section 25 Mine, East Side Looking Southwest, 9/12/95



Section 25 Mine, Erosion Feature, 9/12/95

## **Appendix G**

**Photo Documentation  
Section 31 T13N R9W**



Section 31 T13N R9W, North End Looking South, 9/12/95



Section 31 T13N R9W, Northeast Side Looking West, 9/12/95



Section 31 T13N R9W, Reconstructed Limestone Bluffs, 9/12/95



Section 31 T13N R9W, Southeast Side looking North

# **Appendix H**

## **Photo Documentation Faith Mine**



Faith Mine Shaft Site, Looking East, 9/12/95  
Regraded Area in Background



Faith Mine Shaft Site, Looking North, 9/12/95





Faith Mine Shaft Site, Looking West, 9/12/95



Faith Mine Regraded Area, 9/12/95

# **Appendix I**

## **Photo Documentation Isbella Mine**



Isabella Mine, From North, 9/12/95



Isabella Mine, From South, 9/12/95



Isabella Mine, Erosion Feature, 9/12/95

## **Appendix J**

### **Photo Documentation Marquez Mine**



Marquez Mine, Reclaimed Declined Shaft, 9/12/95



Marquez Mine, Waste Pile, 9/12/95





Marquez Mine Waste Pile, 9/12/95



Marquez Mine, Waste Pile, 9/12/95





Marquez Mine, Waste Pile, 9/12/95



Marquez Mine, Sand Dune, 9/12/95

## **Appendix K**

**Photo Documentation  
Poison Canyon Mine**



Poison Canyon Mine, Middle Looking North, 9/12/95



Poison Canyon Mine, Middle Looking East, 9/12/95



Poison Canyon Mine, Middle Looking South, 9/12/95



Poison Canyon Mine, Middle Looking West, 9/12/95



Poison Canyon Mine, Reclaimed Declined Shaft, 9/12/95



Poison Canyon Mine, Small Depression, 9/12/95



Poison Canyon Mine, Erosion Feature, 9/12/95



Index of Correspondence

Date	Addressee	Subject
08/31/94	John Lingo/From: Tim Leftwich	Requests for Approval of Prior Reclamation.
11/03/94	Tim Leftwich/From: Holland S.	Prior Reclamation Status, Faith Mine et al.
12/14/94	Tim Leftwich/From: Holland S.	Evaluation Guidelines for Prior Reclamation Sites.
08/31/94	MARB/From: Section 25, T.14N,R.10W Homestake-Sapin	Request For Approval of Prior Reclamation
08/31/94	MARB/From: Section 23, T.14N,R.10W Homestake - Sapin	" "
08/31/94	MARB/From: Section 15, T.14N,R.10W Homestake - Sapin	" "
08/31/94	MARB/From: Section 1, T.13N, R.9W Kerr McGee	" "
08/31/94	MARB/From: Section 13, T.1N, R.6W M.P. Grace	" "
08/31/94	MARB/From: Section 13, T.14N, R.10W Homestake - Sapin	" "
08/31/94	MARB/From: Section 29, T.13N, R.9W Ranchers Exploration	" "
08/31/94	MARB/From: Section 19, T.13N, R.9W Reserve Oil & Minerals	" "
08/31/94	MARB/From: Section 23, T.13N, R.9W United Nuclear Corp.	" "
08/31/94	MARB/From: Section 7, T.13N, R.9W Ranchers Exploration	" "
08/31/94	MARB/From: Section 7, T.13N, R.8W Ranchers Exploration	" "
08/31/94	MARB/From: Section 21, T.13N, R.9W Ranchers Exploration	" "
08/31/94	MARB/From: Section 31, T.13N, R.9W United Nuclear	" "
08/31/94	MARB/From: Section 25, T.13N, R.10W Reserve Oil & Minerals	" "
08/31/94	MARB/From: Section 19, T.13N, R.10W Todilto Exploration	" "
08/31/94	MARB/From: Section 19, T.13N, R.9W Ranchers Exploration	" "
08/31/94	MARB/From: Section 1, T.13N.,R.9W Kerr McGee	" "
08/31/94	MARB/From: Section 17, T.13N, R.9W United Nuclear	" "
08/31/94	MARB/From: Section 13, T.1N, R.6W M.P. Grace	" "
08/31/94	MARB/From: SW/4, Section 13, T.13N, R.11W Todilto Exploration	" "



### PRIOR RECLAMATION INSPECTION

DATE: 8/31/95 3:30 PM

CONDITIONS: "Old Home Place"

done-like appearance overall, reclaimed decline, very windy - seeding is not taking - hardpan, some pipe/bunker waste left for Sonny Marguez, mine waste pile reclaimed in 3 terraces (filled in w/ sand)

SITE: Marguez Mine

OPERATOR: SFPG

PRESENT: \_\_\_\_\_

State of New Mexico  
**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**  
Santa Fe, New Mexico 87505

*MLK*



**BRUCE KING**  
GOVERNOR

December 14, 1994

**ANITA LOCKWOOD**  
CABINET SECRETARY

Mr. Tim Leftwich  
Santa Fe Pacific Gold Corp.  
P. O. Box 218  
Albuquerque, New Mexico 87110

**RE: Evaluation Guidelines for Prior Reclamation Sites.**

Dear Mr. Leftwich:

The Mining and Minerals Division (MMD) will be conducting inspections for the purposes of prior reclamation for the site(s) you have requested release. Based on Section 69-36-5 E. of the New Mexico Mining Act, the MMD has developed inventory of items to determine whether the completed reclamation satisfies the requirements of the New Mexico Mining Act and the substantive requirements for reclamation pursuant to the applicable regulatory standards.

This checklist is included for your use to determine if your site meets all of the ten criteria. Based on site-specific information, the MMD will be using this checklist to establish criterion based decisions to release the site from further responsibilities under the Act or not.

MMD will begin inspection of prior reclamation sites in early 1995 and will make a determination by September 30, 1995. If you have any questions regarding the checklist or questions regarding the inspection of your reclamation sites, please contact me or Joe DeAgüero at 505\827-5970.

Sincerely,

A handwritten signature in cursive script, appearing to read "H. Shepherd".

Holland Shepherd  
Bureau Chief  
Mine Act Reclamation Bureau  
Mining and Minerals Division

**VILLAGRA BUILDING - 408 Galisteo**  
Forestry and Resources Conservation Division  
P.O. Box 1948 87504-1948  
827-5830  
Park and Recreation Division  
P.O. Box 1147 87504-1147  
827-7465

**2040 South Pacheco**  
Office of the Secretary  
827-5950  
Administrative Services  
827-5925  
Energy Conservation & Management  
827-5900  
Mining and Minerals  
827-5970

**LAND OFFICE BUILDING - 310 Old Santa Fe Trail**  
Oil Conservation Division  
P.O. Box 2088 87504-2088  
827-5800

**PRIOR RECLAMATION GUIDELINES FOR RELEASE FROM  
REQUIREMENTS OF THE NEW MEXICO MINING ACT.**

THE PURPOSE OF THIS CHECKLIST IS TO EQUITABLY CONDUCT EACH INSPECTION OF RECLAIMED AREAS TO DETERMINE WHETHER THE COMPLETED RECLAMATION SATISFIES THE REQUIREMENTS OF THE NEW MEXICO MINING ACT AND THE SUBSTANTIVE REQUIREMENTS FOR RECLAMATION PURSUANT TO THE APPLICABLE REGULATORY STANDARDS. IF THE DIRECTOR DETERMINES THAT THOSE REQUIREMENTS ARE MET, THE OPERATOR OR OWNER SHALL BE RELEASED FROM FURTHER REQUIREMENTS UNDER THE NEW MEXICO MINING ACT.

<u>YES</u>	<u>NO</u>		
_____	_____	1)	Have all disturbed or affected areas of the mining operation been mitigated?
_____	_____	2)	Has there been topdressing or topsoil replacement? If yes, approximate depth:_____.
_____	_____	3)	Is the material on the ground surface suitable for the re-establishment of vegetation and the post mining land use?
_____	_____	4)	Is the reclaimed surface devoid of waste, ore or other mining debris (e.g. equipment & structures) that would hinder revegetation.
_____	_____	5)	Has the mitigated area been stabilized to effectively control erosion which would either disrupt the post-mining land use or the re-establishment of vegetation?
_____	_____	6)	Do the reclaimed areas, to the extent practicable, provide stabilization that will minimize future impacts to the environment and protect air and water resources
_____	_____	7)	Are the reconstructed slopes at lengths and gradients sufficient to allow vegetation establishment without excess erosion?
_____	_____	8)	Do reconstructed drainages discharge onto undisturbed areas in a manner that will not cause accelerated erosion?
_____	_____	9)	If rip-rap has been placed on reconstructed drainages, has it been placed correctly and is it of durable material and of suitable size?
_____	_____	10)	Has the disturbed area been reclaimed to a condition that will allow a self-sustaining ecosystem to establish as defined in Rule 1.

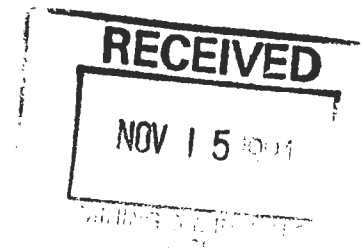


SANTA FE  
PACIFIC  
CORPORATION

BOX 27019 ALBUQUERQUE, NEW MEXICO 87125  
6200 UPTOWN BLVD. NE SUITE 400  
ALBUQUERQUE, NM 87110  
TEL 505-880-5300 FAX 505-880-5435

November 8, 1994

Mr. Holland Shephard  
Chief, Mining Act Reclamation Bureau  
2040 Pacheco Drive  
Santa Fe, New Mexico 87505



Re: Request for additional information concerning prior reclamation

Dear Mr. Shephard:

I have received your September 19, 1994 letter requesting additional information on the sites potentially eligible for prior reclamation which we brought to your attention in our letter of August 31, 1994. With this letter we attempt to provide some of the information requested as to some of the sites. As in your August 31, 1994 letter, however, Santa Fe Pacific Gold Corporation ("SFPGC") again preserves all of its positions relating to the Act. Also, by providing certain information that is readily available to us and within the scope of your requests, SFPGC would like to preserve the position that the information requested is not "required" by any statutory or regulatory provision.

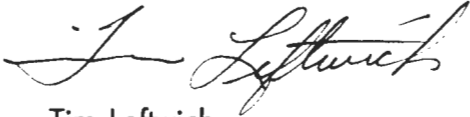
As you know, although Santa Fe holds interests in the properties it voluntarily identified in the August 31 letter, it did not own, conduct, or otherwise control any of the operations which were undertaken by third party mining companies pursuant to certain leases. As a result, SFPGC typically is not in a position to describe such things as all waste units, impoundments, stockpiles, leach piles, open pits or adits which may previously have been located at the sites. Similarly, SFPGC did not in many instances conduct the reclamation work, and so is not able to precisely describe such things as seed mixes, reclamation design, etc. Although SFPGC has voluntarily undertaken its own reclamation program at certain sites, (even prior to passage of the New Mexico Mining Act) it has done so voluntarily in the sense that it was motivated by its own corporate philosophy toward the environment rather than pursuant to any statutory, regulatory or other legal obligation.

Enclosed is the additional information we can provide, including what our latest records show as the names and addresses of the operators which should be able to provide the bulk of your desired data. We have also provided names and addresses of surface owners, since they are in the best--if not the only--position to know about post-mining land uses.

November 8, 1994  
Page 2

I hope this helps the Mining Act Reclamation Bureau. Please give me a call if you or your staff would like to discuss this further.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Tim Leftwich".

Tim Leftwich  
Vice President -  
Environmental Quality

TL:pt

Enclosure



# Gallup Title Company

CHARLES F. HEADEN  
PHILIP G. GARCIA

ABSTRACTS - ESCROWS - TITLE INSURANCE

October 13, 1994

Mr. G.R. Wagner  
Santa Fe Pacific Gold Corp.  
6200 Uptown Blvd., NE, Suite 400  
Albuquerque, NM 87110

VIA FAX: (505) 880-5435

Dear George:

Pursuant to your request of October 7, 1994 following are land ownerships and addresses of owners that you asked that I check on for you, to wit:

T.13N., R.8W, Section 7: Fernandez Company  
5000 San Mateo

San Mateo, NM 87050

T.13N., R.9W, Sections 1,7,17,21,23,29,and 31:

Isabel O. Marquez and  
Solomon Marques, trustees  
of the Isabel O. Marquez  
Trust

P.O. Box 3526

Milan, NM 87021

Section 19:

Isabel O. Marquez  
(above address)

T.13N., R.10W, Section 19:

Donna Jean McKinnon &  
Frances Laree Fathree  
C/O Volton Tietjen  
P.O. Box 125

Continental Divide, NM 87312

Section 25:

Berryhill Ranch, Ltd.  
7000 W. 66 Ave.  
Bluewater, NM 87005

T.13N., R.11W., Section 12(SW1/4):

Elkins Real Estate  
P.O. Box 50  
Prewitt, NM 84045

Continued...

Continued.....

T.14N., R.10W, Sections 13 & 15:

Jerry & Luann Elkins  
1010 W. 66 Ave.  
Gallup, NM 87301

Sections 23 & 25:

Homestake Mining Co.  
P.O. Box 98  
Grants, NM 87020-0011

If you need anything further, please advise.

Very truly yours

*Philip A. Garcia*  
Philip Garcia  
ar

*Sec. 13, T 14N, R 10W (Socorro Co, NM)*

*B.L. Henderson*

*P.O. Box 286*

*Magdalena, N.M. 87825*



State of New Mexico  
**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**  
Santa Fe, New Mexico 87505



**BRUCE KING**  
GOVERNOR

November 3, 1994



**ANITA LOCKWOOD**  
CABINET SECRETARY

Mr. Tim Leftwich  
Santa Fe Pacific Gold Corp.  
Post Office Box 27019  
Albuquerque, NM 87125

Re: Santa Fe Pacific Gold Corporation's Prior Reclamation  
Status, Faith Mine et al, McKinley Mine

Dear Mr. Leftwich:

Thank you for your letter dated August 31, 1994, requesting approval for the prior reclamation of Section's 1, 13, 17, 31, 19, 25 and Faith, Isabella, Johnny M, Marquez, SW 1/4 Sec. 13, and Poison Canyon Mine Areas.

Section 5.10 of the New Mexico Mining Commission Rule 94-1, requires that we conduct an inspection of your mine to determine if the prior reclamation "satisfy the requirements of the Act and the substantive requirements for reclamation pursuant to ..." the rules. In this case the Director of the Mining and Minerals Division will make a determination on the adequacy of your reclamation by September 30, 1995.

Your letter and a subsequent letter did include checks totalling \$3,000.00, since the Mining and Minerals Division has interpreted the rules to require \$250.00 for each mine site. The maps submitted identified the general areas where the mines were located. However, the following information is required before the application for prior reclamation status can be considered complete:

1. a map of 1:24000 or larger scale (1:12000) showing the limits of the reclaimed area and the location, and a description, of any waste units, impoundments, stockpiles, leach piles, open pits or adits that are within this area;
2. a discussion of post-mining land use for the site reclaimed;

**VILLAGRA BUILDING - 408 Galisteo**

Forestry and Resources Conservation Division  
P.O. Box 1948 87504-1948  
827-5830

Park and Recreation Division  
P.O. Box 1147 87504-1147  
827-7465

**2040 South Pacheco**

Office of the Secretary  
827-5950

Administrative Services  
827-5925

Energy Conservation & Management  
827-5900

Mining and Minerals  
827-5970

**LAND OFFICE BUILDING - 310 Old Santa Fe Trail**

Oil Conservation Division  
P.O. Box 2088 87504-2088  
827-5800

Mr. Tim Leftwich  
November 3, 1994  
Page -2-

3. a detailed description of the reclamation work performed, including types of reclamation conducted, amount of acres revegetated, the seed mix used, the current condition of the revegetation, etc., and how the reclamation project has been designed to achieve a self-sustaining ecosystem; and,
4. if part of the reclamation, a discussion of how the current reclamation of waste units, impoundments, stockpiles, tailings piles open pits or adits, have been designed to ensure compliance with all applicable federal and state standards for air, surface and ground water protection and to eliminate any future hazards to health and public safety.

Please call me at (505)827-5970 if you have any questions concerning the new regulations, the permit process or any other related issues.

Sincerely,



HOLLAND SHEPHERD, Bureau Chief  
Mining Act Reclamation Bureau  
Mining and Minerals Division

HS/AJ/fg



SANTA FE  
PACIFIC  
CORPORATION

BOX 27019 ALBUQUERQUE NEW MEXICO 87125  
6200 UPTOWN BLVD NE SUITE 400  
ALBUQUERQUE, NM 87110  
TEL 505-880-5300 FAX 505-880-5435

A Santa Fe Pacific Company

September 19, 1994

Mr. John Lingo, Acting Director  
Mining and Minerals Division  
New Mexico Energy, Minerals and  
Natural Resources Department  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Dear Sir:

Enclosed is Santa Fe Pacific's check in the amount of \$3,000 which should have been enclosed with our letter of August 31, 1994 regarding our request for approval of prior reclamation in connection with the 1993 New Mexico Mining Act.

If you have any questions or need additional information, please contact me.

Very truly yours,

G. R. Wagner  
Manager - Lease Records

GRW:bls  
Enclosure

cc: T. J. Leftwich

INVOICE DATE	INVOICE NUMBER	INVOICE AMOUNT	VOUCHER NUMBER	PAYMENT AMOUNT
09/07/94	4721190907	3,000.00	09-05717	
<i>This check covers prior reclamation fees for the attached 12 mine sites.</i>				
<b>TOTALS</b> →				3,000.00

SANTA FE PACIFIC GOLD CORP.

VEN#:59566

DATE:09/16/94

MICR#:09191790

SYS#:09037820

SANTA FE PACIFIC GOLD CORP.

THE NORTHERN TRUST COMPANY 2-15  
CHICAGO, ILLINOIS 710

Box 27019  
Albuquerque, New Mexico 87125-7019  
(505) 880-5300



**No. 191790**

A SANTA FE PACIFIC COMPANY

09/16/94

\*\*\*\*\*3,000.00

**PAY** \*\*\*\*\* THREE THOUSAND AND 00/100 DOLLARS \*\*\*\*\*

TO THE ORDER OF  
NM ENERGY, MIN. & NAT. RES. DE  
MINING & MINERALS DIV.  
2040 PACHECO STREET  
SANTA FE , NM 87505

*[Handwritten Signature]*



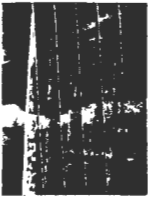


check # 47 21190907 for \$3,000.00

Covers these mines for prior redemption. and

REQUESTS FOR PRIOR REDEMPTION

1	2	3	4	5	6	7	8	9
Pd Mine Name	Location	Present/Former Operator	Mineral Ownership	Map	Required Info			
8/31/94 Bank Fe Pac. Gold Corp.	Unknown	M.F. Grace	Bank Fe Pacific Gold Corp.					
Hemestake Mng. Co	Unknown	Unknown	Unknown					
"	25 14N 10W	Home Stake - Spain	"					
"	23 14N 10W	"	"					
"	15 14N 10W	"	"					
"	13 14N 10W	"	"					
"	19 13N 9W	Ranchers Explor.	"					
"	21 13N 9W	"	"					
"	29 13N 9W	"	"					
"	7 13N 9W	Isabella "	"					
"	7 13N 9W	Johnny M	"					
"	17 13N 9W	Unknown	"					
"	17 13N 9W	United Nuclear	"					
"	31 13N 9W	"	"					
"	23 13N 9W	Marquez	"					
"	13 13N 11W	5 W 1/4	Todo, To Explor.					
"	19 13N 10W	Unknown	"					
"	19 13N 9W	Bison Canyon	Reserve Oil & Min.					
"	25 13N 10W	Sec. 25	"					
"	1 13N 9W	Unknown	Kerr - McGee					
9/1/94	17 14N 9W	Sec. 17	Quivera Mng. Co.					
"	19 14N 9W	"	"					
"	22 14N 10W	"	"					
"	24 14N 10W	"	"					
"	30 14N 9W	"	"					
"	30 14N 9W	"	"					
"	33 14N 9W	"	"					
"	36 14N 9W	"	"					
"	36 17N	IE 36	"					
"	35 17N	Rock I	"					
8/30/94	250	Church	Kerr - McGee Corp.					

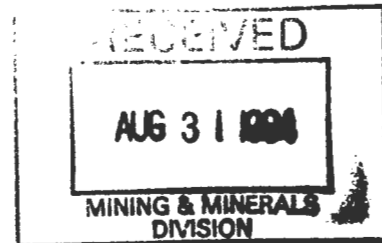


SANTA FE  
PACIFIC  
CORPORATION

BOX 27019 ALBUQUERQUE, NEW MEXICO 87125  
6200 UPTOWN BLVD NE, SUITE 400  
ALBUQUERQUE, NM 87110  
TEL 505-880-5300 FAX 505-880-5435

A Santa Fe Pacific Company

August 31, 1994  
HAND DELIVERED



Mr. John Lingo, Director  
Mining & Minerals Division  
Energy, Minerals & Natural  
Resources Department  
2040 Pacheco Street  
Santa Fe, New Mexico 87505

Re: Santa Fe Pacific Gold Corporation's Requests for Approval of  
Prior Reclamation

Dear Mr. Lingo:

On behalf of Santa Fe Pacific Gold Corporation, this letter is being hand-delivered along with a series of one-page submittals and accompanying maps identifying certain properties which it believes were previously mined by other companies for recovery of uranium ores. These submissions are made in a spirit of cooperation even though Santa Fe Pacific Gold Corporation believes it is not required to make the submittals or undertake any other action under the New Mexico Mining Act, if that Act is deemed to apply at all to the uranium operations conducted at the site. Further, these submissions are made with the expectation that they may overlap with submissions by companies which conducted or owned the operations causing any disturbances.

For each site, Santa Fe Pacific Gold Corporation would like to request that the Director of the Mining and Minerals Division approve prior reclamation efforts pursuant to the New Mexico Mining Act if the Director believes that the Mining Act may be applicable to the operations previously conducted thereon. Pursuant to our attorney's recent discussions with you, these submissions are made with the express understanding that Santa Fe Pacific Gold Corporation fully preserves and does not waive any of its positions that it has no obligations whatsoever under the Mining Act with respect to these sites including, but not limited to, the following positions:



Mr. John Lingo, Director  
August 31, 1994  
Page 2

1. That any commodities or other materials produced from the properties or activities thereon constitute commodities, materials or activities regulated by the Nuclear Regulatory Commission such that the Mining Act does not apply;

2. That minerals were not produced from the properties in marketable quantities for a total of two years since January 1, 1970;

3. That as mere owner of mineral interests and lessor under instrument(s) pursuant to which operations owned and conducted by others occurred on the properties, Santa Fe Pacific Gold Corporation was not and is not an operator or owner of the operations with responsibilities, if there be any, under the Mining Act; and

4. That Santa Fe Pacific Gold Corporation has no obligation whatsoever to request approval of prior reclamation or carry out other responsibilities, if there be any, pertaining to the properties in relation to the Mining Act.

Santa Fe Pacific Gold Corporation makes these submissions with the further understanding that neither the submissions themselves, nor anything stated therein, nor the fact of making the submissions shall be advanced in any context, form or respect by the State of New Mexico or any agency or subdivision thereof as evidence or as an admission of any kind on any issue which may exist or hereafter arise in relation to Santa Fe Pacific Gold Corporation or its mineral properties in connection with the Mining Act. The same understanding applies in all respects to this letter.

With the exception of two mines, Santa Fe Pacific Gold Corporation believes these submissions cover all of its New Mexico properties that might conceivably be argued as properties on which "existing mining operations" are situated. The first such exception is the Northeast Church Rock Mine in Section 35, Township 17 North, Range 16 West. The Northeast Church Rock Mine was operated by United Nuclear Corporation under a lease with Santa Fe Pacific Minerals Corporation, now Santa Fe Pacific Gold Corporation. That lease recently terminated after the adoption of the New Mexico Mining Act.

The second uranium mine for which submission is not made with this letter is the Old Church Rock Mine in Section 17, Township 16 North, Range 16 West. Santa Fe Pacific Gold Corporation believes that ongoing mining operations exist or are contemplated at that site by its most current lessee, Hydro Resources, Inc., and is informed that that company is already in contact with MMD

Mr. John Lingo, Director  
August 31, 1994  
Page 3

concerning any Mining Act responsibilities that may be applicable to the operations.

Santa Fe Pacific Gold Corporation's purpose for voluntarily submitting the enclosed requests for approval of prior reclamation, and for identifying in this letter the two leased uranium mine sites for which no submissions are made, is to cooperate fully and in a spirit of good faith so as to assist the Mining and Minerals Division in its tasks of identifying and narrowing down the potential Mining Act-regulated operations that may require a greater level of regulatory involvement.

If you have any questions concerning this letter, the enclosed submissions or the nonwaiver/preservation of rights language included, please do not hesitate to call.

Very truly yours,

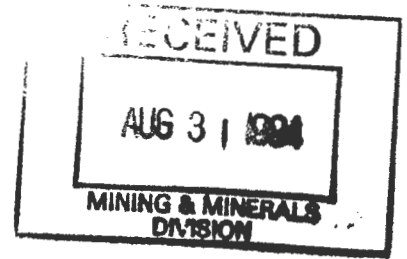
  
Tim Leftwich for

## Request For Approval Of Prior Reclamation

**Name Of Mine:** Marquez Mine

**Topographic Location Of Mine:** Section 23, T.13N., R.9W.

**Operator Name:** United Nuclear Corporation



**Description Of Site Condition:** United Nuclear leased this section from Santa Fe Pacific Minerals Corporation. Open mine features were backfilled in 1987 and the site reclaimed. Areas of surface disturbance were revegetated with native species and topography returned to natural contour to the extent possible. Additional reclamation was conducted in 1994.

**Date Of Request:** August 31, 1994

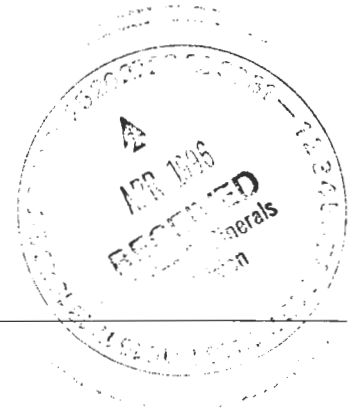
**Non-waiver/Preservation Of Rights:** This request for approval of prior reclamation is made with the express understanding that Santa Fe Pacific Gold Corporation fully preserves and does not waive any of its positions that it has no obligations whatsoever under the Mining Act with respect to these sites including, but not limited to, the following positions:

1. That any commodities or other materials produced from the properties or activities thereon constitute commodities, materials or activities regulated by the Nuclear Regulatory Commission such that the Mining Act does not apply;
2. That minerals were not produced from the properties in marketable quantities for a total of two years since January 1, 1970;
3. That as mere owner of mineral interests and lessor under instrument(s) pursuant to which operations owned and conducted by others occurred on the properties, Santa Fe Pacific Gold Corporation was not and is not an operator or owner of the operations with responsibilities, if there be any, under the Mining Act; and
4. That Santa Fe Pacific Gold Corporation has no obligation whatsoever to request approval of prior reclamation or carry out other responsibilities, if there be any, pertaining to the properties in relation to the Mining Act.

Santa Fe Pacific Gold Corporation makes this submission with the further understanding that neither the submission itself, nor anything stated therein, nor the fact of making the submission shall be advanced in any context, form or respect by the State of New Mexico or any agency or subdivision thereof as evidence or as an admission of any kind on any issue which may exist or hereafter arise in relation to Santa Fe Pacific Gold Corporation or its mineral properties in connection with the Mining Act.



BOX 27619 ALBUQUERQUE NEW MEXICO 87125  
6200 UPTOWN BLVD NE SUITE 400  
ALBUQUERQUE NM 87110  
TEL 505-880-5300 FAX 505-880-5435



April 25, 1996

Mr. Holland Shepherd  
Bureau Chief  
Mining Act Reclamation Bureau  
Mining & Minerals Division  
2040 S. Pacheco St.  
Santa Fe, NM 87505

Re: Poison Canyon Mine

Dear Mr. Shepherd:

I am in receipt of your letter advising Santa Fe Pacific Gold Corporation that the Poison Canyon Mine is the only site for which we previously sought prior reclamation approval where further work will be necessary pursuant to the New Mexico Mining Act. We hereby respond without waiving any of our previously reserved positions regarding the New Mexico Mining Act in relation to Santa Fe Pacific Gold Corporation and the sites for which we sought prior reclamation approvals.

Your letter asks whether we have a more current address than the Grants, New Mexico address in your records for Reserve Oil and Minerals, the former operator of the site. Our files reflect that the current address of Reserve is as follows:

Suite 380, 20 First Plaza  
Albuquerque, New Mexico 87102

1-505/247-2384

Meanwhile, however, it would be helpful in evaluating our intentions concerning the Poison Canyon site if you would provide us with all information you have concerning the site, an assessment of what MMD believes still needs to be done, and your estimation of whether the site might be eligible for a variance or for permitting as a minimal impact site under the Mining Act.

Your letter also indicates that MMD has determined that certain sites which you previously advised were not eligible for a prior reclamation release are not, it turns out, within the definition of existing mining operations under the Act. Because Santa Fe Pacific Gold Corporation was not the operator of those sites, we have not attempted to evaluate production data to confirm your conclusions, which I assume are based on more than just our reservation of the legal position that the sites may

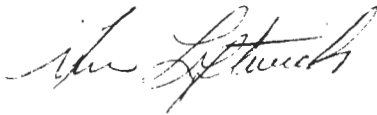
April 25, 1996

Page 2

not have produced in marketable quantities for a total of two years under the pertinent definition. Santa Fe Pacific Gold Corporation contends we do not meet the definition of operator under the Act, therefore we have no obligation to conduct further reclamation of the Poison Canyon site.

We respectfully request a meeting concerning the state of the Poison Canyon site and how this issue might be resolved. Thank you very much.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Tim Leftwich".

Tim Leftwich  
Vice President -  
Environmental Quality

c: P. M. James  
G. R. Wagner  
W. Jarke  
S. R. Butzier





NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

MINING AND MINERALS DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-5970

Jennifer A. Salisbury  
CABINET SECRETARY

Kathleen A. Garland  
DIVISION DIRECTOR

May 13, 1996

Mr. Tim Leftwich  
Vice President - Environmental Quality  
Santa Fe Pacific Gold Corporation  
P.O. Box 27019  
Albuquerque, NM 87110

**Re: Prior Reclamation, Poison Canyon Mine, Santa Fe Pacific Gold Corporation**

Dear Mr. Leftwich:

Thank you for your letter of April 25, 1996. Your cooperation in addressing the Poison Springs prior reclamation question is greatly appreciated.

You mentioned in your recent letter that you had assumed we had dropped the six sites mentioned in our February 13, 1996, from the list of sites requiring reclamation under Mining Act because of the marketable mineral clause found under the definition of "existing mining operation," in the Mining Act. This is correct, we determined that these sites did not meet the definition of an "existing mining operation." We were unable to find any record showing that these operations produced marketable minerals for a total of two years between January 1, 1970 and July 18, 1993.

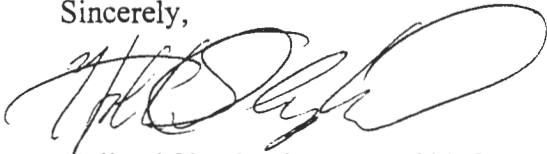
Regarding the status of the Poison Springs site, this must be resolved through a variance or permit application. Pursuant to the New Mexico Mining Act (NMMA) Rules Subpart 510, Santa Fe Pacific Gold Corporation applied to the Mining and Minerals Division (MMD) for an inspection of prior reclamation of their Poison Canyon Mine. During the inspection, MMD personnel could not determine if Santa Fe Pacific Gold's reclamation was successful because the newly seeded vegetation had not had enough time to become established.

MMD is agreeable to granting a variance from the September 30, 1995 deadline addressed in NMMA Rule Subpart 510.B if a variance request is submitted and the requirements of public participation in NMMA Rules Subpart 9 are completed. If the variance is granted MMD will reinspect the reclamation of the Poison Canyon Mine at a time to be agreed upon by the operator and MMD. If then the Director determines that the reclamation measures at the Poison Canyon Mine are consistent with the requirements of the NMMA and Rules then, pursuant to NMMA Rules Subpart 510.B, the Director will release the owner or operator from further requirements of the Act and Rules.

Thank you for sending us the updated address for Reserve Oil and Minerals Corp. We will again attempt to contact Reserve Oil and Minerals Corp. regarding the Poison Springs site. However, until we can get some type of commitment from Reserve Oil we must continue to consider Santa Fe Pacific Gold responsible for the site.

We would be happy to meet with you concerning the status of the Poison Springs mine. I will have sometime during the afternoon of Mon. 5/20 to meet and the afternoon of Fri. 5/24. I will then be out of the office until June 5, 1996. It is very important we resolve this as soon possible because of the time frames set up in the NMMA Rules.

Sincerely,

A handwritten signature in black ink, appearing to read 'H. Shepherd', written in a cursive style.

Holland Shepherd, Bureau Chief  
Mining Act Reclamation Bureau  
Mining and Minerals Division

HWS/RSY

cc: Kathleen Garland, Director, MMD





BOX 27019, ALBUQUERQUE, NEW MEXICO 87125  
6200 UPTOWN BLVD NE, SUITE 400  
ALBUQUERQUE, NM 87110  
TEL 505-880-5300 FAX 505-880-5435

November 21, 1995

Ms. Kathleen A. Garland, Director  
Mining and Minerals Division  
Post Office Box 6429  
Santa Fe, New Mexico 87504-6429

Re: September 29, 1995 Letter and Inspection Report on Voluntary  
Prior Reclamation Requests of Santa Fe Pacific Gold Corp.

Dear Ms. Garland:

Thank you for your letter dated September 29, 1995 reporting on the results of the prior reclamation inspection requests that Santa Fe Pacific Gold Corporation ("Santa Fe") submitted on August 31, 1994. You will recall that Santa Fe's submissions were voluntary. Santa Fe is not the operator or owner of the operations, despite the various references in the Inspection Report to Santa Fe as the operator, and despite the request for further action in your letter.

Although Santa Fe is not responsible, we nonetheless were surprised and disappointed to learn that only three of the reclaimed sites qualified for release in MMD's estimation. Santa Fe respectfully disagrees with the recommendations of the inspectors and the determination of MMD that the seven sites listed on the second page of your letter do not qualify for release under the prior reclamation provisions of the Mining Act.

The purpose of this letter, however, is not to discuss the specifics of that disagreement.

Rather, my purpose is to notify your office that Santa Fe does not itself intend to take any further steps in connection with obtaining variances or existing mine permits for the sites. Please refer to my August 31, 1994 letter accompanying the prior

reclamation submissions. Santa Fe submitted the applications in a spirit of cooperation to assist MMD with its initial tasks of identifying and narrowing down the potential operations that may need some level of regulatory involvement.

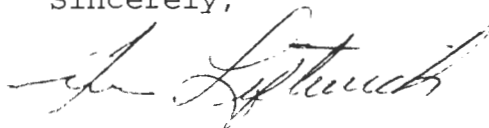
In extensive prior communications with MMD, Santa Fe and others have pointed out the clear statutory and long-established regulatory confirmation that landowners or passive royalty owners who had no operational control or ownership interest in the operations are not the parties with reclamation and permitting responsibilities. Santa Fe also explained its position that uranium operations are excluded from the Act's coverage during the development of regulations. We preserved all of Santa Fe's positions in my August 31, 1994 letter. I assume our analyses need no further explanation here, but if you have any questions or desire anything further from us in this regard, please advise.

Your September 29 letter mentions one reclaimed mining site that your staff was not able to locate on the ground. With respect to that site, I would suggest that you contact the operator, United Nuclear Corporation, to ascertain the exact location and extent of its operations.

I assume that MMD will promptly notify the responsible operators of the opportunity to obtain a variance and the possibility that a permit will be required, as outlined in your September 29 letter. Santa Fe notified MMD of who those operators are, and I note that they are referred to in the Inspection Report. Santa Fe is also willing to share any information we may have that would assist MMD with locating the operators, to the extent that they may still exist.

Please contact Paul Eby or Denise Gallegos of our office with any questions relating to locating an operator. Of course, if I can answer any questions, please call.

Sincerely,



Tim Leftwich  
Vice President - Environmental Quality

cc: Paul Eby  
Denise Gallegos