

# Status of Reclamation Compliance at Gay Mine

Fort Hall Agency, Idaho  
July 1997

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## EXECUTIVE SUMMARY

In response to perceptual differences between interested parties regarding the desired final product of mining operations and subsequent reclamation on the Gay Mine, Ft. Hall Agency, ID, the trust agencies (Bureau of Indian Affairs and Bureau of Land Management, DOI) initiated a detailed inspection and evaluation of the surface disturbances associated with mining operations as they appeared in Fall, 1996. The inspectors examined operational sites three years after active mining had ceased. They also examined the available files to determine the level and intensity of contractual commitments made by the mining companies and/or required by the regulatory agencies. This latter effort required the review of existing lease agreements, mining plans, environmental assessments, reclamation plans, letters of authorization, conditions or stipulations of approval, and other relevant documents. In some cases, the intentions of the interested parties were not always entirely clear, and much of the language of the early agreements was non-specific and nebulous, at times even contradictory. Nevertheless, the inspectors/authors have endeavored to interpret existing documentation as literally as possible without amplifying contemporary expectations or requirements by a factor derived from modern regulation or technology.

The state of reclamation or remediation on the Gay Mine covers an entire spectrum of quality from excellent rangeland or habitat restoration to none at all, without apparent regard for the period of active operations. In general, most of the existing spoils dumps on the lease have been reclaimed to high standards and, with few exceptions, they are supporting diverse, stable, and functional plant communities. The problems associated with spoils dumps are usually minor and can be repaired with minimal cost or mechanical effort. A relative few have more serious problems requiring more intensive repair. Much greater deficiencies were found in mining pit sites, leaving an impression that the heavy equipment operating on them was abruptly shifted to other mining operations when the ore extraction stopped. Although there are also exceptional examples or exemplary mining reclamation of pits (e.g. JG Pit and II Pit), there are many others that received no post-mining treatment at all. Some of these will require relatively extensive efforts to reclaim to contemporary standards, including backfilling, high wall reduction, reshaping the surface, installing safety structures, and revegetation. The term "standard" as used in this manuscript implies measures of quality of mining/reclamation practices that were consistent with reasonable expectations within the industry at that particular point in time. Other pits contain

dumped materials nearby that will expedite reclamation and closure. Many of the primary and ancillary support facilities have not been removed or cleaned up and this needs to occur without delay or protest, since closure and abandonment cannot go forward until then. Other problematical issues and sites are addressed in detail in the main text of this report.

Since all of the invoked parties recognize that further delays are costly, it is hoped that the recommendations contained in this report will find concurrence from all of the interests. Consideration has been given to the high costs associated with reclamation technology and in some instances the authors have rejected resolutions that would have required excessive expenditures. In all cases, the suggestions in this manuscript relate most directly to the standards that prevailed at the time of active operations and the reasonable expectations that originated from them. The companies are encouraged to develop remediation alternatives or innovative compromises that all interested parties can agree to in order to achieve an acceptable final product. We are hopeful that the recommended actions can be implemented and the lease can proceed to final closure.



**Figure 1.** The headquarters(Campsite) area of the Gay Mine during active operations. In its peak years of productivity, over 2,000,000 tons of phosphate ore were mined annually.



## TABLE OF CONTENTS

---

|   |    |
|---|----|
| I. <u>Introduction</u> .....                                      | 11 |
| II. <u>Historical Overview</u> .....                              | 13 |
| III. <u>Chronology of Regulatory Oversight</u> .....              | 13 |
| IV. <u>Chronology of Reclamation Technology Evolution</u> .....   | 16 |
| V. <u>The Mining Sequence</u> .....                               | 21 |
| VI. <u>Observed Compliance to Existing Standards</u> .....        | 23 |
| A. <u>Headquarters and Tipple Area</u> .....                      | 23 |
| B. <u>North Limb</u> .....  | 30 |
| C. <u>East Limb - Group 1</u> .....                               | 35 |
| D. <u>East Limb - Group II</u> .....                              | 41 |
| E. <u>South 40 Area</u> .....                                     | 44 |
| VII. <u>Summary of Specific Conclusions/Recommendations</u> ..... | 49 |
| A. <u>Headquarters and Tipple Area</u> .....                      | 49 |
| B. <u>North Limb</u> .....  | 52 |
| C. <u>East Limb - Group 1</u> .....                               | 55 |
| D. <u>East Limb - Group II</u> .....                              | 57 |
| E. <u>South 40 Acres</u> .....                                    | 58 |
| F. <u>Other Considerations</u> .....                              | 60 |
| CONSULTATIONS WITH OTHERS .....                                   | 61 |
| Appendices .....  | 62 |

## LIST OF FIGURES

---

|   | <i>Page</i> |
|---|-------------|
| <b>Figure 1. Headquarters Area</b>            | <b>4</b>    |
| <b>Figure 2. JG Pit Reclaimed</b>             | <b>18</b>   |
| <b>Figure 3. A12 Pit</b>                      | <b>26</b>   |
| <b>Figure 4. Abandoned Haul Road</b>          | <b>29</b>   |
| <b>Figure 5. Weed Infestations</b>            | <b>29</b>   |
| <b>Figure 6. K4 Pit</b>                       | <b>33</b>   |
| <b>Figure 7. C9 Pit in North Limb</b>         | <b>33</b>   |
| <b>Figure 8. HH-GG Pit</b>                    | <b>38</b>   |
| <b>Figure 9. Dumpfaces in HH-GG Pit</b>       | <b>39</b>   |
| <b>Figure 10. Dumpfaces in HH-GG Pit</b>      | <b>39</b>   |
| <b>Figure 11. Reclaimed Area in East Limb</b> | <b>43</b>   |
| <b>Figure 12. JD Pit</b>                      | <b>47</b>   |
| <b>Figure 13. JC Pit</b>                      | <b>47</b>   |

## LIST OF MAPS

---

|                |    |
|----------------|----|
| <i>Plate 1</i> | 9  |
| <i>Plate 2</i> | 25 |
| <i>Plate 3</i> | 31 |
| <i>Plate 4</i> | 36 |
| <i>Plate 5</i> | 46 |



## APPENDICES

---

- A1     Phosphate Surface Mining Lease**  
*Dated February 4, 1946*
- A2     43CFR, Part 196 - Phosphate Lease Use Permits**
- A3     Mining Lease**  
*Dated July 1, 1966*
- A4     Mining Plan Approval**  
*Dated February 6, 1974*
- A5     Partial Approval**  
*Dated February 25, 1976*
- A6     Conditions of Approval**  
*Dated September 21, 1978*
- A7     Approval to Partial Mining Plan**  
*Dated November 7, 1979*
- A8     Approval to Partial Mining Plan**  
*Dated December 21, 1979*
- A9     Approval to Partial Mining Plan**  
*Dated January 8, 1980*
- A10    Approval Stipulations ....**  
*Dated June 19, 1896*
- A11    Mining Plan Submission**  
*Dated August 5, 1986*

**A12 Approval to Modified Partial Mining Plan**

*Dated August 5, 1986*

**A13 Stipulations of Approval**

*Dated October 23, 1986*

**A14 Conditions of Approval to "Expansion Area" Mining Plan**

*Dated October 27, 1986*

**A15 Stipulations of Approval**

*Dated May 24, 1986*

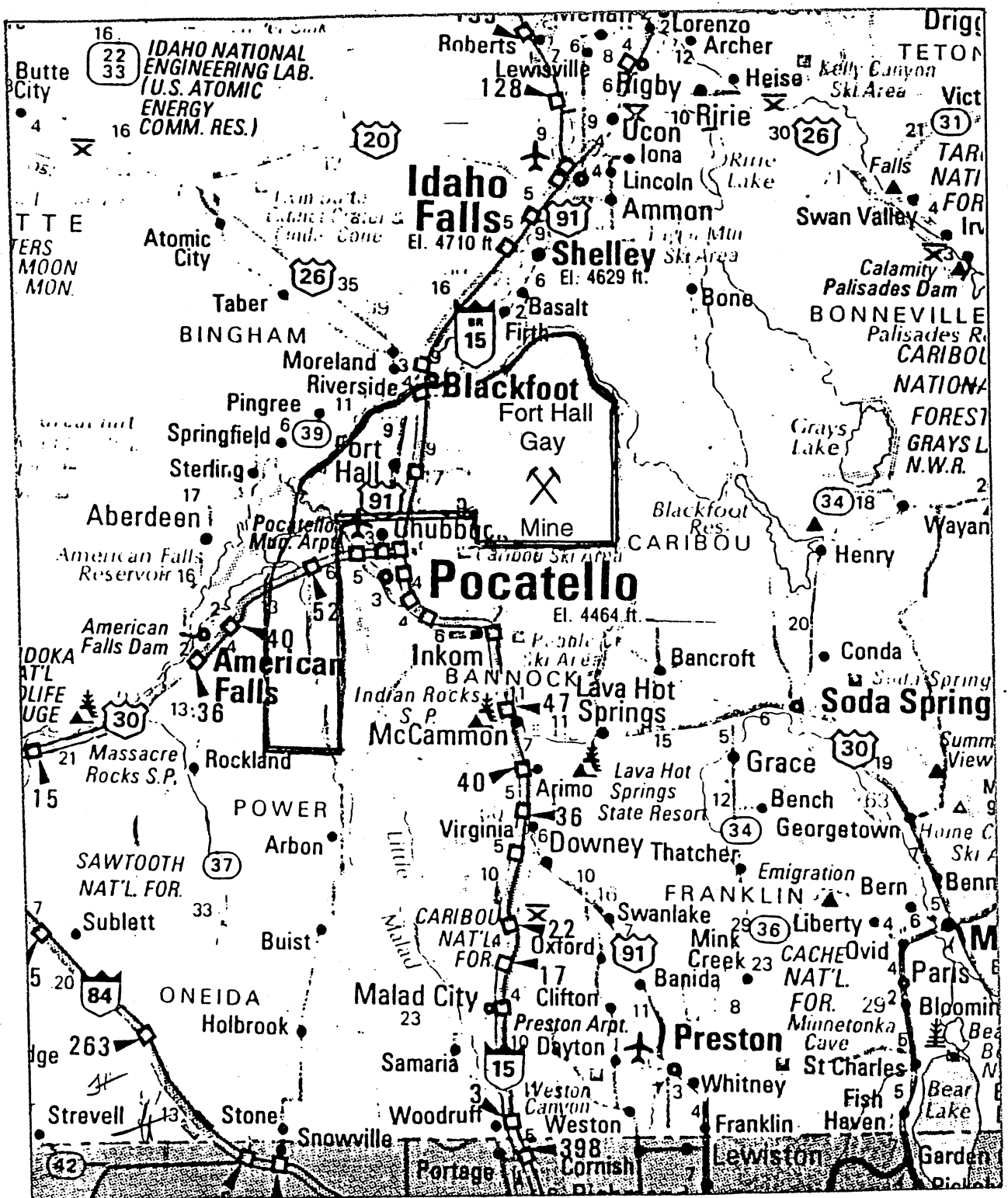


Plate 1. Map Showing the General Location of the Gay Mine, Fort Hall Indian Reservation, Idaho.



## I. Introduction

In August, 1996, the authors were directed by their respective agencies (the Bureau of Land Management (BLM) and the Bureau of Indian Affairs (BIA), both within the Department of the Interior (DOI), to perform a review of the status of the various actions required to finalize closure of operations for the Gay Mine on the Fort Hall Indian Reservation, 25 miles NE of Pocatello, Idaho. The status of surface reclamation of mine pits, spoils dumps, mill shale storage piles, haul roads, former facility sites, and other disturbances, was determined by on-site inspections via vehicle, foot, and horseback. Each site was considered in terms of the period in which mining activities were actualized and the standards, specifications, obligations, and technology that prevailed at that point in time. Considerable variety in the quality of reclamation efforts was found within the same phases of operation in the mining sequence, suggesting that different supervisors and equipment operators demonstrated differential commitment to and/or familiarity with reclamation guidelines. In general, the overall quality of the reclamation program appeared to be good over the general landscape, with small to mid-size inclusions that were not completed or reclaimed adequately or satisfactorily. We were left with the general impression that in many sectors, the restoration process was terminated prematurely, before the last stages could be implemented.

The field inspection was undertaken by the Federal agencies as a trust responsibility to ensure that adequate measures had been taken by the lessees to avoid, minimize, or correct hazards and/or environmental damage. A Memorandum of Understanding signed in 1984 by BIA (Portland Area Office) and BLM (Alaska, Oregon, Washington, Idaho, and Montana State Offices) states that "Federal involvement will begin when a Federal decision is needed regarding surface disturbance, access, confirmation of mineral rights, or approval of permits, leases, and plans, under Titles 25 and 43 of the Code of Federal Regulations (CFR)". The MOU continues, that "the BLM has responsibility for supervision of mineral developments including leasing on Federal lands, and trust responsibility for approval and management of mineral exploration and mine plans on Indian minerals lands. The BIA has the lead Federal

trust responsibility for issuance and general administration of mineral permits, leases and bonds on Indian minerals lands".

During the course of the field review, several considerations were advanced so that determinations of reclamation adequacy could be made fairly and equitably. The process was grounded in the supposition stated earlier - that reclamation success or failure should be measured by the standards that were contemporary during active operations. As each site was visited and evaluated, the following qualifications were applied: (1) what specifications were required under federal regulations in effect during operations?, (2) what contractual obligations had been incurred by the mining companies in conjunction with lease terms and conditions?, (3) what standards were required by the current mining plan, environmental assessment, or reclamation plan?, (4) what standards were mandated by existing environmental legislation?, (5) what standards could be reasonably expected given the development and evolution of current technology?, and (6) what variances, modifications, and amendments were issued prior to the completion of programmed work?.

As agreed by the jurisdictional Federal agencies and the Shoshone-Bannock Tribes, an effort has been made in this evaluation to keep recommendations and findings within reasonable and equitable bounds. The mining companies, the J.R. Simplot Company and FMC Corporation, are not expected to perform extravagant or excessive work to accomplish suggested remediation. Recommended procedures attempt to avoid disagreement or controversy by offering practical solutions that are cost-effective and acceptable to all parties.

The conclusions reached herein represent the consensual perspective of the BLM, the BIA, and the Shoshone-Bannock Tribes, for remedial measures at the Gay Mine that will lead to comprehensive final closure, bond release, and release from continuing residual payments.

## **II. Historical Overview**

The Simplot Fertilizer Company (now J. R. Simplot Co.) was established in 1945 to serve regional agricultural markets for phosphate fertilizers. As those markets expanded, the company pursued extractable resources on the Fort Hall Indian Reservation and in 1946 negotiated a lease with the Shoshone-Bannock Tribes, individual Indian land-owners, the BIA, and the U.S. Geological Survey (USGS) to perform open-pit mining for phosphate ore. The Gay Mine opened in 1946 and became one of the earliest open-pit and ultimately, the longest-operating phosphate mine in Idaho. In 1948, the Union Pacific Railroad constructed 21 miles of standard gauge railroad line between the Fort Hall Agency and the mine tipple.

The Gay Mine produced two basic grades of ore: the high grade (or acid grade rock) contained 30% or more phosphate and was used by Simplot for fertilizer production; the lower grade (or furnace grade shales) contained an average 24.5% phosphate and has been marketed after reduction to an elemental form to produce detergents, cosmetics, and a multiplicity of other products. The Westvaco Chlorine Products Company (later assimilated by Food and Machinery Corporation (FMC)) opened an electric furnace plant near Pocatello in 1949 to provide an instant market for the lower grade ore. The current Simplot fertilizer plant, which utilized 300,000 tons of ore annually at peak production (late 1970's), is adjacent to the FMC elemental phosphorous plant, which utilized 1,700,000 tons annually. The Gay Mine continued operation until 1993, at which time economically extractable ores had been essentially depleted.

## **III. Chronology of Regulatory Oversight.**

After origination of the lease in 1946 by BIA, regulatory and administrative responsibility for the extraction of the subsurface mineral phosphate remained with USGS until 1983, at which time the reorganization of the parent agency created the Minerals Management Service (MMS). During the period 1982 - 1983, MMS



supervised all mining operations on open-pit Idaho phosphate mines until it was combined with the BLM in 1983. Since that time, BLM has assumed control over mining and exploration operations. During this entire period until the present, BIA has retained administrative control over permits, leases, and bonds.

It is important to note that there were two basic types of leases in effect at the Gay Mine. Mining leases affected the removal or physical extraction of overburden and phosphate ore from specified sites. Business leases were employed to authorize road and auxiliary facilities construction and the placement and storage of waste materials and mill shales. During the term of active mining, some leases were held jointly by FMC and Simplot; others were held separately.

The lease authorizing Simplot Fertilizer Company to commence phosphate extraction was formalized on February 4, 1946. The content of that lease addresses the subject of landscape restoration in an indirect manner by simply stating that the lessee will "return the premises upon the termination of the lease to whomever shall be lawfully entitled thereto, in as good condition as received--". Title 43 of the Code of Federal Regulations, Part 196 - Phosphate Leases and Use Permits, in effect at that time, enjoins the lessee that his proposed operations of the property will be in accordance with good conservation practice --"(Section 196.7(f)(4)). Title 25 CFR 171.24 provided that "when the lease is surrendered, the lessee shall deliver to the Government the leased ground with the mine workings in good order and condition, and bondsmen will be held for such delivery in good order and condition". Further, these regulations require that operating equipment may be removed by the lessee "only after the condition of the property has been ascertained by inspection by the Secretary of the Interior or his authorized agents, to be in satisfactory condition". 30 CFR 231.5 only required the following, "prior to the beginning of actual mining operations, maps and plans showing the proposed mining methods and the plant layout shall be submitted to the district mining supervisor for approval. Such maps and plans shall be modified as required by the district mining supervisor---". There were no specific requirements in the latter regulations for land reclamation subsequent to mining.

In a letter to his superior dated February 8, 1974, the USGS District Mining Engineer, John T. Skinner said that "a representative of the operating company explained recently, that to the best of his knowledge and according to company files, mine plan proposals were not required or submitted prior to 1970". Moreover, he continues, "during the same time period (1970 - 73) there were no environmental assessment reports, environmental impact statements, or reclamation plans received by the USGS as they related to 43 CFR 231, 25 CFR 177, and (the National Environmental Policy Act (NEPA). Possibly the lack of reclamation planning can be found in 25 CFR 177.2c which states "the regulations in this part shall apply only to permits and leases issued subsequent to the date on which these regulations become effective and which are subject to the approval of the Secretary of the Interior or his designated representative".

On February 22, 1973, the Secretary of the Interior signed an Executive Order which brought Indian Trust Lands under the protection and jurisdiction of NEPA 1969. NEPA provided a fundamental mandate that all Federal agencies protect and enhance the quality of the human environment and submit all proposed actions on Federal lands to a prescribed analytical process. Environmental Assessments (EAs) were required on all public land actions that would cause environmental impacts not previously analyzed. Environmental Impact Statements (EISs) were required for any Federal action significantly affecting the quality of the human environment.

Under the new NEPA authority, the BIA in 1973 requested that the mining companies prepare an Environmental Assessment. This first document was prepared by Simplot staff and submitted for agency review. After revision, the EA including mitigating measures was approved in 1974.

Since that time, the operating companies or their consultants have prepared and successfully submitted several major mine plans/reclamation plans. The "Group I" Plan was approved on September 21, 1978. The "Group II" Plan was approved on January 7, 1980. Finally, the "South 40" Plan was approved on October 27, 1986. Other authorizations or modifications were also approved: the KK-1/JJ-3/JA-1

Mine/Reclamation Plan on August 5, 1986, the A12 Mine/Reclamation Plan on May 24, 1989, and JD-2 Modification Plan on October 1, 1991. The JB Mine/Reclamation Plan was submitted in 1992 but never approved.

#### **IV. Chronology of Reclamation Technology Evolution**

In the first EA prepared and submitted by Simplot in 1974, the company articulated its reclamation strategy in detail. Each year, they would rehabilitate at least as much land as was disturbed in that year. Each area where operations were complete and no future mining was expected to take place would be sequentially revegetated. In the first step, old, mined-out pits would be filled as full as economically possible with overburden/spoils from other operations. In the second step, all dumps in the area would be graded to slopes that would not erode. Then, topsoil would be saved where practical and redistributed over disturbed sites. Finally, disturbed lands would be ripped and reseeded with crested wheatgrass (Agropyron cristatum). These measures, it was felt, would restore the disturbed lands to full use for grazing. Highwalls would be fenced or some other action satisfactory to landowners would be taken to eliminate hazards. After mining was completed, the company was confident that "the area will still be productive because of rehabilitation measures being practiced as areas are mined out. Grazing, which was the principle use of the land before mining began, will continue. A few years after operations cease, the ground should recover to its original carrying capacity and in some cases, exceed it".

During 1976 and 1977, the US Forest Service (USFS) and the Soil Conservation Service (SCS - now the Natural Resources Conservation Service (NRCS)) provided assistance by constructing test plots in order to facilitate selection of plant species and fertilizers best suited to reclaim southeastern Idaho mined lands. At the same time, SCS and USFS scientists were advising Simplot/FMC to adopt substantially more sophisticated reclamation methods. By 1977, the companies were employing more complex reclamation strategies, including the following components:

- Diverse seed mixtures including native grasses, forbs, and shrubs identified as dominant constituents of baseline vegetative communities.
- Greater emphasis on shrub establishment.
- Stripping and stockpiling topsoil before mining.
- Recontouring of backfilled mine pits and spoils dumps to approximate natural landscapes.
- Ripping compacted soils to one- to three- foot depths to facilitate water infiltration and aeration, plus plant root expansion.
- Redistribution of topsoil over rough or unsuitable surfaces.
- Discing/harrowing of soil surfaces after topsoil distribution.
- Fertilizer distribution on reclamation sites in amounts of 60- to 100-lbs N/acre, 60- to 75-lbs P/acre, and 100-lbs K/acre.
- Discing/harrowing a second time after fertilizer application to ensure vertical distribution.
- Late fall seeding with a rangeland drill, broadcaster, or packer/seeder.
- Fencing some reclaimed areas to exclude livestock until after seedling establishment.
- Application of seed mixtures at rates of approximately 39 lbs/acre (some prescribed species were not available at that time from regional seed distributors).



**Figure 2. JG Pit Reclaimed** One of the many examples of Gay Mine exemplary reclamation techniques. The pit has been backfilled to top of highwalls and regraded to create a closed basin effect. Topsoiling, ripping, tilling, seeding and fertilization have resulted in excellent diversified vegetative cover.

Reclamation technology continued to be refined and modified during the period 1977-1986. Many techniques were introduced after data became available from the experimental plots installed, monitored, and analyzed by Dr. Blane Z. Richardson, USFS, Intermountain Research Station. Additional equipment had been purchased by the operators. A cyclone seeder was being used to reseed sloped, rough, or rocky terrain. Maintenance fertilizer applications in the spring were administered to reclaimed sites. By 1986, the following procedures and policies had been incorporated into the Gay Mine reclamation strategy (Mariah Associates, Inc.):

- All amenable-to-reclamation areas would be backfilled and/or sloped to 3H:1V or less.
- Highwalls would be reduced wherever practicable.
- Topsoil would be salvaged and redistributed on reclamation sites to a depth of 8-10 inches. "Top soils" were constituted by soil material removed from the A, B and C horizons (generally 0 - 46 inches deep in the soil profile) which, after mixing and stockpiling, provided a suitable growth medium for plant growth.
- Prescriptions were formulated for restored wildlife habitat as well as rangeland. Objectives included a ratio of 40% wildlife habitat to 60% grazing land.
- Reclaimed soils would be ripped to a depth of 12 - 18 inches on the contour. When necessary, secondary tillage with a spring-tooth or disc harrow would occur.
- Separate seeding mixtures were applied for range sites vs. wildlife habitat sites.
- Seeding on range sites would be accomplished with a cyclone seeder; seeding on wildlife habitat sites would place alternate rows of grasses with forbs and shrubs with a Brillion seeder/packer.
- Compacted sites would be disced or harrowed to eliminate surface crusting.
- All access roads, haul roads, and facility sites would be ripped, fertilized, seeded, and reclaimed.
- Fertilizer would be spread with a cyclone seeder.
- Fencing would be installed to protect reclaimed sites with company materials and BIA labor.

- Noxious weed infestations were seen as a minor problem on revegetated areas that would be controlled with localized contact spraying with herbicides, however, no provisions were made for eradication.
- Monitoring would be implemented to evaluate revegetation success. Final evaluation would occur before relinquishment of obligations. "Revegetation success" was defined as adequate cover to protect soils, adequate forage production for livestock/wildlife, and acceptable species composition and diversity for forage, shelter, and ecological stability.

Generally, these principles and policies were followed for the duration of operations. This, however, does not imply that the reclamation process on Gay Mine is complete. From appearances, localized reclamation and land-shaping ceased when nearby fill sources were exhausted and the mine closed, leaving problematical sites in numerous locations. These will be discussed in a later section. All coordinated reclamation efforts stopped when the mining companies removed all heavy equipment in 1993, except for individual contracts with tribal members to perform ripping and seeding which continued until 1995.



## V. The Mining Sequence

Historically, the economics of the phosphate industry have required a high volume, low unit cost approach to extraction and processing. In its peak years' of production, Gay Mine produced approximately 2,000,000 tons of ore per year. The phosphate mineral, cryptocrystalline carbonate-fluorapatite, occurred in strata that was generally steeply sloped and frequently interrupted by faults. Ore bodies frequently occurred in beds that were overturned or blocked by faults. The only economically feasible method for extracting this mineral was a surface mining operation that initially required the removal of substantial deposits of overburden. Such overburden materials consisted principally of chert, shales, and limestone deposits. Economically recoverable ore bodies occurred at shallow depths to beds covered by more than 300 feet of alluvium. Ultimate limits of the mining cuts depended on the amount and nature of the ore-bearing material and the economics of retrieval.

The most efficient method for phosphate mining at Gay Mine required a multiple-pit approach because of the discontinuous and scattered nature of minable ore bodies. This process facilitated backfilling of older pits so that land reclamation could proceed. As a first step, topsoil and alluvium were stripped and removed to stockpiles for future redistribution. Secondary overburden removal often required ripping or blasting with explosives prior to stripping. Heavy equipment deployed for stripping included hydraulic shovels (11 cubic yards), 35-ton end-dump trucks, twin engine scrapers, and front-end loaders. Much of the overburden was used to fill accessible previously mined pits; the remainder went to external spoils dumps. Selective ore removal required smaller (4-6 cu. yd.) shovels and trucks.

In the course of annual operations, all mining, hauling, and shipping of ore was accomplished in the May - October period. This was necessitated by the following reasons: (1) ores would freeze in the haul trucks and rail cars in the winter, and (2) heavy snowfall in winter resulted in very hazardous haul road conditions. Most overburden stripping was done in the winter. Because two basic grades of ore were



marketed, and the refining process was set up to handle two average grades with separate standards of impurities, separate stockpiles were necessary where ores were segregated and blended near the pits. These two types were subsequently hauled to the tipples and transported by railroad cars to the Simplot and FMC plants near Pocatello.

The mining procedure, which occurred in frost-free seasons, included excavating to recoverable depths in phases. Each phase was represented by 20-foot-wide benches placed every 60-feet in depth. Benched highwalls were normally found on only one side of the pit, but were occasionally needed on two or more faces, depending upon the incline of the ore stratum.

Backfilling occurred concurrently with active mining. Since backfilling was usually the most economic means of waste (overburden) disposal, it was utilized as often as possible as long as potentially valuable phosphate deposits lying deeper than the pit were not being covered. As long as this condition was met, or backfilling was practical on accessible sites, overburden was transported to previously mined pits. When transport of material to older mining pits was not deemed economical, overburden was placed in external dumps. Spoils dumps contained millions of tons of surplus material but were intended to appear, in their post-mining phase, as natural as possible with rolling or undulating contours and side slopes of 3:1 or less. The end product of this process was intended to be reclaimed areas that were "visually consistent with natural, undisturbed topography".

Another consideration in the process was the interim or semi-final disposition of mill shales or economically low grade ores. These are lower grade phosphatic shales that do not meet current requirements but may, in the future, as technology and economic markets improve, be processed or beneficiated into an economical product. Most of these have been mapped, shaped, sloped, and reseeded pending a final decision on their utility.

The final stage of surface disturbance involves the reclamation process. Policies and procedures for reclamation have been described in an earlier segment. The progression of reclamation activities, as listed in a 1986 EA, were as follows:

- Step 1. Where needed, placement of rock cores in the bases of waste dumps to provide drainage.
- Step 2. Backfilling of mine pits, shaping dumps to smooth contours, and final grading.
- Step 3. Topsoil replacement.
- Step 4. Primary tillage in the form of shallow ripping. Deep ripping of compacted areas such as haul roads.
- Step 5. Distribution of fertilizer and disking/harrowing.
- Step 6. Seeding.
- Step 7. Monitoring revegetation success.

## **VI. Observed Compliance to Existing Standards.**

### **A. Headquarters and Tipple Area.**

1. A general policing of the entire area has not occurred to affect the removal of trash and refuse, including but not limited to, material such as old tires, hoses, auto/machinery parts, cables, barrels and containers, broken tools, fencing material, samples, records, electrical parts, wood products, small sheds, and collapsed buildings.

2. The headquarters (campsite) area is a large complex of facilities associated with the mining operation. These will include the main tipple, chutes, loaders, conveyor belts and lines, various motors, engines, hydraulic pumps and lines, electrical systems, generators and assorted other equipment. Some of these items or materials will be retained by the Tribes but all else should be regarded by the mining companies as waste material.

3. The Union Pacific Railroad Company (UP) and the Surface Transportation Board (formerly the Interstate Commerce Commission (ICC)) still have not negotiated the disposition of 21.49 miles of railroad spur line presently lying between the main tipple and the Fort Hall Agency. The decision has been made to allow UP to abandon the line. However, consultations with the Tribes and compliance with the Historic Preservations Act must be completed.

4. The disposition of the airport or landing strip has not been finally determined. That decision remains with the Tribes.

5. All haul roads converge at the tipple; all those that will not be incorporated into the Agency transportation system have not been reclaimed. There are no water bars in evidence on any haul roads, regardless of slopes or grades. Three kinds of side cuts are seen along Gay Mine haul roads; vertical cuts, banked or terraced cuts, and 3:1 slopes, with consistent standards lacking in any of the primary sectors.

6. There are two damaged culverts on the haul road leading to the South 40 area southwest of A12 Pit.

7. The A12 Pit (west end) was abandoned leaving a standing highwall (approximately 80-100 feet high), with an empty cavity below. An aspen stand grows on the top (south side) of the highwall which will continue to slough. Fill material is available contiguous to the pit on the west side and the southeast corner. Additional fill material may be found on the slope to the northeast.







**Figure 3** After reclamation, several problems remain or have been recently developed. On the north face of the lake (on left) several gullies have formed as a result of overflow coming off main haul road. The excavation on right needs to be stabilized by using material from both sides to regrade a shallow U-Shape that extends to half the height of the highwall. Highwalls with aspen stand can be allowed to slump naturally until angle of repose is achieved.

8. The A12 Lake lies at the bottom of an excavation approximately 225-240 feet deep. Three large gullies have formed on the north side as a result of continuous and unscheduled discharge of water from the upper storage ponds. This water drained abruptly, allowing lower catchment ponds to overload. As water was discharged from the ponds, the surplus was piped under the main haul road into a V-ditch and from there free-flowed into the old pit. The high volume and velocity of the discharge created deep cuts. These gullies have not been plugged, backfilled, regraded or reclaimed.

9. On the south side of the A12 Lake, there are perched seeps and springs on the rim that have attracted concentrations of livestock. Any future remediation will be constrained by saturated soils and the inaccessibility to heavy equipment. There are presently no fences or obstructions to livestock access. Because of saturated soils and instability, the site is not amenable to restructuring.

10. A gravel pit above A12 Lake remains open. The Tribes have not made a final decision regarding the closure or continued access to materials at this site.

11. The reclaimed spoils dump southwest of A12 Lake has vertical ripping in a V-shape converging through a notch in the northeast corner of the site. This dump has been seriously impacted by livestock grazing. The effect is compounded by erosion occurring as a result of vertical ripping.

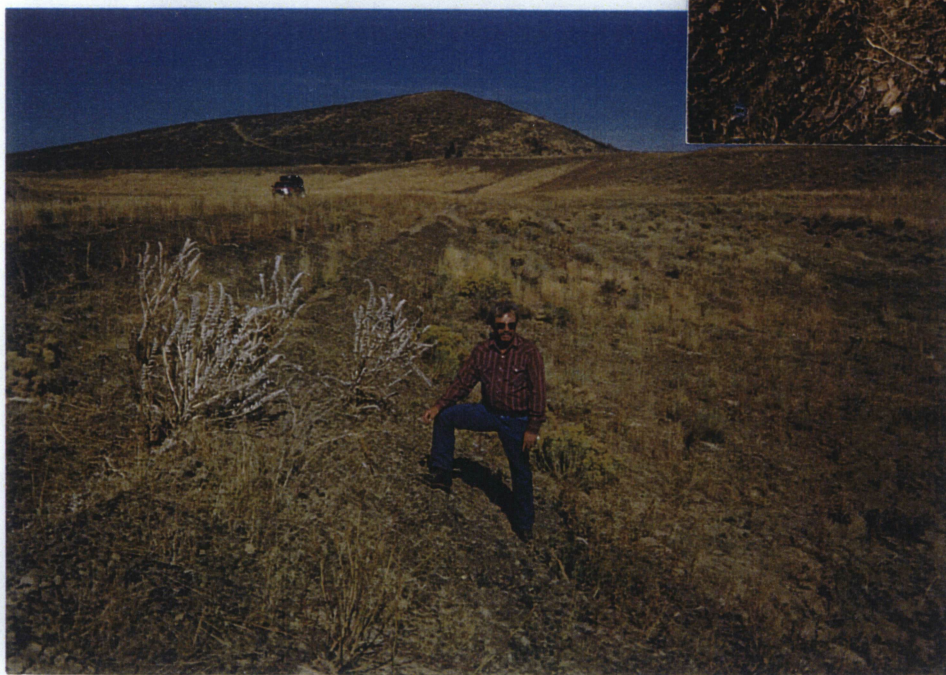
12. The land farm north-east of headquarters was established to biologically degrade hydrocarbons contained in oil-, gasoline-, and hydraulic fluid-soaked soils. The site presumably contains residual petroleum products which must be processed before the area can be certified and closed. Before that occurs, saturated soils from the old trash dump above A12 to the west will be incorporated and processed. The dump also contains oil filters, tires, and auto parts that have not been removed and disposed of.

13. There are three storage ponds above A12 Lake. Even in their present, unimproved state, they are aesthetically pleasing and attractive and impound high-quality, spring-fed water. Flow is controlled by a headgate leading into two overflow ponds which discharge onto the north side above the A12 Lake.



**Figure 4 Abandoned Haul Road**

This and other haul roads have been vertically ripped resulting in water channeling and erosion. Sloped linear surfaces will require water bars, followed by harrowing and reseeded.



**Figure 5 Weed Infestations** Haul roads are the primary establishment corridors for noxious, invasive plant species. To the left is black henbane; to the right is musk thistle and Russian knapweed.



## **B. North Limb.**

1. Active operations of the C9 Pit were concluded in 1978-79. On the south end of the pit, the excavation has been completely regraded and reclaimed. The backfill has been sloped at a gentle grade down to the east highwall and supports a vigorous community of grasses and forbs. On the north end of the pit, however, there is a large linear trench between the highwall and the terminus of the backfill. Spoils dumps to the east and north of C9 Pit have been reclaimed to more than acceptable standards and present a good example of reclamation success.

2. The Powder Shack remains locked and secured, suggesting that there are remaining explosives in that facility. Representatives from the Tribes have confirmed that the facility has been made available to the Fort Hall Police Department.

3. North of C9 Pit, the haul road proceeds between steep vertical walls on a wide Right-of-Way. The Tribes and the Ccompanies desire that this and other key haul roads remain in a physically and structurally intact condition so that mill shale reserves which have been stored on-site can be accessed in the future.

4. North of the cut referred to above, is the old G Pit on the right side of the road. From appearances, this pit was probably mined and backfilled under pre-NEPA regulations. The pit has been backfilled but doesn't appear to have ever been regraded. There are still pronounced piles, now covered with volunteer vegetative growth, instead of a graded slope. It looks as though transport trucks backed in, dumped spoils, and departed. The old highwalls have degraded and decomposed parent material has overlapped the backfill. Secondary succession is occurring on this raw material.



5. To the left of the road, there is another old pit that has been utilized to deposit what we were told by a company representative was loose mill shale, but we later learned was overburden. The material deposit is much more recent than the inactive pit. The materials were dumped over the edge of the pit to form a steep side slope. There was no subsequent action taken on these raw materials.

6. The K4 Pit is a large, deep, excavated crater with a rough, corrugated bottom and sides. The 1976 Mining Plan specified leaving a 12.05-acre pit but it appears to be larger. An attractive pink rock is exposed on the north and west sides, which gives the depression a unique appearance. On the north side, an installed water trough is running over and then pooling before discharging into the pit. The trough was probably installed by the BIA Land Operations Branch. However, a V-ditch constructed to dispose of the water is a problem since the water is continually cutting through soil materials. Cattle trailing to the water are also creating linear paths that will eventually become entrenched erosion channels. The broken water line and drinker have not been addressed by any of the interested parties since the cessation of operations. No backfilling is planned or required for the main pit.

7. The M6/M7 Pit was backfilled and reclaimed in a north-to-south direction but reclamation stopped just short of completion. There is a breach between the highwall and the backfilled material.

8. A V-ditch was constructed to drain water from M6/M7 Pit into O Pit along an old road. The ditch is parallel to that road but has blown out a 90-degree turn in the ditch/road. That breach is not repaired and is deepening.

9. There are two piles of black shale in Pit O that can be seen near the bottom against the west end. The shale piles are not large and contribute to a basically unfinished appearance.



**Figure 6 K4 Pit**

This mine operation in North Limb left a deep excavation over 12 acres in area. Since the mine plan was pre-NEPA and the stipulations of approval (1976) did not require backfill and reclamation, no remediation was done.



**Figure 7 C9 Pit in North Limb**

Located just to the right of the haul road, this pit was partially reclaimed. In the foreground, spoils were sloped to the highwall and seeded. In the background, there is an empty cavity between the highwall and spoils dump that was not backfilled or reclaimed.

10. The test plot near O Pit has a broken fence and no further utility.

11. Mill shale pile No. 4 north of the road on Lincoln Creek is breached and eroded in the northeast corner. This location lacks plugging, reinforcement, and general repair.

12. QQ Pit (the north end) was adequately backfilled and reclaimed and provides an excellent example of good reclamation practices.

13. All north end spoils dumps were found to be in fine shape. These provide still other examples of commendable reclamation practice.

14. The QQ Pit (the south end) is an older pit containing ragged piles of black shale. There is a dense chokecherry stand on the north wall that occurs in conjunction with a wide seep on the highwall face. The east end is characterized by a monocultural stand of yellow sweetclover and rills and gullies are developing as a result of low plant cover. Large, uneven piles of waste material were left intact instead of being regraded. There is also a large pile of waste shales on the top of the south wall. There is an abundance of material that could have been efficiently utilized as fill material or growth medium for reclamation but was not. The present configuration does not demonstrate any attempt to return the land to a usable status. The pit bottom is bare in many places and weed-infested in others. Cattle trails are entrenched and forming gullies. There is also a small wash developing on the west end.



### **C. East Limb - Group 1.**

1. The haul road in this sector is very rough with patches of bare soil and heavy erosion occurring regularly. In general, revegetation of the road has not been satisfactorily accomplished. Invasive, noxious weeds are much in evidence here, especially black henbane and various thistles.

2. A haul road winds down into W Pit, which contains a shallow pond that supports a substantial community of cattails. A large patch of Canadian thistle has established on the north highwall and seems to be expanding. The south side of the pit was left in a particularly rough and irregular state. Oddly, aspen trees are reestablishing on these waste piles, some of which are ten to twenty years old. The northeast corner of the pit has a sizable gully in a vertical cut. The haul road within the pit has slumped off in many places causing more asymmetrical terrain. Rock piles, old berms, bumps and piles, and old highwalls contribute to a very jagged-appearing topography. There is a livestock water source here but it is filling rapidly with sediment and can not be considered a permanent water. This site has received relatively high human visitation and there are safety concerns relating to the standing water, the road conditions, and the sloughing highwalls.

3. The north side of the reclaimed spoils dump associated with W Pit has developed two pronounced gullies. One originates from the spoils edge; the other originates from the V-ditch.

4. Mill shale pile #31 is bare and unreclaimed. Part of this storage pile has been re-excavated and was shipped as furnace grade ore (phosphate content of these materials is approximately 22 - 23 %). The eastern edge of this storage pile in its present form will not support or accommodate substantial vegetation.

5. JJ Pit was completed in 1992. Overburden from the pit was skimmed and pushed into a notch above the Baker Canyon Road. There are also rough piles to the north of this that have not been regraded. Seeding did not establish well because it was not regraded and dressed.

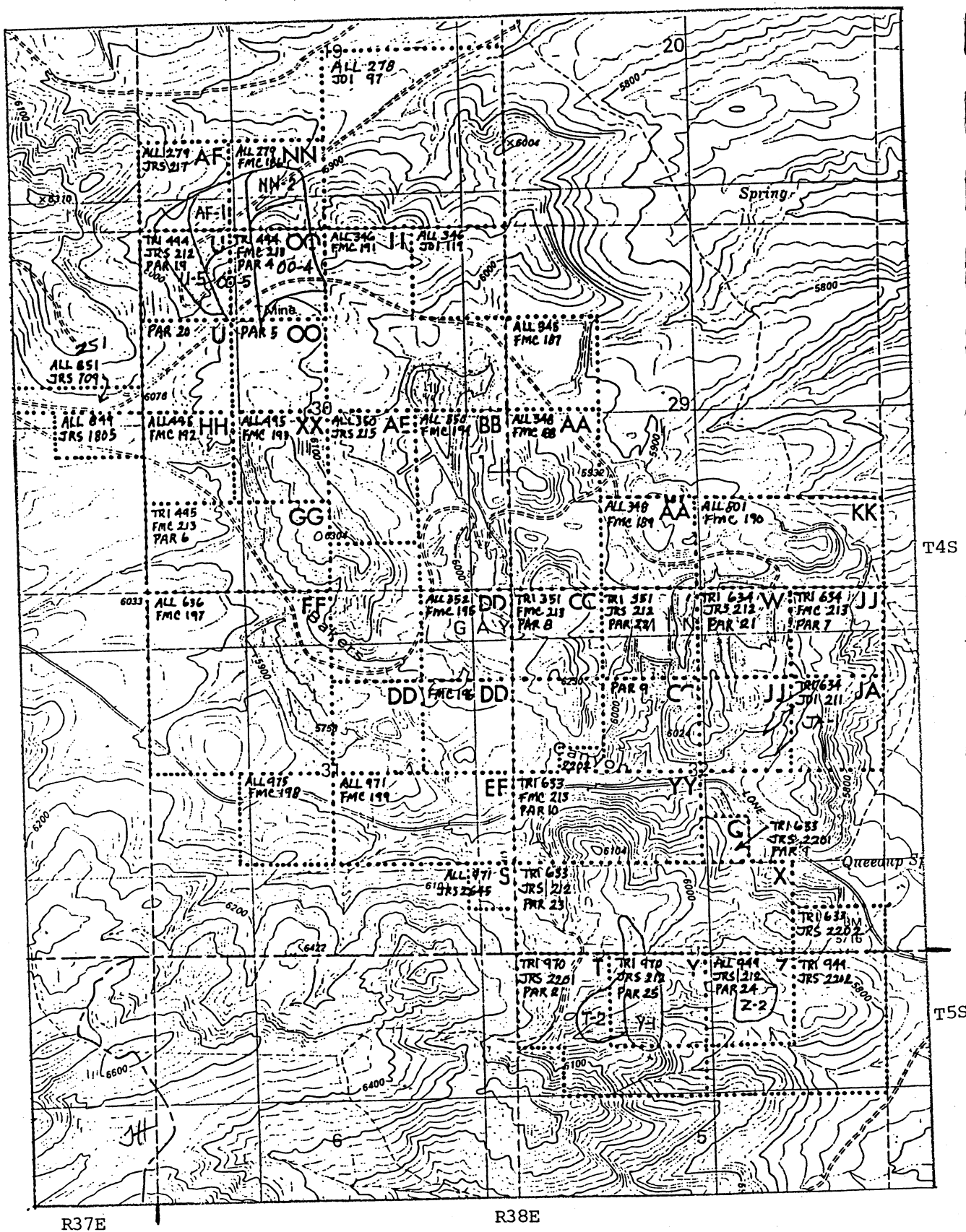


Plate 4. Location Map Showing the East Limb Area, J.R. Simplot Gay Mine

6. HH Pit stands out as an anomaly on the Gay Mine. It was an open pit mined in the 1980's which was then utilized as a waste dump in the 1990's. Absolutely no reclamation has been done here within the main pit area. It remains an open pit with highwalls or steep dump slopes on all sides. The east and north sides evidently served as a spoils dump which extends to the top of the highwall. This material has been graded toward the center of the pit and reseeded but ends abruptly in a high bare angle of repose. It looks as if the company intended to backfill this pit and started to do so but suddenly abandoned the effort. Trash and old tires are mixed with the spoils and are exposed on the east side. The material in this waste dump could have been redistributed at a lower height to create an adequate reclamation effect at the bottom of the pit, but was not. The reclamation effort at this location epitomizes poor planning, poor utilization of material, and generally poor remediation. The present pit bottom can be accessed by a narrow cow trail. The livestock pond above the pit to the west is enclosed by a ragged, uneven berm and is vulnerable to breaching on the northeast end.

7. North of HH Pit, there is a haul road that will be left intact to provide future access to mill shale storage piles. In the middle of the haul road to west of B Pit is a large sinkhole that is a hazard to traffic.

8. BB-3 Pit is also essentially unfinished. However, fill is readily available on the east, west, and north sides, and perhaps from the extensive road embankment on the northeast side. There is a spring on the north side of the pit that should not be covered and could be developed for livestock water.

9. II-3 Pit has been completely reclaimed and probably epitomizes an ideal reclamation scenario. Backfill here has been fashioned into a shallow closed basin with an ephemeral lake in the bottom. Perennial forage grasses and forbs have been successfully established on the surface. There is, however, a small gully on the north end. There are a number of dead tree trunks here that remain from an earlier unsuccessful effort to transplant live trees from undisturbed areas.

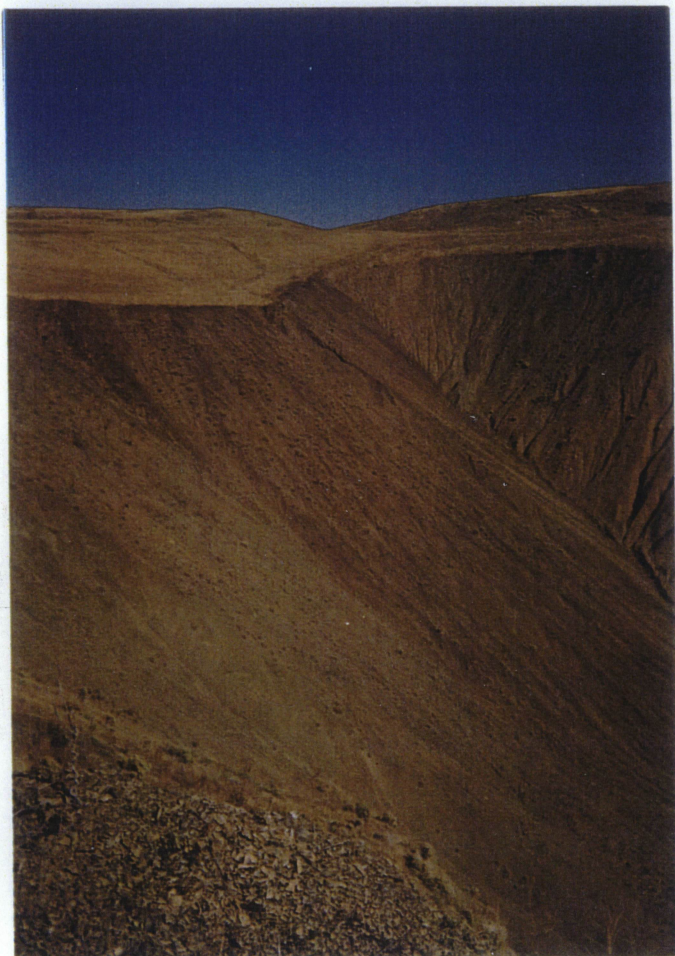




**Figure 8 HH-GG Pit**

The composite photo shows a post-NEPA pit that has not been efficiently remediated. Overburden was dumped over east and north highwalls (left) instead of being efficiently redistributed.





**Figures 9 and 10 Close-ups of dump faces in HH-GG Pit.**

Within this pit, only the spoils dump has been revegetated. The pit was used for waste disposition but the spoils material was not put to good use.

10. The NN, AF, U, and OO Pits, also referred to as "Alf" Pit, were a series of pits mined during the last 4-5 years of the mining operation and were mined simultaneously with the South 40 area. This is a deep, extensive, unfinished pit that has only been reclaimed on the east side. From there, the backfill undulates down to steep berms and an open pit on the bottom. Gullies have started to form on the east (reclaimed) side and on the spoils pile to the south. There is no reclamation whatsoever on the south or west sides. This location also contains the worst infestation of noxious weeds on the entire mine. There is a large patch of musk thistle on the rim with scattered plants below. Black henbane is well established in the pit and along the haul roads.

#### **D. East Limb - Group II.**

1. Z Pit is a deep, circular indentation with an emerald green lake on the bottom, last mined in the 1980's. A steep cow trail descends to the bottom from the southeast corner. The lake is a good stock water but sedimentation is occurring rapidly. A shallow shelf extends 30 - 50 feet out into the water where soil materials have washed in and threaten to fill the lake and displace the water. The west side has spoils dumps over the side of the pit highwall which has resulted in a loose, bare angle of repose. On the south side of the pit, there is an aspen stand on the top of the highwall. Seeps and springs emerge from midway of the highwall. A crack or cleft about 3 - 5 feet wide has formed through the aspen stand about 20 feet from the edge. The crack is presently held together by the aspen root system but separation is imminent. The short-term future of the lake as a livestock water source is jeopardized by the rapid degradation and collapse of the steep highwalls and is unlikely to be sustained. Some previous arrangement to leave the pit as is may have been made to accommodate livestock owners/permittees. However, the present status does not meet standards for mitigation or reclamation specified in EA's, mining plans, or reclamation plans that were operational at the time of active mining.

2. Spoils dumps located between Z Pit and Y Pit were reclaimed to very high standards. Seedings are well established and support a diverse population of desirable species. Contours and grades closely resemble the natural landscape. These pits were among those adjacent to the public road in Bakers Canyon which were assigned the highest priority for backfill, shaping, and reclamation, in order to resemble pre-mining conditions.

3. T2 Pit is a dry pit approximately 300 feet deep. Standing on the bottom, we could hear aggregated material falling from the south highwall, suggesting that this sloughing occurs constantly. The south highwall is composed of highly fractured, loosely aggregated material at an angle of repose. The east side of the pit is well-reclaimed and slopes to the west but then ends. The west side of the pit is rough and bumpy with old piles of waste material scattered around that have not been

redistributed or reworked as would have been expected. The north side of the pit has been ripped vertically up and down the slope so that vegetation is not well established there and sheet and rill erosion is occurring. The northwest corner is very rough and contains waste piles and material that is unreclaimed. This is an area where reconfiguration and revegetation could have been accomplished with very minimal work. There is no vegetation (either natural or established) on the north end of the upper pit.

4. S Pit displays an excellent job of total reclamation. The work is nicely feathered into native vegetation to make a very subtle transition. Vegetative cover is almost 100 percent. On some portions of the haul road, however, certain sharp edges on road cuts and embankments remain at steep angles. There is also a buried culvert on this road that is not functional. Reclaimed area to the west of pit also looks very good.





**Figure 11 Reclaimed Area in East Limb**

Another example of excellent reclamation. This spoils dump south of the haul road had been carefully recontoured and revegetated to resemble natural terrain.

#### **E. South 40 Area.**

1. The JG Pit was the first excavation at this location and extended to an ultimate depth of 310 feet. It has been nicely reclaimed by backfilling and reshaping into a closed basin design which is covered by a dense community of reestablished forage grasses, forbs, and sub-shrubs. The mining companies evidently employed state-of-the-art technology to remediate surface disturbance and achieve a highly desirable result at this site. Backfill was transported to JG Pit over a considerable distance from the more recent JC, JF, and JD Pits. The only, minor problem at this location is a deep cut (gully) that has developed at the southeast corner of JG Pit, where overland flow of water coming off the JG spoils dump has funneled down and caused erosion.

2. The disposition of overburden materials from JG Pit was placement in the JG Dump which was situated to the south and east of the active mining operation. This dump has also been reclaimed in an exemplary fashion. Several small erosion channels, however, have developed on the west face of the dump.

3. There are small sinkholes in the haul road near JG Pit but the road is not active and will probably not be reactivated.

4. In the final phase of mining operations on the Gay Mine, the JC/JF-1/JF-2/JD Pits were excavated to create a deep north-to-south trench with steep highwalls on the east and west sides at a depth of 250 feet and more. This area has been and continues to be the most controversial operation on the mine. In the early stages, overburden removed from JC Pit was transported to the northeast and deposited in the JC Dump. The partial result of that action created a visual screen that intersected the vision of casual observers on the main haul road and obscured the visual impact of excavation at the base of the mountain. Other overburden taken from JC Pit, then JF-1 and JF-2 Pits, and finally JD Pits were utilized to backfill JG Pit. The last pit mined, JD Pit, also partially provided backfill to reconstruct the bottoms of JC Pit and JF-1 Pit and the final result produced reclaimed bottoms at the north and south



extremities of the main trench with tall berms separating the former from the larger cut in the center. A series of stress fractures has developed above JC Pit on the west side which contribute slumped materials into the trench. The mining plan had indicated that this section consisted of stable and impermeable rock. There are three mill shale storage piles between the trench and the road that partially screen the excavation from public view.

Controversy attending this excavation has been strident and vigorous. Major differences regarding the end product and the final appearance after treatment have generated disagreement among the interested parties. The first of these differences simply reflect that the Tribes did not anticipate the magnitude of visual impact that was occasioned by the final excavation. A series of modifications to the original mining plan and a sequence of changing scenarios may have confused many Tribal officials regarding the final product. The final mining plan for this sector, though properly approved, is arguably inconsistent with earlier authorizations including the original lease agreement. Finally, the mining/reclamation plans suggested that there would be only one unreclaimed pit, whereas the current status has left a continuous series of unreclaimed deep pits that have received minimal remediation.

5. The Mining Lease of Indian Lands (1967) states that "upon termination of operations ---the lessee shall---leave all of the areas on which the lessee has worked in a condition that will not be hazardous to life or limb---". There are pockets and sectors of the top of the west highwall that demonstrate extreme instability. These are seen on aerial photographs as concentric cracks proceeding from the highwall edge. Such areas constitute a safety hazard to humans considering the instability of the slopes of both highwalls.

6. The double culverts under the roadway crossing Willow Creek are partially blocked, collapsed, or filled by sedimentation. Piping is occurring from the roadway fill and is allowing sediment transport into Willow Creek.



**Figure 12 JD Pit**

This series of pits in the South 40 area is very deep and very steep. The west highwall (in sunlight) is a 70-degree slope and would be difficult to reduce because of the mountain behind it.



**Figure 13 JC Pit**

This site has been partially backfilled with spoils from JD Pit. It is separated from JD Pit (which is not backfilled) by the steep berm in the lower left corner of photo.

7. The South 40 area has scattered infestations of yellowstar thistle, knapweeds, black henbane and various thistles. At this point in time, the plants have not consolidated into monocultural stands and could be readily controlled. Any delays will invite expansion of local populations and costlier controls at a later time.



## **VII. Summary of Specific Conclusions/Recommendations.**

### **A. Headquarters and Tipple Area**

1. A comprehensive cleanup of the administrative area and other sites needs to be finalized. All material not identified by the Tribes for retention needs to be picked up and removed from the lease site. This effort must include all waste, surplus, and extraneous material not specified as having future utility to the leaseholder (Shoshone-Bannock Tribes).

2. All surface disturbance associated with transport and processing of ore materials and the administration of the primary facility require rehabilitation and reclamation in the same manner and to the same standards as closed field operations. Haul roads, the airstrip, building sites, parking areas, storage and staging sites, and other locations which involved surface disturbance should be reclaimed. These surfaces should be ripped, scarified, and reseeded. Water bars will be required where significant erosion of reclaimed roads by runoff has been observed. Water bars, where needed, will be placed according to the following standards: a) on 1-5 degree slopes, a 3-foot structure will be placed at right angles to the road at 200-foot intervals, b) on 5-10 degree slopes, a 3-foot structure will be placed at 100-foot intervals, and c) on over-10 degree slopes, a 3-foot structure will be placed at 50-foot intervals. On roads that will remain open for administrative or other purposes, the structure may be flattened to accommodate traffic. Closed roads will be barricaded as well as barred. Where practical, side cuts will be reduced to 3:1 slopes and reseeded.

3. Repair or replace the two damaged culverts, near A12 Pit proceeding southwest on the old haul road, with new culverts or stabilized, rock-faced spillways at least 30-feet wide. The latter structures should be wide enough to adequately discharge water.

4. Using spoils materials from close by, reshape the A12 Pit so that the cavity at the base of the highwall is closed and a shallow U-shaped depression is formed that extends to a line halfway up the present highwall. Reclaim this reshaped area to current standards and allow the aspen community at the top of the highwall to slough naturally. The Companies have recognized the potential safety hazards associated with this pit and are committed to install fencing along the south/east highwalls.

5. Close and reclaim gravel pit on the south side of the A12 Lake after determination by the Tribes that source material is no longer needed.

6. Enclose the wetlands on the south rim of A12 Lake which contains natural seeps and springs so that it may recover naturally in the absence of livestock grazing. This will allow the vegetation to reestablish naturally and stabilize underlying soils to the extent possible. This would be a good location to plant willow slips and cuttings. The site is too wet and unstable to permit physical restructuring.

7. Management and effective operation of the water ponds above A12 Lake will require an active partnership between the Tribes, landowners, the Companies, and cooperating agencies. A comprehensive and coordinated strategy with the Tribes is essential to stabilize the site. The local office of the Natural Resources Conservation Service (NRCS) can be consulted to provide design and structural assistance and criteria. Without proper and sustained management, the surface linking the ponds and lake will continue to experience accelerated erosion. It is imperative that a responsible party (until relinquishment occurs, that will be the Companies; after relinquishment, that will be the BIA Range Department) will assume management responsibility for water levels and releases. After the Partnership determines the final design and management alternative, the Companies will be required to shape and top dress the disturbed surface of the site on a one-time basis only. The Companies will not be responsible for subsequent repairs.

8. Revisit all spoils dumps where vertical ripping and subsequent erosion have occurred and rip these sites in a direction that is horizontal to those slopes, followed by ripping and reseeding.

9. Introduce any remaining soil material saturated with petroleum products to the land farm located near the headquarters area. When present and introduced materials have degraded to the point that processed soils can meet testing and certification standards, the site should be closed using current reclamation procedures.



## **B. North Limb.**

1. Revisit C9 Pit and regrade spoils piles at north end to a gentle, rolling slope that terminates at the base of the highwall in a shallow U-shaped depression. There appears to be sufficient material in the spoils pile and berm to regrade an uninterrupted slope to the bottom of the highwall. Regraded slopes will need to be reseeded and restored to productive rangeland. Fencing above the highwalls or constructing a berm needs to be completed for public safety reasons.

2. Remove any remaining explosives from the powder shack and then demolish the storage facility, followed by site reclamation. At present, the powder shack is being utilized by Tribal Police for storage of explosives and/or ammunition. If the Tribes desire to retain this facility, a Tribal Resolution granting a waiver should be addressed to the Companies at the earliest convenience. In the absence of notification, the Companies will not conduct any work in this area and all parties will regard this inaction as a decision to retain the facility.

3. The Tribes and Companies desire that this and other key haul roads remain in a physically and structurally intact condition so that mill shale reserves which have been stored on-site can be accessed in the future. These roads have already been ripped and seeded and in most stretches vegetation has successfully established. There are specific sites, however, that will require additional reseeded. A single-lane road shall remain for administrative purposes. The Tribes desire that these roads will not be part of a public access system.

4. There is an older, pre-NEPA pit north of C9 Pit referred to as G Pit where spoils materials were dumped but not regraded. Technically, the Companies can not be required to revisit this site, however, a small amount of work here would greatly enhance the appearance of the site and make it look more natural and consistent with surrounding topography. That material could be graded in a gentle slope to the old highwall and reseeded, which would fulfill terms of the original lease and provide greater integrity to the overall reclamation effort.

5. Farther north, there is another older pit (west of the old I Pit) that has been used for dumping what we were told were mill shales but subsequently learned was overburden. This material needs to be redistributed, regraded, and reclaimed.

6. K4 Pit was designated and approved in the operations plan as an area that would be left as an open pit. This was a decision that would not be acceptable today under more stringent reclamation requirements. It is difficult for the reviewers to imagine that the current status of this site conforms to the fundamental intent of the 1946 Lease which promises to restore the land to "as good condition as received". However, the correspondence and documentation from that period clearly indicate that no requirement for remediation or backfill was articulated previous to the operational phase even though the federal regulations applicable at the time required "good conservation practice" (43 CFR) and surrender of the leased ground "in good order and condition" (25 CFR). In spite of concerns about its unsatisfactory appearance and safety issues, the pit will probably remain in an unaltered state. On the perimeter of the pit, several items are problematical and require repair:

- move the pipeline and water trough to the restructured swale to the northwest and away from the pit rim where water spillage and livestock trampling are causing aggravated collapse and erosion. This development was probably installed by the BIA Land Operations Branch, which should also be responsible for fixing the problem.
- a berm or fence on the perimeter of the pit will keep livestock off this sensitive and hazardous area.
- eliminate the V-ditch that is channeling water over the edge of the pit and creating a major head cut. One possible alternative would be to place water spreaders in the drainage to the northwest to dissipate water flow.

7. Complete the backfill and reshaping of loose material at the south end of M6/M7 Pit, which is unfinished. This is another of those areas where work seems to have stopped prematurely. A minor investment of time and machine hours would allow this site to be reclaimed in a manner more consistent with the Companies' reputation for good reclamation. Only the south end of the pit requires follow-up topdressing.

8. Repair and reinforce the breach in the V-ditch which channels water from M6/M7 Pit to O Pit.

9. Redress the upper end of O Pit and consolidate the spoils piles there into the final landscape appearance. Two piles of black shales were left at the west end that should be reshaped and redistributed. A minimal effort is required to complete this task.

10. The test plot here has a broken fence and has no further utility. Remove and salvage the fencing material from the test plot.

11. Plug, refill, and repair the erosion channel that has formed on the northeast corner of the mill shales storage pile north of Lincoln Creek. Repairs have been previously made but have not persisted. Another strategy can be considered.

12. The south end of the QQ Pit contains numerous waste piles and spoils dumps that have not been effectively utilized for restoring the land to a functional status, as agreed. A substantial effort is required here to redistribute the abundant waste materials and reclaim the site to productive rangeland. Some indigenous vegetation has established here but adequate diversity, cover, and production are not attainable without surface manipulation/reseeding.

### **C. East Limb - Group 1**

1. Control weed infestations along haul roads and rip and seed those areas on it that have not successfully been revegetated.

2. W-2 Pit is another location where significant reclamation did not occur. This area was mined pre-NEPA but did not conform to original lease stipulations which committed to restoring the land "in as good a condition as received". Stock water will not be permanently available here so that the shallow lake can be filled in without perpetual impact to the site. The site requires full restoration beginning with backfilling and highwall reduction and ending with a fully revegetated basin sloped to the middle with only one or two standing highwalls. Some care may be taken to avoid and preserve established aspen trees on the south side. There are safety concerns about this pit which need to be addressed because many schoolchildren and classes take field trips to this site. Travel on the access road is also dangerous and is a potential hazard. A large patch of Canadian thistle has established on the north highwall and is proliferating; this infestation needs to be controlled or eradicated.

3. Repair and fill two gullies formed on W Dump or JJ/JA backfill, one on the spoils edge and the other from the V-ditch.

4. The eastern side of Mill Shale Pile #31 needs reshaping and reclamation since furnace grade ores have been retrieved and shipped from this site.

5. Complete shaping and reclaiming the notch between the Baker Canyon Road and JJ Pit and redress the area behind (to the north of) the notch.

6. HH Pit served as a depository for overburden materials but otherwise received no reclamation except on the top of the backfill pile. The reviewers fully recognize and understand the concept that the last pit in a mining series could not always be backfilled. We do not agree that this circumstance constituted licence or permission by the federal agencies to the Companies to completely absolve them of any reclamation responsibility. Moreover, we feel that it is somewhat presumptuous of the Companies to argue that their obligation is completed. Reconfiguration and

reshaping of a mined site can occur even in the absence of backfill materials. This is another site that will require a comprehensive restoration strategy and implementation and a full spectrum of treatment from highwall reduction to reshaping to vegetation establishment. Reclamation at this site to reasonable standards will commit significant manpower and machinery to that process. The berm above the stock pond to the west of HH Pit needs to be leveled and reinforced at a consistent elevation.

7. Repair large sinkhole in roadway as agreed in memo dated April 28, 1997.

8. BB-3 Pit needs extensive reclamation also. Fill material obtained from the north, west, and east sides, and from the wide roadway, should be pushed and graded toward the northeast highwall and reseeded. Avoid working in and around the spring on the north side. This is another site where the Companies did not do all the things they could have done to optimize the final reclamation product.

9. Repair small gully on the north end of II-3 Pit or line the primary channel with rock to prevent headcutting.

10. The NN, AF, U, and OO Pits have only received reclamation treatments on the east end. No reclamation has occurred on the north, west, or south sides. Complete restoration will necessitate the importation of fill material, highwall reduction in some sectors, surface reconstruction, and vegetation replacement. There are many things that can be done to improve the appearance and productivity of this area. Extensive time and effort are necessary for this location to meet obligated standards. Tribal contracts and other perquisites notwithstanding, the Companies still retain primary responsibility for state-of-the-art reclamation. Fences and/or berms need to be completed above highwalls.



#### **D. East Limb - Group II**

1. Z Pit was abandoned without highwall reduction or mechanical manipulation of the substantial amounts of spoils that were dumped inside. Reclamation here will require a major commitment of time and machinery. A design for rehabilitation should be comprehensive and should encompass all major components of pit restoration, including highwall reduction on two or more sides, backfill from all available sources, reconstruction of the water storage pond to assure more permanent availability, reshaping slopes and approaches to the water to acceptable grades, and the reestablishment of permanent, perennial vegetation.

There is disagreement regarding the Tribal request to leave this pit unreclaimed. The available livestock water is not a good trade-off for leaving this large pit completely unreconstructed. Moreover, the federal agencies never relinquished authority for these kinds of decisions to the Tribe or any committee of the Tribal government. Any informal agreement with the Mining Committee or other entity is invalid and the Agencies will require that this site be restored to contemporary standards as mutually agreed by the interested parties.

2. T-2 Pit also needs considerable work to meet current standards. Only the east side of the excavation has been adequately reclaimed. The north side has been reclaimed but the slope was plowed and ripped vertically which allowed erosion channels to form and revegetation to fail. That sector needs to be revisited and reworked. The northwest corner and west side contains various spoils piles that need redistribution and finishing. The Companies are agreed to fix the problems discussed above.

Consideration should be given to reducing the highwall on the south which is reposed at a steep angle and consists of loose and unstable aggregate material. The reviewers feel that as a general rule no highwalls consisting of unconsolidated materials should have been left standing and should have been reduced before the work site was abandoned.

Only the east side is adequately reclaimed which leaves approximately 75% of the total site to be completed.

3. Reduce steep road cuts in this area where they occur.
4. Repair or replace culvert under haul road or remove sediment from west end.

**E. South 40 Acres.**

1. Repair the erosion channel that has formed at the southeast corner of JG Pit as a result of runoff from the dump or develop a stable and permanent primary channel to accomodate runoff.

2. Repair several small gullies on the rim of JG Dump.

3. Repair sink holes in the haul road near JG Pit as agreed April 28, 1997.

4. By far the largest concern of the Tribes and the regulatory agencies is the final and satisfactory resolution to the present controversy regarding JC/JD/JF-1/JF-2 Pit series. This controversy has been amplified by the various permutations of the original mining plan that occurred before completion. The original language of the mining plan and the conditions of agreement stipulated that an open pit would remain after cessation of operations. At that time, no one envisioned the huge trench that was left after mining and there was never any expectation that reclamation of the site

would not occur. All parties agreed that an excavated depression would be acceptable when the process was completed but not everyone anticipated the huge, raw scar that remained. Modifications to the approved mine plan significantly reduced the amount of backfill available to the north and south ends. Another issue to be addressed is the reasonable expectation that only one pit would be left after operations ended instead of the four contiguous ones that actually exist. After inspection and consideration, the interested parties recommend that the following steps are the minimal acceptable pathways to final mitigation and remediation:

- Allow west highwall to stand with the unstable pockets at the top buttressed at the bottoms and monitored for human safety hazards.
- Exploit nearby material sources to initiate partial backfill of the trench.
- Consider reducing the east highwall to provide additional backfill material to place in trench bottom. It would be preferable to undertake this reduction even if existing slope standards are waived. Two parallel steep highwalls approximately 300 feet apart are not acceptable remnants in the final configuration of this operation.
- If necessary, access the JC Dump for additional materials for placement in the trench bottom.
- Another possibility would involve the utilization of the three mill shale piles east of the pits to stockpile in the top layer of the trench. This is a strategy that would at least temporarily provide additional fill.
- Regrade all materials thus obtained at a reasonable slope toward the west highwall.
- Regrade all materials from north to south in the trench bottom in a rolling and discontinuous configuration.
- Dress and harrow reconstituted surface before seeding.
- Reseed and fertilize in accordance with reclamation plan.
- Monitor site to assure adequate revegetation.

5. Repair or replace double culvert at Willow Creek Crossing with a leveled spillway lined with rock. Surplus material can be employed to backfill JD Pit or feathered into adjacent hillside. Allow stream crossing (ford) on rock-lined area to continue access to Bennet's Pass.

**F. Other Considerations.**

1. Detect and map all current weed infestations on the lease area and treat in early summer for three consecutive summers with appropriate herbicide applications.

2. Revisit all haul roads and repair surfaces where vertical channeling and erosion is occurring. There are locations on major haul roads that will not be successfully rehabilitated without water bars because of slopes, vertical ripping, and soil factors.

3. Protect all sensitive areas from livestock use by deployment of electric fence. These should be placed at those locations where the rehabilitation effort is being hampered by persistent livestock use.

4. Complete Tribal Park facility as agreed. BLM will coordinate with the Tribe in the development and approval of a site plan.

5. Resurvey and replace survey points and monumentation where needed. The BLM will develop cost estimates for a reimbursable agreement.

6. Monitor vegetative establishment and success for a least two growing seasons after closure and abandonment.

7. Continue water quality sampling for heavy metals, organic impurities, nonpoint source pollution, etc.

## **CONSULTATIONS WITH OTHERS**

### **Bureau of Land Management, DOI**

Jeff Steele, Pocatello Resource Area Manager  
J. David Brunner, Deputy State Directory/Resources  
Jeff Cundick, Mining Engineer  
Fred Hagius, Mining Engineer  
Howard Hedrick, Upper Snake Districts Manager  
David A. Koehler, Rangeland Management Specialist (ISO)  
Carolyn Chad, Rangeland Management Specialist (PRA)  
Martha Hahn, State Director

### **Bureau of Indian Affairs, DOI**

Sam Hernandez, Agricultural Engineer  
Norman V. Bird, Supervisory Soil Scientist  
June Boynton, Area Environmental Coordinator (Portland Area)  
Jim LeBret, Area Geologist (Portland Area)  
Geri Williams, Realty Officer  
Gordon E. Cannon, Acting Agency Superintendent  
Eric LaPointe, Superintendent

### **Shoshone-Bannock Tribes**

Delbert Farmer, Former Tribal Chairman  
Tony Galloway, Sr., Land Use Commissioner  
Claudio M. Broncho, Tribal Councilman  
Larry Bagley, Tribal Councilman  
Hobby Hebewah, Land Use Commissioner/ Tribal Councilman  
Louise Dixie, Paralegal  
Albert Jones, Tribal Attorney  
Chris Rule, Tribal Attorney  
Marvin Tissidimit, Range Rider  
Duane Thompson, Former Superintendent/ Tribal Councilman  
Genevieve Edmo, Land Use Director

### **J.R. Simplot Co.**

Larry Raymond, Manager of Resource Development  
Vaughn Anderson, Consultant (Arrowhead Sands, Inc.)  
Pat Avery, Environmental Engineer

### **FMC Corporation**

Jim Simmons, Mining Engineer  
Mike Sheffield, Environmental Coordinator  
Ken Tandy, FMC



## Appendices

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
OFFICE OF INDIAN AFFAIRS

Contract No. 1-34-Ind. 9302

Lease No. 12330

MINING LEASE ALLOTTED INDIAN LANDS

(For Minerals other than Oil and Gas)

Phosphate Surface Mining Lease Fort Hall Reservation  
(Write all names and addresses in full)

THIS INDENTURE OF LEASE, made and entered into in quintuplicate, on this 4th day of

February, 19 46, by and between the heirs of Elia Evening, John Evening Jr., and Lest Evening, namely, Frank Cavigliat and Charles Evening.

Allotment  
allottee No. 684, 685 & 686 of the Shoshone Band tribe of Indians,  
of Fort Hall, State of Idaho  
parties of the first part, hereinafter called the lessor, and J. E. Simplot

of Caldwell

State of Idaho, part 7 of the second part, hereinafter called the lessee, under and in pursuance of the provisions of existing law and the rules and regulations prescribed by the Secretary of the Interior relative to mining leases covering restricted Indian allotments.

WITNESSETH

1. That the lessor, for and in consideration of \$1, receipt whereof is hereby acknowledged, and of the royalties, covenants, stipulations, and conditions hereinafter contained and hereby agreed to be paid and observed by the lessee, doth hereby demise, grant, and lease unto the said lessee, the following-described tract of land lying and being within the Fort Hall

Reservation, county of Blaine, and State of Idaho

to wit: Allot. No. 684 — 21st Section 27, 40 acres;

Allot No. 685 — 21st Section 28, 80 acres;

Allot. No. 686 — 22nd Section 22, 160 acres.

of section \_\_\_\_\_, township 4 S., range 37 E. Boise meridian, and containing

280 acres, more or less, for the full term of three years from the date of approval hereof, for the

sole purpose of prospecting for and mining minerals, as follows: Phosphate Ore

the lessee to occupy so much only of the surface of said land as may be reasonably necessary to carry on the work of prospecting for, mining, milling, storing, and removing such minerals.

2. The term "Superintendent" as used herein shall refer to the superintendent or other official in charge of the Indian Agency having jurisdiction over the lands leased.

3. In consideration of the foregoing, the lessee hereby agrees:

(a) ROYALTY.—To pay, or cause to be paid, to the Superintendent, for the use and benefit of the lessor, as royalties, the sums of money as follows, to wit:\*

~~Thirty cents (30¢) per ton (2,000 lb.) extracted at lessee's shipping point, which is the Simplot Fertilizer Co. plant in Pocatello, Idaho. Lessee further agrees to submit a report with each payment of royalties showing amount of ore extracted from each mine.~~

All royalties accruing for any month shall be due and payable on or before the twenty-fifth day of the month succeeding.

(b) ANNUAL RENTAL.—To pay, or cause to be paid, to the Superintendent for the use and benefit of the lessor, in advance beginning with the date of approval of the lease, as annual rental, the following: Twenty-five cents per acre for the first calendar year or fraction thereof, 50 cents per acre per annum for the second and third years, and \$1 per acre per annum in advance for each and every calendar year thereafter during the continuance of the lease; it being understood and agreed that said sum so paid shall be a credit on the royalties accruing during the year for which the payment of annual rental is made, and that said annual rental when paid shall not be refunded to the lessee because of any subsequent surrender or cancellation hereof.

(c) DILIGENCE, PREVENTION OF WASTE.—To exercise diligence in the conduct of prospecting and mining operations; to carry on development and operations in a workmanlike manner and to the fullest possible extent; to commit no waste on the said land and to suffer none to be committed upon the portion in his occupancy or use; to comply with all the requirements of the laws of the State in which the land is located; to take appropriate steps for the preservation of the property and the health and safety of workmen; promptly to surrender and return the premises upon the termination of this lease to whomsoever shall be lawfully entitled thereto, in as good condition as received, excepting for the ordinary wear and tear and unavoidable accidents in their proper use; not to remove therefrom any buildings or permanent improvements erected thereon during the said term by the said lessee, but said buildings and improvements shall remain a part of said land and become the property of the owner of the surface of the land, excepting the office fixtures and records, personal property, tools, pumping and drilling outfits, boilers, engines, and mining machinery, which shall remain the property of the lessee and may be removed at any time prior to 60 days after the termination of the lease by forfeiture or otherwise, provided the payments agreed upon by this lease have been made and the lease terms and regulations applicable thereto have been fully complied with, but not otherwise; not to permit any nuisance to be maintained on the premises under lessee's control, nor allow any intoxicating liquors to be sold or given away for any purpose on such premises; and not to use such premises for any other purposes than those authorized in this lease.

(d) DEVELOPMENT.—The land described herein shall not be held by the lessee for speculative purposes, but in good faith for mining the minerals specified; and the failure by the lessee in the diligent development and continued operation of the mine or mines, except when operations may be interrupted by strikes, the elements, or casualties not attributable to the lessee, shall be held as a want of compliance with the purposes of this lease and shall render it subject to cancellation: *Provided*, That whenever the Secretary of the Interior shall consider the marketing facilities inadequate or the economic conditions unsatisfactory, he may authorize the suspension of operations for such time as he may deem advisable, but such action will not release the lessee from the payment of the advance annual rental.

(e) MONTHLY STATEMENTS.—To keep an accurate account of all mining operations, showing the sales, prices, dates, purchasers, and the whole amount of minerals mined, the amount removed, and the gross receipts derived therefrom, and to furnish the Superintendent sworn monthly reports thereon not later than the twenty-fifth of the succeeding month; and all sums due as royalty and advance rental shall be a lien on all implements, tools, movable machinery, and all other personal chattels used in operation upon said property, and upon all of the unsold minerals obtained from the land herein leased, as security for payment of said sums. An audit of the lessee's accounts and books shall be made annually or at such times as may be directed by the Superintendent by certified public accountants approved by the Secretary of the Interior and at the expense of the lessee. The lessee shall furnish free of cost a copy of such audits to the Secretary of the Interior through the Superintendent within 30 days after the completion of each auditing.

(f) REGULATIONS.—To abide by and conform to any and all regulations of the Secretary of the Interior now or hereafter in force relative to such leases: *Provided*, That no regulations hereafter approved shall effect a change in rate of royalty, the annual rental herein specified, or the term of this lease, without the written consent of the parties to this lease.

\* Here insert the royalties agreed upon in accordance with applicable regulations.

(g) **ASSIGNMENT OF LEASE.**—Not to assign this lease or any interest therein by an operating agreement or otherwise nor to sublet any portion of the leased premises before restrictions are removed, except with the approval of the Secretary of the Interior. If this lease is divided by the assignment of an entire interest in any part of it, each part shall be considered a separate lease under all the terms and conditions of the original lease.

(h) **BOND.**—To furnish such bond as may be required by the regulations of the Secretary of the Interior conditioned upon compliance with the terms of this lease.

4. **MILLING.**—All ores or minerals mined on said land shall be cleaned and prepared for market thereon, and no ore or crushed material shall be removed therefrom to be cleaned or prepared for market without the written consent of the Secretary of the Interior.

5. **INSPECTION.**—The leased premises and producing operations, improvements, machinery and fixtures thereon and connected therewith, and all books and accounts of the lessee shall be open at all times for inspection by the lessor and his agents or any duly authorized representative of the Secretary of the Interior.

6. **DISPOSITION OF SURFACE.**—The lessor expressly reserves the right to lease, sell, or otherwise dispose of the surface of the lands embraced within this lease under existing law or laws hereafter enacted, such disposition to be subject at all times to the right of the lessee herein to the use of so much of said surface as is necessary in the extraction and removal of the minerals from the land herein described in accordance with this lease.

7. **SURRENDER AND TERMINATION.**—The lessee shall have the right at any time during the term hereof to surrender and terminate this lease or any part thereof upon the payment of all rentals, royalties, and other obligations due and payable to the lessor, and the further sum of \$1, and in the event restrictions have not been removed, upon a showing satisfactory to the Secretary of the Interior that full provision has been made for the conservation and protection of the property, the lease to continue in full force and effect as to the lands not so surrendered. If this lease has been recorded lessee shall file a recorded release with his application to the Superintendent for termination of this lease.

8. **CANCELATION AND FORFEITURE.**—When, in the opinion of the Secretary of the Interior, there has been a violation of any of the terms and conditions of this lease before restrictions are removed, the Secretary of the Interior shall have the right at any time after 30 days' notice to the lessee, specifying the terms and conditions violated, and after a hearing, if the lessee shall so request within 30 days of receipt of notice, to declare this lease null and void, and the lessor shall then be entitled and authorized to take immediate possession of the land: *Provided*, That after restrictions are removed the lessor shall have and be entitled to any available remedy in law or equity for breach of this contract by the lessee.

9. **RELINQUISHMENT OF SUPERVISION BY THE SECRETARY OF THE INTERIOR.**—Should the Secretary of the Interior, at any time during the life of this instrument, relinquish supervision as to all or part of the acreage covered hereby, such relinquishment shall not bind lessee until said Secretary shall have given 30 days' written notice. Until said requirements are fulfilled, lessee shall continue to make all payments due hereunder as provided in section 3 (a) and (b). After notice of relinquishment has been received by lessee, as herein provided, this lease shall be subject to the following further conditions:

(a) All rentals and royalties thereafter accruing shall be paid directly to lessor or his successors in title.

(b) If, at the time supervision is relinquished by the Secretary of the Interior as to all lands included in this lease, lessee shall have made all payments then due hereunder, and shall have fully performed all obligations on its part to be performed up to the time of such relinquishment, then the bond given to secure the performance hereof, on file in the Indian Office, shall be of no further force or effect.

10. **HEIRS AND SUCCESSORS IN INTEREST.**—It is further covenanted and agreed that each obligation hereunder shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors of, or assigns of the respective parties hereto.

11. **GOVERNMENT EMPLOYEES CANNOT ACQUIRE LEASE.**—No lease, assignment thereof, or interest therein will be approved to any employee or employees of the United States Government whether connected with the Indian Service or otherwise, and no employee of the Interior Department shall be permitted to acquire any interest in such leases by ownership of stock in corporations having leases or in any other manner.

IN WITNESS WHEREOF, the said parties have hereunto subscribed their names and affixed their seals on the day and year first above mentioned.

TWO WITNESSES TO EXECUTION BY LESSOR:

(Sgd.) Asahel A. Perry (Sgd.) with mark [SEAL]

P. O. Fort Hall, Idaho Frank Gagliant  
(Sgd.) Willie Edmo (Sgd.) with mark [SEAL]

P. O. Fort Hall, Ida. Charles Evening

TWO WITNESSES TO EXECUTION BY LESSEE:

(Sgd.) Irene P. Edmo (Sgd.) J. R. Simplot [SEAL]

P. O. Fort Hall, Ida.

(Sgd.) Willie Edmo

P. O. Fort Hall, Ida. Attest:

State of \_\_\_\_\_  
County of \_\_\_\_\_

ACKNOWLEDGMENT OF LESSOR

Before me, a notary public, on this 7th day of February, 1940, personally appeared Frank Gagliant and Charles Evening, to me known to be the identical person who executed the within and foregoing lease, and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

Bruce G. Gurn, Notary Public.  
My commission expires Nov. 30, 1946

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
Washington, D. C.

The within lease is hereby approved.  
Assistant Secretary of the Interior

Filed for record this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, at \_\_\_\_\_ o'clock \_\_\_\_\_ m.

Rental received, \$ \_\_\_\_\_ By \_\_\_\_\_





UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
WASHINGTON

CODE OF FEDERAL REGULATIONS  
TITLE 43--PUBLIC LANDS: INTERIOR

## CHAPTER I--BUREAU OF LAND MANAGEMENT

PART 196--PHOSPHATE LEASES AND USE PERMITS

This part is hereby completely revised as follows:

PHOSPHATE LEASES

- |        |  |        |  |
|--------|--|--------|--|
| 196.1  | Statutory authority.   | 196.12 | Action by successful bidder.                                       |
| 196.2  | Size of leasehold and limitation of acreage holdings.        | 196.13 | Assignments of leases; subleases.                                  |
| 196.3  | Qualifications of applicants.                                | 196.14 | Readjustment of terms and conditions at end of twenty-year period. |
| 196.4  | Minimum expenditure and lease bond.                          | 196.15 | Relinquishment of lease.   |
| 196.5  | Minimum production.  | 196.16 | Cancellation of lease.   |
| 196.6  | Lessee's petition for change in minimum production.          | 196.17 | Use of silica, lime-stone or other rock.                           |
| 196.7  | Application for lease.                                       | 196.18 | Use permits for additional lands.                                  |
| 196.8  | Noncompetitive application; publication; protests.           | 196.19 | Claims initiated prior to February 25, 1920.                       |
| 196.9  | Issuance of noncompetitive lease.                            |        | Effective date.  |
| 196.10 | Offer of lands or deposits for lease by competitive bidding. |        |  |
| 196.11 | Notice of lease offer.                                       |        |  |

AUTHORITY: Sections 196.1 to 196.19 inclusive, issued under sections 9-12 and 32, 41 Stat. 440, 441, 450; 30 U.S.C. 211-214 and 189.

PHOSPHATE LEASES

Section 196.1 Statutory authority. Sections 9 to 12, inclusive, of the Act approved February 25, 1920 (41 Stat. 440; 441; 30 U.S.C. 211-214), as amended, authorizes the Secretary of the Interior to lease any phosphate deposits of the United States and lands belonging to the United States containing deposits of phosphates and associated or related minerals, hereinafter called "leased deposits." Invitations to bid for such leases will be made in accordance with the procedure hereinafter set forth. Leases will be issued on Form 4-1110 for

*File  
3*

periods of twenty years and so long thereafter as the lessee complies with the terms and conditions of the lease and upon the further condition that at the end of each 20 year period such seasonal readjustment may be made of the terms and conditions thereof as may be prescribed by the Secretary of the Interior unless otherwise provided by law at the expiration of such periods.

196.2 Size of leasehold and limitation of acreage holdings. Leases may embrace not exceeding 2,560 acres reasonably compact in form. Each lease shall describe the lands involved by legal subdivisions of the public land surveys. No person, association or corporation, may hold at any one time more than 5,120 acres in any one State, or more than 10,240 acres in the United States, whether directly through the ownership of phosphate leases or interests in such leases, or indirectly as a member of an association or association or as a stockholder of a corporation or corporations, holding such leases or interests therein or both.

196.3 Qualifications of applicants. Leases may be issued to (a) citizens of the United States, (b) associations of citizens, and (c) corporations organized under the laws of the United States or of any State or Territory thereof.

196.4 Minimum expenditure and lease bond. (a) An actual bona fide expenditure for prospecting, where necessary, and mine operations development, or improvement purposes of the amount determined by the Secretary of the Interior will be a condition in each lease as to the minimum basis on which it will be granted, with the requirement that not less than one-third of such expenditure shall be made during the first year, and a like amount each year for the two succeeding years, the expenditure during any one year over such proportionate amount for that year to be credited on the expenditure required for the ensuing year or years. Except as to the sums required to be expended for prospecting on the leased land, the minimum expenditure requirement may be met, when so authorized in the lease, by expenditures made or to be made off the leased land but for its benefit.

(b) A bond, in such sum as may be fixed in the notice of leasing but in no event less than \$5,000, executed by the lessee with approved corporate surety on Form 4-1113 or the lessee's personal bond on Form 4-1114, conditioned upon compliance with the expenditure requirement and the other terms of the lease will be required. Personal bonds must be accompanied by a deposit of negotiable Federal securities in a sum equal at their par value to the amount of the bond.

196.5 Minimum production. Each lease will contain appropriate conditions fixing a minimum annual production of the leased deposits beginning with the fourth year from date thereof or payment of a minimum royalty in lieu thereof, except when production is interrupted by strikes, the elements, casualties not attributable to the lessee, or upon a satisfactory showing that market conditions are such that the lessee cannot operate except at a loss. When authorized in the lease the minimum production requirements may be satisfied by production from other properties controlled by the lessee and constituting

a necessary reserve so located as to be a part of a successful unit operation.

196.6 Lessee's petition for change in minimum production. The lessee may request at any time prior to the end of the thirtieth lease month, that the Secretary reduce the amount of the minimum production specified in the lease upon the basis of the showing submitted by the lessee. The petition must be filed in duplicate with the office from which his lease was delivered. It should give, among other relevant information, (a) his estimate of tonnage of mineral phosphate rock and associated or related minerals in the leased land, (b) all available information as to the grade thereof, (c) his plan of operation for the property and adjacent property to be worked therewith, (d) a general statement of the method or methods which he intends to use in mining and processing of the phosphate rock and associated or related minerals, (e) the estimated rate of its extraction and (f) possible absorption in the markets. Within six months after receipt of this information the Secretary, after considering what would be a reasonable period within which to mine the leased deposits taking into account, where material, the lessee's mining operations on adjacent phosphate land owned or controlled by him, will determine whether the minimum production requirement in the lease shall be changed to a lesser figure than the amount then provided.

196.7 Application for lease.<sup>1/</sup> Application for lease must be filed in duplicate in the proper district land office or, for lands or deposits in States in which there is no district land office, in the Bureau of Land Management, Washington 25, D.C. The application, if for a noncompetitive lease, must be accompanied by the first year's rental of twenty-five cents per acre for each acre of land included in the lease application. No specific form is required but the application should cover the following points:

(a) Applicant's name and address.

(b) A statement of his interests, direct or indirect, whether as a member of an association or stockholder in a corporation, or otherwise in other phosphate leases or applications therefor on public lands, identifying the same by land office and serial number together with the total amount of acreage so held both in the State in which the lease is desired and in the United States, and a statement that such holdings under said Act within the State in which the land is situated, together with the lands applied for, do not exceed in the aggregate 5,120 acres and a like statement

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<sup>1/</sup> 18 U.S.C. section 80 makes it a crime for any person knowingly or wilfully to submit or cause to be submitted to any agency of the United States any or fraudulent statement as to any matter within its jurisdiction.

with respect to the maximum allowable area of 10,240 acres in the United States.

(c) Proof of citizenship; in the case of an individual, by a statement as to whether native-born or naturalized and, if naturalized, date of naturalization, court in which naturalized, and number of certificate, if known; if a woman, whether she is married or single, and if married, the date of her marriage and citizenship of her husband. Associations are required to file a certified copy of their articles of association and the same showing as to the citizenship and holdings of their members as required of an individual and specified herein. Corporations are required to file a certified copy of their articles of incorporation and a showing as to residence and citizenship of the stockholders; if 20 percent or more of the stock of any class is owned or controlled by any one stockholder, a separate showing of his citizenship and holdings. In case any of the stock of the corporation is held by aliens, a showing is required giving, to the extent reasonably ascertainable, the name, the country to which each owes allegiance and the amount of stock held by each.

(d) Description of the land for which lease is desired, by legal subdivisions or, if unsurveyed, by metes and bounds, connected with a corner of the public survey by course and distance, and, where possible, description of the land by the approximate subdivisions of the future survey.

(e) To the extent such information is known to the applicant, a description of the phosphate and associated or related mineral deposits in the land based upon such actual examination as can be effected without an injury to the land or deposits, (such examination shall not be deemed a trespass), giving nature and extent of the deposits, an outline in general terms of the proposed method of mining and processing of same; the proposed investment in mining operations thereon, and processing facilities therefor.

(f) Each applicant must show in sufficient detail that

(1) the amount of phosphate lands, Federal and non-Federal, held by him together with the lands described in the application are necessary for his proposed development plan.

(2) he intends to explore, mine and develop the property in good faith;

(3) he is financially and otherwise able to comply with the minimum expenditure requirements for exploration, mining and development of the property; and

(4) his proposed operations of the property will be in accordance with good conservation practice and this additional development is needed in order to supply an existing demand which cannot otherwise be reasonably met.

(g) The applications must be signed by the applicant or his attorney-in-fact, and if executed by an attorney-in-fact must be



of Land Management, may authorize. The notice will be published at the expense of the Government. A copy of the notice will be posted in the proper district land office during the period of publication. The notice of publication shall state the place where and the date and hour on which bids will be received, and whether the sale will be at public auction or by sealed bids, and shall describe the land, the rental and rate of royalty to be charged, the minimum investment and the minimum production required. The notice shall also state (1) that the minimum production requirement will not be reduced or waived at the lessee's request except as provided in sections 196.5, 196.6, 191.25, or 191.26, or upon a satisfactory showing that market conditions are such that the lessee cannot operate except at a loss; and (2) that the lease will be canceled if production, or the construction of production facilities, including processing plants, is not commenced by the beginning of the fourth year of the lease. The right is reserved by the Secretary, in the public interest, to reject any and all bids; and should a bid be rejected, the deposit made by the bidder will be returned.

All bidders at any public sale of leases are warned against committing any act by intimidation, combination, or unfair management, to hinder or prevent bidding thereon, in violation of section 59 of the Criminal Code of the United States, approved March 9, 1909 (35 Stat. 1099; 18 U.S.C. 113).

196.12 Action by successful bidder. The successful bidder at a sale by public auction must deposit with the manager of the district land office or other officer conducting the sale on the day of sale, and each bidder, if the sale is by sealed bids, must submit with his bid the following: Certified check, money order, or cash, for one-fifth of the amount bid by him; evidence of qualifications as prescribed in sections 196.7(b), (c), (g) and (h), if a current showing in that regard has not been filed; If the land is surveyed, the successful bidder will be allowed 30 days from date of auction or where sealed bids are submitted, 30 days from receipt of notice that his bid has been accepted within which (a) to file in the proper land office a lease, duly executed by him, in quintuplicate, on Form 4-1110 and the bond required by section 196.4(b) of this part; and (b) to pay the remainder of the bonus bid by him and the annual rental for the first year of the lease. The lease will be dated as of the first day of the month following its issuance unless the successful bidder requests that it be dated as of the first day of the month of issuance. If the land is unsurveyed, the successful bidder will not be required to comply with requirements (a) and (b) in this section until the land has been surveyed and the plat of such survey accepted and officially filed. The survey will be made at the expense of the Government. If the bidder fails to comply after due service of notice, that portion of his deposit representing the minimum required to be deposited with the bid shall be held as liquidated damages and disposed of as other receipts under the Mineral Leasing Act.

196.13 Assignments of leases; subleases. Leases may be assigned or subleased in whole or in part to any person or corporation qualified to hold such leases. All instruments of transfer of a lease or of an interest therein including assignments of record title, subleases, operating agreements and working or royalty interests, must be filed

for approval within 90 days from the date of final execution and must contain evidence of the qualifications of the assignee or transferee, consisting of the same showing required if a lease applicant by section 196.7(b), (c), (g) and (h) hereof. If the instruments fail to describe the true consideration therefor, a statement must be submitted showing the consideration in full. The statement will be treated as confidential and not for public inspection. If a bond is necessary it must be furnished. Assignments of record title interests, including operating agreements, must be filed in triplicate. A single executed copy of all other instruments or transfer is sufficient. An assignment of such leases shall take effect the first day of the month following its final approval by the Director, Bureau of Land Management, or if the assignee requests, the first day of the month of the approval.

The assignor or sublessor and his surety will continue to be responsible for the performance of any obligation under the lease until the effective date of the approval of the assignment of sublease. If the assignment or sublease is not approved, their obligations to the United States shall continue as though no such assignment or sublease had been filed for approval. After approval the assignee or sublessee and his surety will be responsible for the performance of all lease obligations notwithstanding any term in the assignment or sublease to the contrary.

The lease account must be in good standing before approval of an assignment will be given.

196.14 Readjustment of terms and conditions at end of twenty-year periods. The terms and conditions of a lease may be readjusted at the end of each twenty-year period succeeding the date of the lease. Prior to the expiration of that period, the lessee will be advised of the reasonable readjustment of terms proposed by the Department or notified that no readjustment is to be made for the next period. The lessee may file his consent to such proposed readjustment or inform the Department as to the terms which are unsatisfactory. After considering the suggestions of the lessee, the Secretary shall make his determination as to the reasonable readjustment of terms to be effective for the twenty-year period under consideration.

196.15 Relinquishment of lease. Upon payment of all rentals, royalties and other debts due and payable to the lessor, and upon payment of all wages or moneys due and payable to the workmen employed by the lessee, the lessee may surrender the entire lease at any time during the first three years of the lease. The lessee may during the first three years of the lease, upon a satisfactory showing that the public interest will not be impaired, surrender any legal subdivision or subdivisions of the area included within the lease. In no case will such lease be so terminated in whole or in part until and unless the lessee shall have made provision for the preservation of any mines or productive works or permanent improvements on the lands covered thereby. The surrender of all or part of a lease after the third year may be permitted in the discretion of the Secretary and only if the conditions specified in this section have been satisfied. A surrender must be by a relinquishment filed, in triplicate, in the proper land office. A relinquishment upon its approval shall take effect as of the date it is filed.

accompanied by the power of attorney and the applicant's own statement as to his citizenship and acreage holdings. Application on behalf of a corporation must be accompanied by proof of the signing officer's authority to execute the instrument and must have the corporate seal affixed thereto.

(h) And in addition, in the case of noncompetitive lease applications, the extent to which further prospecting is necessary before development can reasonably be undertaken and the general exploration program which will be undertaken, the estimated expenditure under such exploration program, and the maximum period of time required for its completion, not to exceed three years.

196.8 Noncompetitive application; publication; protests. (a) If upon our examination of the first application filed to lease the lands noncompetitively, and such additional information as the applicant may be required to submit, in support of it, and upon the report of the Geological Survey as to the need for further exploration and any other technical matters submitted to it, the Secretary determines that the applicant is qualified, and that the lands or deposits constitute an acceptable leasing unit and are subject to phosphate lease and that further exploration is necessary before development could reasonably be undertaken, the applicant, as a condition precedent to the issuance of the lease, will be required to publish, at his own expense, once a week for four consecutive weeks in a designated newspaper of general circulation in the county or counties in which the land is situated, a notice, specified by the Secretary, containing the terms upon which the lease will be issued to the applicant in the absence of a protest deemed valid by the Secretary. The applicant will be required to commence publication within 30 days after service of the decision upon him unless he requests reconsideration of the decision within that time.

(b) The notice shall describe the land, specify the rental and rate of royalty to be paid under the lease, state the minimum expenditure and minimum production requirements, together with a general statement as to the exploration program required by the Secretary to be undertaken by the applicant after lease issuance to ascertain that development is feasible under the lease. The notice shall also state (1) that the minimum production requirement will not be reduced or waived at the lessee's request except as provided in sections 196.5, 196.6, 191.25 or 191.26, and (2) that the lease will be canceled if apart from or in addition to any other grounds that may exist therefore, production, or the construction of production facilities, including processing plants, is not commenced by the beginning of the fourth year of the lease. A copy of the notice will be posted in the district land office after receipt by the manager.

(c) A valid protest may be based upon (1) a prior equitable claim, including a mining location, or (2) the fact that there is sufficient interest by qualified applicants to justify offer of lease by competitive bidding. A protest based upon the second ground must be accompanied by the payment of the first year's rental of 25¢ per acre for the land, together with a showing that the protestant has the qualifications of an applicant under section 196.7. In addition, there must be set forth in the protest an offer

to reimburse the applicant in whole, or ratably with other similar protestants, for the cost of publishing the notice of the application. Decisions on protests will be made within 30 days after the applicant has submitted proper proof of publication. No application will be rejected on the second ground unless proof is filed that, when directed by the Secretary, payment of the advertising cost has been made or a satisfactory tender is being made and is still being kept open. If the protest is rejected or if the protestant is not the successful bidder when a sale is held, his rental payment will be returned to him.

(d) If the Secretary decides after the receipt of an application or after proof of advertising has been submitted that the land is not available for leasing or that the applicant is not entitled to a lease or that the land should be offered for competitive bidding, the rental payment will be returned to the applicant and his application for a noncompetitive lease rejected.

196.9 Issuance of noncompetitive lease. The applicant should file with the district land office, within 30 days after publication has been completed, proof thereof, together with a lease duly executed by him in quintuplicate on Form 4-1110 and the bond required by section 196.4(b) of this part. In the absence of protest or of a protest deemed valid and if all else is regular, the lease will be issued and dated as of the first day of the month following its issuance, unless the applicant requests that it be dated as of the first day of the month of issuance. If the land is unsurveyed, the lessee need not deposit the executed lease and bond until the land has been surveyed and the plat of such survey accepted and officially filed. A survey will be made at the expense of the Government. If the applicant has not reported compliance with the requirements of the decision issued under section 196.8, within 120 days of its receipt by him, the [REDACTED] annual rental deposited by the applicant will be covered into the Treasury and the applicant advised that the case has been closed.

196.10 Offer of lands or deposits for lease by competitive bidding. If the Secretary of the Interior, upon the report of the Geological Survey, with respect to an application for lease or otherwise, as to the need for further exploration, royalty rates, minimum expenditure and production requirements and any other technical matters submitted to it, determine that specific lands or deposits which constitute an acceptable leasing unit are subject to phosphate lease without the need of further exploration before development could reasonably be undertaken, the offer of lease will be made on the terms and conditions to be specified in the notice of sale to the qualified person who offers the highest bonus by competitive bids either at public auction or by sealed bids as provided in the notice of sale.

196.11 Notice of lease offer. Notice under the preceding section, of the offer of the lands or deposits for lease will be given by publication once a week for four consecutive weeks, or for such other period as may be deemed advisable, in a newspaper of general circulation in the county in which the lands or deposits are situated, and in such other publications as the Director, Bureau

196.16 Cancellation of lease. If the lessee shall fail to comply with the provisions of the act, or of the general regulations promulgated and in force at the date of the lease, or at the effective date of any readjustment of the terms and conditions thereof under section 196.14, supra, or make default in the performance or observance of any of the terms, covenants, and stipulations of the lease and such default shall continue for 30 days after service of written notice thereof by the lessor, then the lessor may institute appropriate proceedings in a court of competent jurisdiction for the forfeiture and cancellation of the lease as provided in section 31 of the act, provided, that, as to any default occurring under a lease issued noncompetitively not corrected prior to the commencement of production, the Secretary may cancel such lease without institution of such court proceedings. A waiver of any particular cause of forfeiture shall not prevent the cancellation and forfeiture of the lease for any other cause or forfeiture, or for the same cause occurring at any other time.

196.17 Use of silica, limestone or other rock. Any lease to develop and extract phosphates, phosphate rock, and associated or related minerals under the provisions of the act shall provide that the lessee may use so much of any deposit of silica or limestone or other rock situated on any public lands embraced in the lease as may be utilized in the processing or refining of the leased deposits or deposits from other lands upon payments of such royalty as may be determined by the Secretary of the Interior, which royalty may be stated in the lease when issued, or, may be provided for by an attachment to the lease to be duly executed by the lessor and the lessee.

196.18 Use permits for additional lands. (a) A lessee may be granted a right to use the surface of not exceeding 80 acres of unappropriated and unentered public land not included within the boundaries of a national forest as may be necessary for the proper extraction, treatment, or removal of the leased deposits. The annual charge for the use of such land will be not less than \$1.00 per acre or fraction thereof.

(b) Applications for permits for such additional land shall be filed in the office specified in section 196.7 hereof. Such applications must set forth the specific reasons why the additional land is necessary to the lessee for the use named, describe the land desired in accordance with section 196.7(d) hereof, and also set forth the reasons why the land is desirable and adapted to the uses named, either in point of location, topography, or otherwise, and that it is unoccupied and unappropriated. The application must also contain an agreement to pay the annual charge prescribed in the permit. Use permits will be issued on Form 4-1111 dated as of the first day of the month after its issuance unless the lessee requests that it be dated the first day of the month of issuance.

196.19 Claims initiated prior to February 25, 1920. Section 37 of the act of February 25, 1920 (41 Stat. 451; 30 U.S.C. 193), provides that thereafter the deposits of phosphates described in the act may be disposed of only in the manner provided by the act, "except as to valid claims existent at date of passage of this act, and thereafter maintained in compliance with the laws under which initiated, which claims may be perfected under said laws, including discovery."



Those claims initiated under the pre-existing law may go to patent which, at the date of the act, were valid mining locations, duly made and maintained as such on lands subject to such location at the date initiated.

Effective date. These regulations shall become effective 30 days after their publication in the Federal Register.

(Sgd) Marion Clawson

Director.

Approved: January 11, 1949.

(Sgd) J. A. King

Secretary of the Interior.

Distribution L-1

Distribution L-1  
50900



Form 5-159  
(Modified July 1966,  
BIA-Portland, Oregon)

RECORDED OR FILED  
BUR. INDIAN AFFAIRS.  
Contract No. 14-20-0564-022002

Lease No. 85

UNITED STATES '67 FEB 1 AM 8:25  
DEPARTMENT OF THE INTERIOR  
Bureau of Indian Affairs 180 3745

MINING LEASE INDIAN LANDS  
(For Minerals other than Oil and Gas)  
Phosphate Mining Lease - Fort Hall Reservation  
TITLES & RECORDS  
SECTION

THIS INDENTURE OF LEASE, made and entered into in triplicate on  
this 1st day of July, 1966, between the Indian owners of trust or restricted  
lands and mineral estates, said owners and interests being identified in  
Exhibit "A" attached hereto and made a part hereof, parties of the First  
part, hereinafter called the lessor, and FMC Corporation, a corporation,  
and J. R. Simplot Company, a corporation, co-lessees, of Pocatello, State of  
Idaho, parties of the second part, hereinafter called the lessee,

WITNESSETH:

I. Lessor, in consideration of \$1, receipt of which is hereby  
acknowledged, of the rent and royalty to be paid, and of the agreement of  
the lessee herein contained, grants and leases unto lessee for the primary  
purpose of prospecting for and mining phosphate rock and phosphate shale,  
the land within the Fort Hall Indian Reservation, Idaho, described in  
Exhibit "A" attached hereto and made a part hereof. The lessee may occupy  
as much of the surface of the land as is necessary to carry on the work of  
prospecting for and mining, preparation, and removal of said minerals, in-  
cluding milling and storing.

II. TERM. Subject to the other provisions herein contained, this  
lease is for a term of ten years beginning July 1, 1966, and as long there-  
after as phosphate rock or phosphate shale, as defined in Paragraph (1) A.  
below, or other specified minerals are produced in paying quantities from  
this lease or from any of the phosphate mining leases held by FMC  
Corporation and/or J. R. Simplot Company, or their successors and assigns,  
as lessees, covering other trust or restricted allotted lands owned in  
their entirety by individual Indians and located within the boundaries  
of the Fort Hall Indian Reservation. "Allotted lands" as used herein  
includes former allotments wherein the ownership exclusive of minerals

1 vests in the Tribes. For the purpose of complying with the requirements  
2 of continuous production, this lease and any of the other phosphate mining  
3 leases on aforesaid allotted lands are to be considered as one lease.

4 III. DEFINITION. Superintendent refers to the official in charge  
5 of the Indian Agency that has jurisdiction over the lands leased.

6 IN CONSIDERATION OF THE FOREGOING, THE LESSEE AGREES:

7 (1) ROYALTY. To pay, or cause to be paid, to the Superintendent,  
8 Fort Hall Indian Agency, Fort Hall, Idaho, for the use and benefit of the  
9 lessor, a royalty as follows:

10 A. For purposes of this lease any phosphate rock, shale, beneficiated  
11 products and mixed products containing 30% or more of  $P_2O_5$  is  
12 termed "phosphate rock" whereas any such material containing less  
13 than 30%  $P_2O_5$  is termed "phosphate shale."

14 "Ton" as used herein shall be 2,000 pounds.

15 Weights will be determined from railroad scales or other  
16 appropriate scales acceptable to the Superintendent.

17 B. For phosphate rock or phosphate shale shipped from the mine, ex-  
18 cept for shipments to a beneficiation plant, a royalty of 10% of  
19 the market value at the point of direct shipment at the mine, or  
20 the figure appearing immediately below, whichever is the greater.

| Item            | % $P_2O_5$      | Royalty Rates         |
|-----------------|-----------------|-----------------------|
| Phosphate rock  | 30% or more     | 50¢ per ton, mine run |
| Phosphate shale | 26.5% up to 30% | 36¢ per ton, mine run |
| Phosphate shale | Less than 26.5% | 22¢ per ton, mine run |

21 "Mine run" means tonnage shipped without any allowance for water  
22 content.

23 C. For beneficiated and mixed products, a royalty of 10% of the  
24 market value at the point of direct shipment to lessee's furnace  
25 operations or other point of use, or the figure appearing  
26 immediately below, whichever is the greater.

| Item            | % $P_2O_5$      | Royalty Rates          |
|-----------------|-----------------|------------------------|
| Phosphate rock  | 30% or more     | 50¢ per ton, dry basis |
| Phosphate shale | 26.5% up to 30% | 36¢ per ton, dry basis |
| Phosphate shale | Less than 26.5% | 22¢ per ton, dry basis |

28 "Dry basis" means tonnage shipped less the content of water.

29 It is contemplated that beneficiated products may be mixed with  
30 mine run for shipment to lessee's furnace operations or other  
31 point of use. Such mixture is herein termed "mixed products."

32

1 to comply with the applicable laws of the State in which the land is located;  
2 to take appropriate steps to preserve the property and provide for the health  
3 and safety of workmen; to surrender and return promptly the premises upon  
4 the termination of this lease to whoever is lawfully entitled thereto, in as  
5 good condition as received, except for the ordinary wear and tear and un-  
6 avoidable accidents in their proper use of the premises; not to remove any  
7 building or permanent improvement erected on the leased property during the  
8 lease. If the payments agreed upon by this lease have been made and the  
9 other lease terms and applicable regulations have been complied with, the  
10 office fixtures and records, personal property, tools, pumping, and drilling  
11 outfits, boilers, engines, and mining machinery may be removed by the lessee  
12 at any time before 60 days after the lease expires by forfeiture or otherwise.

13 (4) FOREST PROTECTION. The lessee agrees:

14 (a) Not to cut, destroy or damage timber without prior authority  
15 of the Commissioner of Indian Affairs or his authorized representative, such  
16 authorization to be made only where required by the pursuance of necessary  
17 mining operations.

18 (b) To pay for all such timber cut, destroyed or damaged at rates  
19 prescribed by the Commissioner of Indian Affairs or his authorized repre-  
20 sentative, such rates to be determined on the basis of sales of similar  
21 timber in the vicinity.

22 (c) Not to interfere with the sale or removal of timber from the  
23 land covered by this lease by contractors operating under an approved timber  
24 sales contract now in effect or which may be entered into during the period  
25 of this lease.

26 (d) To do all in its power to prevent and suppress forest, brush  
27 or grass fires on the leased land and in its vicinity, and to require its  
28 employees, contractors, subcontractors, and employees of contractors or sub-  
29 contractors to do likewise. To place its employees, its contractors, sub-  
30 contractors, and the employees of such contractors or subcontractors em-  
31 ployed on the leased land at the disposal of any authorized officer of the  
32 Indian Service for the purpose of suppressing forest, brush or grass fires



1 with the understanding that the payment for such services shall be made at  
2 rates to be determined by the Commissioner of Indian Affairs or his author-  
3 ized representative, which rates shall not be less than the rates of pay  
4 prevailing in the vicinity for services of similar character; Provided,  
5 That no payment shall be made for services rendered in the suppression of  
6 fires for which the lessee, its employees, contractors or subcontractors, or  
7 the employees of such contractors or subcontractors are responsible.

8 (e) To pay for the loss of all timber ten inches or more in  
9 diameter occasioned by fires for which it, or any of its employees; its con-  
10 tractors, subcontractors, or the employees of such contractors or subcon-  
11 tractors are responsible for the start or spread, the assessment of the  
12 value of such damages to be determined by the Commissioner of Indian Affairs  
13 or his authorized representative on the basis of the value of such timber on  
14 sales of similar timber in the vicinity. Also, to pay liquidated damages of  
15 Twenty-five and No/100 Dollars (\$25.00) per acre for all young timber less  
16 than ten (10) inches in diameter destroyed by such fires unless a lesser  
17 rate of damages shall be approved by the Commissioner of Indian Affairs, and  
18 to pay all costs for the suppression of fires for which it, or any of its  
19 employees, contractors or subcontractors, or the employees of such contractors  
20 or subcontractors are responsible.

21 (F) Not to burn rubbish, trash, or other inflammable materials  
22 except with the consent of the authorized representative of the Commissioner  
23 of Indian Affairs, and not to use explosives in such manner as to scatter  
24 inflammable materials on the surface of the land during the fire season, ex-  
25 cept as authorized to do so by such representative.

26 (G) DEVELOPMENT. The land described herein is presently un-  
27 proven as to ore reserves. It shall not be held by the lessee for spec-  
28 ulative purposes, but for prospecting for and mining the minerals specified.  
29 The lessee shall begin operations within twelve (12) months from the  
30 effective date of this lease. During the first four lease years only, the  
31 lessee shall spend in prospecting and exploration work upon the leased land,  
32 or for the benefit of the leased land, not less than a yearly average of

1 D. For vanadium a royalty of 10% of the market value at the point of  
2 direct shipment at the mine, but not less than 1¢ per ton of shale  
3 or mixed products. This applies to shale that is used in producing  
4 a concentrate which is sold for its vanadium content.

5 Vanadium royalty due each year shall be paid annually by the lessee  
6 within 60 days after the close of the normal annual shale shipping  
7 season. The lessee shall specify the year in which the shale from  
8 which the concentrate was sold for its vanadium content was mined,  
9 such specification to be based on lessee's records of additions to  
10 and disposals from its concentrate stock pile on a first-in, first-  
11 out basis. The royalty so paid shall be prorated to each lessor  
12 of Fort Hall Indian phosphate leases held by FMC Corporation and/or  
13 J. R. Simplot Company in the same proportion that phosphate shale  
14 production royalty accrued to him was to the total phosphate shale  
15 production royalty accruals to all lessors of Fort Hall Indian  
16 lands during the same year in which the shale from which the  
17 vanadium concentrate sold was mined.

18 E. For other elements or compounds thereof which are recovered from  
19 the leased premises and sold, used, or otherwise disposed of by  
20 the lessee, the royalty shall be 10% of the market value at the  
21 point of direct shipment at the mine.

22 If the description of the premises herein leased is further identified by  
23 "Parcel Numbers", royalties must be paid and accounted for on each separate  
24 numbered parcel until otherwise directed in writing by the Superintendent.

25 All royalty accruing for any month shall be due and payable before the twenty-  
26 fifth day of the following month. It is expressly understood that the  
27 Secretary of the Interior may establish reasonable minimum values for the  
28 purpose of computing royalty on any of the leased deposits, due consideration  
29 being given to the highest price paid for majority of the production of like  
30 quality products from the same general area, the price received by the  
31 lessee, posted prices and other relevant matters.

32 (c)(a) MINIMUM ROYALTY. Commencing with the fifth lease year or  
such earlier lease year that a commercially valuable phosphate ore body is  
located within the leased premises or actual mining is started, the lessee  
shall pay, or cause to be paid, to the Superintendent for the use and  
benefit of the lessor an annual minimum royalty payable annually in advance,  
in the amount of Seven and 50/100 Dollars (\$7.50) per acre. If the lessee  
produces phosphate rock or phosphate shale from the lands covered by this  
lease during the stated term, extended term, or modified term of this  
lease, the lessee shall be entitled to recover the advance royalty payments  
paid pursuant to this provision by deducting the amount of such royalties

1 with the understanding that the payment for such services shall be made at  
2 rates to be determined by the Commissioner of Indian Affairs or his author-  
3 ized representative, which rates shall not be less than the rates of pay  
4 prevailing in the vicinity for services of similar character; Provided,  
5 That no payment shall be made for services rendered in the suppression of  
6 fires for which the lessee, its employees, contractors or subcontractors, or  
7 the employees of such contractors or subcontractors are responsible.

8 (e) To pay for the loss of all timber ten inches or more in  
9 diameter occasioned by fires for which it, or any of its employees; its con-  
10 tractors, subcontractors, or the employees of such contractors or subcon-  
11 tractors are responsible for the start or spread, the assessment of the  
12 value of such damages to be determined by the Commissioner of Indian Affairs  
13 or his authorized representative on the basis of the value of such timber on  
14 sales of similar timber in the vicinity. Also, to pay liquidated damages of  
15 Twenty-five and No/100 Dollars (\$25.00) per acre for all young timber less  
16 than ten (10) inches in diameter destroyed by such fires unless a lesser  
17 rate of damages shall be approved by the Commissioner of Indian Affairs, and  
18 to pay all costs for the suppression of fires for which it, or any of its  
19 employees, contractors or subcontractors, or the employees of such contractors  
20 or subcontractors are responsible.

21 (F) Not to burn rubbish, trash, or other inflammable materials  
22 except with the consent of the authorized representative of the Commissioner  
23 of Indian Affairs, and not to use explosives in such manner as to scatter  
24 inflammable materials on the surface of the land during the fire season, ex-  
25 cept as authorized to do so by such representative.

26 (G) DEVELOPMENT. The land described herein is presently un-  
27 proven as to ore reserves. It shall not be held by the lessee for spec-  
28 ulative purposes, but for prospecting for and mining the minerals specified.  
29 The lessee shall begin operations within twelve (12) months from the  
30 effective date of this lease. During the first four lease years only, the  
31 lessee shall spend in prospecting and exploration work upon the leased land,  
32 or for the benefit of the leased land, not less than a yearly average of

1 Two and 50/100 Dollars (\$2.50) per acre for all acreage not earlier dealt  
2 with under Paragraphs (1)(a) and (2) as having a commercially valuable  
3 phosphate ore body located within the leased premises or as having actual  
4 mining started. The lessee shall file with the Superintendent an itemized  
5 statement, in duplicate, within 20 days after each of said four lease years,  
6 of the amount and character of the expenditures during the respective lease  
7 year. The statement must be certified under oath by the lessee or its  
8 agent. With respect to reports to be rendered direct to the Regional  
9 Mining Supervisor, USGS, and matters concerning operating and safety regu-  
10 lations, the lessee shall observe the requirements of Title 30 of the Code  
11 of Federal Regulations, Part 231 (cited in Paragraph 7 below). If the  
12 lessee fails in the diligent development and continued prospecting and  
13 exploration work or operation of the mine, except when operations are  
14 interrupted by a strike, an act of God, or casualty not attributable to the  
15 lessee, this lease will be subject to cancellation. Whenever the Secretary  
16 of the Interior, or his authorized representative, considers the marketing  
17 facilities inadequate or the economic conditions unsatisfactory, he may  
18 authorize the suspension of operations for such time as he considers  
19 advisable, but this does not release the lessee from paying the advance  
20 annual rental. Payment of minimum royalty will not excuse complying with  
21 the provisions of this section. It is understood by the parties, however,  
22 that, exclusive of the prospecting and exploration expenditures above  
23 specified, for the purpose of complying with development, operations and  
24 producing requirements as well as the requirements of continuous production,  
25 this lease and any of the other phosphate mining leases covering land  
26 ownership types, as defined in Section II above, are to be considered as  
27 one lease.

28 (6) MONTHLY STATEMENTS. To keep an accurate record of the  
29 mining operations, showing the sales, prices, dates, purchasers, and the  
30 amount of minerals mined, the amount of minerals removed, and the gross  
31 receipts, and to furnish the Superintendent sworn monthly reports before  
32 the twenty-fifth of the succeeding month. All royalty and advance rental

1 due shall be a lien on all implements, tools, movable machinery, and all  
2 other chattels used in the operation and upon all of the unsold minerals  
3 obtained under the lease. An audit of the accounts and books of the lessee  
4 shall be made annually or at any other time directed by the Superintendent  
5 by a certified public accountant approved by the Secretary of the Interior  
6 and at the expense of the lessee. The lessee shall furnish, through the  
7 Superintendent, a free copy of the audit to the Secretary of the Interior  
8 within 30 days after the completion of each audit.

9 (7) REGULATIONS. To abide by and conform to any and all regu-  
10 lations of the Secretary of the Interior now or hereafter in force relative  
11 to such leases including 25 CFR 171 as to tribal lands, 25 CFR 172 as to  
12 allotted lands, and 30 CFR 231 as to both types. Rate of royalty, the  
13 annual rental, or the term of the lease may not be changed by a future  
14 regulation without the written consent of the parties to this lease.

15 (8) ASSIGNMENT OF LEASE. Not to assign this lease or any  
16 interest therein by an operating agreement including agreements providing  
17 for payment of overriding royalty or otherwise, nor to sublet any portion  
18 of the leased premises before restrictions are removed, except with the  
19 approval of the Secretary of the Interior. If this lease is divided by  
20 the assignment of an entire interest in any part of it, each part shall  
21 be considered a separate lease under all the terms and conditions of the  
22 original lease.

23 (9) BOND. To furnish to the Superintendent an acceptable surety  
24 bond in the amount of Fifteen Thousand Dollars (\$15,000.00) for every  
25 multiple of 10,240 acres or fraction thereof; said bond(s) shall cover  
26 collectively all mining leases held by the lessee on the Fort Hall  
27 Reservation and may be prepared on Collective Bond Form 5-154f. The right  
28 is reserved to the Secretary of the Interior or his authorized representative  
29 to increase the amount of bond above the sum named.

30 (10) LIQUOR. The lessee further agrees that it will not use or  
31 permit to be used any part of said premises for any unlawful conduct or  
32 purpose whatsoever; that it will not use or permit to be used any part of

1 said premises for the manufacture, sale, gift, transportation, drinking, or  
2 storage of intoxicating liquors or beverages in violation of existing laws  
3 relating thereto, and that any violation of this clause by the lessee or  
4 with its knowledge, shall render this lease voidable at the option of the  
5 Superintendent.

6 (11) INSPECTION. The leased premises, producing operations,  
7 appurtenances, and all books and accounts of the lessee may be inspected  
8 by the lessor and its agent or any authorized representative of the  
9 Secretary of the Interior.

10 (12) DISPOSITION OF MINERALS AND SURFACE. The lessor expressly  
11 reserves the right to lease, sell, or otherwise dispose of the oil and gas  
12 and the surface of the lands in this lease under existing law or laws  
13 hereafter enacted, such disposition to be subject to the right of the lessee  
14 to use as much of the surface as is necessary in the extraction and removal  
15 of the minerals from the leased land.

16 (13) SURRENDER AND TERMINATION. The lessee may at any time termi-  
17 nate this lease or any part thereof upon the payment of all rentals, royal-  
18 ties, and other obligations due to the lessor, and the further sum of \$5,  
19 and in the event restrictions have not been removed, upon a showing satis-  
20 factory to the Secretary of the Interior or his authorized representative  
21 that full provision has been made for the conservation and protection of  
22 the property, the lease to continue in full force and effect as to the  
23 lands not so surrendered. If this lease has been recorded, lessee shall  
24 file a recorded release with its application to the Superintendent for  
25 termination of this lease.

26 (14) RELINQUISHMENT OF SUPERVISION BY THE SECRETARY OF THE  
27 INTERIOR. Should the Secretary of the Interior, at any time during the  
28 life of this instrument, relinquish supervision as to all or part of the  
29 acreage covered hereby, the relinquishment does not bind the lessee until the  
30 Secretary has given 30 days' written notice. Until the requirements are  
31 fulfilled, lessee shall continue to make all payments due under subsections  
32 1 and 2. After notice of relinquishment has been received by lessee, this



1 lease is subject to the following further conditions:

2 (a) All rentals and royalties accruing shall be paid directly  
3 to lessor or its successors in title.

4 (b) If at the time supervision is relinquished by the Secretary  
5 of the Interior as to all lands under this lease, and lessee has made all  
6 payments due under the lease and has fully performed all obligations on  
7 its part to be performed up to the time of such relinquishment, then the  
8 bond given to secure the performance of the lease and one file in the  
9 Indian Office shall be of no further force or effect.

10 (15) WATER WELLS. The lessee may, at its own expense, drill  
11 and equip water wells on the leased premises and agrees that all wells  
12 will be left intact and properly cased at the termination of the lease by  
13 expiration of its term or otherwise. Lessee shall have the right to remove  
14 all mechanical pumping equipment installed by it at any wells.

15 (16) DAMAGES. The lessee shall conduct all operations authorized  
16 in this lease with due regard to preventing unnecessary damages to vegeta-  
17 tion, timber, soil, roads, bridges, cattle-guards, fences, and other im-  
18 provements, including construction, operation, or maintenance of any of  
19 the facilities on or connected with this lease which causes damage to the  
20 watershed or pollution of the water resources. On termination of operations  
21 under this lease, the lessee shall make provisions for the conservation,  
22 repair, and protection of the property and leave all of the areas on  
23 which the lessee has worked in a condition that will not be hazardous to  
24 life or limb, and will be to the satisfaction of the Superintendent.

25 (17) LIABILITY FOR DAMAGE. The lessee is liable for any and  
26 all damages resulting from its operations under this lease; including  
27 injury to the lessor, the tenants, licenses and surface owners, and for  
28 any and all damage to, or destruction of, all property, caused by the  
29 lessee's operations hereunder. The lessee agrees to save and hold the  
30 lessor and the United States, its employees, licensees, and the surface  
31 owner or their tenants harmless from all suits for injury or claims for  
32 damages to persons and property resulting from the lessee's operations

1 under this lease.

2 (18) ROADS. The lessee may use existing roads, if any, on the  
3 land and may construct, and maintain, at its own expense, any additional  
4 roads across lessor's lands that are necessary in carrying on the actual  
5 mining, prospecting, and exploration work after the location of these  
6 roads has been approved in writing by the Superintendent of the Fort Hall  
7 Agency. The public obtains no rights to these roads, and upon termination  
8 of this lease or if at any time it becomes unnecessary for lessee to use  
9 the road for conducting the operations authorized under this lease, the  
10 right to use the road shall thereupon cease and all the rights shall revert  
11 in lessor in accordance with law. The lessee shall hold the lessor and the  
12 United States harmless and indemnify them against any loss or damage that  
13 might result from the negligent construction or maintenance by lessee of  
14 the road.

15 (19) INDIAN LABOR. The lessee shall employ Indians, giving  
16 priority to lessor and other members of its tribe in all positions for which  
17 they are qualified and available and shall pay the prevailing wage rates  
18 for similar services in the area. The lessee shall do everything  
19 practicable to employ qualified Indians, giving priority to the lessor and  
20 other members of its tribe and their equipment in the hauling of all  
21 materials under this lease, insofar as the lessee does not use its own  
22 equipment for that purpose. Lessee agrees to make special efforts to work  
23 Indians, giving priority to the lessor and other members of its tribe into  
24 skilled, technical, and other higher jobs in connection with the lessee's  
25 operations under this lease. Except as herein provided, the lessee will  
26 not discriminate against any employee or applicant for employment because  
27 of race, creed, color or national origin.

28 (20) INSURANCE, SOCIAL SECURITY, TAXES, ETC. The lessee agrees  
29 to carry such insurance covering all persons working in, on, or in connec-  
30 tion with the leased premises for the lessee as will fully comply with the  
31 provisions of the statutes of the State of Idaho covering workmen's  
32 compensation and occupational disease, as are now in force or as may be

1 amended. Further, the lessee agrees to comply with all the terms and pro-  
2 visions of all applicable laws of the State of Idaho, and of the United  
3 States of America as now exist or, as may be amended, pertaining to Social  
4 Security, unemployment, compensation, wages, hours, and conditions of labor;  
5 and to indemnify and hold the lessor and the United States harmless from  
6 payment of any damages occasioned by the lessee's failure to comply with  
7 these laws. The lessee shall pay all taxes lawfully levied or assessed on  
8 the sale, severance, production, extraction, or removal of any of the  
9 minerals covered by this lease.

10 (21) HEIRS AND SUCCESSORS IN INTEREST. It is further covenanted  
11 and agreed that each obligation under this lease shall extend to and be  
12 binding upon, and every benefit hereof shall inure to, the heirs, executors,  
13 administrators, successors of, or assigns of the parties to this lease.

14 (22) GOVERNMENT EMPLOYEES CANNOT ACQUIRE LEASE. No lease,  
15 assignment thereof, or interest therein will be approved to any employee  
16 or employees of the United States Government whether connected with the  
17 Indian Service or otherwise, and no employee of the Interior Department  
18 shall be permitted to acquire any interest in such leases by ownership of  
19 stock in corporations having leases or in any other manner.

20 (23) CANCELLATION AND FORFEITURE. When, in the opinion of the  
21 Secretary of the Interior or his authorized representative, there has been  
22 a violation of any of the terms or conditions of this lease before restric-  
23 tions are removed, the Secretary of the Interior or his authorized repre-  
24 sentative has the right at any time after 30 days' notice to the lessee,  
25 specifying the terms and conditions violated, and after a hearing, if the  
26 lessee shall so request within 30 days of receipt of notice, to declare this  
27 lease void, and the lessor may then take immediate possession of the lands.  
28 After restrictions are removed, the lessor may use any available remedy in  
29 law or equity for breach of this contract by the lessee.

30 (24) ADJUSTMENT OF TERMS OR CONDITIONS. The terms and conditions  
31 of this lease shall be subject to reasonable adjustment, with the approval  
32 of the Secretary of the Interior or his authorized representative, at the

1 end of each 10-year period. Should either party to this lease desire to  
2 effect a reasonable adjustment in any of the terms or conditions of this  
3 lease, then the party desiring such reasonable adjustment must give written  
4 notice of not less than 120 days to the other party prior to the expira-  
5 tion of each 10-year period of the term of this lease. Such written notice  
6 shall specify in particular the section of the lease which is desired to be  
7 adjusted. If such notice to make reasonable adjustment is not given as  
8 herein required, then the terms and conditions of this lease shall continue  
9 in full force and effect during the next successive 10-year period. In the  
10 event the parties have not reached an agreement by six (6) months after the  
11 commencement of each successive 10-year period of the terms of this lease,  
12 then the matter shall be submitted to the Secretary of the Interior who  
13 will make a determination giving due consideration to the facts as presented  
14 by both parties, and his determination shall be final.

15 (25) NOTICES. Any notice required or permitted to be given or  
16 served upon either party hereto, shall be sufficiently given, served or  
17 made if sent to such party by prepaid registered or certified mail  
18 addressed to it at the following address or to such other address as the  
19 parties shall from time to time designate in writing:

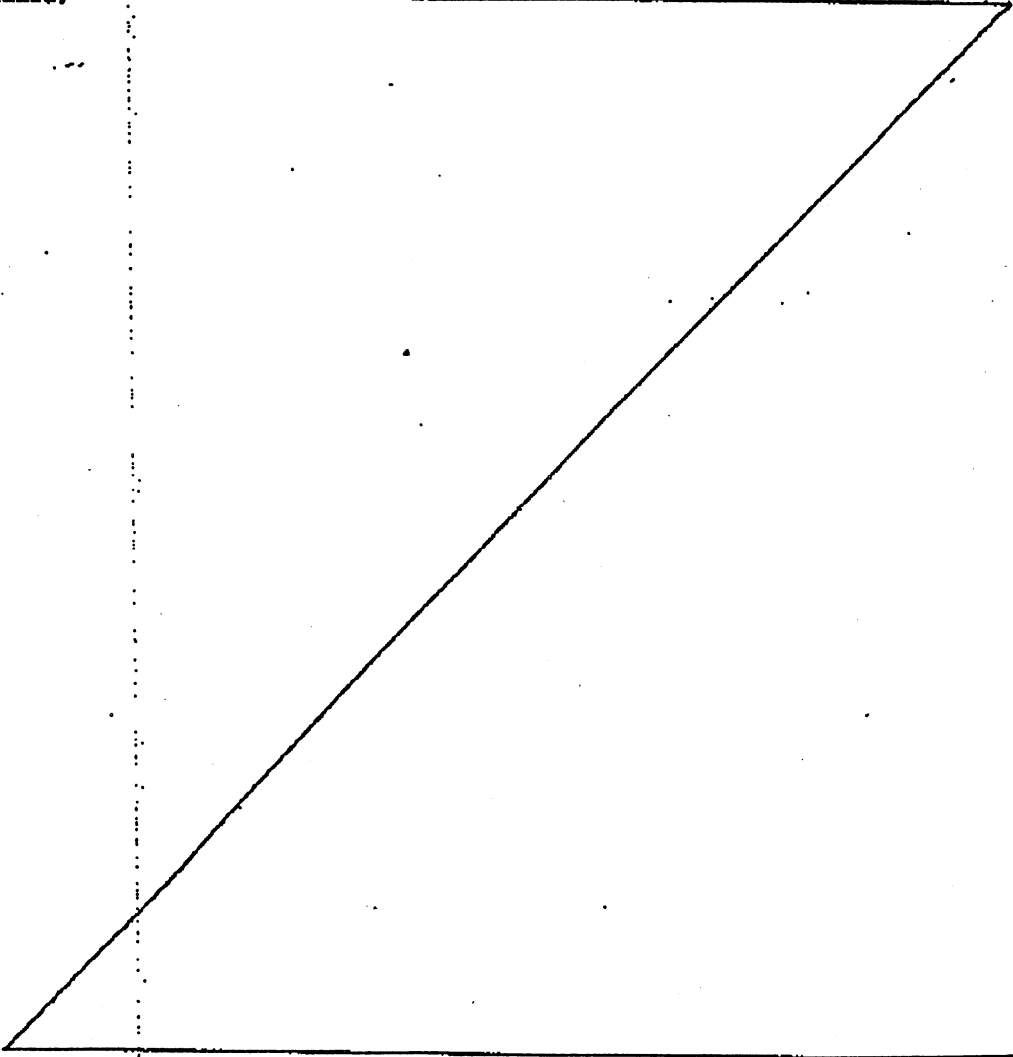
20 NOTICE TO THE LESSOR: Superintendent  
21 Fort Hall Indian Agency  
Fort Hall, Idaho 83201

22 NOTICE TO THE LESSEE: FMC Corporation  
23 P. O. Box 4111  
Pocatello, Idaho 83201  
24 and  
J. R. Simplot Company  
25 P. O. Box 912  
Pocatello, Idaho 83201

26 The date of the mailing of notices via registered mail shall be the  
27 effective date of any such notice. Routine or regular periodical reports  
28 and statements hereunder may, however, be sent by regular mail addressed as  
29 above, but, if after the proper mailing any of such mail shall not be  
30 received when due, the addressee will notify the addressor in accordance  
31 with the provisions for notice hereinabove of such failure of receipt and  
32 give the addressor a reasonable time to follow up and secure the delivery

1 of the statement and report or a duplicate thereof, before claiming any  
2 default on account thereof.

3 (25) EXECUTION AND COUNTERPARTS. This lease may be executed in  
4 any number of counterparts, no one of which needs to be executed by all  
5 parties, or the parties may join, ratify, adopt, confirm and consent to this  
6 lease by separate instrument of joinder in writing specifically referring  
7 hereto and which shall be attached hereto and made a part hereof, and  
8 shall be binding upon all those parties who have executed such a counter-  
9 part or joinder with the same force and effect as if all such parties had  
10 signed the document and regardless of whether or, not it is executed by all  
11 other parties owning or claiming an interest in the lands covered by this  
12 lease.



## (27) CANCELLATION OF OLD LEASES AND DEFERRAL OF INCREASED

ROYALTIES UNDER SOME NEW LEASES. It is understood and agreed by the parties hereto as follows:

- A. That any phosphate mining leases existing on June 30, 1966, held by the lessee herein, and covering all or any portion of the premises herein leased is hereby terminated effective June 30, 1966;
- B. That cumulative credit balances for advance royalties paid, but not applied against production royalties accrued under said cancelled leases as of June 30, 1966, shall be extended for application under the new leases;
- C. That, in computing the initial year's rental and minimum royalty under the new lease, the respective amounts already paid under the old lease and which are allocable to any portion of the initial year of the new lease shall be deducted; and
- D. That the production royalty rates for phosphate rock and phosphate shale under Paragraphs (1) B. and (1) C. of certain of the new leases identified in the below tabulation shall be 35¢, 25¢ and 15¢ instead of 50¢, 36¢ and 22¢ for the period July 1, 1966 through the date shown below for the respective leases, and upon the expiration of such period shall increase to 50¢, 36¢ and 22¢. In some cases, as noted below, this deferral of increased royalties does not apply to the entire leased premises but only to specified parcels.

| Old Lease Number | New Lease, Contract No.<br>(14-20-0504-) | Expiration Date of<br>Deferral | Lessee  |
|------------------|--|--------------------------------|---------|
| 27               | 1194                                     | June 8, 1968                   | FMC     |
| 28               | 1195                                     | June 8, 1968                   | FMC     |
| 52               | 1196                                     | January 11, 1968               | Simplot |
| 23               | 1197                                     | July 16, 1967                  | Simplot |
| 32               | 1198                                     | June 8, 1968                   | FMC     |
| 47               | 1199                                     | June 8, 1968                   | FMC     |
| 33               | 1200                                     | June 8, 1968                   | FMC     |
| 34               | 1201                                     | June 8, 1968                   | FMC     |
| 45               | 1205                                     | June 8, 1968                   | FMC     |
| 29               | 1206                                     | June 8, 1968                   | FMC     |
| 30               | 1208                                     | June 8, 1968                   | FMC     |
| 46               | 1213                                     | June 8, 1968                   | FMC     |
| 35               | 1216                                     | June 8, 1968                   | FMC     |
| 36               | 1217                                     | June 8, 1968                   | FMC     |
| 21 & 22          | 1225                                     | July 16, 1967                  | Simplot |
| 66               | 1226                                     | June 8, 1968                   | FMC     |
| 19, 21 & 22      | 1228, all Parcels except No. 4.          | July 16, 1967                  | Simplot |
| 66               | 1229, Parcels 1, 2, 3, 6, 9 & 11 only.   | June 8, 1968                   | FMC     |



1 IN WITNESS WHEREOF, the said parties have hereunto subscribed  
2 their names and affixed their seals on the day and year first above mentioned.

3 LESSOR (as its interest might appear):

4 SHOSHONE-BANNOCK TRIBES OF THE  
5 FORT HALL RESERVATION, a constitutional body

6 ATTEST:

7 Janet Foote  
8 Secretary,  
9 Fort Hall Business Council

10 By: Lesley Edms  
11 Chairman, Fort Hall Business Council

12 LESSOR (as its interest might appear):

13 THE SHOSHONE-BANNOCK TRIBES, a corporation

14 ATTEST:

15 Janet Foote  
16 Secretary,  
17 Fort Hall Business Council

18 By: Lesley Edms  
19 Chairman, Fort Hall Business Council

20 LESSEE:

21 J. R. SIMPLOT COMPANY

22 ATTEST:

23 [Signature]  
24 Secretary  
25 J. R. Simplot Company

26 By: W. Grant Kallbourn  
27 Vice President

STATE OF IDAHO }

ss.

COUNTY OF BINGHAM)

On this 22<sup>nd</sup> day of September, in the year 1966, before me, the undersigned Notary Public in and for said State, personally appeared Kesley Edmo and Janet Foote, known to me to be the Chairman and Secretary, respectively, of the Fort Hall Business Council of the Shoshone-Bannock Tribes of the Fort Hall Reservation, a constitutional body, the entity that executed the within instrument of the persons who executed the instrument on behalf of said entity, and acknowledged to me that such Shoshone-Bannock Tribes of the Fort Hall Reservation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Kesley D. Edmo  
Notary Public for Idaho

residing at Fort Hall, Idaho  
My commission expires May 19, 1967

STATE OF IDAHO }

ss.

COUNTY OF BINGHAM)

On this 22<sup>nd</sup> day of September, in the year 1966, before me, the undersigned Notary Public in and for said State, personally appeared Kesley Edmo and Janet Foote, known to me to be the Chairman and Secretary, respectively, of The Shoshone-Bannock Tribes, the corporation that executed the within instrument or the persons who executed the instrument on behalf of said corporation, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Kesley D. Edmo  
Notary Public for Idaho

residing at Fort Hall, Idaho  
My commission expires May 19, 1967



## J. R. SIMPLOT COMPANY

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

Feb. 6, 1974

RECEIVED

FEB 8 1974

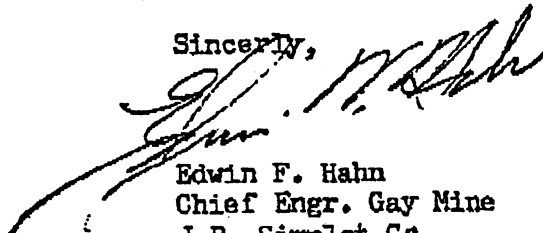
Conservation Division  
U.S. GEOLOGICAL SURVEY  
Pocatello, IdahoMr. John Skinner  
District Mining Engineer  
U. S. Geological Survey  
313 Post Office Building  
Pocatello, Idaho 83201

Dear Mr. Skinner:

In response to your verbal request, Feb. 6, 1974, for a list of the approved mining plans for Gay Mine the following is submitted:

| Panel         | Date     | Date Submitted | Date Approved | Approved By  |
|---------------|----------|----------------|---------------|--------------|
| A-11, C9      | 7/19/73  | 8/17/73        | Not Approved  |              |
| FF-GQ         | 7/11/73  | 8/16/73        | Not Approved  |              |
| ✓ BB-3        | 2/25/72  | 3/2/72         | 5/4/72        | J.W. Moffitt |
| M-6           | 2/22/72  | 2/24/72        | 4/3/72        | J.W. Moffitt |
| O-R           | 10/1/71  | 10/8/71        | 10/13/71      | J.W. Moffitt |
| XX1, GG1, HH2 | 4/8/71   | 4/20/71        | 5/25/71       | J.W. Moffitt |
| DD4           | 10/29/70 | 11/2/70        | 3/24/71       | E. Blessing  |
| XX1           | 9/22/70  | 9/24/70        | 3/24/71       | E. Blessing  |
| FF2-EE2-DD5   | 9/17/70  | 9/24/70        | 3/24/71       | E. Blessing  |
| M5            | 9/17/70  | 9/18/70        | 2/24/71       | E. Blessing  |
| FF2 Partial   | 7/22/70  | 7/27/70        | 7/30/70       | E. Blessing  |
| AA5           | 4/17/70  | 4/20/70        | 5/5/70        | E. Blessing  |
| QQ1           | 2/24/70  | 3/2/70         | 5/15/70       | E. Blessing  |
| QQ2-R1        | "        | "              | "             | "            |
| DD3-EE1       | "        | "              | "             | "            |
| E3            | "        | "              | "             | "            |
| O5 North      | "        | "              | "             | "            |
| O5 South      | "        | "              | "             | "            |
| ✓ BB2-II 1    | "        | "              | "             | "            |

Sincerely,



Edwin F. Hahn  
Chief Engr. Gay Mine  
J.R. Simplot Co.



CONFIDENTIAL**J. R. SIMPLOT COMPANY**

MINERALS AND CHEMICAL DIVISION

P. O. BOX 912

POCATELLO, IDAHO 83201

February 25, 1976

**RECEIVED**

Mr. John T. Skinner  
 District Mining Supervisor  
 U. S. Geological Survey  
 Conservation Division  
 P. O. Box 1610  
 Pocatello, ID 83201

Conservation Division  
 U.S. GEOLOGICAL SURVEY  
 Pocatello, Idaho

Dear John:

In accordance with federal mining regulations and in response to your directive letter of August 12, 1975, please find enclosed a partial mining plan, as required by 30 CFR 231.10 (e) and (f) and 25 CFR 177.7 (f) and (g), for removal of remaining phosphate reserves at Gay Mine "proper". Gay Mine "proper" is herein defined as developed leased properties in Bingham and Caribou counties (Idaho), T4S, R38E & R37E. Joint venture (FMC and Simplot) properties to the south in Bannock County, T5S, R37E, are not considered in this plan.

The enclosed mining plan should be considered a partial plan since future market conditions and unforeseen mining problems may necessitate changes.

Sincerely,

*Robert B. Hill*

Robert B. Hill  
 Superintendent  
 Gay Mine

Group III - R-4/CC-  
 Nov 1979

pjm

enclosures

**SEP 21 1978 - Group I**Date  
MINING PLAN APPROVED

JAN 07 1980

Date  
MINING PLAN APPROVED

*John T. Skinner*  
 J. T. Skinner  
 District Mining Engineer

Group II

*Benny Bunnell*

Total Plan Approved on Jan. 7, 1980





6

Conservation Division  
Fed. Bldg., U.S. Courthouse      Gay Mine  
250 South 4th Avenue  
Pocatello, Idaho 83201

September 21, 1978

Mr. Robert B. Hill  
Superintendent  
Gay Mine  
P. O. Box 912  
J. R. Simplot Company  
Pocatello, ID 83201

Dear Mr. Hill:

Reference is made to J. R. Simplot Company's proposed mining plan, "Partial Mining Plan for Removal of Remaining Reserves, Gay Mine, March, 1977," and additional information supplied for that plan, dated April 19, 1977. This latter documents that the surface and mineral resource managing agencies are in concurrence and that an approvable plan for Group I is on file with this office. The Bureau of Indian Affairs has recommended approval on Group I area only. Accordingly, the proposed Gay Mine Group I mining plan is hereby approved in conformance with the conditions of the appropriate mining and business leases, 25 CFR 171 as to tribal lands, 25 CFR 172 as to allotted lands, and 30 CFR 231, particularly 30 CFR 231.10(c) and (d) subject to the following eight conditions:

1. Future operating details shall be submitted in the form of an Annual Operations Plan, or more frequently as operating conditions require, and shall consist of a narrative section supplemented with maps and appropriate cross-sections showing pit and dump limits. The purpose is to detail upcoming mining and overburden removal operations. The plan should be submitted before December of each year. It is suggested that prior to submission of the annual plan, an agency tour be arranged, before continuous snow cover, to preview on-site the forthcoming proposal. It is not expected that the written operating plan be submitted prior to said inspection.
2. A water monitoring program shall begin on the Baker Canyon unnamed stream above and below the proposed mining disturbance. Water quality (i.e., pH and Total Suspended Solids (TSS) in milligrams per liter) and water quantity data shall be obtained. This information shall be compiled and filed with the Mining Supervisor as part of the Gay Mine Annual Operating Report. Final culvert design for the Baker Canyon haul road crossing shall be based upon this flow data and expected storm frequency.
3. Reclamation of the backfilled pits shall be conducted as contemporaneous as practical after surface disturbance and shall leave a minimum of land reclamation consistent with the best practical technology as determined by

Part III - A-1

A-1

64

the Mining Supervisor. The reclamation purpose is to stabilize mined areas, re-establish traditional land-uses, and minimize adverse off-site environmental impacts. Future events such as geologic related hazards, highwall instability, dump instability, etc., shall be reported promptly by phone to the Mining Supervisor followed in writing if required.

4. Wastes or by-products shall not be discharged if they are known to contain any substance(s) in concentrations which would prove harmful to fish, wildlife, or water supplies.

5. The lessee shall be responsible for erosion prevention and control on the area covered by this approval and lands adjacent thereto, and shall conduct preventative measures if required by the Mining Supervisor to abate off-site movement of sediment.

6. It is recognized that additional mining and business leases need be obtained to mine Group II as outlined in the mining plan. Approval of Group II plans, including the Baker Canyon haul road crossing, are hereby withheld until all necessary studies and additional leases as shown on mining plan Map No. 1120 are obtained.

7. Approval of Group III is withheld pending receipt of Bureau of Indian Affairs comments which are expected shortly. Written approval of Group III will follow.

8. Approval for all areas described for future possible mining, Map No. 113 (green areas) are hereby withheld pending submission of site-specific mining details, maps, and cross-sections.

I have appreciated your cooperative attitude during the assessment of the Gay Mine Plans. You are cautioned to take no action in the Group II, III, and the green (see condition 8) areas until written approval is granted by this office. If you have any questions or comments, please feel free to contact this office.

Sincerely yours,

(Original Sgd.) J. T. Skinner  
John T. Skinner  
District Mining Supervisor

JTR:cf

Enclosures  
cc Superintendent, Fort Hall Agency, BIA

Part III - b

A2

BARNEY -

SEE ATTACHED TELEPHONE MESSAGE TAP

BOB HILL WAS CALLED LAST EVENING BY MR. PIPER AND QUIRIED AS TO WHETHER IRS HAD SUBMITTED A RECENT MINE PLAN. RESPONSE, AFFIRMATIVE.

PIPER EXPLAINED TO HILL THAT THE SUPERINTENDENT HAD WRITTEN TO THE BIA, AREA DIRECTOR EXPRESSING CONCERN OVER LOSS OF REVENUE TO THE TRIBE IF MR. ITSCHER'S DECISION TO NOT ALLOW FOR ISSUANCE OF THE NEW LEASE, WAS ALLOWED TO STAND. ADDITIONALLY, PIPER RELATED THAT A SIMILAR LETTER WAS SENT BY THE CHAIRMAN, TRIBAL BUSINESS COUNCIL TO SENATOR FRANK CHURCH, AND ALTHOUGH BOB HILL WAS NOT CERTAIN AT THIS TIME, THE TRIBE MAY HAVE NOTIFIED OTHER IDAHO CONGRESSIONAL LEADERS.

THE HOPE IS THAT EITHER THE AREA DIRECTOR'S OFFICE, BIA, OR CONGRESSIONAL PRESSURE WILL REVERSE ITSCHER'S DETERMINATION.

THEREFORE HILL WANTS A "STOP FURTHER ACTION" ON THE NEW MINE PLAN SUBMITTAL, WHEREVER IT IS (DHS; POCATELLO OR AMS; MENDO PARK) UNTIL WE HEAR FROM HIM (HILL). I AGREED TO THAT REQUEST.

JOHN



CONSERVATION DIVISION  
FED. BLDG., U.S. COURTHOUSE  
250 SOUTH 4TH AVENUE  
POCATELLO, IDAHO 83201

Gay Mine  
November 7, 1979

Mr. Robert B. Hill  
Superintendent  
Gay Mine  
J.R. Simplot Company  
P.O. Box 912  
Pocatello, Idaho 83201

Dear Mr. Hill:

Reference is hereby made to J.R. Simplot Company's proposed mining plan, "Partial Mining Plan for Removal of Remaining Reserves, Gay Mine, March, 1977," and additional information supplied for that plan, dated April 19, 1977, and September 18, 1979. This letter documents that the Shoshone - Bannock Tribal Business Council, BIA and USGS have assessed the proposal as to panels K-4 and CC-3 (Group III) and hereby approve said panels along with necessary access roads, ore haul roads, waste haul roads, etc.

Please find enclosed the plan maps for the subject panels as approved by this office.

Barney Brunelle  
District Mining Supervisor

ABB/JWR:pcp

Enclosures:

cc: Shoshone - Bannock Tribal Business Council  
Superintendent, Fort Hall Agency, BIA.

Map and copy of  
this letter sent  
to Mr. McCann  
November 8, 1979  
BIB  
LSD Bannock





CONSERVATION DIVISION  
FED. BLDG., U.S. COURTHOUSE  
250 SOUTH 4TH AVENUE  
POCATELLO, IDAHO 83201

*Approved*

December 21, 1979  
Gay Mine

Wayne Meyers  
Superintendent  
Gay Mine  
J.R. Simplot Company  
P.O. Box 912  
Pocatello, Idaho 83201

Dear Mr. Meyers,

Reference is hereby made to J.R. Simplot Company's proposed mining plan, "Partial Mining Plan for Removal of Remaining Reserves, Gay Mine, March, 1978," and additional information supplied for that plan, dated April 19, 1977, and September 18, 1979, as modified by the plan of December 18, 1979. This letter documents that the Shoshone - Bannock Tribal Business Council, BIA and USGS have assessed the proposal as to the modified CC-3 (Group III) panel and hereby approve said panel along with necessary access roads, ore haul roads, waste haul roads, waste haul roads, etc.

Please find enclosed the modified plan map for the subject panel as approved by this office.

Very Truly Yours,

Barney Brumelle  
District Mining Supervisor

Enclosures:

cc: Shoshone - Bannock Tribal Business Council  
Superintendent, Fort Hall Agency, BIA, with  
enclosure





UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
CONSERVATION DIVISION  
FED. BLDG., U.S. COURTHOUSE  
250 SOUTH 4TH AVENUE  
POCATELLO, IDAHO 83201

*Approved*

January 8, 1980

Mr. Wayne Meyers  
Superintendent  
Gay Mine  
J.R. Simplot Company  
P.O. Box 912  
Pocatello, Idaho 83201

Dear Mr. Meyers:

Reference is hereby made to J.R. Simplot Company's proposed mining plan, "Partial Mining Plan for Removal of Remaining Reserves, Gay Mine, March, 1976," and additional information supplied for that plan, dated April 19, 1977, September 18, 1979 and December 18, 1979. This letter documents that the Shoshone - Bannock Tribal Business Council and BIA have approved and issued the necessary business and mining leases for the Group II area (ref: March 1976 plan) and such leases have been accepted by J.R. Simplot Company and will be used in mining the Group II area. Therefore, the Group II area is hereby approved for mining along with all necessary access roads, ore haul roads, waste haul roads, etc.

Please find enclosed the plan maps and cross sections for Group II as approved by this office.

I appreciate your patience during the long period necessary to receive approval for these leases and with their mining plan approval. With this plan approval, the entire March 1976 plan as amended and modified is now approved.

Very Truly Yours,

*Barney Brunelle*  
Barney Brunelle  
District Mining Supervisor

Enclosures:

cc: Shoshone - Bannock Tribal Business Council  
Superintendent, Fort Hall Agency, BIA.



Approval Stipulations  
Main Haul Road  
Gay Mine Extension - South 40 Joint Leases  
and  
Associated Business Leases  
Fort Hall Indian Reservation  
June 1986

It is hereby agreed that as a condition to the approval of the Main Haul Road for the Gay Mine Expansion of the Joint Lease Area ("South 40 Area") which proposes construction of about 3.6 miles of road, development of 3 borrow pits, crossing of a public road and crossing of a creek (plan dated November 6, 1985, hereinafter referred to as the "Subject Plan") and all operations under the Subject Plan, J.R. Simplot and FMC Corporation and its employees, contractors, agents, operators, and heirs in interest shall adhere to the following.

1. All operations at the Gay Mine, Fort Hall Indian Reservation, shall be in accordance with all applicable laws, regulations and rules including those of the Shoshone-Bannock Tribes.
2. Use of fire shall be carefully restricted according to Company rules and Tribal Ordinances.
3. Surface acreage disturbance during road construction shall be held to a minimum to minimize adverse impacts to vegetation. Off-road travel by tractors, trucks, scrapers, and other wheeled and tracked vehicles shall be in conformance with Tribal Ordinances dealing with off-road vehicles, BIA rules and regulations, and shall be confined within the approved haul road and associated borrow pit areas.
4. Roads shall be watered as necessary to minimize fugitive dust.
5. Public access to the South 40 Main Haul Road and other active mining areas shall be restricted to provide for safety of the public and for security reasons. Signs shall be posted to advise unauthorized personnel about access limitations.
6. The Company shall provide for continued access for authorized persons to the Big Springs area and the government road by constructing a crossing over the haul road and providing a public access route adjacent to the haul road as shown on the Company's proposal.
7. At the cessation of ore production from the South 40 area, or when Simplot or FMC requests relinquishment of the haul road business leases (whichever comes first), the following actions will commence within 12 months and be promptly completed:
  - A. The mine access road shall be abandoned and reclaimed, at company expense, except for those portions which are suitable as part of the Fort Hall Reservation road system.
  - B. Spread, shape, rip and reclaim those road sections which are not suitable for retention as part of the Fort Hall Reservation road system.

C. Revegetate to BIA and Tribal specifications as discussed in Section 5.2 of the EA.

D. If the Fort Hall Reservation road system at the time of abandonment or lease relinquishment includes the Willow Creek crossing, then the fill over the culverts in Willow Creek will be removed to a depth that will allow available Fort Hall equipment to maintain said culvert(s), but in no instance will the fill remaining after abandonment exceed 20 feet in depth or the finished grade exceed 5 percent. Following reclamation of the haul road, as described in A through D above, a Tribal, BIA and BLM interdisciplinary team will agree on proper abandonment or retention of the haul road in accordance with the EA.

8. Areas amenable to reclamation shall be graded and reclaimed. Access roads leading to the Main Haul Road shall be ripped and seeded when no longer necessary for mining purposes, unless otherwise approved by the authorized official of the Fort Hall BIA Agency and Tribal Council.
9. As priority for 1986 reclamation of disturbance caused by construction of the haul road, Simplot shall fertilize and seed the following portions:
  - A. The north and northwest facing cut and fill slopes between stations 5+00 to 80+00 north of the government/haul road crossing,
  - B. Both sides of the haul road between stations 0+00 to 25+00 south of the government/haul road crossing.
10. Necessary measures shall be taken to protect the fisheries and water quality of Ross Fork Creek and tributaries. Discharge of water from any haul road construction areas into any surface drainage is expressly excluded from this approval of the Haul Road Plan.
11. As far as possible, road surfaces shall be sloped, water control features provided, and snow handled so as to eliminate sediment laden waters from reaching Ross Fork Creek or its tributaries. Sediment traps, ponds, berms, and other engineering measures shall be used, as necessary, to prevent sediment movement and erosion.
12. West of the proposed JG pit area (near station 7+00), the haul road shall be constructed with a core of coarse, competent rock, continuous from the east sideslope to the west sideslope of the finished haul road. The rock core, approximately 150 feet in length and at least 8 feet in depth, is to be built in the center line of the natural drainage channel near station 7+00 and a pipe or culvert installed to prevent water buildup deeper than 10 feet. The purpose of this is to catch runoff from the JG pit and dump and to promote drainage of this water. A temporary road will be constructed within the confines of the waste disposal site north of the haul road fill so as to facilitate placement of the rock core.
13. Criteria for selecting species for revegetation shall include diversity, palatability, nutritive value and big game forage preferences and cover requirements. Strips of native vegetation, particularly those with high cover value like aspen and conifer,

will be retained wherever possible to provide wildlife cover, enhance the interspersation and edge effect, and to provide a seed source for reclamation. The Shoshone-Bannock Tribal Council will decide on priority as to land utilization for wildlife forage or stock grazing.

14. As a condition to approval to construct the haul road, a four-wire fence built to BIA specifications, will be constructed at Simplot's expense. This fence will be constructed to maintain livestock allotments nearly identical to the existing situation. Simplot has proposed (plan received Nov. 19, 1985) to build about 2,900 feet of new fence. About 1,300 feet of this new fence will run east-west through the dry farm area (north end of lease 84) near the saddle where the proposed haul road will cross the government road. Two other sections of fence, about 1,600 feet total length, and a cattleguard will be built in the northwestern portion of lease I-203 to connect and/or replace some existing fence and cattleguard. This portion of lease I-203 is near the proposed crossing of Willow Creek. Before construction, a joint BIA/Simplot/Tribal personnel field examination will be done and the final alignment approved. The fence and cattleguard will be installed concurrent with road construction.
15. The haul road shall not form a continuous barrier to animal movement. Areas shall be provided along the haul road (i.e. 2 or 3 or more places per mile of road) where big game and livestock can cross over the road between the existing Gay Mine area and the South 40 area.
16. The lessee shall not disturb cultural resources. Should any cultural resources be found within the haul road area, a cultural resources recovery program, approved by the Superintendent, BIA, Shoshone/Bannock Tribes, and the State Historic Preservation Officer, shall be implemented. Standard BIA practice (30 BIAM Supplement 2) shall be followed if cultural resources are discovered during operations under this approval. If cultural resources are found on a mining lease, then the lessee shall immediately bring them to the attention of the District Manager, BLM, or the Superintendent of the Fort Hall Agency, BIA, if the District Manager is not available. The Bureaus shall promptly notify the Tribal Land Use Commission of any such cultural resource find. In consultation with the authorized officer and Shoshone/Bannock Tribal Council, recovery of cultural resources during lease operations is the lessee's responsibility. Any recovery of archeological resources shall be accomplished by a recognized archeological expert. Any such cost of cultural resources recovery will be borne by the lessee (or lessees).

Dean J. Simplot  
J.R. Simplot, Title  
President, Minerals & Chemical Division

F. H. Herbert  
FMC Corporation, Title  
F. H. Herbert, Resident Manager

June 19, 1986

Date

June 19, 1986  
Date

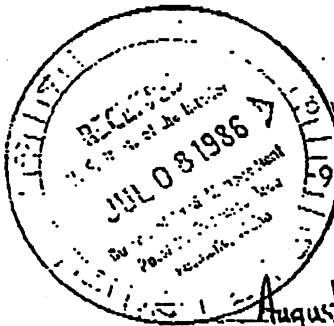




J. R. SIMPLOT COMPANY / P.O. BOX 912 / POCATELLO, IDAHO 83204  
(208)232-6620 (PLANT) / (208)233-7500 (DIVISION OFFICES)

MINERALS & CHEMICAL DIVISION  
Gay Mine

Mr. Wallace Evans  
Area Manager  
Pocatello Resource Area  
Federal Building  
250 South 4th Ave.  
Pocatello, Idaho 83201



August 5, 1986

Dear Mr. Evans:

*Cheryl A. Frazier*  
District Manager

In accordance with the provisions set forth in 25 CFR, please find enclosed mining plan map number 1142 which, together with this letter, will constitute a mine plan for two small surficial ore deposits called KK-1 and JJ-3, JA-1. Both pits are located within an existing mined area and because of their close proximity and structural relationship to previous mining, they should be considered as a modification of earlier approved plans. Pertinent information regarding the two proposed pits is as follows:

| PIT   | LEASE   | ALLOT. | ORE(TONS) | WASTE(CU.YDS.) | ACRES | DIST. |
|-------|---------|--------|-----------|----------------|-------|-------|
| KK-1  | 190     | 801    | 53,000    | 52,000         | 0     |       |
| JJ-3, |         |        |           |                |       |       |
| JA-1  | 213,211 | 634    | 121,700   | 35,500         | 4     |       |

The acreage disturbed does not include the haul roads shown in the plan since they will be constructed on previously disturbed ground, but they will disturb some natural regrowth and reclaim which has occurred since the last mining in this area.

Waste from KK-1 Pit will be pushed southward into the mined out pit (W-2) shown on the map. This waste will provide a ramp connecting KK-1 to the existing haul road out of the old pit (see map). Because the area has been disturbed by previous mining, there will be no topsoil recovered with this pit. After mining, KK-1 can be backfilled with a portion of the waste dump located on the west side of the pit. Final reclamation will take place in conjunction with the surrounding area at some later date.

Waste generated by JJ-3, JA-1 will be disposed of as backfill in the mined out pit to the west (JJ-2). Some waste may be used in construction of necessary haul roads or disposed of within the pit itself. Because JJ-3, JA-1 is relatively shallow (45 feet max.), it can be reclaimed with or without backfill. All highwalls and abrupt elevation changes will be reduced with dozer work during and immediately following mining. Final reclamation will take place within the first planting season.

As you can see, the plan requires no external dumps and only a small amount of new disturbance within an established mining area. Please

let us know if additional information is required.

Sincerely,

*Jack Nielson*  
Jack Nielson  
Mine Geologist





## United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Idaho Falls District

940 Lincoln Road

Idaho Falls, Idaho 83401

IN REPLY  
REFER TO:3500  
Fort Hall Indian Reservation

August 5, 1986

Mr. Bill Schmitt  
Gay Mine Manager  
J.R. Simplot  
P.O. Box 912  
Pocatello, ID 83201

Dear Bill:

NEPA documentation has been completed through a Categorical Exclusion Review (CER) for your proposed modification to the Gay Mine Plan. The modification involves panels KK-1, JJ-3 and JA-1. A joint field examination was conducted on July 17, 1986. Input and recommendations in the development of the CER were received from the Bureau of Indian Affairs and Tribal representatives.

This plan is a modification of the Gay Mine plan, "Partial Mining Plan for Removal of Remaining Reserves" dated March, 1976. As such, approval stipulations relating to the March, 1976 plan are incorporated by reference and made part of the approval of the KK, JJ, and JA panels. Copies of the related approval documents are enclosed.

The Gay Mine proposal for KK-1, JJ-3, and JA-1 mine panels, dated July 2, 1986, is approved subject to the following:

1. Compliance with all the terms and conditions of the lease and with the provisions of Title 25, CFR 211, and
2. Conformance with the approval stipulations, relating to the above referenced March, 1976 Gay Mine plan.

If you have any questions regarding matter, please call. Your continued cooperation is appreciated.

Sincerely,

  
O'dell A. Frandsen  
District Manager

## Enclosure:

Approved J.R. Simplot Mine Plan: Panels KK-1, JJ-3, JA-1  
dated July 29, 1986

cc: A. Appenny, Business Council  
J. Ballard, Land Use Commission  
D. Thompson, B.I.A., Fort Hall Agency  
D. Piper, Mining Consultant  
B. Newell, FMC Corp.



Gay Mine Expansion - South 40 Joint Leases  
Fort Hall Indian Reservation  
October 1986

OCT 23 1986

These stipulations apply to the approval of the Gay Mine Expansion - Phase I, Joint Lease Area ("South 40 Area") which proposes mining of Joint Simplot/FMC phosphate mining leases 82, 83, 84, 85, 86, 208, and I-203, and Simplot lease 209. Mining of the Gay Mine Expansion, Phase I, will produce an estimated 859,000 tons acid grade rock, 6,333,000 tons furnace grade shale, and 28,079,000 cubic yards of silt shale and overburden. Production would come from the following nine pits, listed in the sequence to be developed and mined: JG, JC, JF-1, JF-2, and JD. The plan to be approved also proposes construction of 2 ore surge pile areas, one silt shale stockpile, Alternative 1 JG waste dump, JC waste dump and other proposed work as contained in the J.R. Simplot Mine Plan dated January 1986. The Mine Plan and the Reclamation Plan, and mitigating measures and monitoring program contained in the Mariah Environmental Assessment Report dated September 1986, hereinafter referred to as the "Subject Plan."

IT IS HEREBY AGREED THAT as a condition to approval of the Gay Mine Expansion - Phase I, and all operations under the Subject Plan, J.R. Simplot Company (hereinafter "Simplot") and FMC Corporation and its employees, contractors, agents, operators, and heirs in interest shall adhere to the following:

I. GENERAL

1. All operations at the Gay Mine, Fort Hall Indian Reservation, shall be in accordance with all applicable laws, ordinances, regulations, and rules including those of the Shoshone-Bannock Tribes.

2. Any changes or modifications to the Subject Plan shall be submitted for approval in accordance with 25 CFR 214.7.

3. The mine operator shall comply with the Federal Mine Safety and Health Act in all mining activities and continue a training program for employees in the basic surface mining skills to improve worker safety and to reduce the potential for injury.

4. Use of fire shall be carefully restricted according to Company rules and Tribal Ordinances.

5. As provided in the J.R. Simplot Gay Mine policy, no firearms will be allowed in Company vehicles. The company will instruct on-duty employees to avoid sensitive wildlife areas.

6. Except for common sanitation facilities (portable chemical toilets), a 15,000 gallon fuel tank, a 30 ton HFO storage tank, the guard shack at the crossing of the government road (Cross Fork - Lone Pine road) and the main haul road, no other structures or storage tanks are authorized.

7. Surface acreage disturbed during project development shall be in accordance with the approved Subject Plan, or approved modifications thereto, and shall be held to a minimum, and revegetated the first season following use or as soon as practicable after construction is complete.

8. Off-road travel by tractors, scrapers, and other wheeled and tracked vehicles shall be in conformance with Tribal Ordinances dealing with off-road vehicles and BIA rules and regulations. Vehicles shall be confined to approved pits, waste dumps, stockpiles, and access road locations on issued leased areas within the approved areas as shown in the Subject Plan, or future approved modifications thereto. Use of off-road vehicles is prohibited on all reclaimed sites except on designated roads.



**II. RECLAMATION AND TOPSOIL SALVAGE** **OCT 23 1986**

1. All disturbed areas shall be reclaimed in accordance with the approved Subject Plan. Reclamation is the lessee's responsibility.

2. Topsoil shall be salvaged and applied 8 to 10 inches in depth over the JC and JD waste dumps and backfilled pits. Primary tillage will be employed immediately following redistribution of topsoil and will involve shallow ripping on the contour to a depth of 12 to 18 inches, and followed where necessary, by tillage with a spring tooth harrow or disc.

3. Unless otherwise authorized, all areas amenable to reclamation shall be graded to a slope of 3H:1V or flatter, covered with topsoil or surfaced with material suitable for plant growth, and fertilizer applied based upon field soil testing, and a seed mixture sown as proposed in the mine plan, the EA, or as otherwise specified.

4. Reclamation shall be designed to provide for wildlife habitat as well as livestock forage. Emphasis shall be placed on obtaining a combination of plant species which provide a diversity of food and cover for wildlife and aid in natural succession of plant communities. Reclamation of wildlife habitat shall consider cover species and diversity, not just forage production. A ratio of 40% cover to 60% open areas is considered optimum for wildlife habitat. There will be two seed mixes, a range seed mix and a wildlife seed mix. The wildlife seed mix is listed in Table 5.1-b (page 5-17) of the EA, except substitute 24 lbs/acre sainfoin rather than 2 lbs/acre of sainfoin. The wildlife seed mix will be used on the following areas: the north faces of JC and JE dumps, the backfilled JE pit, and the west side of backfilled pits JC, JF-1, and JF-2 as shown on the Reclamation Map in the mine plan. The wildlife seed mix will be planted in rows with the Brillion seeder packer. This seeding shall consist of alternating rows of grasses and rows of forbs and shrubs. The range seed mix listed in the mine plan will be sown all other disturbed areas and will be applied by broadcasting. Seeding shall be done on the contour. Alfalfa will not be used in the reclamation seed mix unless otherwise expressly approved. The BIA and Tribes shall have the final approval of the seed mixture to be used, and depending upon reclamation results and Tribal preferences the seed mixture may be changed.

5. All mine pit access roads and the main haul road not retained as part of the BIA Fort Hall road system shall be ripped, fertilized, seeded, and reclaimed when no longer necessary for mining purposes, unless otherwise approved. All other abandoned surface disturbance amenable to reclamation shall be ripped, fertilized and seeded unless otherwise approved. Also, shallow dipping footwalls where equipment can maneuver and which are not covered by backfill, shall be properly reclaimed. Waste dumps shall be sloped to drain back into the pit unless otherwise approved. Faces of waste storage areas shall be constructed with a convex configuration to minimize channeling of water runoff.

6. Areas of native vegetation, particularly those with high cover value like aspen and conifer, will be retained wherever possible to provide wildlife cover, enhance the interspersed and edge effect, and to provide a native seed source.

**III. WASTE DUMP AND STOCKPILE CONSTRUCTION**

1. To mitigate the visual impact of the mill shale stockpile to be located east of the JD pit, Sisplot shall construct the stockpile to shield the JD pit from view and shape and seed the top of the stockpile to approximate a natural hill in profile and appearance. Also, the JE and JC waste dumps shall be shaped to blend with the existing topography and the top of the dump left in a condition to approximate a natural appearance. Where possible, Sisplot shall also round the west crest of the highwall about 50 feet on the west side of the JD pit to reduce the potential safety hazard of the final open pit.

Prior to construction of the JC waste dump, Sisplot shall place two coarse rock cores in the center line of the drain underlying the JC dump to allow for lateral drainage. Sisplot will provide cross-sections to be included in the mine plan showing JC dump and rock cores.

**IV. FENCING**

To protect newly established revegetation of the J6 waste dump and pit, fencing will be required. Fences will be installed in accordance with BIA standards for permanent fences (see Appendix E of the haul road EA). In order to minimize new fence construction, existing fences in the South 40 area will be utilized wherever possible. All materials for fencing will be supplied by the operator. The BIA will build the fence and provide the labor. Fence alignment shall be coordinated with the Tribes and BIA.

OCT 23 1996

**V. CULTURAL**

The lessee shall not disturb cultural resources. Should any cultural resources be found in the Gay Mine area, a cultural resources recovery program, approved by the Superintendent, BIA, Shoshone-Bannock Tribes, and the State Historic Preservation Officer, shall be implemented. Standard BIA practice (50 BIA, Supplement 2) shall be followed if cultural resources are discovered during operations under this approval. If cultural resources are found on a mining lease, then the lessee shall immediately bring them to the attention of the District Manager, BIA, or the Superintendent of the Fort Hall Agency, BIA, if the District Manager is not available. The Bureau shall promptly notify the Tribal Land Use Commission of such cultural resource find. In consultation with the authorized officer and the Shoshone-Bannock Tribal Council, recovery of cultural resources during lease operations is the lessee's responsibility. Any recovery of archaeological resources shall be accomplished by a recognized archaeological expert who has a valid Department of Interior Cultural Resources Use Permit. Any such cost of cultural resources recovery will be borne by the lessee (or lessors).

**VI. WATER QUALITY AND MONITORING**

1. Construction shall be designed so as to avoid wet soils and seeps. If such areas cannot be avoided, construction shall be designed so as to provide drainage and passage of water to natural drainways by using rock blanket filters, culverts, etc.
2. Necessary measures shall be taken to protect water quality. Water control ditches, road drainage, dump slopes, etc. shall be designed and constructed as necessary to minimize erosion and avoid sedimentation of surface water resources. Sediment traps, ponds, berms, and other engineering measures shall be used to minimize sediment movement and erosion. Areas disturbed during the course of mine development shall be sloped, water control features provided, and snow handled so as to eliminate sediment laden waters from reaching Ross Fork Creek or its tributaries.
3. Discharge or pumping of water from any mine pit(s) into any surface drainage, or pit dewatering by pumping into an injection well, is not authorized. Should pit dewatering prove necessary, the need for an NPDES permit will be evaluated.
4. The south end of JF-1 pit shall be constructed no closer than 200 feet from Willow Creek to provide an undisturbed buffer between mining operations and live water. No surface disturbing activities are authorized within the 200-foot buffer.
5. A water quality monitoring program using the same parameters as was established during baseline data collection shall be continued. Water quality monitoring shall include the established sample sites: A) Lower, Middle, and Upper Ross Fork, B) Upper and Lower Willow Creek, C) Prospect Spring, D) Cow Spring, and E) existing and future water monitoring wells. Surface and subsurface water data in the Gay Mine Expansion (South 40) area shall be promptly submitted to the BIA and Shoshone-Bannock Tribes. Comparisons of operational phase, baseline water quality data and existing State and national water quality standards will be made to document and interpret any changes in water quality. This will act as an early warning system to allow prompt mitigation and prevention of stream impacts.
6. Water monitoring in the Phase II area is to begin two years prior to development drilling, or expected initiation of mining operations of lease areas east of the J6 pit.
7. When no longer needed, or at abandonment, water monitoring wells will be abandoned by plugging with cement, grout, bentonite, or otherwise suitable materials unless otherwise approved by the Tribes.

3. Pollution of Ross Fork Creek from waste dump, mill shale stockpiles, ore storage stockpiles, the fuel tank area, and the APU storage tank area will be prevented by directing runoff from these areas into containment traps. The purpose of this stipulation is to provide for zero-discharge from these areas into any surface channel leading to water. Backfilling of the ore and mill shale stockpile pads to drain water into a lined-out pit, and the use of dikes, diversion channels, and sediment catchment basins as necessary will be implemented to comply with this stipulation.

OCT 23 1986

## VII. AQUATIC RESOURCES

1. An aquatic ecological monitoring program will continue. As part of Sinalot's continuing aquatic monitoring program, the company shall monitor two times per year (at high flow and base flow periods) the benthic macroinvertebrates density and diversity at the Lower, Middle, and Upper Ross Fork Creek sample stations. In order to provide for valid comparisons of benthic community structure between operational and baseline phases, 10 (ten) sample replicates of the macroinvertebrate populations shall be taken at each location during the first year of sampling. Subsequent sampling intensities will be based on results of the annual review as per VII-5 below. Also, fisheries populations will be monitored and evaluated as described in parts VII-2, VII-3, and VII-6 below.
2. Fisheries shall be monitored twice per year at the Upper, Middle, and Lower Ross Fork monitoring stations at high and low flow periods. The fisheries monitoring shall be directed by the Tribal Biologist. Sinalot shall provide personnel to assist the Tribal Biologist in fisheries sampling of Ross Fork Creek.
3. Water quality, fisheries, and benthic invertebrate density and community structure data shall be analyzed concurrently to indicate any long-term or cumulative negative impacts due to the (lessen(s)) activities. In the event that deterioration of water quality, fisheries, or benthic invertebrate population occurs, then corrective measures will be taken to restore the water quality, fisheries, and aquatic organisms to baseline conditions as soon as possible.
4. Should a pollution event that would seriously impact the Ross Fork Fisheries occur, then the (lessen(s)) shall immediately notify the PLN, BIA, and Tribes. Should a significant impact to fisheries be established through an inventory of fish mortality, and should it be required by the Tribes, then a fish stocking program will be undertaken at Company expense to restore fish populations to the pre-mining density and species composition as defined in the baseline studies. Before implementing a fish stocking program, a plan shall be presented to the Tribal Fish and Game Department for approval. A stocking plan would be implemented as soon as possible after the stream contamination has been removed. Alternatively, it may be considered cost-effective to mitigate off-site during operational phases and restore Ross Fork populations only after abandonment.
5. Water quality data gathered concurrently with benthic macroinvertebrate and fisheries samples will be used to identify and document changes in the chemical and physical characteristics of streams influenced by surface mining. An evaluation of key chemical and biological characteristics of potentially impacted streams, including a search for possible correlations, will provide a continuous and comparable record of overall stream quality.
6. The aquatic ecological monitoring program will be reviewed at the end of the year by Sinalot and the Shoshone-Bannock Tribes. The primary goals of this review process are as follows: a. Ensure that all monitoring is producing results that are important to the overall objectives of the aquatic monitoring program; i.e. to provide early warning of negative impacts, and b. Tailor and refine the monitoring programs to be more useful as knowledge of the Ross Fork ecosystem becomes available.

## VIII. WILDLIFE

1. The results of a continuing wildlife monitoring program shall be submitted to the Tribes. Big game signature counties as identified during the baseline studies, will be the subject of subsequent monitoring programs.
2. Sage grouse and sharp-tail grouse lek surveys, and a ruffed and blue grouse survey shall be performed in the Spring of 1987. The results of these surveys shall be supplied to the Tribes.
3. In cooperation with the Tribal Wildlife Biologist, an off-site mitigation plan to improve wildlife habitat shall be developed, i.e. riparian improvement, aspen habitat management, etc. within the Gay Mine area.
4. A rock pile, as shown in the mine plan, shall be placed on the DC waste dump to provide wildlife cover and

3. To minimize direct wildlife mortality on haul roads, vehicle speeds shall be reasonable and prudent. Hard kill of any wildlife directly attributable to Gay Mine operations (big game, raptors, and game birds) shall be promptly reported to the Tribal Fish and Game Department.

OCT 23 1986

## IX. PUBLIC ACCESS

1. Public access to the South 40 Main Haul road and other active mining areas shall be restricted to provide for safety of the public, for security reasons, and to warn the public of mine traffic at the haul road crossing. Signs shall be posted to advise unauthorized personnel about access limitations.

2. Simplot shall provide for continued access to the Big Springs area and the government road by maintaining during the mine's operating hours a guarded crossing over the haul road and continuing to provide a public access route adjacent to the haul road as shown on the approved haul road plan. The users of the public road shall have the right-of-way.

3. Access will be provided to the Bennetts Pass area during mining.

## X. AIR QUALITY

1. Heavily used haul roads will be watered and/or treated with a dust suppressant to minimize fugitive dust. All oil wastes shall be hauled away and disposed of properly.

2. High-volume samples for TSP shall be taken monthly during the ore haul season in a location representative of the South 40 area.

## XI. ABANDONMENT

When Simplot or FMC requests relinquishment of Gay Mine mining and/or business leases, the following actions will be required:

- The mine access road shall be abandoned and reclaimed, at company expense, except for those portions which are suitable as part of the Fort Hall Reservation road system.
- Spread, shape, rip and reclaim those sections of the haul road which are not suitable for retention as part of the Fort Hall Reservation road system, and
- Re-vegetate to BIA and Tribes specifications as discussed in Section II above.

Following reclamation of disturbed areas, a Tribal, BIA, FMC, interdisciplinary team will inspect for proper abandonment in accordance with applicable memoranda of understanding.

2. In the event that mining operations cease for an extended period of time, then the BIA/BLM and Tribes shall meet with the leaseholder and develop measures necessary, such as water control, reclamation, etc., to prevent damage to mineral and environmental resources. Such measures developed will be implemented in a prompt and timely manner.

*Dean Travis*

Dean Travis, J.R. Simplot Company  
President, Minerals & Chemical Division

*Harvey Herbert*

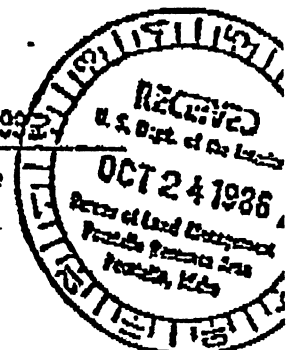
Harvey Herbert, FMC Corporation  
Resident Manager

OCT 24 1986

Date

OCT 24 1986

Date



A10



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IN REPLY  
REFER TO:

## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Idaho Falls District  
940 Lincoln Road  
Idaho Falls, Idaho 834013500  
Fort Hall Indian Reservation

October 27, 1986

Mr. Bill Schmitt  
Gay Mine Manager  
J.R. Simplot  
P.O. Box 912  
Pocatello, ID 83201

Dear Bill:

NEPA documentation, an Environmental Assessment (EA) for the South 40 Mine and Reclamation Plan and associated fringe acreage phosphate mining leases and business leases has been completed. The plan involves mining of Joint Simplot/FMC phosphate mining leases 82, 83, 84, 85, 86, 208, I-203, and Simplot lease 209 and applications for additional mining and business leases in the South 40 area.

All lands are within the Fort Hall Indian Reservation. A comprehensive joint EA covering the proposed mine development and associated leases was prepared by Mariah Associates, Inc. Input and recommendations for the development of the joint EA were provided by the Environmental Committee which consists of representatives of the Shoshone-Bannock Tribes, the Bureau of Indian Affairs, and the Bureau of Land Management.

A set of approval stipulations for the Mine and Reclamation Plan - Gay Mine Expansion, South 40 Joint Leases was sent to both J.R. Simplot and FMC Corporation and has been signed. A copy of the signed approval stipulations is enclosed for your files.

The Simplot plan for the Gay Mine Expansion Area (South 40) dated January 1986, and the reclamation plan, mitigating measures, and monitoring program contained in the Mariah Associates, Inc. Environmental Assessment Report dated September 1986, is approved subject to the following:

1. Compliance with all the terms and conditions of the lease and with the provisions of Title 25, CFR 216, and

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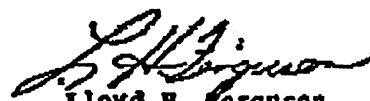
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2. Conformance with the enclosed approval stipulations signed on October 24, 1986, by Mr. Dean Travis, President, Minerals and Chemical Division, J.R. Simplot Co. and Mr. Harvey Herbert, Plant Manager, FMC.

This approval includes the proposed pits: JG, JC, JP-1, JP-2, and JD, but does not include proposed pits JB or A-12, nor any mining in the "Phase II" area east of Bennetts Pass.

If you have any questions, call Fred Hagius, 236-6863. Your continuing cooperation is appreciated.

Sincerely,



Lloyd H. Ferguson  
District Manager

Enclosure: Signed Approval Stipulations for the Mine and Reclamation Plan,  
Gay Mine Expansion - South 40 Joint Leases. .

cc: (with enc.)

R.W. Dixey, Tribal Council  
D. Thompson, B.I.A., Port Hall Agency  
J. Ballard, Land Use Policy Commission  
D. Piper, Mining Consultant, Butte, MT  
D.T. White, Attorney, Boulder, CO  
R. Kortlever, BIA, Port Hall  
B. Frost, BIA, Port Hall  
J. Labret, Geologist, BIA, Portland  
D. Travis, J.R. Simplot  
R.V. Kimball, J.R. Simplot  
H. Herbert, FMC  
W.G. Newell, FMC Corp.

A-S







## United States Department of the Interior

16

BUREAU OF LAND MANAGEMENT  
Idaho Falls District  
940 Lincoln Road  
Idaho Falls, Idaho 83401

IN REPLY  
REFER TO:

3500  
Port Hall Indian Reservation

May 24, 1989

Mr. Bill Schmitt  
Gay Mine Manager  
J. R. Simplot Company  
P.O. Box 912  
Pocatello, ID 83201

Dear Bill:

We have completed a Categorical Exclusion (CE) for Simplot's proposed mine plan dated January 20, 1989, in the A-12 pit (J. R. Simplot mining leases 181, 212, and FMC lease 210 and use of the associated pending business lease south of lease 210). Input and recommendations were received from the Bureau of Indian Affairs and Tribal representatives during on-site examinations on February 9th and March 15th, 1989.

The A-12 pit mine plan dated January 20, 1989, is approved conditional to the issuance of the associated business lease south of lease 210 by the BIA, and subject to the following stipulations:

1. Compliance with all the terms and conditions of the leases and with the provisions of Title 25, CFR 211, and
2. Compliance with the approval stipulations for the Mine and Reclamation Plan - Gay Mine Expansion, South 40 Joint leases signed by Mr. Dean Travis, J. R. Simplot Co., and by Mr. Harvey Herbert, FMC Corp. on October 24, 1986, and
3. As discussed during the above mentioned on-site examinations, leave some capacity in the southwest corner of the A-12 waste dump to serve as a small water catch basin having a capacity of around 1 or 2 acre-feet. Slope the top of the A-12 waste dump about 1:1 towards the southwest direct drainage towards this water catch basin. The dump will be shaped to blend with the surrounding topography and the north face shaped to 3:1 slope and all disturbed areas reclaimed.
4. The proposed mine plan shows that the western portion of the A-12 pit will be the first area mined. As the second phase of mining in the eastern portion of the A-12 pit proceeds, waste will be used to backfill and reclaim, to the maximum extent feasible, the mined-out western portion of the A-12 pit.

All

5. The A-12 pit area is overlain by alluvial material. Topsoil and/or suitable soil materials will be saved for reclamation use where possible. Sigmoid will round, shape, and reclaim the highwalls in those areas of the A-12 pit to eliminate highwall hazards and maximize reclaimed land productivity. 17

Should you have any questions regarding this approval, feel free to contact this office, or our Pocatello Resource Area Office. Your continued cooperation is appreciated.

Sincerely yours,

  
Lloyd H. Ferguson  
District Manager

Enclosures

Approved A-12 Mine Pit plan dated January 20, 1989.

cc:

Duane Thompson, Superintendent, BIA, Fort Hall, Idaho  
Susan Broderick, Fisheries Biologist, Shoshone Tribes, Fort Hall, Idaho  
Dave Piper, Tribal Mining Consultant, Butte, Montana  
Buck Nowell, Mining Specialist, FMC, Pocatello, Idaho

A12