

RECORD OF DECISION

**SIMPLOT SMOKY CANYON MINE
B AND C PANELS**

**U.S. Department of the Interior
Bureau of Land Management
Idaho State Office
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**JOINT LEAD AGENCY
PROVIDING RECOMMENDATIONS TO BLM**

**U.S. Department of Agriculture
Forest Service
Caribou-Targhee National Forest**

May 31, 2002

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INTRODUCTION

In 1983 the U.S. Minerals Management Service (MMS) approved a Mine and Reclamation Plan (M&RP) for the J.R. Simplot Company (Simplot) Smoky Canyon Mine. The M&RP approved mining and reclamation activities for five (5) adjacent pits referred to as panels A, B, C, D and E. The basis for the Smoky Canyon M&RP approval was the 1982 Smoky Canyon Phosphate Mine Environmental Impact Statement (EIS) and associated Record of Decision. A condition of approval of the 1983 Smoky Canyon Mine acknowledged the general nature of the overall M&RP and required Simplot to provide MMS with detailed, site-specific mine and reclamation plans for each of the individual panels A - E. These more detailed, supplemental plans would be used to assess and develop any additional, appropriate mitigation measures prior to mining each individual panel. These measures would be added to the original conditions of approval for the 1983 Smoky Canyon M&RP. This process has been followed since 1983 and mining and reclamation activities have either been completed or are ongoing in panels A, D and E at the Smoky Canyon Mine.

Authority to administer minerals management functions on Federal and Indian lands was transferred from MMS to the U.S. Bureau of Land Management (BLM, or Bureau) in 1983. The Bureau has overseen mine and reclamation activities on the Federal phosphate leases at Smoky Canyon since that time.

In July, 1999 Simplot submitted the detailed plans for Panels B & C to the Bureau's Pocatello Field Office, and the U.S. Forest Service (USFS), Caribou-Targhee National Forest. BLM and the USFS are termed the "Agencies" in this document. The general design of the open pits and overburden (waste rock) disposal facilities in Simplot's B & C mine plan was reviewed, along with panels A, D & E, in the original EIS and approved in 1983. It is also generally similar (with some key differences) to the mine plan finally adopted in this Record of Decision (ROD).

The purpose of the Proposed Action under consideration is to recover phosphate ore reserves contained within Panels B & C, to mill the ore on-site and to transport phosphate concentrate to the Don Plant in Pocatello via an existing pipeline. The Proposed Action is needed to continue economically viable development of the phosphate resources within the Federal mineral leases to supply phosphate ore to Simplot's fertilizer plant. The plant produces phosphate based fertilizer to help meet demands in the United States.

Panels B & C of the Smoky Canyon Mine are located in Caribou County, Idaho approximately ten air miles west of Afton, Wyoming on the east slope of the Webster

Range along a portion of Smoky Canyon. Mining described in the Proposed Action would result in additional site disturbance of 618 acres. The proposed B & C Panel mining operations are entirely within the Caribou-Targhee National Forest on Federal phosphate leases administered by the BLM. Portions of the proposed facilities extend off lease onto unleased National Forest System lands. Mining would take place on and adjacent to existing Federal phosphate leases I-012890 and I-026843.

After reviewing the B & C mine plan, the BLM and USFS determined that a supplemental Environmental Impact Statement (SEIS) should be prepared to review these mining plans and develop site-specific impact mitigation measures. This determination was made in light of significant new information that had recently become available on potentially significant impacts related to selenium and other contaminants contained in mine overburden. Also, a change in circumstance occurred on March 21, 2000 when the Canada Lynx (*Lynx canadensis*) was listed as "threatened" under the Endangered Species Act. Adequate selenium information had not been available in 1982, and impacts on the Lynx were not considered in detail when the original environmental reviews and approvals for the Smoky Canyon Mine were completed by the United States Geological Survey (USGS), in conjunction with the USFS.

As the designated agency responsible for minerals management functions on Federal lands, BLM has assumed the role of lead agency responsible for the SEIS. The BLM has prepared this ROD to document the agency's decision on appropriate land use authorizations for Simplot's proposal. Regulations at 43 CFR 3520.2 direct BLM to "consult with the agency having jurisdiction over the lands with respect to the surface protection and reclamation aspects" of a mine and reclamation plan. In this case, the land surface is managed by the Caribou-Targhee National Forest. For this reason, the USFS participated in preparation of the SEIS as a joint lead agency and has provided recommendations to the BLM related to this ROD. Other approvals by other Federal, State, and local agencies will also be required before certain aspects of the project can be initiated (i.e. U.S. Army Corps of Engineers must approve fill in wetlands and waters of the United States as regulated under Section 404 of the Clean Water Act).

Initially, the Proposed Action assessed in the SEIS was Simplot's 1999 Panel B & C mine and reclamation plan. However, during the SEIS scoping process, a number of environmental and regulatory concerns were identified with the layout of the mine plan, in particular with the proposed location of the external overburden disposal site east of Panel B. In order to alleviate those concerns, Simplot modified its mine plans in 2000 (and thus modified the Proposed Action), primarily to relocate the external overburden disposal facility to a site south of Panel B which also better conformed to the layout approved in the 1982 ROD.

The scope of the SEIS was set by and coordinated with other ongoing and planned efforts by Simplot and other State and Federal agencies to study the effects of selenium and other metals related to existing mining disturbances. The intent of this

coordination was to comply with existing inter-agency agreements which call for ensuring efficiency and reducing duplication of efforts in studying these impacts.

A Draft SEIS (DSEIS) on the Panel B & C development was prepared and released to the public in July 2001. The DSEIS analyzed the environmental impacts from four (4) alternatives: three (3) action alternatives - the Proposed Action, Alternative A, and Alternative B; and the No Action Alternative. These alternatives are briefly described below and are described in greater detail on following pages of this ROD:

Proposed Action: Included recovering phosphate ore using open pit mining techniques standard to other mines operating in Southeast Idaho. B & C pits would be partially backfilled with overburden as would the empty portion of the existing A pit. Some overburden would be permanently disposed of in an external waste rock dump adjacent to panels A & B. Disturbed areas, except residual highwalls, would be reclaimed. Overburden placed as backfill and in the external site would be run-of-mine and would contain seleniferous shale rock. A 9 - 11' cap would be placed over the overburden disposal sites to prevent reclamation vegetation from accumulating toxic amounts of selenium. The cap would consist of an 8' layer of chert and limestone containing low or no amounts of extractable selenium and a 1' - 3' of topsoil growth medium having very low values of extractable selenium.

Alternative A: Operations are similar to the Proposed Action. Open pit and overburden disposal site characteristics are essentially the same as the Proposed Action with the exception that all seleniferous overburden would be disposed of only in the open pit backfills and other overburden would be placed in the external overburden disposal site.

Alternative B: The operations, open pit and overburden disposal site footprints (disturbed area) are essentially the same as the Proposed Action and Alternative A with the exception that no permanent external storage of overburden would be allowed. All overburden would be ultimately disposed of in the open pit backfills and the external overburden disposal site used temporarily would be restored during reclamation to approximate pre-mining contours.

No Action: Development of the B & C Panels would be delayed until other mine plans acceptable to the Agencies are approved.

In addition, five other alternatives were considered and eliminated from further detailed analysis because they were not considered to be reasonably practical or feasible.

In response to the impacts identified in the DSEIS and agency and public comments on that document, Simplot modified its Proposed Action to include additional mitigation measures, monitoring and contingency commitments in order to further address selenium contamination concerns, especially the extent of potential impacts to groundwater from selenium. The Proposed Action in the Final SEIS (FSEIS) is the latest modification of the mine plan which incorporates these additions and forms the

basis of this ROD. It is important that this be fully understood and appreciated by the reader of this ROD. For this reason, the Proposed Action in the FSEIS will be referred to as “the Proposed Action (with mitigation)” in this ROD.

The FSEIS describes the components of, reasonable alternatives to, and the anticipated environmental consequences of activities associated with mining Panels B & C at Simplot's Smoky Canyon Mine, as required by the National Environmental Policy Act (NEPA) of 1969. During preparation of the FSEIS, the Agencies considered comments received on the DSEIS and consulted with a number of Federal, State and local agencies. The FSEIS was released to the public in April, 2002.

DECISION

The Selected Alternative in the ROD is the Proposed Action (with mitigation) as described in the FSEIS. Additional mitigation and monitoring requirements are to be added as presented in the *Mitigation Measures and Monitoring Requirements* section which follows later in this ROD. As a component of the Selected Alternative, I am also authorizing BLM to proceed with processing an enlargement (modification) of the existing Federal mineral lease to accommodate the B & C external overburden disposal site. The Selected Alternative was also designated by the Agencies as the Preferred Alternative in the FSEIS. This represents application and adoption of all practical means to avoid or minimize environmental harm from the selected alternative (40 CFR 1505.2c).

In reaching this decision, I have reviewed the Smoky Canyon Mine, Panels B & C Final SEIS, including the analysis of effects by alternatives and mitigation measures. The following were also considered: comments and responses received during the project scoping period and on the draft SEIS; anticipated environmental consequences discussed in the SEIS; letters received during the FSEIS 30-day availability period; and applicable laws, regulations, and policies. Further, I have carefully considered the recommendations of the Caribou-Targhee National Forest Supervisor, who is the official responsible for management of lands within the Caribou-Targhee National Forest. The Supervisor recommended selection of the Proposed Action (with mitigation) and appropriate site-specific conditions of approval as contained in the *Mitigation Measures and Monitoring Requirements* section that follows.

ALTERNATIVES FULLY EVALUATED IN THE SEIS

Issues raised during public scoping, and during public and agency review of the Proposed Action as described in the SEIS were used to identify potentially significant impacts that could result from the proposed mine extension project. In general, the potential effects that were evaluated include: mobilization of selenium and other contaminants to surface water and groundwater resources; physical and potential

contamination impacts to wildlife, livestock, wetlands, aquatic habitats, threatened, endangered and sensitive species; soils and vegetation; disturbance of watersheds, visual resources, topography; disruption to public travel and transportation, and impacts to cultural, recreation, and wilderness resources. Consideration was also given to Native American concerns and environmental justice. These effects and other public scoping issues were used to help revise the Proposed Action before and after completion of the DSEIS, and to formulate alternatives to the Proposed Action.

Four (4) alternatives were carried forward for full evaluation in the FSEIS: The Proposed Action (with mitigation), Alternative A, Alternative B, and the No Action Alternative. These represent a range of reasonable alternatives to the Proposed Action. Other alternatives such as underground mining, no pit backfill, purchasing ore elsewhere, and installation of an infiltration barrier were considered but dismissed from detailed consideration because of practicality or feasibility concerns or benefits that were not substantially different from the alternatives considered in detail (see Section 7 of the FSEIS).

In the FSEIS, various overburden disposal designs are examined in the action alternatives, in order to reduce mobilization of selenium to the surface environment, formation of seleniferous overburden seeps and to protect groundwater quality. Impacts associated with the implementation of the overburden disposal designs are addressed in Chapter 4 of the FSEIS.

Proposed Action (with mitigation, Selected Alternative) - Smoky Canyon Mine, Panels B & C

The proposed mining operations would consist of two open pits - Panels B & C, topsoil stockpiles, mine equipment parking areas, access and haul roads, a power line extension, an external overburden disposal area, and runoff/sediment control facilities. Operations would include management practices for the control of releases of sediment and dissolved contaminants. The disturbed area of the two open pits would be 274 acres. The additional disturbance caused by the new external overburden disposal area would be approximately 244 acres. Road and water management facilities would disturb 100 acres. The Proposed Action (with mitigation) would result in a total new site disturbance of 618 acres.

After distribution of the DSEIS, Simplot revised the Proposed Action as contained in that document to include overburden facility designs that would mitigate groundwater impacts. The revised Proposed Action in the FSEIS (Proposed Action, with mitigation) also reviews and presents a range of mitigation measures, BMPs, other management practices, and environmental monitoring programs.

Mining activities within Panels B & C would result in recovery of phosphate ore reserves that would be milled on-site and transported to the Don Plant in Pocatello via an

existing pipeline. Under the Proposed Action (with mitigation), approximately 93.77 million tons (MMT) of ore and overburden would be removed during the active mine life.

Mining operations at Simplot's Smoky Canyon Mine currently include drilling, blasting, loading, and hauling of ore and overburden using a shovel and truck fleet; the Proposed Action (with mitigation) would continue those operations. Mining proceeds sequentially by opening individual mining pits along the trend (strike length) of the Phosphoria Formation outcrop. The sequential mining of pits along the strike length of the deposit facilitates backfilling open pits with overburden from subsequent pits. When overburden is removed from the ground it is fractured into particles which occupy approximately 30 percent more volume than before the rock was mined. This volume expansion is called "swell" and is the reason why all the overburden cannot be returned to the same open pit from which it came. Some overburden must be placed in external overburden disposal sites outside of the open pits. Most of the overburden from the Panel B & C pits would be used to backfill them and the remaining open pit in the north half of nearby Panel A. The backfilling of the south portion of the Panel A pit would also be completed. Approximately 20.82 million cubic yards of excess overburden that would not be used for pit backfill would be placed in an external overburden disposal site.

Selective handling of mine overburden would be practiced during the proposed operations. Waste overburden shales known to contain elevated concentrations of selenium (seleniferous) would be handled separately from other overburden. Low selenium content (non-seleniferous) chert and limestone overburden (hereafter referred to as "chert") would also be handled separately. This chert overburden would be spread over the seleniferous overburden at a thickness of approximately eight feet at the external overburden disposal facility and the pit backfill areas. This thickness of chert cover is intended to protect the underlying seleniferous overburden shales from erosion and prevent root penetration. One to three feet of topsoil would be spread over chert cover to complete the cap.

Although the chert cap is designed to cover all areas of seleniferous overburden and isolate it from the surface environment, it would be permeable to infiltration of meteoric water from rain and snowmelt. However, the grading of the cap encourages runoff rather than infiltration over this area with eventual collection of non-selenium bearing runoff water at the chert margins of both the external and internal overburden fills. At these margins, the collected runoff would be allowed to percolate into chert fill "Runoff Recharge Areas" (see FSEIS figure 2.2-7) and into the permeable bedrock foundation, serving to recharge the local groundwater aquifer with large amounts of fresh water, thus reducing offsite discharge of runoff water and the selenium concentrations in groundwater contributed from percolation through seleniferous overburden.

Simplot has proposed to incorporate changes into the design and construction of the external overburden facility (see FSEIS Section 2.4.3, and figures 2.2-5, -6, -7) to ensure that seeps or springs do not develop along the margins of the structure. The

incorporation of the Runoff Recharge Areas and design changes to the external overburden facility were proposed by Simplot after release of the Draft SEIS and in response to water quality impact issues contained in that Draft.

Water management would also include sediment ponds, stream bank modifications, and culvert crossings of Smoky Creek.

Reclamation would be conducted concurrently with mining, and would closely follow completion of the fills in the following sequence: shaping and contouring overburden; placement of the chert cap material; spreading topsoil over the chert surface; and seedbed preparation, seeding, and fertilizing.

Alternative A - Handling Overburden to Eliminate External Disposal of Seleniferous Overburden

This alternative would incorporate all the components of the Proposed Action (with mitigation) but would require Simplot to selectively handle and replace all seleniferous overburden shale as backfill in the mine pits of Panels A, B, and C. This responds to an issue of concern expressed during the project scoping period that seeps or springs that may develop in the external overburden structure could become contaminated with selenium and pose a health risk to animals. This issue was addressed by formulation and evaluation of Alternative A which eliminates the disposal of overburden having elevated concentrations of selenium in an external disposal facility outside of the open pits. Other overburden, such as chert and limestone that do not contain elevated concentrations of selenium would be placed in the ridge top external overburden disposal site that is included within the Proposed Action (with mitigation).

The disturbance footprint of the pits and overburden disposal areas would be the same in this alternative as in the Proposed Action (with mitigation). However, completion of the capping for the pit backfills (comprised mostly of seleniferous shales) with chert overburden would require rehandling overburden from the external overburden disposal area back to Panel B. This amount would be approximately 16 percent of the total overburden volume moved. This would add about 50 feet to the Panel B backfill thickness and reduce the length of remaining highwall in this panel from 2,800 feet in the Proposed Action (with mitigation) to 2,100 feet. It would reduce the height of this highwall from 250 feet in the Proposed Action (with mitigation) to 200 feet. This final rehandling of overburden would extend the completion date of the reclamation activities by approximately ten months.

The configuration of the Panel C backfill would be the same as under the Proposed Action (with mitigation).

Selective handling of mine overburden would also incorporate capping the seleniferous pit backfill material. Chert overburden would be spread over seleniferous overburden to an approximate thickness of 8 feet in the seleniferous overburden disposal areas. This

thickness of chert cover is intended to protect the underlying seleniferous shale from erosion and root penetration. One to three feet of topsoil would be spread over the chert rock cover. A chert rock cover would not be required over the external overburden disposal site because it would not contain seleniferous overburden.

Alternative B - No External Wasterock Disposal

This alternative would incorporate all the components of the Proposed Action (with mitigation) but would require Simplot to replace all chert, limestone, shale and mudstone overburden as backfill in the mine pits of Panels A, B, and C. This alternative was suggested in several of the comments received during public scoping of the SEIS. The main issue addressed by this alternative is minimization of potential mobilization of contaminants from the overburden to the environment by replacing all overburden back into the open pits. Impacted seeps or springs in an external overburden dump would not be an issue since no external structure would be allowed. Another issue addressed by Alternative B is the reduction of some of the residual pit highwalls that would remain under Alternative A and the Proposed Action (with mitigation). This could lessen visual impacts to a small degree. Under Alternative B, most areas of the B & C panels would be fully backfilled with overburden that contains seleniferous shales. The backfilled pits would be capped with 8 feet of chert and 1 to 3 feet of topsoil over the chert. Some highwalls would remain in Panel C however (see SEIS figure 2.3-2), as a large portion of overburden generated by developing Panels B & C would be used to backfill the portion of the existing Panel A pit that is currently open.

To make this alternative possible, Simplot would temporarily store overburden within the same 244 acre area as the external overburden disposal site in the Proposed Action (with mitigation) or Alternative A and then relocate all of it back into Panel B when mining in that panel is completed.

This alternative would eliminate the need to develop any new, permanent external overburden disposal area; however, approximately 244 acres of the temporary overburden storage area would still be disturbed during mining and need to be reclaimed. Thus, the disturbance area for this alternative would be the same as for the Proposed Action (with mitigation) or Alternative A.

The requirement for rehandling the overburden from the temporary external overburden storage area, and some additional chert at the end of mining, would require the rehandling of approximately 36 percent of the total overburden volume. This would extend the time period for final reclamation of Panel B by approximately 21 months.

The backfilling of Panel C would essentially be the same as for the Proposed Action (with mitigation) and Alternative A. The full backfilling of Panel B would completely eliminate the highwall in this panel compared to the 250-foot high and 2,800-foot long highwall that would remain in the Proposed Action (with mitigation).

Selective handling of mine overburden would be practiced during the mine backfill operations. Chert overburden would be spread over the combined overburden in a thickness of approximately eight feet. This thickness of chert cover is intended to protect the underlying overburden from erosion and root penetration. One to three feet of topsoil would be spread over the chert cover.

No Action Alternative

A No Action Alternative was evaluated in the original 1982 EIS for the Smoky Canyon Mine that would have resulted in not developing the phosphate resources at Smoky Canyon. This alternative was rejected in favor of an agency preferred alternative that would result in the development of mine panels A through E, incorporating suitable mitigative measures and monitoring practices. The Smoky Canyon Mine and Reclamation Plan (including panels B & C) was conditionally approved in 1983.

Under the No Action Alternative evaluated for the 2002 Supplement to the 1983 EIS, Simplot's proposed detailed mining and reclamation/mitigation plans for the development of mine Panels B & C would be delayed, not precluded. Simplot would not be able to proceed with mining of the ore in these panels until such time as a mine and reclamation plan is found to be acceptable by the Agencies.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Council on Environmental Quality regulations at 40 CFR Part 1505.2 requires agencies to specify the environmentally preferable alternative. The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment and which best protects, preserves, and enhances historic, cultural, and natural resources.

Because mining is, by its nature, disruptive and impacts environmental resources in the mine vicinity, both in the short term and the long term, all of the action alternatives result in new disturbance, which may indicate that the No Action Alternative is the environmentally preferable choice. However, in the case of the Smoky Canyon Mine, the No Action Alternative would result in the following impacts for the foreseeable future, or until such time that an acceptable alternative mine and reclamation plan is approved by the BLM:

1. The existing open pit in the north portion of Panel A would not be backfilled and reclaimed. This pit holds seasonal runoff water that becomes impacted by contaminants, including selenium above the cold water biota standard of five parts per billion.

2. The south portion of the existing Panel A backfill would not be capped with chert as part of reclamation of this area. An adequate cap has been shown to control selenium concentration in reclamation vegetation by limiting uptake of selenium through vegetation roots. A cap was not utilized in Panel A and the existing reclamation vegetation planted in backfilled shale rock appears to be accumulating selenium.
3. Ongoing groundwater quality impacts downgradient of the north portion of Panel A would not be mitigated with a runoff recharge area.

The Selected Alternative and any of the action alternatives would mitigate these existing impacts related to the A Panel. Therefore, the No Action Alternative is not the environmentally preferable alternative with regard to the decision on the B & C Panels.

All the action alternatives have the same disturbance area footprint so the physical disturbance of cultural and surface natural resources is the same for all these alternatives. The design and mitigation incorporated into the External Overburden Disposal Area, as described in the FSEIS indicates that the three action alternatives should be, in general, functionally equivalent with regard to preventing seleniferous overburden seeps for this overburden facility.

The Proposed Action (with mitigation) is predicted to result in a groundwater impact area with concentrations greater than MCLs (maximum contaminant levels - the highest level of a contaminant that is allowed in drinking water) for selenium that is approximately 250 acres larger than Alternatives A and B. All of this type of groundwater quality impact is generally confined under the immediate mining area for B & C Panels and the downgradient impacts to the west of the mine area are estimated to be identical for all the action alternatives.

Due to limits of the groundwater quality impact model utilized in the SEIS, the predicted impacts do not incorporate the unquantified effect of potentially increased concentrations of selenium in the seepage from the Panel B area from Alternatives A or B. These alternatives are backfilled with more seleniferous overburden than the Proposed Action (with mitigation). The selenium concentration could also be increased by the additional oxidation and weathering exposure of the increased seleniferous backfill amount due to the extended time of weathering and double handling of this material. There is considerable uncertainty about these potential geochemical effects, but assuming their effect is related to the quantity of seleniferous backfill in Panel B and how much of it is rehandled, the impact could be greater in Alternative A than the Proposed Action (with mitigation) and could be greater in Alternative B than Alternative A.

The Proposed Action (with mitigation) would result in the shortest time period of disturbance of surface natural resources of the three action alternatives. It would also

expose seleniferous overburden to surface weathering and erosion for the shortest amount of time.

The Proposed Action (with mitigation) would result in lower air pollutant emissions compared to the Alternatives A and B.

Therefore, the Proposed Action (with mitigation) which was identified as the Agency Preferred Alternative in the FSEIS and is also the Selected Alternative in this ROD, is considered to be the environmentally preferable alternative.

MITIGATION MEASURES AND MONITORING REQUIREMENTS

As conditions of approval of the Smoky Canyon Mine, Panels B & C Project, Simplot, or the current Federal lease holder, its employees, contractors, agents, assignees, and operators shall comply with the following mitigation and monitoring measures:

1. Simplot must abide by the mine and reclamation plan presented as the Proposed Action in the Smoky Canyon Mine, Panels B & C Final SEIS. As part of this requirement, Simplot must implement the monitoring and mitigation measures and management practices (referred to as Best Management Practices in the SEIS) described in Chapter Two (description of the Proposed Action), Appendix 2B (Best Management Practices) and Appendix 2E (Environmental Monitoring Plan) of the Final SEIS. These monitoring and mitigation measures have been designed to reduce, eliminate, and measure impacts to sensitive resources as water, soil, vegetation, wetlands, wildlife, and fisheries identified in the SEIS.
2. Simplot must implement all of the monitoring plans described in Chapter Two (see sections 2.5, 2.9 and Appendix 2E) of the FSEIS. First, Simplot must provide additional detail on these plans. Within 120 days of the date of this ROD, Simplot must prepare and submit the following detailed monitoring plans, incorporating all applicable components from the FSEIS, to the BLM. Proposed monitoring plans and activities must be at sufficient levels, as determined by the BLM, to measure impacts, judge effectiveness of mitigation measures, and determine compliance of mining activities with established requirements. The BLM may accept plans prepared or approved by other agencies, or the ongoing CERLCA investigation, to fulfill, or partially fulfill this requirement.

Failure to submit suitable plans within 120 days (unless extended by BLM) from the end of the appeal period of this ROD, shall be sufficient for BLM to order a temporary cessation of the approved operations until such plans are submitted and determined acceptable by the BLM and the surface management agency. BLM will consult with the Forest Service regarding the adequacy of all the plans.

Following agency approval of the above plans, Simplot will comply with the plans and provide reports to the Agencies on an annual basis.

a. *Surface Water and Groundwater Monitoring Plan* - Assess project compliance with surface water and groundwater standards set by the Clean Water Act or other State of Idaho statutes and other goals and objectives listed in the Smoky Canyon Mine Panels B & C Environmental Monitoring Plan (Appendix 2E as augmented by sections 2.5 and 2.9.1 of the FSEIS). Proposed monitoring should be extensive enough to assess the effectiveness of approved mitigation measures for the project. Once effectiveness has been demonstrated, monitoring requirements will be reduced or discontinued as determined appropriate by the BLM.

The requirement for installing a monitoring well in the southwest quarter of Section 17, T8S, R46E between Panel B and Lower Smoky Spring may be eliminated if a satisfactory alternative is proposed to monitor the potential connection between the Wells Formation aquifer and Lower Smoky Spring and Creek.

The frequency and list of groundwater and surface water sites to be monitored by Simplot will be determined and approved by the Agencies in the Final *Surface Water and Groundwater Monitoring Plan*. Adequate monitoring must occur to measure environmental impacts as well as determine the effectiveness of mitigation measures. In making this determination and to avoid unnecessary duplication/redundancy, the Agencies will consider monitoring requirements contained in Simplot's negotiated Consent Order with Idaho Department of Environmental Quality (DEQ) on groundwater quality (and related Final Water Quality Monitoring Plan for Smoky Canyon Mine Panels B & C, 4/9/2002 (approved by the State of Idaho) for substitution or addition to the wells and sites described in the SEIS (section 2.9.1 and appendix 2E).

b. *BMP Effectiveness Monitoring Plan* - Simplot will provide the land management agencies with an annual summary of the Best Management Practices utilized on site and a summary of their effectiveness supported by data. The data supplied will support the effectiveness of the BMP's.

c. *Soil Inventory/Salvage Plan* - Prepare plans to adequately determine suitability of soil and growth medium materials salvaged prior to mining and later used in reclamation activities. In addition, the plan should include a method to determine selenium content in undisturbed soil to gauge suitability of salvaged soil for use in reclamation activities. It is recommended that Simplot follow the interim soil salvage guideline (or the most current revised Forest Service guideline) for selenium content on page 3-82 of the FSEIS.

d. *Wetlands Monitoring Plan* - Document the success of the wetland mitigation activities and insure that mitigation measures required by the U. S. Corps of Engineers (COE) are implemented. For the wetland restoration areas associated with Panels B & C, detailed monitoring requirements will be established in concert with the COE and may include monitoring of the wetland's hydrology, soil, and vegetation using specific success criteria.

e. *Wildlife Monitoring Plan* - Simplot will plan and conduct monitoring to:

Monitor contaminant levels and diversity in fish populations in Smoky Creek downstream of the B & C Panel area according to a plan approved by the Agencies.

Monitor the tailings pond for use by Federally listed threatened or endangered species. If species are present, cooperate with the U.S. Fish and Wildlife Service to determine potential effects and take such action as may be necessary to avoid any unacceptable effects to the species. In particular, the plan must evaluate potential risks to bald eagles related to operation of the proposed and existing mine, mill and tailings facilities and to build on the baseline work performed in support of the original and supplemental environmental impact statements to continue to monitor for threatened and endangered species at the Smoky Canyon Mine. It is anticipated that this plan and monitoring will be conducted under the site-specific Administrative Order on Consent consistent with the Statement of work for Area B (tailings ponds).

f. *Cultural and Paleontological Resources Monitoring Plan* - Document avoidance of known prehistoric sites near Simplot's mining activities using observation notes and photographic documentation of site condition, and report the occurrence of any vertebrate fossils exposed during mining. Also comply with any survey or mitigation requirements of the State Historic Preservation Officer prior to disturbance of the existing conditions.

g. *Infiltration Rates for Overburden Areas Study Plan* - In addition to the infiltration testing described in the FSEIS section 2.9.2 Simplot must demonstrate that the vertical percolation rate of key areas is sufficient to prevent development of seleniferous seeps and that the runoff recharge areas will function as designed. These key areas include the foundation of the external overburden site, runoff recharge areas, and the pit floor of the northwest portion of Panel B where the pit daylights above Smoky Creek. Within the footprint of these sites, Simplot must conduct appropriate infiltration field testing or adequate ground preparation (i.e., blasting, ripping) to ensure infiltration as approved by BLM. Testing must be conducted according to a study plan and a subsequent report(s) that will be reviewed and approved by the Agencies prior to placing fill in these areas.

h. *Construction Quality Assurance / Quality Control Plan and Inspector* - This plan shall detail the measures that will be taken by Simplot to ensure that all of the approved mitigation measures and management practices (section 2.4, 2.9 FSEIS) are implemented and constructed in accordance with applicable designs and intent. Major project components that require QA/QC are construction of the chert/topsoil cover, drainage control within the overburden dump, runoff recharge structures, etc. The plan should detail the method used to adequately monitor and supervise construction of the overburden disposal facilities including foundation preparation, runoff recharge structure construction, selective placement of seleniferous and chert overburden, and installation of erosion and sediment controls to protect the long-term functioning of the runoff recharge areas. The plan should provide an overburden characterization/handling component to ensure that only overburden materials low in selenium and other trace metals are used where specified in the approved mine and reclamation plan.

Simplot will pay the cost for a 3rd party QA/QC inspector to document, check and direct construction activities for compliance with the approved *Panel B & C Mine and Reclamation Plan* and the *Construction QA/QC Plan*. The inspector must be qualified as determined by BLM and under supervision of a certified Professional Engineer (PE) in the State of Idaho, or approved suitable equivalent. Any engineering firm retained by Simplot will be subject to agency concurrence. The inspector will keep written daily logs that will be made available for review by Simplot or the Agencies. A suitable *Construction Quality Assurance / Quality Control Report* assessing compliance and documenting the results of site inspections shall be prepared and submitted by the 3rd party contractor to the BLM and Forest Service on an annual basis (or more frequently if directed by BLM). The report will be certified correct by the PE and submitted simultaneously to the Agencies and Simplot without preliminary review by Simplot.

The 3rd party QA/QC inspector will immediately report any deviations from the approved construction plans to the BLM and Forest Service inspectors assigned to the Panel B & C project. Reports will be made verbally within 24 hours, and in writing within 14 calendar days to the BLM Pocatello Field Office Manager.

i. *Smoky Canyon Corridor Haulroad Construction Plan and Geotechnical Investigation* - Simplot will perform adequate watershed and geotechnical study to design a low impact, stable lower B-panel haulroad on the east side of Smoky Creek. Simplot will submit plans to the Agencies detailing how water-runoff and sediment will be controlled on this section of haulroad. As part of the study and submitted plans, Simplot will provide for adequate design and stability of the haulroad and take all necessary measures to ensure that the haulroad does not impact Smoky Creek above levels anticipated in the SEIS or allowed by statute.

- j. *Reclamation Vegetation Monitoring Plan* - to assess reclamation vegetation success in meeting standards and goals including species composition, diversity, cover, and selenium uptake. This plan must ensure and demonstrate that vegetation growing on reclaimed mine sites does not contain levels of selenium or other trace metals that may be harmful to grazing livestock or wildlife (i.e., that the reclamation vegetation meets the interim vegetation standard on page 4-146 of the FSEIS, or final regional or site-specific standards adopted by the Forest Service after the date of this Record of Decision - see #8 below). Consideration will be given in the monitoring plan to measuring the effectiveness of the overburden cap and in identifying plant species that may be accumulating selenium.
3. Simplot will be responsible to acquire and comply with all necessary State and Federal regulatory permits, and provide documentation of those permits to the BLM for inclusion in the project file. Riparian and wetland areas within the project area have been surveyed and identified in the Final SEIS. These areas will be protected or appropriately mitigated as determined by the U.S. Dept. of the Army, Corps of Engineers and/or State of Idaho agencies with jurisdiction. Simplot will obtain any applicable Clean Water Act permits and certifications for the project.
 4. Simplot will provide the land management agencies copies of their plans for conducting research on public lands. Simplot will promptly provide the Federal land management agencies with copies of research data collected on Federal lands.
 5. Simplot will provide an annual report of all environmental monitoring data required to be gathered by the approved Smoky Canyon Mine and Reclamation Plan (the general plan as well as site specific plans for Panels A, B, C, D and E) collected from the mine site.
 6. Reclamation seed mixes must be approved by the U.S. Forest Service for use at the Smoky Canyon site. Seed mixes proposed by Simplot may be subject to change pending completion of agency research projects on reclamation plant mixtures and administrative objectives. In an effort to achieve a more natural condition, Simplot will work with the Forest Service to increase the planting density and number of tree species used in reclamation activities. However, the potential for adverse impacts from selenium or other contaminant uptake into planted trees will be considered prior to planting trees at reclaimed sites.
 7. Simplot will perform nutrient analysis on reclamation soils to ascertain the optimum soil fertilization rate to ensure success of reclamation plantings.
 8. Reclamation in Panels B & C must meet the interim standard for selenium in reclamation vegetation which is stated on page 4-146 of the FSEIS. This

requirement may be lessened by a final regional or site-specific reclamation standard adopted by the Forest Service after the date of this Record of Decision. (A final standard for phosphate mine sites in Southeast Idaho may be developed in the future by the Federal land management agencies after additional study and public comment.) The standard must be reached before the Agencies will consider releasing the reclamation bond for the project.

9. Simplot will conduct testing approved by the Agencies to validate the predictive ground water impact model used in the SEIS. Results from this further testing and modeling will be made available to the Federal agencies involved. Field monitoring such as drill holes in existing backfilled and external dumps will also be used, as applicable, to further validate the prediction model. Corrective actions may be required if results show a need to enhance environmental protection.
10. Prior to commencement of ground disturbing activities, Simplot will provide to the appropriate responsible agency a performance bond. The amount of the bond will consist of the estimated actual cost to the government to reclaim disturbances created by the Panels B & C and all other portions of the Smoky Canyon Mine. The bond shall also include three months projected lease production royalties. At a minimum, the bond will be reassessed and recalculated every three years. Simplot will assist the land management agencies in the calculation of a bond amount. Bond amounts will be calculated considering development and reclamation phases of the entire Smoky Canyon Mine project.
11. Simplot will provide the BLM and Forest Service with supplements (modified drawings, maps, and narrative) to the Panel B & C Mine & Reclamation Plans that were previously submitted to the Agencies. The supplements must fully reflect the final Mine and Reclamation Plan activities approved in this Decision. The information on file with the Agencies must meet requirements of 43 CFR 3592.1-3, *[Mining Operations] Plans and Maps*.
12. Simplot will continue to comply with the conditions of approval that were attached to the original Smoky Canyon Mine and Reclamation Plan approval¹ and the Records of Decision for the 1982 Smoky Canyon Phosphate Mine EIS. The BLM Pocatello Field Office Manager will provide direction on any conflicting requirements, if any.

¹See "Management Constraints", chapter 4, Smoky Canyon Phosphate Mine EIS, 1982. Also see "Special Stipulations to the Smoky Canyon Mine and Reclamation Plan, Idaho 012890" and "Partial Plan Approval Requirements" signed on January 6, 1983 by Ben D. McCollum, Sr. Vice President, J.R. Simplot Co.

RATIONALE AND MANAGEMENT CONSIDERATIONS

This decision is one that involved a balancing of several considerations. The BLM is charged with promoting orderly and efficient mining operations and production practices without waste or avoidable loss of minerals or damage to deposits; to encourage maximum recovery and use of all known mineral resources; to promote operating practices which will avoid, minimize or correct damage to the environment - land, water and air - and avoid, minimize or correct hazards to public health and safety;

Non-renewable phosphate resource conservation and recovery as granted by legal lease rights previously purchased by Simplot from the Federal government, and as approved in the 1982 ROD for the Smoky Canyon Mine, were balanced with public interests, surface resources management, and responsible environmental protection. As the right and approval to mine the Smoky Canyon phosphate deposit had previously been granted to Simplot, the decision on this supplemental analysis is focused on selecting appropriate mitigation for environmental impacts from that mining, in light of the information on selenium that has become available since the 1982 EIS.

The right to mine carries with it the responsibility to ensure that mining operations include adequate and responsible measures to prevent unnecessary or undue degradation of the public land, compliance with other established requirements which include but are not limited to, the Federal Endangered Species Act, Migratory Bird Act, Federal Land Policy and Management Act, Clean Water Act, Clean Air Act, and the Idaho Groundwater Protection Rule. and to provide for reclamation and post mine land uses. The right to mine is subject to review and approval of site-specific mine development plans, alternatives, and application of appropriate mitigation measures that address these requirements.

Some of the important considerations in reaching this decision are:

- Degree to which the proposed mitigation measures reasonably minimize impacts to environmental resources;

- Predicted effects of the Selected Alternative and other alternatives on groundwater and surface water quality in the area as compared to State and Federal requirements;

- Ultimate maximum recovery of phosphate ore from the Federal leases, and;

- Coordinating the evaluation of environmental impacts in this SEIS with other ongoing and planned studies by Simplot and other State and Federal agencies.

The residual impacts to environmental resources would be similar for all of the action alternatives after application of the mitigation measures proposed by Simplot as described in the Final SEIS. Some of the most notable differences between

alternatives are in impacts to groundwater quality, which became a major focus of the environmental impact analysis and mitigation planning. During the course of preparing and issuing the FSEIS extensive coordination and direction on groundwater quality compliance was obtained from the Idaho DEQ, which is the agency authorized to enforce groundwater protection requirements in the State of Idaho.

Once additional mitigation measures were added to the Proposed Action to decrease predicted impacts to groundwater quality, the action alternatives became somewhat functionally equivalent with respect to environmental impacts and predicted compliance with established requirements. Cost to implement each alternative then became a consideration in making the most reasonable decision.

Rationale - Proposed Action (with mitigation)/Agency Selected Alternative

The Bureau's Selected Alternative is the Proposed Action (with mitigation), as described in the FSEIS. This alternative was also designated as the Agency Preferred Alternative in that document. The Agencies believe this alternative fulfills their statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. The Selected Alternative results in the same acreage of disturbance, and consequent physical impacts to soils, vegetation, generally wildlife, and grazing as the other two action alternatives, while allowing Simplot to potentially recover more phosphate ore than the other two action alternatives. The Selected Alternative results in less air emissions because less waste rock would need to be rehandled. The potentially shorter disturbance time frame of the Selected Alternative reduces the length of time that potential impacts may occur which are associated with the physical disturbance of the B & C Panel areas.

While the Selected Alternative results in a greater potential area of seleniferous overburden and a greater area of highwall (north and southwest portions of Panel C and northeast Panel B) remaining after reclamation than under the other two action alternatives, the consequences of these impacts are minimal and localized to the mine area. Aside from the areas of unreclaimed highwall, the Selected Alternative and both action alternatives have equivalent reclamation plans and standards for reclamation. The Selected Alternative overburden rehandling and reclamation are less costly for Simplot to implement and less cost may allow greater utilization of the non-renewable phosphate mineral resource than the other action alternatives. Simplot will likely be able to mine longer in the Panel B & C impact area before moving on to other potential mining areas.

The Selected Alternative and the other action alternatives are predicted to have equivalent effects on the Smoky Creek stream channel, flow rates, erosions and sedimentation, and wetlands. However, the predicted effects on water groundwater quality would be much different: a total aquifer area of about 550 acres is estimated to have groundwater selenium concentrations greater than the MCL for the Selected Alternative, compared with slightly more than 300 acres for Alternatives A and B.

Under all three of these scenarios, approximately 100 acres of these impact areas are estimated to have groundwater selenium concentrations greater than the MCL downgradient (outside the footprint) of the mine area, rendering the three alternatives equivalent for considering compliance with Idaho groundwater protection requirements outside the mine area. After considering the conservative nature of the modeling used to derive these predictions however, the BLM has selected the Proposed Action (with mitigation). The predicted effects on groundwater quality are based on conservative modeling and may be less than predicted; are localized within the mine area; and are not predicted to impact surface resources or human health.

Substantial mitigation measures have been added to the Panel B & C mine plan since its original submittal to BLM in 1999 and evaluation in the Draft SEIS. The overburden (waste rock) management elements contained in the Selected Alternative (see FSEIS figure 2.2-6 and section 2.9.2) are designed to eliminate the potential for formation of seleniferous overburden seeps from the external overburden disposal site, which was the *main reasons for considering Alternatives A and B*. Foundation permeability control, selective placement of overburden, surface runoff management, and collection and subsurface recharge of surface runoff will provide multiple layers of protection to reduce the potential for development of seleniferous seeps along the margin of the external overburden fill.

Design of the overburden disposal facilities is expected to reduce the area of significant groundwater impacts from seepage through seleniferous overburden to the immediate vicinity of the mine disturbance. Downgradient groundwater quality is expected to comply with State protection standards. Simplot has entered into a legally binding Consent Order with the State of Idaho to ensure that groundwater quality is not impacted above allowable standards.

The selective handling of overburden would result in a minimum 8-foot thick chert cap over all areas of seleniferous overburden to prevent its long-term release to the environment through vegetative uptake, direct contact, or erosion. All disturbed areas would also be covered with 1 to 3 feet of native soil for re-establishment of permanent vegetative cover. These and other management practices are expected to reduce to acceptable levels impacts to surface resources including soils, surface water, vegetation, wildlife, livestock grazing, visual resources, and recreational uses of the public land.

Mitigation measures designed to eliminate the potential for seeps to form in the external overburden disposal structure have been incorporated into the Selected Alternative at a much lower overall project cost than the other action alternatives. Because of this, the more marginal phosphate reserves that lie deeper could be economically extracted resulting in an increased utilization of the public phosphate ore resource compared to the other action alternatives.

Many of the proposed mitigation measures and overburden drainage control design components for the Selected Alternative are relatively new to the southeast Idaho phosphate mining industry. I acknowledge that there is a certain risk in approving application of these new measures and allowing implementation. Less risk to the environment is associated with an Alternative A or B approach to eliminating the threat of selenium impacted seeps or springs developing in a phosphate mine's external waste rock dump. Although also predicted to be effective, the Alternative A and B approach are much more costly and do not allow Simplot to be given a chance to respond to these issues by applying principles of science and engineering to come up with successful, cost effective designs. This allows industry to operate in a competitive market while meeting the mandates of BLM to ensure that this project does not unnecessarily or unduly degrade the environment and complies with established requirements.

However it is important that the Bureau be able to monitor, assess and control the various components of the Selected Alternative for panels B & C in concert with the Forest Service and other responsible State and Federal agencies. For this reason, I am conditioning approval to include the extensive monitoring, reporting, Construction Quality Assurance and Quality Control, and contingency planning explained in the Mitigation Measures and Monitoring section of this ROD and in the associated sections of the FSEIS (sections 2.5, 2.9, appx. 2E). This data will also provide useful data for the BLM and surface management agencies to use in evaluating future phosphate mining proposals in Southeast Idaho. If monitoring data indicates unacceptable impacts or that certain management practices are not as effective as anticipated, Simplot will follow contingency plans outlined in Chapter 7 of the Monitoring Plan located in Appendix 2E of the FSEIS or take corrective action as directed by the authorized agency(s). This will allow the Agencies to ensure that the public good be met as well as accommodate the purpose and need of Simplot's B & C mining proposal.

Rationale - Alternative A - No External Disposal of Seleniferous Overburden

As seen from the above discussion, this alternative would have some advantages over the Selected Alternative, namely reduced areas of unreclaimed highwall and reduced areas of groundwater contamination. However, compared to the Selected Alternative it would: have the same area of downgradient (outside the footprint of the mine area) selenium concentrations in groundwater greater than the MCL, extend the time frame of surface disturbance, increase exposure of seleniferous overburden to surface weathering and erosion, and increase fugitive dust emissions.

Alternative A was formulated to eliminate the potential for seeps or springs that may develop in the external overburden storage facility to become impacted by selenium or other contaminants. During the period between the close of the comment period on the Draft SEIS and issuance of the FSEIS, mitigation measures designed to eliminate the potential for seeps to form in the external overburden disposal structure have been

incorporated into the Selected Alternative at a much lower project cost than Alternative A. This renders the Proposed Action (with mitigation) “functionally equivalent” to Alternative A for eliminating the possibility of impacted seeps and springs.

Not allowing seleniferous overburden to be placed in the external disposal site would increase reclamation cost an estimated \$6,052,000 over the Selected Alternative. The added cost for this alternative would result in a decreased utilization of the phosphate ore resource compared to the Selected Alternative as the deeper phosphate resource, which is more costly to recover, would be left in the ground.

In light of this information, it seems unreasonable to require an approach like Alternative A at this time.

Rationale - Alternative B - No External Disposal of Overburden

Alternative B was formulated and assessed in the SEIS in response to issues relating to the potential for seeps or springs that may develop in the external overburden storage facility to become impacted by selenium or other contaminants as well as visual impacts from highwalls remaining after reclamation is completed. Since a permanent overburden disposal facility is not a component of Alternative B, there is no potential for development of impacted seeps or springs in an external structure.

This alternative would have some advantages over the Selected Alternative. Alternative B would leave 5 acres of unreclaimed residual highwalls compared to 11 acres under the Selected Alternative. However, the real benefit of a small decrease (6 acres) in the extent of residual highwalls under Alternative B seems minor when compared to the 618 acres total disturbance of the project.

Compared to the Selected Alternative and Alternative A, Alternative B would: have the same area of downgradient (outside the footprint of the mine area) selenium concentrations in groundwater greater than the MCL, extend the time frame of surface disturbance, increase exposure of seleniferous overburden to surface weathering and erosion, and increase fugitive dust emissions.

During the period between the close of the comment period on the Draft SEIS and issuance of the FSEIS, mitigation measures designed to eliminate the potential for seeps to form in the external overburden disposal structure have been incorporated into the Selected Alternative at a much lower project cost than Alternative A. This renders the Proposed Action (with mitigation) “functionally equivalent” to Alternative B for eliminating the possibility of impacted seeps and springs.

It is estimated that Alternative B would cost an additional \$17,900,000 in operational and reclamation expenses over the Selected Alternative. The added cost for this alternative would likely result in a decreased utilization of the phosphate ore resource

compared to the Selected Alternative or Alternative A as the deeper phosphate resource, which is more costly to recover, would be left in the ground.

For these reasons, selection of Alternative B seems unwarranted.

No Action

Under this alternative, additional impacts to surface resources associated with public land administered by USFS and BLM from the Smoky Canyon Mine, Panels B & C would be precluded until such time as an acceptable Mine Plan could be approved. Adoption of the No Action alternative would interrupt the phased development of the Smoky Canyon leases until more suitable mitigation plans are approved by the Agencies.

The environmental impacts from the No-Action Alternative include ongoing presence of the unbackfilled, open pit in the north portion of Panel A and uncapped backfilled area in the south portion of Panel A. Existing groundwater impacts from Panel A would continue with no mitigation. These impacts can be mitigated with continued phosphate mining in the B & C Panels which is part of the overall phased development of the Smoky Canyon Mine previously approved by the Agencies.

This alternative does not address the nation's consumption and demand for phosphate rock and phosphorus based products. Because of this demand, implementation of the No Action alternative would shift impacts from mining in the Smoky Canyon to other locations. As this area has already been affected by mining impacts, it is prudent to keep mining activities in the same vicinity of past impacts rather than transfer mining impacts to other, possibly un-impacted locations sooner than necessary.

The No-Action alternative is not in harmony with mineral lease development rights purchased by Simplot from the United States because reasonable and acceptable mitigation measures have been developed and incorporated into the Selected Alternative that are predicted to ensure that unnecessary or undue degradation does not occur to the environment. Simplot has invested a significant amount of time and expense in acquiring and holding their phosphate leases, exploring the deposit, and preparing a mine and reclamation plan that addresses ore recovery with due regard to protection of the environment. Further, the 1982 ROD granted general approval to mine Panels B & C, after additional acceptable information has been provided. Should the No Action Alternative be selected at this time, Simplot would continue to revise the mine plans, with the likely result being mining in Panels B & C at some later date. In the interim period, the Smoky Canyon Mine would likely have to needlessly shut down causing hardship to the employees, company, and the economy of the region.

Having a supply of minerals available for consumption by society results in trade-offs being made and accepting reasonable levels of environmental impacts. However, the impacts must not be unnecessary or undue and should be predicted to not exceed

thresholds of applicable laws. It is my responsibility as the Authorized Officer for the BLM, who is charged with multiple use management, to ensure that these impacts are mitigated to acceptable levels. If they cannot be mitigated to acceptable levels, then mining is not an appropriate use of the affected lands.

I have decided that the predicted impacts associated with the proposed B & C Panel development can be mitigated to reasonable and acceptable levels in the Selected Alternative. The Action Alternatives - Selected Alternative and Alternatives A and B - are predicted to comply with established requirements, without unnecessary or undue degradation of the environment. The selection of the No Action Alternative is inappropriate at this time.

PUBLIC INVOLVEMENT

To allow an early and open process for determining the scope of significant issues related to the Smoky Canyon Mine, Panels B & C (40 CFR 1510.7), the BLM and USFS provided a public scoping period. A Notice of Intent to prepare the SEIS was published in the Federal Register on March 24, 2000. A legal notice was published in Pocatello, Idaho (March 28, 2000) and Afton, Wyoming (March 30, 2000) newspapers. A news release was also published in Pocatello and Soda Springs, Idaho, and Afton, Wyoming newspapers.

The public mailing list was compiled and 170 scoping letters were sent to interested individuals, agencies, and groups. Two public meetings were held. One meeting was held in Afton, Wyoming on April 17, 2000 at Star Valley High School, and the other in Pocatello, Idaho on April 18, 2000 at the BLM Pocatello Field Office. The open house meetings provided a project description, photo displays of the project area, and a forum for exchange of information and ideas or concerns related to the project. Comment forms were available at the meetings. Agency and consultant representatives were present.

By the close of the scoping period on April 30, 2000, eleven comment letters, four comment forms, and one e-mail comment had been received for the Smoky Canyon Mine B & C Panels development. Two additional letters and one additional comment form were received after the end of the scoping period. Issues contained in the scoping responses were incorporated and assessed in the SEIS.

A Draft SEIS was prepared and sent for review to individuals and organizations on the project mailing list and other government agencies. The DSEIS was filed with EPA and a Notice of Availability published in the Federal Register in July 2001. The DSEIS was available for comment for 60 days. During the public comment period, two public meetings were held in the same locations as during the public scoping period. The open house meetings provided a project description, photo displays of the project area and potential environmental impacts, and a forum for exchange of information and

ideas or concerns related to the project. Comment forms were available at the meetings. Agency and consultant representatives were present. To respond to requests from commentors, the public comment period was extended by 30 days (for a total of 90 review days) and notices of this extension were published in the Federal Register and local newspapers. During the review of the public comments, a mailing was sent to the entire Smoky Canyon mailing list for the DSEIS soliciting responses as to whether or not the recipients wished to receive a copy of the FSEIS. The FSEIS mailing list was revised based upon the response from this mailing.

Fifteen comment letters were received on the DSEIS. These letters were reviewed, a detailed content analysis completed, and a response to each substantive comment prepared. The comments and responses are contained in Chapter Seven of the FSEIS and were used to assist in preparation of the FSEIS. In addition, the Selected Alternative was revised as a result of comments received on the DSEIS.

BLM filed the Smoky Canyon Mine, Panels B & C Final SEIS with the EPA. EPA and BLM each published a Notice of Availability in the Federal Register on April 21, 2002. The FSEIS was issued and released to the public just prior to that time. Legal notices announcing the availability of the FSEIS were published in the Idaho State Journal (Pocatello, Idaho) and Star Valley Independent (Afton, Wyoming). A press release was also issued to regional and Boise, Idaho news organizations. The availability period for the FSEIS was commenced on April 26, 2002 for a minimum of 30 days prior to this Record of Decision.

The Bureau received several letters via email and normal mail during the FSEIS availability period that started April 26, 2002 and ended on May 28, 2002. All of the email letters consisted of similar, if not identical statements consisting of a brief statement acknowledging the selenium problem associated with phosphate mining in southeast Idaho and urging the BLM to select Alternative B in our ROD. Although these letters are acknowledged, they offered no new information or issues that were not previously considered in the Draft and Final SEIS. The letters did not present additional information for me to consider in formulating the Bureau's ROD.

The J.R. Simplot company submitted a letter to BLM providing rationale for eliminating one groundwater monitoring well from the overall monitoring plan and eliminating field testing of infiltration capability and/or surface preparation to enhance infiltration of the footprint of the mine. I have considered their comments carefully and consulted with my technical staff. In Mitigation Measure #2(a) of this ROD an allowance has been to further evaluate the need for the subject groundwater monitoring well. The need will be assessed by BLM after considering the groundwater monitoring requirements that have been imposed on Simplot by the Idaho DEQ as part of the signed Consent Order between those two parties. With respect to infiltration testing or ground preparation for enhancing infiltration, it is important to note that adequate infiltration into the ground is a critical component of the approved groundwater and surface water mitigation measures and management practices. Although Simplot makes convincing arguments regarding

the likelihood of adequate infiltration capacity, the capacity should be confirmed through actual field testing and/or enhancing the ground to assure that adequate infiltration occurs as planned. I am keeping these requirements as part of the conditions of approval as outlined in Mitigation Measure #2(g) in this ROD.

The U.S. Environmental Protection Agency, Region 10, sent a letter discussing recommendations regarding the ROD for this project. The letter discussed issues such as actual cost bonding, monitoring, contingency planning, the Simplot/Idaho DEQ enforceable groundwater agreement, quality assurance planning, and reporting requirements. The Bureau has been coordinating the issues contained in the letter with EPA during the entire course of the SEIS project. The result is that most, if not all, of the final issues relating to the Panel B & C project contained in EPA's letter have been addressed either in Chapter 7 of the FSEIS or in this ROD. BLM will further consider the issues raised in EPA's letter as we finalize the monitoring plans and actual cost bond for the mine and as we administer operations on Federal mineral leases at Smoky Canyon.

The Greater Yellowstone Coalition (GYC) also submitted a letter to BLM commenting on the FSEIS. The content of GYC's letter consisted mostly of comments on the FSEIS. I have considered appropriate issues raised in the letter in formulating this ROD.

GYC's letter expressed concerns about predicted impacts to groundwater quality. My technical staff has reviewed these comments and determined that they do not raise any significant issues not already addressed in the FSEIS, nor do they provide any new significant information on the project environmental analysis. BLM has received written correspondence from the Idaho DEQ which indicates the predicted groundwater impacts from the Selected Alternative can be regulated by them in compliance with State statutes and regulations. The Coalition also commented on potential risk to human health from water quality impacts at the on-site culinary supply well. The FSEIS indicates that the water quality in this culinary source is predicted to continue to comply with current drinking water Maximum Contaminant Levels so I have determined that additional mitigation to protect this source, other than that already discussed in the FSEIS, is not required at this time.

The Coalition commented that impact mitigation using infiltration barriers was prematurely ruled out due to costs but my review of the FSEIS and Appendix 2C indicates that an objective review of this technology was conducted which identified numerous technical feasibility issues in addition to cost considerations. I conclude that additional evaluation of this type of mitigation for this specific project is not warranted at this time. This decision does not preclude potential application of this technology to other projects.

GYC commented that the proposed application of CERCLA authority to the investigation and mitigation of the existing environmental impacts at the Smoky Canyon

Mine was inappropriate for a number of reasons and more analysis of these effects should have been incorporated into the Cumulative Effects section of the FSEIS. I note that the BLM and other Federal and state regulatory agencies have signed a Memorandum of Understanding and an Area-wide Administrative Order on Consent that address the investigation and mitigation of existing contamination impacts at all phosphate mining operations in Southeast Idaho under CERCLA authority and commit the parties to these agreements to follow those procedures to assure effective and efficient actions and minimize duplication of efforts. I have also noted that the FSEIS describes how the mitigation measures incorporated into the B and C Panels are intended to prevent contribution to the existing contamination-related impacts which are the focus of the CERCLA investigations. Therefore, I have concluded that the treatment of contamination-related cumulative effects in the FSEIS is sufficient for this ROD. This is also the case with regard to GYC's comments related to evaluation of the cumulative effects to vegetation, grazing resources and watersheds.

CONSISTENCY WITH LAND USE PLANS AND OTHER LAWS

My decision is consistent with established requirements including environmental protection requirements, specifically:

The Selected Alternative is subject to the *Caribou National Forest Land and Resource Management Plan* approved September 27, 1985. The land use plan has been reviewed and a determination made that the proposed mineral development action conforms with the goals and objectives of the plan. The Forest Service has recommended selection of the Proposed Action (with mitigation) by letter dated May 30, 2002.

Mining in Panels B & C is also subject to the BLM *Pocatello Resource Management Plan* approved January 8, 1988. This land use plan has been reviewed and a determination made that the Selected Alternative conforms with the plan's terms and conditions as required by 43 CFR 1610.5.

Endangered Species Act - The Bureau has coordinated with the U.S. Fish and Wildlife Service. A Biological Assessment was prepared for the project which states, that implementation of the Selected Alternative and associated mitigation measures specified for the Smoky Canyon Mine B & C Panels may affect, but are not likely to adversely affect the gray wolf, bald eagle, Canada lynx, or Ute ladies'-tresses. The Project would have no affect on the whooping crane. The project is expected to meet requirements of the Endangered Species Act. By memorandum dated May 20, 2002 the FWS has concurred with the Biological Assessment.

Migratory Bird Treaty Act -The Selected Alternative is not expected to violate any provisions of the Migratory Bird Treaty Act.

Federal Lands Policy and Management Act and Land Use Plans - This decision has been reviewed for compliance with land management agency policies, plans, and programs. The Selected Alternative is in conformance with the direction for mineral development contained in the BLM Pocatello Resource Management Plan, 1988 and the Caribou National Forest Land and Resource Management Plan, 1985. The project has also been mitigated to ensure that unnecessary or undue environmental degradation does not occur. Approval of the project also recognizes the policy of multiple land use and the Nation's need for domestic sources of phosphate minerals.

Clean Air Act and Idaho Groundwater Quality Rule - Idaho DEQ is authorized to enforce ground water and air quality standards in Idaho. DEQ has reviewed the mine plans, the 1982 EIS, and the groundwater impacts predicted in the 2002 SEIS. DEQ and Simplot have reached agreement on the terms of a Consent Order, pursuant to the Environmental Protection and Health Act, regarding ground water quality and the Panels B & C mine plan. The Consent Order addresses issues both during and after active mineral expansion. Given the Consent Order, and DEQ's review of the plans and other material noted above, DEQ believes the mine operation in the B & C panels outlined in the Selected Alternative shall be consistent with state ground water and air quality standards.

Clean Water Act and Safe Drinking Water Act- The effect of the project on surface quality has been modeled and presented in the EIS. Impacts to surface waters, including seeps, springs, and creeks, are not predicted to exceed applicable numerical water quality standards in the Clean Water Act (CWA).

The water quality modeling results are presented in Section 4.3.1 of the FSEIS and show that the water quality for the drinking water at the mine, specifically the Culinary Well, is estimated to continue to comply with drinking water standards and the *Safe Drinking Water Act*.

Project implementation will not be allowed until Simplot provides evidence of CWA approvals from the State and U.S. Corps of Engineers for disturbance of stream channels and designated wetlands in Smoky Canyon.

Mining and Minerals Policy Act - The selected alternative is in harmony with direction given in the Act to foster and encourage private enterprise in development of economically sound and stable domestic mining and minerals industries, orderly and economic development of domestic mineral resources, and reclamation of mined land. It is the responsibility of the Department of Interior to carry out this policy when exercising authority under such other programs as are authorized by law.

Mineral Leasing Act - The Selected Alternative will allow Simplot to exercise their existing mineral development rights granted in their Federal mineral leases. It also allows modification of an existing lease to include necessary mine facilities and helps assure that ultimate maximum recovery of the mineral resource can occur. Simplot will

pay annual rents and a 5% gross value royalty on phosphate production to the United States. Half of the money collected will be returned to the State of Idaho.

National Environmental Policy Act - The proposal has the potential to result in significant effects to the environment. As a result, the Smoky Canyon Mine, Panels B & C Final SEIS was prepared to comply with this statute.

IMPLEMENTATION AND APPEAL RIGHTS

Any party who is adversely affected by this decision has a right to appeal to the Interior Board of Land Appeals, in accordance with the provisions described in 43 CFR Part 4. A person who wishes to appeal must file in the office of the State Director, Bureau of Land Management, Idaho State Office, 1387 South Vinnell Way, Boise, ID 83709-1657, who made the decision a notice that he wishes to appeal. This notice must be filed within 30 days after May 31, 2002, which is the signature date of this Decision and the date the Notice of Availability of this Decision was published in the Idaho State Journal, Pocatello, Idaho. The notice of appeal must identify the decision being appealed and may include a statement of reasons for the appeal and any argument the appellant wishes to make. If the notice of appeal does not include the statement of reasons for the appeal, the appellant shall file such a statement with the Interior Board of Land Appeals, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, Virginia 22203, within 30 days after the notice of appeal was filed. The appellant shall serve a copy of the notice of appeal and of any statement of reasons and arguments on the Field Solicitor, U.S. Department of the Interior, Federal Building & U.S. Courthouse, 550 West Fort Street, MSC 020, Boise, ID 83724, not later than 15 days after filing the document. Service of the copy may be made by delivering the copy personally or by sending it by registered or certified mail, return receipt requested.

Implementation of this decision may begin at the close of an appeal-filing period which begins today and ends 30 days after publication of a legal notice announcing the availability of this ROD in the Idaho State Journal, Pocatello, Idaho.

Mike Ferguson
Acting Idaho State Director
Bureau of Land Management

May 31, 2002
Date