



United States
Department of
Agriculture

Forest
Service

January 2009



RECORD OF DECISION

Idaho Cobalt Project

Salmon-Cobalt Ranger District, Salmon-Challis National Forest

Lemhi County, Idaho



JANUARY 2009

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**RECORD OF DECISION
IDAHO COBALT PROJECT
SALMON-CHALLIS NATIONAL FOREST
LEMHI COUNTY, IDAHO**

Prepared by:

USDA Forest Service, Salmon-Challis National Forest



January 2009

January 22, 2009

Record of Decision for the Idaho Cobalt Project

Dear Reader:

I signed a Record of Decision (ROD) for the Idaho Cobalt Project (ICP) on June 12th, 2008. Appeals of my decision were filed by the Nez Perce Tribe, Noranda, Charles Pace, Earthworks and Boulder-White Clouds Council. The Regional Forester issued a decision on the appeals on September 30, 2008, which reversed and remanded my decision for further consideration. Specifically, the Regional Forester determined that the analysis of potential effects in the Final Environmental Impact Statement (FEIS) and record was adequate; however, the Regional Forester found that the ROD failed to adequately address some of the criteria for approval of a Plan of Operations under 36 CFR 228.5.

On November 14, 2008, Formation Capital Corporation (FCC) notified the USDA Forest Service that information gained from mining the Ram deposit would be utilized to further refine the proposed operating plan for the Sunshine deposit. FCC also advised that it intended to provide financial assurance for reclamation of operations related to the Ram deposit only at this time.

A new ROD has been prepared in response to the Regional Forester's appeal decision and the new information from FCC regarding plans for development of the Sunshine deposit. Specifically, this ROD clarifies provisions of the plan of operations to be approved regarding management of sedimentation from initial construction activities and management and treatment of groundwater in accordance with 36 CFR 228.5 and 228.8. The ROD also documents additional efforts to consult with Native American Tribes and compilation of a Watershed Analysis as required by the Forest Plan. While the EIS thoroughly discussed the potential effects to aquatic and riparian resources, that analysis had not been compiled into a Watershed Analysis report as technically required by the Forest Plan. Finally, this ROD provides a more succinct discussion of the potential effects of mining operations to the characteristics of Inventoried Roadless Areas and the management of these areas under the October 2008 Idaho Roadless Area Management Rule.

Due to the information provided by FCC subsequent to the Regional Forester's appeal decision, this ROD also addresses the proposed plan of operations for only those operations associated with development of the Ram deposit. In accordance with 36 CFR 228.5(a)(3), I have determined that the additional information FCC indicated will be gathered during development of the Ram deposit is necessary to approve a plan for development of the Sunshine deposit. In addition, under 36 CFR 228.5(a)(5) this information is also required to determine if the potential environmental effects of developing the Sunshine deposit have been fully analyzed in the EIS. Therefore, I am deferring a decision on approval of those components of the proposed plan of operations related to development of the Sunshine

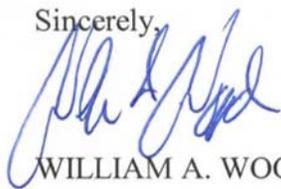
deposit until the information from development of the Ram deposit referenced by FCC in the November 14 letter has been compiled.

This ROD describes the decision to approve a Plan of Operations, the rationale for the decision, and includes a brief description of all alternatives considered in reaching the decision. It also includes a discussion of preferences among alternatives based on relevant factors and how those factors were used in reaching the decision. The approved Plan of Operations will allow surface-disturbing activities that affect approximately 132 acres of National Forest System (NFS) land. There is potential for the proposal to effect approximately 135 acres of NFS lands if a plan is approved for operations related to development of the Sunshine deposit. Surface-disturbing activities include construction of roads, powerlines, pipelines, adits, mine, mill and tailings facilities. This ROD also documents changes and additions to the plan of operations proposed by FCC deemed necessary by the United States Department of Agriculture (USDA) Forest Service in order to meet the requirements of the regulations set forth in 36 CFR Subpart A.

This decision is supported by seven years of analysis conducted with agency, Tribal and public participation. To date, approximately 175 individuals, groups, organizations, Tribal entities, and agencies have provided comments regarding project related concerns and issues. This input has allowed the SCNF to develop a sound alternative for approving a Plan of Operations that meets the purposes of the regulations and addresses public concerns and issues expressed in comments.

I wish to thank the cooperating agencies, U.S. Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (IDEQ), other participating agencies, Tribal Governments, and the public for their comments, input and reviews. If you have any questions, please contact Kimberly D. Nelson, Salmon-Cobalt District Ranger, at (208) 756-5247.

Sincerely,



WILLIAM A. WOOD
Forest Supervisor

TABLE OF CONTENTS

LIST OF FIGURES	iv
1.0 DECISION AND REASONS FOR THE DECISION	1-1
1.1 DECISION BEING MADE	1-1
1.1.1 Description of Preferred Alternative.....	1-4
1.1.2 Modifications to Preferred Alternative	1-7
1.1.3 Stipulations, Mitigations, and Monitoring Programs	1-8
1.1.4 Permits, Licenses and Authorizations Needed to Implement the Decision	1-15
1.2 APPLICABLE LAWS REGULATIONS AND POLICIES	1-18
1.3 CONSIDERATION OF ENVIRONMENTAL ISSUES	1-18
1.3.1 Blackbird Mine CERCLA Remediation and Natural Resources Restoration	1-19
1.3.2 Effects of the Proposed Activities on Groundwater Quality in the Panther Creek Watershed	1-20
1.3.3 Effects of the Proposed Activities on Surface Water Quality in the Panther Creek Watershed.....	1-21
1.3.4 Effects of the Proposed Activities on Water Use, Management, Treatment and Disposal	1-21
1.3.5 Effects of the Proposed Activities on Sediment Delivery	1-21
1.3.6 The Effect of the Proposed Activities on the Transportation of Product and Hazardous Materials, Chemicals, and Fuels.....	1-22
1.3.7 The Effect of the Proposed Activities on Vegetation/Reclamation in the Project Analysis Area	1-22
1.3.8 The Effect of the Proposed Project Activities on Wetlands and Other Waters of the U.S.....	1-22
1.3.9 The Effect of the Proposed Project Activities on Fish Populations and Habitat of Concern (Federally Listed Species, Sensitive Species, and Management Indicator Species)	1-23

1.3.10 The Effect of the Proposed Project Activities on Air Quality, Visual Resources and Wilderness Experience.....	1-30
1.3.11 The Effect of the Proposed Project Activities on Wildlife Populations and Habitats of Concern (Threatened and Endangered Wildlife Species; Region 4 Sensitive Species; Management Indicator Species; and Idaho Species of Concern) ...	1-31
1.4 FACTORS OTHER THAN ENVIRONMENTAL ISSUES	1-31
1.4.1 The Effect of the Proposed Activities on Roads and Access Management in the Analysis Area.....	1-31
1.4.2 The Effect of the Proposed Activities on Socio-Economics.....	1-32
1.4.3 The Effect of the Proposed Project Activities on Cultural Resources and Tribal Trust Responsibilities	1-32
1.4.4 The Effect of the Proposed Project Activities on Forest Planning .	1-33
1.5 ENVIRONMENTAL DOCUMENTS CONSIDERED IN THE DECISION.....	1-33
2.0 PUBLIC INVOLVEMENT	2-1
2.1 PUBLIC PARTICIPATION AND SCOPING	2-1
2.2 ISSUES CONSIDERED AND ADDRESSED.....	2-2
3.0 ALTERNATIVES CONSIDERED	3-1
3.1 ALTERNATIVE I: THE NO-ACTION ALTERNATIVE.....	3-1
3.2 ALTERNATIVE II: THE PROPOSED ACTION.....	3-2
3.3 ALTERNATIVE III - RELOCATION OF TWSF, PERPETUAL MINE DEWATERING, AND LAND APPLICATION WATER DISCHARGE.	3-2
3.4 ALTERNATIVE IV - REDUCED SIZE OF TWSF, MODIFIED WATER TREATMENT TO REDUCE WASTE STREAM, SURFACE DISCHARGE TO BIG DEER CREEK AND BACKUP GROUNDWATER CAPTURE IN LOWER BUCKTAIL CREEK	3-3
3.5 ALTERNATIVE V - LOWER BUCKTAIL GROUNDWATER CAPTURE, WATER TREATMENT AT SITE OF BLACKBIRD TREATMENT PLANT AND SURFACE DISCHARGE TO BLACKBIRD CREEK	3-3

3.6 ALTERNATIVES ELIMINATED FROM DETAILED CONSIDERATION	3-4
4.0 FINDINGS REQUIRED BY OTHER LAWS, EXECUTIVE ORDERS, AND RULES	4-1
5.0 ENVIRONMENTALLY PREFERRED ALTERNATIVE	5-1
6.0 FINANCIAL ASSURANCE	6-1
7.0 IMPLEMENTATION DATE	7-1
8.0 ADMINISTRATIVE REVIEW AND APPEAL OPPORTUNITIES	8-1
8.1 215 APPEALS	8-1
8.2 PROPONENT’S APPEAL PROCESS (36 CFR 251, SUBPART C)	8-1
9.0 CONTACT PERSON	9-1
10.0 SIGNATURE AND DATE.....	10-1

LIST OF FIGURES

FIGURE 1.	GENERAL LOCATION MAP, IDAHO COBALT PROJECT.....	1-2
FIGURE 2.	PREFERRED ALTERNATIVE IV LOWER BUCKTAIL GROUNDWATER CAPTURE – ADVANCED WATER TREATMENT AND DISCHARGE TO BIG DEER CREEK.....	1-6

RECORD OF DECISION
IDAHO COBALT PROJECT
SALMON-CHALLIS NATIONAL FOREST
LEMHI COUNTY, IDAHO

1.0 DECISION AND REASONS FOR THE DECISION

This is the Salmon-Challis National Forest's (SCNF) Record of Decision (ROD) for its response to the Formation Capital Corporation's (FCC) Proposed Plan of Operations for the Idaho Cobalt Project (ICP) proposal. The ICP would mine cobalt, copper and gold from National Forest System (NFS) lands; these metals are used for a variety of purposes ranging from industrial to medical purposes.

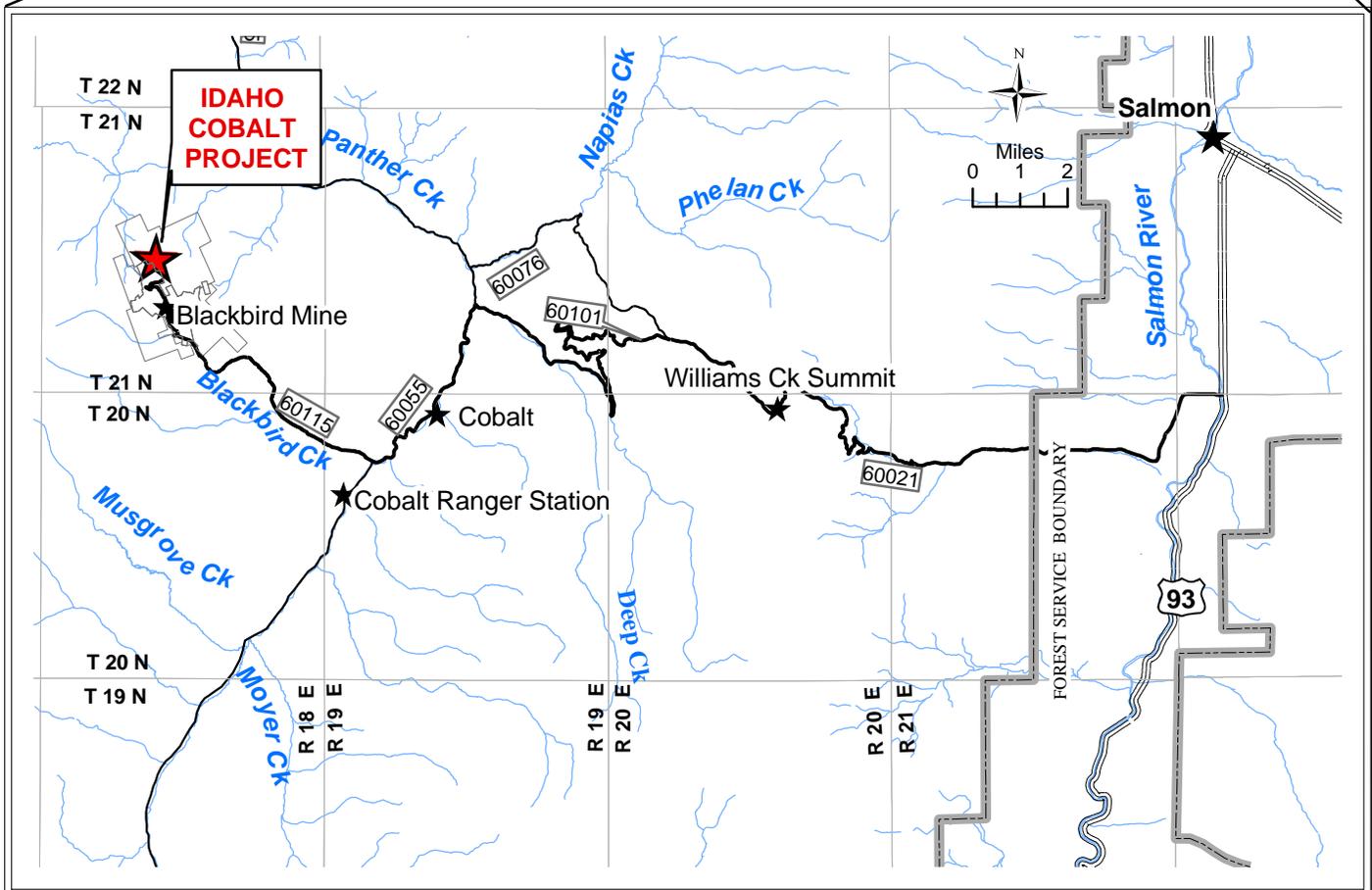
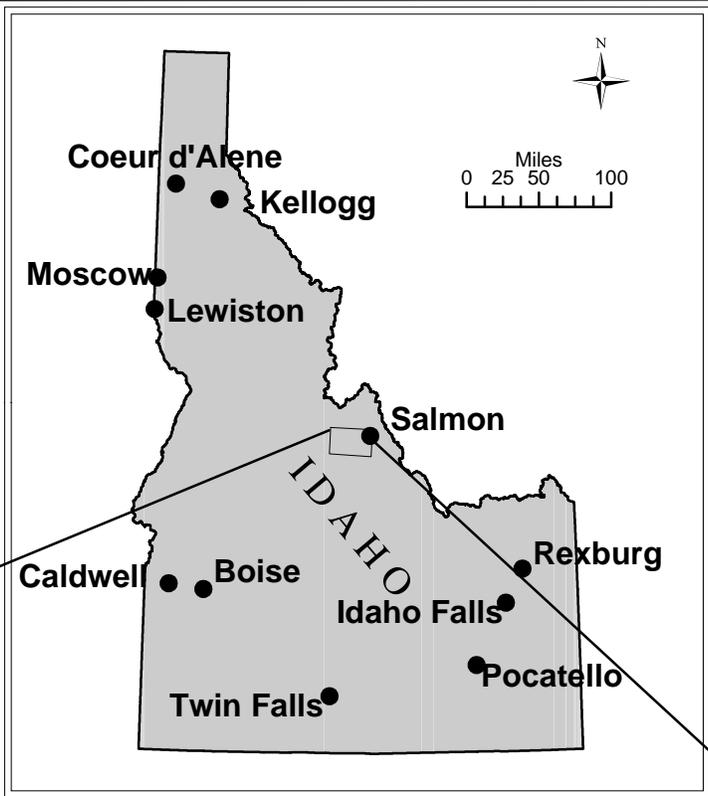
This ROD documents my decision along with the rationale for the decision and all alternatives considered in reaching the decision. It also includes a discussion of preferences among alternatives based on relevant factors and how those factors were balanced in reaching the decision. This ROD also documents changes and additions to the proposed plan of operations submitted by FCC deemed necessary by the USDA Forest Service to meet the requirements of the regulations at 36 CFR 228 Subpart A.

The Proposed Plan of Operations, submitted June 2006 and updated November 14, 2008 by FCC, describes a mineral development project in the Panther Creek drainage on the Salmon-Cobalt Ranger District, SCNF, approximately 45 road miles (or 22 direct miles) west of Salmon, Idaho. The legal land description is Sections 8, 9, 15, 16, 17, 20, 21, and 22, Township 21 North, Range 18 East (Figure 1, General Location Map).

As proposed, the ICP would consist of an underground cobalt-copper-gold mine to extract minerals from two separate ore bodies (Ram and Sunshine), a processing plant (mill), and associated facilities. The FCC property is composed of several mineral deposits acquired by locating and filing mining claims within the Salmon-Cobalt Ranger District of the SCNF pursuant to the United States Mining Laws. The property consists of 241 unpatented mining claims for a total of 4,979 acres. Approval of the Plan of Operations for the Ram deposit will result in surface disturbance of approximately 132 acres. If the Sunshine deposit is developed in the future, total surface disturbance will be approximately 135 acres.

1.1 DECISION BEING MADE

I, the SCNF Supervisor, have decided to approve a Plan of Operations for mining operations necessary to develop the Ram deposit that is consistent with Alternative IV of the FEIS. Alternative IV requires changes and additions to the Proposed Plan of Operations which are



IDAHO COBALT PROJECT
 FORMATION CAPITAL CORP. U.S.
 LEMHI COUNTY, IDAHO

**GENERAL LOCATION MAP
 IDAHO COBALT PROJECT**

January, 2006

Figure

1

necessary to meet the requirements of regulations at 36 CFR 228 Subpart A. Those elements of the proposed plan of operations solely related to development of the Sunshine deposit are not being approved at this time. A decision on a plan for development of the Sunshine deposit will be based on information provided to the USDA Forest Service that is gathered during development of the Ram deposit.

My decision is based on the review of the FEIS, project file information and review of public concerns received on this project. The selected alternative meets the stated purpose and need for the decision, protects resources to the extent feasible, addresses the public's concerns, and is consistent with applicable State and Federal laws, plans and policies. Alternative IV, as modified by this ROD, provides all practicable environmental safeguards, including reduced waste production and management of mine waste materials to provide assurance of meeting post-closure water quality standards. Waste production is reduced by changing the water treatment method to a system that creates a reduced waste stream to be stored or removed from the site. Alternative IV provides a state of the art tailings and waste rock facility for the management of mine waste by enhancing the liner underneath the cover and increasing the cap depth to provide increased integrity and reduced maintenance over time. This Alternative offers a better assurance of meeting post closure water quality standards through increased monitoring and reporting requirements and financial assurance requirements for long-term water management. Additional benefits of choosing Alternative IV are the improvements in the entire transportation system that will be implemented over the mine life and extensive decommissioning of existing roads within the project area. Alternative IV is similar to the Proposed Plan of Operations we received (Alternative II) in that it provides for discharge through an NPDES permit into Big Deer Creek. Alternative IV also allows less land disturbance than Alternative III. Alternative IV requires changes and additions to the Proposed Plan of Operations that will avoid, reduce, minimize, or mitigate adverse environmental impacts to the extent feasible. These changes will be incorporated into the mitigation and monitoring plans (see Sections 1.1.2 and 1.1.3 below).

Nothing in this ROD or in the approval of a Plan of Operations by the USDA Forest Service authorizes or in any way permits a release or threat of a release of hazardous substances into the environment that will require a response action or result in the incurrence of response costs. All designs, monitoring plans, and analyses required by the Plan of Operations are subject to the requirement of 36 CFR 228.8 that mining operations be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources. However, the operator's compliance with such requirement in no way insulates or releases it from any liability or obligations which may arise with respect to its operations under any applicable environmental law, including but not limited to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601 et seq. The United States reserves its rights and claims under CERCLA to seek performance of response actions and/or reimbursement of response costs that may be incurred as a result of any release or threat of a release of a hazardous substance from the ICP, or any ancillary operation for the mining activity.

Additionally, nothing in this ROD or in the approval of a Plan of Operations by the USDA Forest Service authorizes or in any way permits the ICP to adversely affect or affect the integrity of the design, construction, or performance of the Blackbird Mine Superfund Site remedy, the long-term operation and maintenance of the remedy, or the restoration of natural resources contemplated at the Site pursuant to the 1995 Blackbird Site Consent Decree (*State of Idaho et al. v. M.A. Hanna Company*, Consolidated Case No. 83-4179 (R) (D. Idaho)). To the extent it was determined that operations under the Plan of Operations have potential for impacts to the Blackbird Mine Superfund Site remedy, FCC is required to avoid these impacts through the stipulations, mitigations, and monitoring programs discussed under section 1.1.3. In general, FCC will be required through these additional plans to demonstrate that operations will not interfere with the Blackbird Mine Superfund Site remedy prior to commencing operations that have the potential to affect the remedy, or obtain agreements to use facilities involved in the remedy.

Additionally, any change in the approved Plan of Operations will require that FCC submit a written proposal to the USDA Forest Service in accordance with 36 CFR 228.4(e), and provide copies of the proposal to the EPA CERCLA RPM for the Blackbird Mine Superfund Site (private lands), and the USDA Forest Service CERCLA PM for the Site (NFS lands), along with design documents (drawings and technical specifications) or the equivalent thereof. EPA and the USDA Forest Service will coordinate with one another in the review and approval of submitted proposals consistent with their respective CERCLA authorities and their mutual interests at the Site. Additionally, if submitted proposals are determined by the USDA Forest Service to have the potential to interfere with the natural resource restoration requirements prescribed in the 1995 Consent Decree (including the Appendices thereto), then the USDA Forest Service will consult with the Blackbird Mine Site Trustee Council in order to assist the plan operator in the development of any necessary mitigation measures.

Since the Plan of Operations does not authorize operations that will adversely affect the remedial or restoration activities to the Blackbird Mine Superfund Site. The Plan of Operations does not cause damage to any Blackbird Mine Superfund Site remedial or restoration infrastructure actions by the plan operator or its agents, employees, or contractors that adversely affect the Blackbird Mine Superfund Site remedial or restoration activities or infrastructure, such affects shall constitute operator non-compliance with the Plan of Operations.

1.1.1 Description of Preferred Alternative

Alternative IV is fully described in Chapter 2 of the FEIS. This alternative contains changes and additions to FCC's proposed Plan of Operations (Alternative II) and includes agency-developed design modifications, operational components, mitigation and monitoring plans intended to minimize the risk of adverse impacts to the environment to the extent feasible.

FCC has proposed to develop two deposits over the life of the ICP project. Operations for development of the Ram deposit may proceed upon submission and approval of a Plan of Operations that is consistent with this ROD. There are 2,230,000 tons of ore currently

known to exist in the Ram deposit. Proposed operations for the Sunshine deposit will be further evaluated upon submission of additional information obtained by mining the Ram deposit. There are 340,000 tons of ore currently known to exist in the Sunshine deposit (Figure 2, General Facility Location Alternative IV). Development of each deposit will use underground mining methods. The average rate of mining production will be 280,000 tons per year, or 800 tons per day (tpd) based on mine operation of 350-days-per-year. During start-up the rate will be approximately 400 tpd in the first year, increasing to full production in the third year of operations. It is possible, however, that mine and mill output could reach 1,200 tpd. Ore will be trucked from the mines to the mill. Ore from the Ram deposit may eventually be conveyed by an overhead tram to the mill. Concentrate from the mill will be shipped to an off-site processing facility.

Exploration for additional ore reserves is anticipated to continue through the life of the ICP operations. If additional ore tonnage is identified and defined, the production life of the ICP may be extended beyond the currently proposed mine and mill life schedule.

There will be three main phases in the life of the ICP: the construction phase (approximately two years), the operating phase (ten to twelve years), and the reclamation/closure phase (two years for surface reclamation and up to thirty or more years of post mine water quality monitoring, and water treatment if necessary). There will also be concurrent reclamation in the construction and operating phases as existing disturbed areas or new disturbances are reclaimed post-use.

Mine and mill facilities include the Ram mine portal, the tram, the mill/plant, the tailings and waste rock storage facility (TWSF), water management pond, water treatment and discharge facilities, new and existing improved roads, borrow areas, and a soil stockpile area. Ancillary facilities will include power lines, fuel storage tanks, water ditches, and a septic and drain field.

The Ram mine portal is located on the slopes above Bucktail Creek. A decline will be developed from the portal located above the groundwater level and will be designed to ensure that water does not drain from the portal. There will be two ventilation shafts at the Ram Mine. Ore and waste rock will be hauled directly to the mill or TWSF, as appropriate, in 20-ton trucks.

The ore processing mill (flotation) and ancillary facilities will be located on the Big Flat, a relatively flat area located between the drainages of Big Deer Creek and Little Deer Creek. Ancillary facilities will include water treatment, offices, warehouse, change rooms, shipping and receiving docks, emergency sleep quarters, and other structures. At full production, the mill will produce approximately 32 dry tons of concentrate and 768 dry tons of tailings per day. The approved Plan will provide for disposal of waste rock and tailings in a lined tailings and waste rock storage facility (TWSF). The underliner will consist of an impermeable soil (or engineered clay) layer and a synthetic liner. A drainage collection system will be constructed over the liner to collect water that infiltrates the tailings and waste rock. This water will be conveyed to the nearby water management pond.

Tailings will be dewatered prior to placing them in the TWSF. Water treatment waste will be placed in the TWSF and any post closure water treatment wastes will be hauled offsite. Approximately half of the tailings produced at the mill will be turned into paste-tailings and utilized in backfilling the Ram underground workings. Excess treated water will be discharged via a pipeline to an in-stream diffuser at Big Deer Creek. The discharge will be permitted through a NPDES discharge permit, issued by the EPA.

Power for the project will be obtained from an existing power line that delivers power to the adjacent Blackbird Mine Superfund Site. Emergency power will be supplied with diesel generating equipment.

The ICP's proposed year-round transportation route for employees and transportation of concentrate, equipment, reagents, and other freight from Salmon, Idaho has been retained in the selected alternative and will be via the Williams Creek, Deep Creek, Panther Creek and Blackbird Creek roads (Figure 1). The anticipated personnel requirement at full production is 157 employees. The work force numbers are anticipated to be temporarily higher during construction and start up. During closure and reclamation, the work force will be reduced significantly. It is anticipated that most of the project employees will live in the Salmon, Idaho area. Personnel will be transported to the project in vans or buses.

1.1.2 Modifications to Preferred Alternative

The ROD documents the changes and additions to the proposed plan of operation deemed necessary by the USDA Forest Service to meet the requirements of the regulations and that must be incorporated by FCC in order to obtain approval of a Plan of Operations to develop the Ram deposit. A decision regarding approval of a Plan of Operation for development of the Sunshine deposit will be made after additional information gathered from development of the Ram deposit is provided. This information will be utilized to determine if the analysis of potential environmental effects in the EIS is adequate, whether the proposed plan for development of the sunshine deposit may be approved and what changes or additions may be required, and whether additional environmental analysis and public involvement is required prior to approval of a Plan for development of the Sunshine deposit.

This ROD modifies the FEIS preferred alternative (Alternative IV) by selecting the Tailings, Waste Rock and Storage Facility (TWSF) design concept presented in Alternative II. The Plan of Operations will include the phased construction of the TWSF with a maximum disturbance footprint of 55 acres. This design modification allows for the most efficient construction of the TWSF and includes a geometry that facilitates the requirement that tailings and waste rock be commingled in the facility to minimize the possibility of metals leaching from the waste rock component. The third phase of the TWSF construction will not proceed until such time as additional ore reserves have been identified and testing confirms that the tailings and waste rock to be disposed of in the TWSF are of similar geochemical character to the materials analyzed in the FEIS. The purpose of this confirmation testing is to assure that the potential leachate from the TWSF falls within the range considered in the FEIS.

The modification of Alternative IV to include the larger TWSF footprint means that 0.2 acres of non-jurisdictional wetlands will be covered by the TWSF. Replacement wetlands will be constructed to mitigate this habitat loss as described in the approved Plan of Operations.

1.1.3 Stipulations, Mitigations, and Monitoring Programs

A number of operational component modifications, monitoring requirements and mitigation measures will be incorporated in the approved Plan of Operations as identified in Alternative IV. The Forest Service feels that these changes and additions are necessary to meet the purposes of the applicable regulations including compliance with the Endangered Species Act (ESA) as set forth in the Biological Opinions (BO) prepared by the US Fish & Wildlife Service (USFWS) and NOAA Fisheries (NOAA). The following items need to be incorporated into the Plan of Operations and submitted by FCC prior to SCNF approval of the Plan of Operations:

1. Make changes and additions to the Proposed Plan of Operations to be consistent with development of the Ram deposit in accordance with Alternative IV as described in this ROD.
2. Submit a reclamation performance surety acceptable to the USDA Forest Service for the development of the Ram deposit.
3. Provide SCNF with a copy of the NPDES permit from the US EPA and the 401 Certification from IDEQ.

Prior to commencing any surface disturbing activities which require access through private land, FCC shall provide the following to the USDA Forest Service:

1. Documentation of approval from the CERCLA RPM and USDA Forest Service CERCLA PM for any designs or activity that would modify the existing transportation system and/or which could affect existing wastes, rock piles, water diversions, and other remedial facilities in place to ensure design performance is not adversely impacted and thereby ensure protection of the Blackbird remedy.
2. Rights-of-way or other access agreements through patented lands owned by Noranda within the Cobalt Townsite and Blackbird Mine Site that will allow the USDA Forest Service continued future access to the ICP for administration of the plan of operations and any reclamation that may need to be implemented by the federal agencies. Additionally, FCC will provide an agreement indicating permission to utilize powerlines across private property to the ICP, which also permits the USDA Forest Service to utilize the power line facilities in the event long-term water treatment or other reclamation administered by the agencies is required. Agreements shall address protocol for authorized vehicle access to the site, measures to ensure contaminated materials do not leave the site, and other requirements as outlined in any health and safety plan or other decontamination requirement for vehicles and personnel related to the remediation project area.

Alternative IV of the FEIS describes operational requirements, design criteria, mitigation items, monitoring plans and changes and additions to the Proposed Plan of Operations. Mitigation measures, design components and monitoring programs that must be incorporated in the Plan of Operations prior to the SCNF signing the approved Plan of Operations are listed below. Where plans or final designs are required for facilities, formal approval by the USDA Forest Service is necessary prior to initiation of construction of those facilities by the FCC.

1. FCC shall provide an annual report summarizing mining, reclamation and monitoring activities and projecting proposed activities for the coming year. FCC shall conduct an annual review with the USDA Forest Service to determine if activities are in accordance with the approved Plan and if any changes to the Plan or financial assurance are needed.
2. FCC shall provide notice to the USDA Forest Service and make appropriate modifications to the Plan of Operations if there are significant changes to project permits (such as NPDES, 404 or Air Quality or actions requiring reinitiation of consultation with USFWS and NOAA).
3. Waste rock (slash) left underground in the Ram workings shall be amended to provide alkalinity to reduce potential for metals leaching.
 - a. FCC shall provide a Waste Rock Amendment Plan as described in the FEIS and Water Resources Technical Report prior to producing waste rock.
 - b. A third-party contractor selected by the SCNF shall assist the SCNF in review of the Waste Rock Amendment Plan. To ensure a timely review and decision, FCC shall provide funding for these contractor services.
4. Waste rock and tailings materials shall be tested throughout the life of the mine to evaluate potential for acid generation and metals leaching.
 - a. FCC shall provide a Geochemical Monitoring Plan as described in the FEIS and Water Resources Technical Report.
 - b. A third-party contractor selected by the SCNF shall assist the SCNF and an Interagency Task Force to complete review and approval of the Geochemical Monitoring Plan. To ensure a timely review and decision, FCC shall provide funding for these contractor services.
5. FCC shall provide engineering final design for the water management that include:
 - a. Spillways to reduce risk of failure if overtopping occurs.
 - b. Protection of pond liners from potential ice damage.

6. FCC shall provide design changes to address geotechnical issues, including a five foot setback between the toe of the fill and the toe of the cut on the mechanically stabilized earth pad fill and to reinforce or reduce cut slopes to a range of ¾:1 to 1.5:1, where they will otherwise exceed construction standards depending on the soil conditions.
7. FCC shall provide a Surface Water Management Plan that includes:
 - a. Permanent water control structures that will exist beyond the life of the mine. Any culverts on streams will be designed to handle flow from the 100-year storm event.
 - b. Road sediment control best management practices (BMPs) to be designed for a 25 year, 24-hour precipitation event.
 - c. BMPs to be utilized for project sediment control.
 - d. Sediment control monitoring.
 - e. Provisions to demonstrate that construction phase sediments will not be captured by BMSG facilities unless agreements are in place with BMSG to utilize those facilities.
 - f. FCC will operate within a set construction season for soil disturbing construction activities to minimize impacts to soils and sediment production.
8. FCC will modify its water resources monitoring plan to provide adequate data to evaluate potential impacts to surface and groundwater. This must include provisions for post-mining monitoring of water quality for the project area, including discharges from the TWSF for a period of not less than 10 years.
 - a. A post-mining Groundwater Capture Plan that includes:
 - i. Decision criteria and action (trigger) limits for post-mining water capture. Criteria shall include conditions that will lead to decisions regarding ceasing dewatering of the Ram Mine. The water quality must be demonstrated to be of such caliber that use of pumpbacks will meet water quality objectives prior to stopping the dewatering of the Ram Mine. It is expected a flush will occur during this period and the pumpbacks will ensure water quality objectives are met. If water quality cannot be met, the plan must commit to dewatering of the Ram Mine for as long as needed, possibly in perpetuity. A plan for installation and evaluation of bedrock groundwater, alluvial groundwater and surface water capture systems for the Ram Mine must be included. Mine dewatering must continue until it can be demonstrated the contaminated groundwater from the Ram workings will not reach BMSG treatment facilities

or an agreement with BMSG is reached regarding use of its facilities for water treatment.

- ii. Installation of the groundwater capture system prior to construction of the mine adits to below the groundwater table.
9. Enhanced emergency management capabilities shall be instituted for medical (including designating a helipad site), spill control and fire situations.
10. Preservation or installation of necessary references to reestablish benchmarks, section and corner monuments. Prior to disturbing any benchmark, section or corner monument, a plan that describes plans to protect or reference them shall be submitted.
11. Seed mixes shall consist of native species for reclamation to ensure achievement of self-sustaining vegetation following reclamation.
12. Vegetation reference areas shall be established in the first year of operations adjacent to the project to quantify reclamation goals for vegetative cover.
13. In order to reduce the potential of excessive hunting pressure from mine employees, FCC shall require as company policy that employees have no firearms on site or during travel to the site.
14. FCC shall provide phased road construction and reconstruction requirements as described in Alternative IV to reduce sediment release and traffic accident risk.
15. Daily, FCC shall monitor and inspect roads and bridges to assure public safety and adherence to USDA Forest Service engineering standards.
16. Any surface vegetation clearing or timber removal shall be conducted following USDA Forest Service guidelines and practices and following USDA Forest Service approval.
17. The ICP shall institute a weed control plan that conforms to USDA Forest Service and County guidelines.
18. A plan submitted by FCC within the first year of operations to monitor existing wetlands and constructed wetlands to determine impacts to wetlands functions and to modify the constructed wetlands as necessary to assure that they are providing suitable wetland habitat to compensate for project impacts to natural wetlands.

19. FCC shall provide a final engineering design for the TWSF that includes:
- a. A closure cap that includes a minimum of four feet of soil cover material to protect the liner from potential damage from trees growing on the reclaimed surface.
 - b. A plan for placement of tailings into the TWSF during winter designed to maintain the design density and moisture content of the dry stack tailings.
 - c. Co-disposal of tailings and waste rock in the TWSF to reduce the oxidation rate of the higher permeability waste rock component and reduce long-term risk to the environment of metals release.
 - d. Final design details for construction of the approved TWSF facility.
20. The ICP shall develop a waste rock disposal plan for disposal of any contaminated mine waste, including but not limited to areas such as the Blackbird Road No. 60115, and overbank materials encountered during pipeline excavation along Bucktail and Big Deer Creeks.
21. A final engineering design for the water treatment system and a third-party contractor, selected by the SCNF, to assist the SCNF in review of the Plan. To ensure a timely review and decision, FCC shall provide funding for these contractor services.

At a minimum, the water treatment plan will:

- a. Provide treatment capable of meeting effluent limits in the NPDES permit; and
 - b. Minimize the need for disposal of water treatment waste residues.
22. FCC shall submit a final engineering design for the water discharge pipeline and discharge facility that includes:
- a. A route for the water discharge pipeline that avoids potential impacts to cultural resources.
 - b. Field investigation report of the discharge location.
 - c. Design of effluent diffuser.
 - d. Once the route is determined it will be staked on the ground and the Shoshone-Bannock Tribes will be notified so that they may review the route.

23. FCC shall designate an on-site reclamation coordinator to be responsible for the following:
 - a. Being the primary contact with the SCNF on permit compliance, monitoring and mitigation.
 - b. Describing how environmental protection standards contained in plans and permits will be implemented.
 - c. Preparing reclamation plans for all proposed surface disturbance. These plans will be submitted to the USDA Forest Service and will include interim and final reclamation for the facilities along with an estimate of the costs to complete the work.
 - d. The coordinator will certify that all reclamation work was completed as planned for each facility. The USDA Forest Service Administrator will accompany the coordinator in reviewing all proposed activities.
 - e. Prior to the eighth year of operation FCC will summarize the results of all testing for closure purposes and submit its plans for final reclamation to the USDA Forest Service and Inter-Agency Task Force for review and approval.
24. FCC shall reduce impacts of dust along primary access roads by watering, surfacing, or treating the surface of the road with an approved chemical amendment as directed by the SCNF.
25. FCC shall utilize accepted reclamation practices including the following:
 - a. Stockpile soil material from all areas of project disturbance in sufficient quantities to place a minimum of a one foot layer on features identified for reclamation in the Reclamation Plan.
 - b. Earth fill construction will be confined to the normal operating season (June 1 through November 30) unless specifically authorized by the USDA Forest Service.
 - c. All exposed soil materials will be stabilized and reclaimed in the same season as the disturbance, unless otherwise authorized by the USDA Forest Service.
 - d. All slopes should be kept to a minimum of 3:1.
 - e. Surface disturbances will be recontoured.
 - f. Reclaimed slopes will be shaped to prevent the concentration of water except at points specifically designed to handle flows without erosion.

26. If heritage or cultural resources are discovered during any earth disturbing activities, the activities will immediately cease and the SCNF archeologist will be notified.
27. The ICP Plan of Operations shall describe plans to control public access to mine areas such as fencing and posting to prohibit unauthorized entry to hazardous areas.
 - a. For all access roads, FCC will guarantee administrative, permittee, and contractor use of the mine access road during the active life of the mine including construction, reclamation and long-term monitoring.
28. The ICP transportation and/or spill control plan shall include training requirements for all drivers including a requirement that all new drivers transporting fuel, chemicals or concentrate make their first trip to the site accompanied by a company representative.
 - a. All fuel, chemical-supply and concentrate trucks, all tractor trailer units and any single unit vehicles more than 45 feet in length will be accompanied by a pilot car.
 - b. No secondary trailers (pups) will be allowed for FCC or their suppliers.
 - c. During the construction period, FCC will coordinate all use and maintenance of approved and alternative access routes with the USDA Forest Service and, as appropriate, Lemhi County, under an approved Road Use Permit.
29. Road reclamation – All new roads, except those roads identified by the agencies as needed for administrative purposes, will be reclaimed at mine closure. FCC shall provide a road reclamation plan identifying routes to be reclaimed during construction, including the route blocked by development of the Ram portal. Approximately 40,000 feet of site roads shall be reclaimed at the end of the project.

The USDA Forest Service, as the lead federal agency for the ICP EIS, has a primary role in approving and administering the Plan of Operations. The USDA Forest Service will review all final designs and monitoring and mitigation plans, and written approval from the USDA Forest Service must be obtained prior to initiation of the work outlined in the Plan for activities on NFS lands. Prior to initiating ground-disturbing activities, an Inter-Agency task force will be formed to provide oversight of the ICP. The USDA Forest Service, IDEQ, US EPA, NMFS, USFWS, Nez Perce Tribe and Shoshone-Bannock Tribes will be invited to be members of the task force. This Inter-Agency task force will review plans and monitoring data and will oversee regulatory compliance and quality assurance issues related to the ICP.

FCC shall provide a construction schedule as part of their revised Plan of Operations that incorporates the conditions, requirements and review steps contained in the FEIS and this ROD.

1.1.4 Permits, Licenses and Authorizations Needed to Implement the Decision

Federal mining laws authorize mineral exploration and development on Federal Lands. State and federal environmental laws are intended to ensure that adverse impacts are minimized and long-term productivity of the surface resources preserved to the extent feasible.

The USDA Forest Service may accept certification and other approvals issued by state or other federal agencies as evidence of compliance with similar or parallel requirements of regulations governing mining activities on the National Forests. Besides the USDA Forest Service, other agencies that required permits for the ICP are: US EPA, IDEQ, US Corps of Engineers (COE), the Idaho Department of Water Resources (IDWR), the Idaho Department of Health and Welfare and Lemhi County.

The plans and permits submitted to, or to be submitted to, these agencies by FCC for the ICP include:

1. A National Pollution Discharge Elimination System (NPDES) Permit Application submitted to the EPA (amended application January 2008) describes project discharges to surface waters that will be regulated under Section 402 of the Clean Water Act. A NPDES permit must be obtained prior to the discharge of any wastewater, including any waters impacted by the Ram mine, to waters of the United States. The discharge of stormwater also requires NPDES permit(s). Stormwater discharges are covered by separate stormwater NPDES general permits issued by the EPA and may be covered by separate stormwater permits. Prior to issuance of the NPDES permit, the State of Idaho must complete CWA Section 401 certification.
2. A Permit to Construct and Operate to be submitted to the Bureau of Air Quality, IDEQ, which will describe project impacts to air quality, as well as measures which will be taken to reduce impacts.
3. Beneficial use of surface and/or groundwater permits submitted to the IDWR. These water rights are required prior to the diversion and use of surface or ground water.
4. Stream Channel Alteration Permit(s) submitted to the IDWR required for any activities that will occur below the mean high water mark of a perennial stream.
5. US COE nationwide 404 permit(s) related to the water discharge pipeline for dredge and fill in wetlands and/or waters of the U.S. (submitted February 2008).
6. Permit for septic system to Idaho Department of Health and Welfare Eastern Idaho Public Health District.
7. Building permits from Lemhi County, Idaho.

8. USDA Forest Service road use permit that specifies the conditions under which FCC may use the National Forest System roads. The ICP's Plan of Operation and/or Road Use Permit will include the following:
 - a. Access road design shall meet USDA Forest Service specifications (USDOT Federal Highway Administration, 2003) for road width, grade, alignment, surfacing, drainage, quality control and signing. Exceptions to these standards may be used only with SCNF approval. Salmon National Forest Plan requirements for road construction and natural resource protection will be followed. FCC will submit designs for road construction and improvements to the USDA Forest Service for review and approval prior to initiating construction.
 - b. A plan for busing of all mine employees. FCC shall monitor the use of the provided busing to establish the rate of use and will furnish an annual summary of use to the SCNF. If an 80 percent usage rate for all mine employees including management is not achieved on an annual basis, revisions to the Plan may be required by the USDA Forest Service.
 - c. A requirement for FCC to direct contractors to comply with requirements for van pooling or busing of employees including the 80 percent participation goal. In addition, FCC will ensure that small deliveries or partial loads of materials are delivered to a staging area in Salmon for consolidation prior to proceeding to the mine site to the extent practicable. Occasional site visitors such as sales people will be authorized access to the site as necessary.
 - d. A requirement that FCC develop a written policy for compliance with all USDA Forest Service traffic rules and require that all contractors comply with State and SCNF rules for oversize and overweight loads.
 - e. A requirement that USDA Forest Service approval must be obtained for all location or design changes for access and haul roads on NFS lands.
 - f. FCC shall be responsible for maintaining all signs, fencing and other features of the mine safety and security program.
 - g. FCC shall implement or provide payment to the USDA Forest Service for deferred road maintenance (such as surface, culvert or bridge replacement), and recurrent (grading, cleaning culverts) maintenance based on road use, as specified in the Road Use Agreement.
 - h. Borrow Areas – Work on the Williams Creek Road will utilize borrow from the existing Leesburg East pit. The pit will be reclaimed following its use.
 - i. All fuel, chemical supply and concentrate trucks, all tractor trailer units and any single unit vehicles more than 45 feet in length will be accompanied by a pilot car.

- j. No secondary trailers (pups) will be allowed for FCC or their suppliers.
- k. Fuel tankers will contain no more than 4500 gallons per load.
- l. During the construction period, FCC will coordinate all use of approved and alternative access routes with the USDA Forest Service under an approved Road Use Permit.
- m. FCC will develop a testing and inspection schedule as outlined in USDA Forest Service guidelines (USDOT, 2003), acceptable to the SCNF for all construction and reconstruction of mine access and haul roads, and will be responsible for providing “as-built” certification of all items by a licensed professional engineer. The SCNF Administrator will review the ICP construction to ensure compliance with approved Plans. Certification, results of tests and inspections, will be forwarded to the SCNF for review and approval.
- n. FCC and the SCNF will review all access and haul roads, during and after spring runoff, and prior to winter operations. The purpose of this inspection will be to certify that all design features are functioning as designed, and/or to identify any needed improvements or changes.
- o. Road Improvements for the entire 40 mile project Access Route as detailed in the FEIS.

FCC proposes improvements to the Williams Creek/Deep Creek access road consisting of 10.9 miles of surface treatment. In addition to these improvements, the ICP will implement road improvements in a phased approach, as approved by the USDA Forest Service, to mitigate additional road wear due to mine related traffic. The phased improvements, along with the 10.9 miles of improvements proposed by FCC, will eventually lead to reshaping the subgrade and resurfacing the entire 40 mile project Access Route. Other mitigation will include raising sections of road lying within the floodplain to reduce sediment delivery to streams. Sections to be raised include approximately 1.2 miles of Morgan Creek-Panther Creek Road, No. 60055 between Deep Creek Road and Blackbird Road and 1.7 miles (MP 35.7 to 37.4) of Blackbird Road (No. 60115). The ICP Coordinator shall submit plans and designs to address sections of the Blackbird Road 60115 to raise, realign and/or armor the road to prevent Blackbird Creek from leaving its channel during a high flow event including reconstruction from MP 35.7 to 37.4 and also include improving channel width on Blackbird Creek. A new section of road on Williams Creek Road No. 60021 between mile point (M.P.) 7.1 and 8.1 will be constructed to bypass switchbacks that are a safety concern and create a steady grade climbing to the upper bench. During the construction, the section of bypassed road will be reclaimed. Five turnouts on Blackbird Creek Road, No. 60115 between M.P. 38.7 and 39.0 will be

constructed to allow safe passing of vehicles. FCC will apply dust abatement to the entire project Access Route to address safety issues and protect investment in resurfacing. The section of road from the intersection of the Ram portal road and the Sunshine portal road to the mill facility will be widened to at least 40 feet and have a safety barrier separating haul truck traffic and other traffic (i.e., vendors, mine personnel vans, regulators, visitors).

- p. FCC proposed reclaiming approximately 23,760 feet of site roads. The agencies have identified an additional 15,840 feet of site roads to be reclaimed at the end of the project. All new roads constructed under all Alternatives will be reclaimed at closure except those roads identified by the agencies as roads to be used for administrative purposes.

FCC must obtain approved Plans and permits from the state and federal agencies described above. Approval of this Plan is required prior to beginning any surface disturbing activities on NFS lands. FCC will be required to change its Proposed Plan of Operations to incorporate any requirements identified in this ROD. Because the USDA Forest Service recognizes parallel requirements of other state and federal agencies, approval of the Plan of Operations is contingent upon the operator obtaining these approvals.

1.2 APPLICABLE LAWS REGULATIONS AND POLICIES

The FEIS was prepared in accordance with regulations implementing the NEPA (40 CFR 1500-1508). This decision is consistent with the requirement of the National Forest Management Act (36 CFR 219), USDA Forest Service locatable mineral regulations (36 CFR 228, Subpart A), the 1897 Organic Administration Act (30 Stat. 11), the 1970 Mining and Mineral Policy Act (P.L. 91-631), and other applicable state and federal statutes.

My decision is made in accordance with the requirements of 36 CFR 228 Subpart A, meets the requirements of the above mentioned state and federal laws, and addresses the requirements of the 1872 Mining Law, (30 U.S.C. 21 et seq., and the 1955 Multiple Use Mining Act (30 U.S.C. 612)).

The proposed action will affect both privately owned and NFS lands within the Panther Creek drainage. FCC controls 241 unpatented lode mining and claims (4,979 acres) on NFS land. USDA Forest Service decision authorities apply only to NFS lands and do not extend to private lands within or adjacent to the SCNF.

1.3 CONSIDERATION OF ENVIRONMENTAL ISSUES

Alternative IV, as modified by this ROD is the SCNF preferred alternative. A number of environmental issues were identified during public participation and scoping for the EIS (see Section 2.0, Public Involvement). Alternative IV satisfies the purpose and need identified in the FEIS while being designed to avoid, reduce, minimize or mitigate adverse environmental impacts. The rationale behind this decision for each significant environmental issue raised during scoping is described below.

1.3.1 Blackbird Mine CERCLA Remediation and Natural Resources Restoration

By approving the proposed Plan of Operations for the ICP, the USDA Forest Service is not permitting the release or threat of release of hazardous substances into the environment that would require a response action or result in the incurrence of response costs under CERCLA. Additionally, approved Plans of Operation are not permits that give rise to a federally permitted release as defined at 42 U.S.C. 9601(10). The approval of the proposed Plan of Operations for the ICP, with the delineated changes and additions, is based upon the determination that it will meet the requirements of the regulations at 36 CFR Subpart A for environmental protection. As fully described in the FEIS Chapter 2, adherence to the approved Plan of Operations is predicted to avoid the release of hazardous substances through the following controls:

1. Water treatment and discharge in compliance with a NPDES permit.
2. Post-mining groundwater and surface water capture and treatment to the extent needed to offset all ICP-derived chemical mass loads to the Bucktail Creek/Big Deer Creek drainage.
3. Stormwater controls in compliance with Stormwater NPDES general permits.
4. Measures to capture all sediment loadings unless agreement is reached with the BMSG to use its sediment capture system.
5. Amendment of tailings backfill and waste rock material remaining in the underground mines to reduce the potential for leaching of metals.
6. Placement of ICP waste rock and tailings in a lined and capped tailings and waste rock storage facility (TWSF).
7. Geochemical and water monitoring programs.
8. Development of a waste rock and contaminated material disposal plan.
9. The approved Plan of Operations does not allow operations at the ICP to adversely affect the design, construction and performance of the Blackbird Mine Superfund Site remedial action and long-term operation and maintenance of the selected remedy. As fully described in the FEIS Chapter 2, adherence to the approved Plan of Operations is predicted to avoid interference with the Blackbird Mine remedy through the following mitigations:
 - a. Road upgrades and modifications required for SCNF Road Use permit.
 - b. Modifications that could affect capped mine wastes or remedial infrastructure to be approved by EPA and FS Remedial Project Managers.

- c. Power line and access route access agreements.
- d. Establishment of an Inter-Agency Task Force to oversee, coordinate and approve activities for the ICP approved Plan of Operations.
- e. Stipulations, mitigations, and monitoring programs discussed under section 1.1.3, some of which will require approval by the EPA CERCLA Remedial Project Manager (RPM) and the Forest Service CERCLA Project Manager (PM) for the Site.

The United States reserves its rights and claims under CERCLA to seek performance of response actions and/or reimbursement of response costs that may be incurred as a result of any release or threat of a release of a hazardous substance from the ICP, or any ancillary operations for the mining activity.

1.3.2 Effects of the Proposed Activities on Groundwater Quality in the Panther Creek Watershed

The approved Plan of Operations will incorporate controls that are designed and expected to minimize and mitigate the release of hazardous materials to groundwater. During the operational phase, metal-bearing groundwater that flows into the underground workings will be captured and treated by the ICP prior to discharge to Big Deer Creek under the terms of a NPDES permit, and a net reduction (improvement) in the chemical mass load of metals in groundwater will occur.

Alkaline amendments added to waste rock slash and tailings (cement) during mine backfilling are predicted to control the release of metals to groundwater during the post-mining phase. Post-closure groundwater metal concentrations are expected to be similar to, or slightly greater than, current baseline conditions. Despite the slight increase, groundwater quality is still predicted to be in compliance with groundwater quality standards with the exception of sulfate near the Ram Mine.

The approved Plan of Operations will provide a multi-component groundwater capture and treatment system to mitigate the effects of the minor changes in groundwater quality. Groundwater capture wells in the bedrock groundwater system will capture post-mining groundwater flowing from the Sunshine and Ram mines. Captured water will be treated to meet NPDES effluent limits prior to discharge to Big Deer Creek. The bedrock capture system is expected to result in a net reduction (improvement) in the chemical mass loads of metals in groundwater.

The second component of the groundwater capture system is an alluvial groundwater/surface water system that is a back-up system to the bedrock capture systems. The alluvial groundwater/surface water system will be used, if needed, to capture any additional chemical mass loads needed to fully offset the ICP impacts.

The final component of the groundwater capture system is post-mining mine dewatering. In the unexpected case that the bedrock/alluvial groundwater/surface water system is unable to capture sufficient chemical mass loads to offset ICP effects, the Ram Mine will continue to be dewatered and treated to fully mitigate all ICP effects to groundwater at the source.

1.3.3 Effects of the Proposed Activities on Surface Water Quality in the Panther Creek Watershed

The approved Plan of Operations will incorporate controls which are designed and expected to minimize and mitigate the release of hazardous materials to surface water. During the operational phase, metal-bearing groundwater that flows into the underground workings will be captured and treated by FCC prior to discharge to Big Deer Creek under the terms of a NPDES permit, and a net reduction (improvement) in the chemical mass loads and concentrations of metals in surface water in the Panther Creek watershed will occur.

During the post-mining phase, metal-bearing groundwater that flows from the underground workings will be captured by one or more of the groundwater capture systems (as described above) and will be treated by FCC prior to discharge to Big Deer Creek under the terms of a NPDES permit. No net increase in the chemical mass loads and concentrations of metals in surface water in the Panther Creek watershed will occur.

1.3.4 Effects of the Proposed Activities on Water Use, Management, Treatment and Disposal

The approved Plan of Operations will include design changes intended to minimize the production of water treatment waste products and to minimize impacts to groundwater and surface water in the Project Area as described in sections 1.3.2 and 1.3.3. The potential need for collection and treatment of post-closure groundwater is a key issue in the long-term management of the ICP. The FEIS outlines the monitoring and decision process in determining the need for post-closure water capture and treatment.

1.3.5 Effects of the Proposed Activities on Sediment Delivery

Adherence to the approved Plan of Operations is projected to result in reduced sediment yield to area streams following the implementation of road improvement actions scheduled to begin concurrently with the initiation of construction activities. Sediments and stormwater discharges from the ICP would be regulated via the Surface Water Management Plan, a component of the approved Plan of Operations, and EPA's Stormwater NPDES permit. During the initial construction period the BOISED model predicts that sediment yield in the immediate Project Area will increase over background conditions (a potential short-term effect). This increase is due to facilities and road construction and reclamation of existing unused roads in both the Bucktail and Big Flat Creek watersheds. The sediment yield in Big Flat Creek will be a one percent increase over the baseline level with sediment delivery returning to baseline levels within one year. The sediment yield in Bucktail Creek will initially increase 31 percent over the baseline level, but is predicted to return to the baseline level within two years.

The BOISED model predicts that the selected alternative will reduce long-term sediment yield in Bucktail Creek by 15 percent below baseline levels. Other area streams will also have long-term reductions in sediment due to the road improvements that will accompany the ICP.

Sediment quality in Bucktail Creek, South Fork Big Deer Creek, Big Deer Creek, Panther Creek, and Blackbird Creek will be expected to improve through natural recovery and over time the Blackbird sediment cleanup levels will eventually be achieved.

1.3.6 The Effect of the Proposed Activities on the Transportation of Product and Hazardous Materials, Chemicals, and Fuels

There is a risk to water quality from transporting potentially hazardous materials to and from the mine site over the SCNF road system. Although the risk of a spill from any single supply delivery is very small, there will be a large number of truck trips over the life of the mine. This risk was identified in the Biological Assessment (BA) as resulting in a “**LIKELY TO ADVERSELY AFFECT**” impact to federally protected fish (Snake River spring/summer Chinook salmon, threatened Snake River basin steelhead, and threatened Upper Columbia River population segment of bull trout), and their spawning and rearing habitats within the middle Panther and Williams Creek watersheds. Biological Opinions prepared by NMFS and USFWS included terms and conditions necessary to mitigate potential impacts to the fishery. The terms and conditions that require action or commitment by the ICP operator have been incorporated in the Stipulations, Mitigations and Monitoring Plans required as a condition of Plan of Operations approval (see section 1.1.3).

1.3.7 The Effect of the Proposed Activities on Vegetation/Reclamation in the Project Analysis Area

Operations under the approved Plan of Operations are expected to have little effect on vegetation and soil resources other than the 132 acres of direct disturbance caused by the facilities and roads. Reclamation of 40,000 feet of existing roads that will not be needed for the ICP will partially offset this impact. Following completion of mining, the disturbed area will be reclaimed and revegetated, resulting in little long-term effect.

1.3.8 The Effect of the Proposed Project Activities on Wetlands and Other Waters of the U.S.

ICP activities under the approved Plan of Operations are predicted to directly impact about 0.2 acres of jurisdictional wetlands due to dewatering of the Ram Mine and where the treated water discharge pipeline crosses streams and riparian zones. This impact is unavoidable and will require COE 404 permit approval prior to wetland disturbance. An additional 0.2 acres of non-jurisdictional wetlands will be removed by construction of the TWSF. The impacts to these non-jurisdictional wetlands are proposed to be partially compensated by construction of replacement wetlands as described in the approved Plan of Operations.

1.3.9 The Effect of the Proposed Project Activities on Fish Populations and Habitat of Concern (Federally Listed Species, Sensitive Species, and Management Indicator Species)

As indicated in the transport of hazardous substances section, the BA identified a “**LIKELY TO ADVERSELY AFFECT**” impact to federally threatened Snake River spring/summer Chinook salmon, threatened Snake River basin steelhead, and threatened Upper Columbia River population segment of bull trout. The proposed action also indicated “**LIKELY TO ADVERSELY AFFECT**” designated Critical Habitat for Chinook salmon and steelhead, and Essential Fish Habitat for Chinook salmon within the middle Panther and Williams Creek watersheds. The proposed action was also found to “**LIKELY TO ADVERSELY AFFECT**” USDA Forest Service Region 4 sensitive westslope cutthroat trout fish and their habitats.

NMFS BO concluded that: “After reviewing the status of Snake River spring/summer Chinook salmon, Snake River Basin steelhead, their designated critical habitats, the environmental baseline for the action area, the effects of the proposed action, and cumulative effects, NFMS concludes that the action, as proposed, is not likely to jeopardize the continued existence of the affected species and is not likely to destroy or adversely modify designated critical habitats for those species.”

NMFS identified Reasonable and Prudent Measures and developed Terms and Conditions required to mitigate impacts of the ICP on Chinook and steelhead. To the extent that they apply to Forest Service authorities, the SCNF will ensure the Reasonable and Prudent Measures and Terms and Conditions are addressed.

NMFS Reasonable and Prudent Measure are as follows:

1. “Minimize incidental take from construction related activities (SCNF).
2. Minimize incidental take from water quality related effects (SCNF and EPA).
3. Ensure completion of a monitoring and reporting program to confirm that the Terms and Conditions in this Incidental Take Statement are effective in avoiding and minimizing incidental take from permitted activities. Ensure completion of monitoring and reporting sufficient to determine the amount and/or extent of take described in this Opinion is not exceeded (SCNF and EPA).”

The Terms and Conditions required to implement the Reasonable and Prudent Measures are:

1. “To implement Reasonable and Prudent Measure (RPM) #1, minimizing incidental take from construction related activities, the SCNF shall ensure that:
 - a. Prior to beginning work, all contractors working on-site shall be provided with a complete list of proposed BMPs, RPMs, and terms and conditions intended to

minimize the amount and extent of take resulting from riparian disturbance and general construction activities.

- b. Construction impacts are confined to the minimum area necessary to complete the Project, particularly where project activities affect riparian vegetation.
- c. Activity in the stream shall be kept to the minimum necessary. Equipment shall be moved to an upland location at least 150 feet from the water prior to refueling, repair, or maintenance.
- d. Equipment will work from the streambank during installation of the effluent pipeline. Use work area isolation methods (complete or partial) and sediment containment measures (i.e., SedimatTM, straw bales, silt fence) to reduce the amount of sediment transported downstream during construction.
- e. Project design criteria and BMPs associated with the culvert removal on North Fork Williams Creek will be submitted to NMFS for review and approval prior to beginning road reconstruction efforts on the Williams Creek Road.
- f. At a minimum, culvert removal shall be conducted in accordance with project design criteria and BMPs established in NMFS R1/R4 Stream Crossing Structure Replacement and Removal Programmatic BO (NMFS No. P/NWR/2005/06396). http://bluefin2.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.download?p_file=F18879/200506396_culvert_programmatic_08-08-2006.pdf.
- g. Ensure an adequate supply of sediment control materials (e.g. SedimatTM, silt fence, straw bales, etc.) is available on-site to address emergency situations should they arise.
- h. Visual turbidity monitoring will be completed during construction of the effluent pipeline, construction of the cable car, and during road construction activities by observing any sediment plumes that might be caused by project activities. If the sediment plumes are visible more than 300 feet downstream, the USDA Forest Service shall immediately notify NMFS to determine if reinitiation of consultation is necessary.
- i. Specific to the culvert removal action on North Fork Williams Creek, a Fisheries Biologist or Hydrologist will monitor turbidity levels downstream from construction activities to ensure that levels do not exceed State standards of 50 nephelometric turbidity units (NTUs) above baseline (instantaneous), or > 25 NTUs above baseline (chronic). If available, a NMFS representative shall be present on-site during dewatering and re-watering of the North Fork.
- j. Toxic materials do not enter live water during construction activities. Equipment used in construction of the cable car crossing on Panther Creek and the

construction of the NPDES outfall on Big Deer Creek shall be clean and free of fuel and lubricant leaks prior to beginning work, and shall be inspected daily once beginning work.

- k. Prior to and during the equipment crossing of Panther Creek for the cable car installation, a fish biologist shall be present on-site. The fish biologist shall walk alongside the stream and look for adult steelhead and/or steelhead redds within 350 feet of the construction site. If either adult or redd are observed, activity will cease until the fish biologist has coordinated with NMFS to determine the best approach to proceed while avoiding effects to adult steelhead and/or their redds.
- l. As outlined in Section 1.2.15 of the BO, NMFS shall participate on the Interagency Oversight Task Force to assist with oversight of the ICP. NMFS shall review and provide input where appropriate to all project design reports, documents, and annual reports. At a minimum, as an active member of this group, NMFS expects to be able to review and provide input to the following elements described in the proposed action:
 - i. The engineering design for the water treatment system;
 - ii. Final design of the TWSF;
 - iii. Final road construction/reconstruction plan;
 - iv. Final stormwater pollution prevention plan;
 - v. Final geochemical amendment plan;
 - vi. Final design for the outfall diffuser;
 - vii. Post-mining groundwater/surface water capture plan;
 - viii. Weed control plan;
 - ix. Wetland monitoring plan;
 - x. Copper loading demonstration plan;
 - xi. Methylmercury study plan and report; and
 - xii. Final reclamation and closure plan.

2. To implement RPM #2, minimizing incidental take from effects to water quality:
 - a. The EPA shall modify the draft NPDES permit to limit the effluents maximum daily concentration for levels of nitrate + nitrite to <10 mg/L at the end-of-pipe to prevent nutrient enrichment of habitat in Big Deer and Panther Creeks.
 - b. The SCNF shall work with the applicant to prioritize, schedule, and complete road reconstruction/improvements to ensure that all road segments with environmental or safety concerns are addressed in Phase I. This includes all road segments in RHCAs or draining directly into perennial or intermittent streams. The SCNF will work with the Interagency Oversight Task Force to identify and prioritize the road segments of concern.
 - c. The SCNF shall ensure that an appropriate native seed mix is used to mulch and seed all cuts and fills of roads, and disturbed areas from road maintenance. As described in the Mitigations section of the ICP DEIS (page 2-55, Item 3/c), disturbed areas will be treated during the same years as the construction/disturbance activity. If vegetation is not adequately established for erosion control the mulch and seed will be applied in subsequent years until natural vegetation is established.
 - d. The SCNF shall require that the ICP Coordinator implement the following process (BA - Table 17) to screen new reagents/formulas before changing the manufacturer, the formula, or adding a chemical not considered in the BA.
 - i. Toxicity - If the new material is considered highly or very highly toxic with a 96 hr LC₅₀ < 1,000 µg/L for fish species or aquatic invertebrates the material needs to be carefully reviewed regardless of accident probability or spill risk. If the toxicity of the proposed new material is below this threshold then the spill risk and accident probability need to be considered and evaluated in coordination with NMFS.
 - ii. Screen for Probability of Accident – If the accident probability as described in the BA indicates that accidents near a stream are not likely to occur in more than 100 years (equates to < 59 trips/year), and toxicity is rated Moderate or lower, then no additional analysis will be required regardless of spill risk. However, if the accident rate predicts that accidents near a stream will occur in less than 100 years (>59 trips/year), toxicity is rated Moderate or High, and spill risk is rated High, additional analysis will need to be completed in coordination with NMFS.

BA - Table 17. Screen to identify when additional toxic effects analysis is needed.

# of Trips/ year (accident probability near streams)	Spill Risk	Toxicity	Coordination Needed?
Any	Any	Very highly toxic or highly toxic (Fish 96 hr LC ₅₀ < 1,000 µg/L)	Additional Analysis and Coordination with NMFS Necessary.
>59 (less than 100 yrs between accidents)	High or Moderate	Moderately toxic (Fish 96 hr LC ₅₀ < 10,000 µg/L)	Additional Analysis and Coordination with NMFS Necessary.
<59 (more than 100 yrs between accidents)	Low, Moderate, or High	Moderately toxic, slightly toxic, not acutely toxic	No Coordination with NMFS Necessary.

The risk of a material spill happening in case of an accident is determined based on the material packaging. Containerized solid = **Low Risk**, Containerized liquids in small containers (<100 gallons) = **Moderate Risk**, Bulk liquids = **High Risk**.

3. To implement RPM #3, monitoring and reporting:
 - a. The SCNF shall monitor and report compliance with the project’s proposed effects minimization measures. Ensure completion of a monitoring and reporting program to confirm that the amount and/or extent of take anticipated in this Opinion is not exceeded and that the project is implemented as proposed.
 - i. Annually report on the compliance with and implementation of the RPMs and Terms and Conditions.
 - ii. Adhere to the proposed monitoring as described in the ICP BA, ROD, and Supplemental Reports.
 - b. The EPA shall work with FCC to develop a tissue sampling protocol and sampling scheme for salmonids in Big Deer Creek. The protocol and sampling scheme must be approved by NMFS prior to first effluent discharge. A baseline study shall be conducted prior to first effluent discharge, and annually for three years following, conduct tissue sampling of non-ESA listed resident salmonids in Big Deer Creek collected downstream from effluent and upstream from the falls for:
 - i. Bioaccumulation of aluminum, arsenic, cadmium, cobalt, lead, manganese, mercury, nickel, selenium, thallium, and zinc.

Measurable bioaccumulation of these metals and pollutants will indicate the amount of take authorized has been exceeded. If resident fish are not collected in numbers suitable for tissue sampling purposes, coordinate with NMFS to develop an alternative sampling protocol.

- c. The EPA shall work with FCC to develop an aquatic invertebrate sampling scheme and protocol in Big Deer Creek. The protocol and sampling scheme must be approved by NMFS prior to first effluent discharge. Prior to first effluent discharge, and annually for three years following, conduct sampling of aquatic invertebrates in Big Deer Creek to assess the potential for bioaccumulation of pollutants and/or changes in community structure. Measurable bioaccumulation of metals/pollutants identified in Term and Condition 3.b.i. and/or changes in community structure will indicate the amount of take authorized has been exceeded.
- d. The SCNF and EPA will annually report monitoring results as described in the ICP BA, ROD, Supplemental Reports, and the BO. The report shall identify in separate sections: (1) any results indicating adverse habitat modification or other adverse effects of the action on spring/summer Chinook salmon, steelhead, or sockeye salmon; (2) persistence of adverse conditions that could be improved through modification of the proposed action, or through additional actions; and (3) recommended remedies to address the problems identified in items 1 and 2. NMFS shall work with the SCNF and EPA to determine any corrective actions, which the applicant must implement.
- e. The SCNF and EPA shall submit reports and annual monitoring results noted in the BA, ROD, Supplemental Reports, and this Opinion to: NMFS, Attn: David Mabe, 10095 W Emerald, Boise, Idaho 83704.
- f. If a sick, injured or dead specimen of a threatened or endangered species is found in the project area, the finder must notify NMFS through the contact person identified in the transmittal letter for this Opinion, or through Idaho State Habitat Office of NMFS Law Enforcement at (208) 321-2956, and follow any instructions. If the proposed action may worsen the fish's condition before NMFS can be contacted, the finder should attempt to move the fish to a suitable location near the capture site while keeping the fish in the water and reducing its stress as much as possible. Do not disturb the fish after it has been moved. If the fish is dead, or dies while being captured or moved, report the following information: (1) NMFS consultation number; (2) the date, time, and location of discovery; (3) a brief description of circumstances and any information that may show the cause of death; and (4) photographs of the fish and where it was found. NMFS also suggests that the finder coordinate with local biologists to recover any tags or other relevant research information. If the specimen is not needed by local biologists for tag recovery or by NMFS for analysis, the specimen should be returned to the water in which it was found, or otherwise discarded.”

The USFWS’s BO concluded that: “After reviewing the current status of bull trout, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the USFWS’s Opinion that the Mine Project, as proposed, is not likely to jeopardize the continued existence of the bull trout.” USFWS further noted in

relation to the Williams Creek Road work: “While some individuals may be harassed as a result of activities associated with the culvert removal, any impacts will be limited in time and space and will not amount to an appreciable change in the status, distribution, or long-term persistence of the species. The adverse effects are not expected to appreciably reduce the likelihood of survival and recovery of bull trout range-wide in terms of numbers, distribution, or reproduction of the species.”

USFWS identified one issue requiring mitigation and provided the following Terms and Conditions to address impacts of road reconstruction on the Williams Creek Road:

1. The SCNF shall adhere to the Upper Salmon River Recommended Instream Work Windows and Fish Periodicity report for timing of in-stream work and implementation of associated BMPs.
2. The SCNF shall adhere to all project design criteria and BMPs provided in the Programmatic BO for Stream Crossing Structure Replacement and Removal (Service, 2006) when implementing the Williams Creek Road culvert removal.
3. Blocknets will be deployed at the upstream end of the site to prevent additional fish from entering the work area during dewatering and construction activities.
4. Water flows/levels in the Williams Creek culvert project area shall be ramped down slowly as the stream reach is dewatered to encourage voluntary movement of bull trout to escape downstream easily.
5. Following installation of the upper block net, fish should be ‘hazed’ out of the dewatered section by walking seines downstream from the upstream block net location to the end of the work site in an attempt to ‘herd’ fish out of the worksite. A downstream block net will then be installed and efforts to capture remaining fish with dip-nets will follow. Due to the small size of the stream and minimal flows, electroshocking is not authorized.
6. Following culvert removal, the work site will be pre-washed prior to diversion dam removal and reintroduction of flow in order to minimize suspended sediments being flushed downstream.
7. Reintroduction of water through the Williams Creek stream channel shall occur in a slow, gradual manner in order to minimize suspended sediments being flushed downstream.
8. The ICP Coordinator shall, prior to construction, submit to the USFWS the engineering/project design for the Williams Creek culvert removal to ensure all appropriate conservation measures are in place to minimize impacts to bull trout.

Additionally, USFWS requires the following monitoring and reporting related to the ICP:

1. In order to confirm the assumption that dilution in Big Deer Creek will reduce concentrations of the constituents discharged in the effluent to concentrations below which adverse affects are expected, sampling of Big Deer Creek surface water shall be conducted. In order to document the concentrations of constituents in the effluent just below the impassable cascade, the SCNF will ensure one sampling event for all constituents discharged per the NPDES permit, at a point immediately below the impassable cascade in Big Deer Creek. This sampling event shall occur once full mining (not pre-mining) activities have been underway for one year, and sampling shall occur during high (spring) flows. A report (and associated data) from this sampling shall be provided to the USFWS within four months of the sampling event. Should sampling indicate concentrations of constituents in the effluent are occurring below the cascade at levels above those reported to cause adverse affects, the SCNF and USFWS will meet to discuss the possible need for reinitiation.
2. Should it be necessary to implement additional treatments (biological and ion exchange using zeolites) in order to meet effluent limits for nitrate and ammonia, respectively, the USFWS requests notification. This notification should include documentation on the exceedances, timing of implementation of treatments, and confirmation of compliance once additional treatment is implemented.
3. Screening shall be conducted for any new reagent/formulation not considered in the Assessment. Should screening reveal the new reagent/formulation contain higher toxicity levels than those outlined in the Assessment, a brief report shall be submitted to the USFWS discussing what, if any, impacts might occur and the possible need for reinitiation.
4. Reports generated from testing required as part of the NPDES permit (i.e., WET testing, toxicity tests, etc.) shall be submitted to the USFWS for our review as they become available. Additionally, any notifications of violations of compliance with the NPDES permit shall be submitted to the USFWS as they occur.
5. Turbidity at the Williams Creek culvert project shall be monitored to assure that the incidental take exempted in the USFWS BO and associated with suspended sediment (intensity, duration) has not been exceeded. Monitoring results shall be provided to the USFWS's Eastern Idaho Field Office in Chubbuck, Idaho.

1.3.10 The Effect of the Proposed Project Activities on Air Quality, Visual Resources and Wilderness Experience

An Air Quality Permit will be required by the IDEQ for release of contaminants to air. There will be short-term increases in particulate releases associated with construction activities. The ICP will be visible to small areas of National Forest Lands including a portion of the Frank Church - River of No Return Wilderness. Recreational use of the areas within the ICP view-shed is limited and no significant impacts to visual or wilderness resources are

anticipated (Idaho Cobalt, EIS Technical Reports, Recreation Visuals, Wilderness, Hydrometrics, April 2006).

1.3.11 The Effect of the Proposed Project Activities on Wildlife Populations and Habitats of Concern (Threatened and Endangered Wildlife Species; Region 4 Sensitive Species; Management Indicator Species; and Idaho Species of Concern)

The ICP will have direct impacts on wildlife habitat in the 115 acre facility area. There will be secondary impacts to wildlife peripheral to the mine area and along the transportation route. These impacts are predicted to be limited to individual animals and will not significantly affect wildlife populations including TES, Region 4 sensitive species, Management Indicator Species or Idaho Species of Concern except as discussed under the threat of spills along the transportation route to fish. Management of transportation including the requirements for a spill plan, employee busing and hazardous materials transport requirements are intended to minimize potential impacts to wildlife and aquatic ecosystems.

1.4 FACTORS OTHER THAN ENVIRONMENTAL ISSUES

1.4.1 The Effect of the Proposed Activities on Roads and Access Management in the Analysis Area

The West Panther Creek Roadless Area #13504 (36,064 net acres in size) is segmented into four parcels by existing developments (powerlines, private lands), existing and planned development activity areas within the Bucktail, Indian Creek and Blackbird drainages.

Three of these segments are highly impacted as a result of past activities which included active mining, exploration drilling and remedial measures for the Blackbird Mine cleanup, consisting of a water treatment plant, dams, impoundments, etc.

A number of alternatives for pipeline discharge and access construction were evaluated in the FEIS. In addition to roadless impacts, selecting a pipeline discharge route took into account water quality, channel stability, dilution characteristics, and maintenance. The preferred alternative will result in approximately 1.4 miles of new road construction in the West Panther Creek Roadless Area. The purpose of the road is to provide FCC access to their proposed operation and avoid potential impacts to the BMSG CERCLA remedy. Once no longer needed by the project, 0.6 miles of this road will be reclaimed to restore the Roadless Area characteristics and 0.8 miles will remain as permanent access to the upper Bucktail drainage.

The new road construction and pipeline construction would not change the roadless character of the Roadless Areas, as they only occupy an estimated 6.5 acres. This portion of the Roadless Area will continue to be affected from past mining activity and the additional impact as proposed for the ICP will not be significantly different. The vast majority of the 36,064 acres of the West Panther Creek Roadless Area is not affected by this project.

Construction and operation of the ICP under all action alternatives will result in increased traffic on major transportation and project access routes. Approximately four miles of new

road will be constructed and 43 miles improved or upgraded under Alternative IV. Road construction required for the other action alternatives would be similar to Alternative IV except that the agency alternatives III, IV and V would require about 29 miles of additional road improvements compared to the company plan (Alternative II). About 7.5 miles of existing roads no longer needed, will be reclaimed to reduce road density and sediment yield. Project employees and construction workers will be required to utilize buses or vans to reduce traffic.

1.4.2 The Effect of the Proposed Activities on Socio-Economics

Direct and secondary employment associated with the operations under the approved Plan of Operations and taxes paid by the mining operation and employees will have a positive economic effect at the state and local level. Although many of the ICP employees will be found in the local work force there will be some influx of workers, particularly during construction. The added population will impact community services and housing in the area. However, since only a small number of construction and mine workers with specialized skills are expected to be hired from outside the local labor area, negative impacts are expected to be small and will likely be overshadowed by growth that will eventually occur regardless of the ICP.

1.4.3 The Effect of the Proposed Project Activities on Cultural Resources and Tribal Trust Responsibilities

The ICP area is located within the aboriginal lands of the Shoshone-Bannock Tribes and the Nez Perce Tribe. No cultural resources sites are anticipated to be impacted by the ICP under an approved Plan of Operations. The USDA Forest Service will continue to inform the Nez Perce Tribe and the Shoshone-Bannock Tribes of on-going activities.

In the Fort Bridger Treaty of 1868, Article 4, the United States of America and the Shoshone-Bannock Tribes mutually agreed that the Tribes retain the right to:

“...hunt on the unoccupied lands of the United States so long as game may be found thereon...”

In *State v. Tinno*, the Idaho Supreme Court ruled that the Shoshone-Bannock Tribes right to hunt includes the right to fish and gather.

The Agreement of February 5, 1898, ratified June 6, 1990, Article IV between the United States of America and the Shoshone-Bannock Tribes includes the following language:

“As long as any of the lands ceded, granted, and relinquished under this treaty remain part of the public domain, Indians belong to the above-mentioned tribes and living on the reduced reservation, shall have the right, without any charge therefore, to cut timber for their own use, but not for sale, and to pasture their livestock on said public lands, and to hunt thereon and to fish in the streams thereof.”

In the Treaty of June 8, 1855, Article 3, between the United States of America and the Nez Perce Tribe certain off-reservation rights on Forest Service lands were reserved to the Nez Perce including:

“...the right to fish at all usual and accustomed places in common with citizens of the Territory, and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses upon open and unclaimed lands.”

The ICP will exclude approximately 135 acres from hunting, fishing, or gathering for the life of the project. The exclusion of this area from hunting, fishing, or gathering have minimal affect on the reserved rights to hunt, fish or gather by Shoshone-Bannock Tribes or the Nez Perce Tribe since the excluded area represents less than 0.1% of the total USDA Forest Service land available to the Tribes for this reserved right. Mitigation measures such as reclamation bonding, including long-term water treatment bonding, ensure water quality objectives will be met during and after mine life which will be protective of downstream treaty fishing rights. Additionally, use of native seed sources, removal of structures and reshaping of disturbances ensures long-term productivity of the site upon completion of the Project which in the long-term will be protective of treaty rights.

In addition, the USDA Forest Service has a general trust responsibility to the Shoshone-Bannock Tribes and the Nez Perce Tribe not to harm their physical property interests within their reservation boundaries. (*Pyramid Lake Paiute v. Morton*: Agencies have trust obligations when their actions may adversely affect water quality/quantity air quality, or property of Indian reservations.)

Trust responsibility also means that Federal agencies must consult with Tribes before taking actions which affect their property and rights. The SCNF consulted with the Shoshone-Bannock Tribes and the Nez Perce Tribe throughout the project scoping and evaluation from 2001 through 2007. Consultation included formal Government-to-Government discussion as well as informal staff-to-staff meetings, informational presentations, periodic project update letters, and on-site tours involving representatives of the Shoshone-Bannock Tribes and the Nez Perce Tribe.

1.4.4 The Effect of the Proposed Project Activities on Forest Planning

Mining of the ICP in accordance with the approved Plan of Operation will be consistent with the Salmon National Forest Land and Resource Management Plan (LRMP) and will not require any amendments. The LRMP contains a management goal related to mineral resources which is to “Encourage the legitimate exploration and extraction of leasable and locatable minerals from National Forest lands while maintaining or improving other resource values.”

1.5 ENVIRONMENTAL DOCUMENTS CONSIDERED IN THE DECISION

In the early stages of the planning process, the SCNF determined that the proposed operations might significantly affect the quality of the human environment. As a result, the

SCNF along with IDEQ and EPA, prepared an EIS pursuant to the National Environmental Policy Act of 1969 (NEPA). A draft EIS was released in February 2007. The FEIS was released in June 2008 and the Notice of Availability (NOA) for the FEIS was published in the Federal Register in June 2008.

The FEIS merges information and analyses from the draft EIS, includes responses to comments on the draft, and incorporates changes based on those responses. The FEIS describes the proposed action and a number of alternatives to the proposed action. All action alternatives will meet the purpose and need for the project. In deciding whether to approve the Proposed Plan of Operations, or whether changes or additions to the Proposed Plan of Operations are needed prior to approval, the SCNF must comply with regulations at 36CFR 228A, particularly the requirements for environmental protection contained in 36 CFR 228.8. FCC submitted a proposed plan to construct, operate, and reclaim all facilities necessary to mine, remove, and transport economically mineable minerals from the Idaho Cobalt deposit. These metals are used for a variety of purposes ranging from industrial to medical purposes. The FEIS also describes the potentially affected environment and discloses the potential environmental consequences of implementing the proposed action or alternatives to the proposed action. The FEIS is on file and available at the SCNF Supervisor's Office and Salmon-Cobalt Ranger District Office in Salmon, Idaho. The FEIS is also located on the SCNF web-site: <http://www.fs.fed.us/r4/sc>. The Final NPDES permit will be located on EPA Region 10's website at: <http://yosemite.epa.gov/r10/WATER.NSF/NPDES+Permits/New824#Permits> or <http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/Current+ID1319>.

My decision is based on the review of the FEIS, project file information, review of public concerns received on this project and on how well the selected alternative meets the stated purpose and need, protects resources and addresses the public's concerns and is consistent with applicable State and Federal laws, plans and policies. I have concluded that there is adequate information in the project record to support the decision to approve the Plan of Operations with the changes and additions identified in this ROD and in Alternative IV.

2.0 PUBLIC INVOLVEMENT

Public participation has played and continues to play an important role in making decisions regarding this project.

2.1 PUBLIC PARTICIPATION AND SCOPING

An initial informational Scoping Packet was distributed to potentially interested parties on July 10, 2001 with a request for written comments, concerns, or suggestions regarding the proposed ICP and EIS being developed by the SCNF. The information packet included a summary of the proposed mining and milling project. A public notice of meeting time and place for the July 20, 2001 public Scoping meeting was placed in the *Recorder Herald*, the newspaper of Record for the SCNF.

Subsequent to the July 20, 2001 public Scoping meeting, a Notice of Intent (NOI) to prepare an EIS for the USDA Forest Service decision regarding approval of the Proposed Plan of Operations was published by the USDA Forest Service in the Federal Register on September 10, 2001. This was followed by the distribution of another information Scoping Packet to potentially interested parties on the SCNF Forest-wide mailing list, detailing modifications to the Proposed Plan of Operations that were made by FCC as a result of agency review. In addition, the meeting times and places for additional public scoping meetings were placed in the *Recorder Herald* newspaper in Salmon, ID and the *Challis Messenger* Newspaper in Challis, ID. The USDA Forest Service held formal public Scoping meetings in Challis, Idaho on October 10, 2001 and in Salmon, Idaho, on October 11, 2001. Comment forms were also provided at these meetings. The majority of individuals, local government and business representatives providing oral and written comments, provided comments in support of the proposed mining project on the basis of an opportunity for increased employment, jobs, and benefits to the local economy.

In response to the 2001 scoping letters, the SCNF received oral and/or written comments from 58 private individuals, federal agencies, groups, Native American Tribes, local governments, businesses, and the Blackbird Mine Trustees. These comments have been compiled and documented in a Public Scoping Content Analysis Report. Subsequent public comments received by the SCNF were considered during development of the DEIS. Since the beginning of the public involvement and scoping process, Project information and update letters regarding progress on the SCNF's preparation of the DEIS for FCC's proposed ICP have been periodically mailed to individuals and groups that expressed interest in the ICP. Outreach was also made to the Nez Perce Tribe and the Shoshone-Bannock Tribe through formal letters to the Tribal Chairmen, meetings, and field reviews.

Interested Party letters have been distributed by the USDA Forest Service to the ICP mailing list on the following dates:

July 10, 2001
October 2, 2001
January 3, 2003
March 27, 2003
March 5, 2004
June 23, 2004
November 22, 2004
March 29, 2005
August 18, 2005 and
March 26, 2007.

In addition to Interested Party letters, updated information regarding preparation of the DEIS has been included in each of the SCNF's published quarterly Schedule of Project Actions (SOPA) since July 2001.

The DEIS notice of availability was published in the Federal Register in February 23, 2007. Approximately 175 persons or groups responded to the DEIS. The public's comments and the agencies' responses were grouped into 16 similar categories: geology, soils and reclamation, hydrology, biodiversity (vegetation, wildlife, noxious weeds), threatened and endangered species, aquatics/fisheries, Forest Plan, NEPA, transportation, recreation, scenic resources, cultural resources (including Native American Indian rights), air quality/climate, sound, socioeconomic, and miscellaneous topics. The responses to these 16 categories of comments are included in Appendix D of the FEIS.

Additional information is documented in the project record.

The USDA Forest Service has consulted with the Shoshone-Bannock and Nez Perce Tribes during the development of this EIS. Primary consultation between the SCNF and various Tribal entities has included meetings (including formal Government-to-Government meetings) conference calls, phone calls and letters. The two Tribes were consulted prior to and throughout the planning process for this project. The SCNF Tribal Liaison and EIS Project Coordinator have been involved in the consultation.

2.2 ISSUES CONSIDERED AND ADDRESSED

The USDA Forest Service used issues identified from the public, other agencies, and Tribal representatives to develop and evaluate the effects of the alternatives. Fifteen issues with potentially significant effects emerged from the scoping process and discussions. Using the comments from the public, the Tribes, and other agencies and organizations, the Interdisciplinary (ID) Team developed a list of issues to address in the environmental analysis. Issues are defined as a point of discussion, debate, or dispute about environmental effects. Issues were separated into two groups: significant issues and non-significant issues. Significant issues are concerns used to formulate alternatives to the proposed action,

prescribe mitigation measures, or analyze environmental effects. The significant issues identified during the scoping and analysis process include:

- Issue #1: The potential effects of the proposed activities on the Blackbird Mine Superfund Remediation and Natural Resources Restoration.
- Issue #2: The potential effects of the proposed activities on groundwater quality/Panther Creek Watershed.
- Issue #3: The potential effects of the proposed activities on surface water quality/Panther Creek Watershed.
- Issue #4: The potential effects of the proposed activities on water use, management, treatment and disposal.
- Issue #5: The potential effects of the proposed activities on sediment delivery (Bucktail Creek, Panther Creek and other streams).
- Issue #6: The potential effect of the proposed activities on roads and access management in the analysis area.
- Issue #7: The potential effect of the proposed activities on the transportation of product and hazardous materials, chemicals, and fuels.
- Issue #8: The potential effect of the proposed activities on socio-economics within the analysis area.
- Issue #9: The potential effect of the proposed activities on vegetation/reclamation in the project analysis area.
- Issue #10: The potential effect of the proposed project activities on Wetlands and Other Waters of the U.S.
- Issue #11: The potential effect of the proposed project activities on Fish Populations and Habitat of Concern (Federally listed species, sensitive species, and Management Indicator Species).
- Issue #12: The potential effect of the proposed project activities on Air Quality, Visual Resources and Wilderness Experience.
- Issue #13: The potential effect of the proposed project activities on wildlife populations and habitats of concern (threatened and endangered wildlife species; Region 4 sensitive species; Management Indicator Species; and Idaho Species of Concern).
- Issue #14: The potential effect of the proposed project activities on cultural resources and tribal trust responsibilities.
- Issue #15: The potential effect of the proposed project activities on Forest planning.

3.0 ALTERNATIVES CONSIDERED

Alternatives to the proposed action were developed to address significant issues identified during the public scoping process and were analyzed to determine the potential effects of the ICP. The intent of these alternatives was to provide a reasonable range of alternatives to evaluate opportunities to minimize potential environmental effects by considering changes or additions, including new or expanded mitigation and monitoring plans that could be made to the Proposed Plan of Operations. The five alternatives, including the no-action alternative, summarized below are described in detail in Chapter 2 of the FEIS. A comparison of the operational components, reclamation plans and potential impacts of these alternatives is presented in Tables S-1 and S-2 of the FEIS.

The five alternatives considered in the FEIS and this ROD provide a reasonable range of alternatives for evaluating the potential effects that are predicted to occur if the proposed Plan of Operations were approved, and determining changes or additions to the Proposed Plan of Operations that may be needed to meet the requirements of the regulations at 36 CFR 228 Subpart A. The FEIS addresses direct, indirect, and cumulative impacts that are predicted to occur under all of the alternatives as framed by the issues identified during scoping and analysis.

A number of components are common to all alternatives. The majority of the mine operations Plan is presented in the FCC's Plan of Operations (Alternative II). Stipulations, design modifications and mitigation measures required as a condition of Plan approval (see section 1.1.3) are generally applicable to all alternatives, but will vary depending on facility layout and other specific Plan components. Mitigation measures applicable to the selected alternative are included in this ROD, while an explanation of the potential impacts addressed by these mitigations are presented in more detail in the FEIS.

3.1 ALTERNATIVE I: THE NO-ACTION ALTERNATIVE

Under Alternative I, the no-action alternative, the Proposed Plan of Operations would not be approved and FCC would not be allowed to develop the ICP. The no-action alternative provides a baseline for estimating the effects of other alternatives. The potential effects of the No Action Alternative were evaluated, and it was predicted that existing baseline conditions and trends would be maintained. Water quality in South Fork Big Deer Creek, Big Deer Creek, and Panther Creek would continue to improve due to Blackbird cleanup actions. However, groundwater quality in portions of Bucktail Creek drainage would remain worse than groundwater quality standards due to the effects of Blackbird Mine and natural conditions.

Under the Mining Laws, 30 U.S.C. 21 et seq. and regulations of the Secretary of Agriculture, 36 CFR 228 Subpart A, the No Action alternative may not be selected. The USDA Forest Service may require changes or additions to the Proposed Plan of Operations that are necessary to meet the requirements of the regulations for environmental protection, public safety, and protection of other resources and facilities, but may not preclude operations that

are reasonably incident to exploration, mining, and processing mineral materials from properly located mining claims.

3.2 ALTERNATIVE II: THE PROPOSED ACTION

Alternative II was to approve FCC's Proposed Plan of Operations. FCC would construct, operate, monitor, and reclaim the ICP as proposed in the Proposed Plan of Operations and NPDES permit application. FCC's proposal is to develop two underground mines, construct an 800 ton per day mill that utilizes conventional flotation technology to produce a cobalt, copper and gold concentrate, dispose of mill tailings in a dry stack waste storage facility, utilize paste backfill to return a portion of the tailings underground as part of the mining process and collection and treatment of excess mine water with a reverse osmosis system and discharge to Big Deer Creek under a NPDES permit. The water discharge pipeline would directly affect a small area (0.14 acres) of jurisdictional wetlands and require a 404 permit from the US Army COE.

Operations under FCC's proposed Plan and common to all alternatives would employ an estimated 157 people for the 12 year life of the mine while mining 2.5 million tons of ore. The tailings and waste storage facility (TWSF) would occupy 55 acres and ultimately hold 2.6 million cubic yards of dewatered tailings and waste rock. Following closure, facilities would be removed and disturbances would be reclaimed.

3.3 ALTERNATIVE III - RELOCATION OF TWSF, PERPETUAL MINE DEWATERING, AND LAND APPLICATION WATER DISCHARGE

Alternative III incorporated potential changes and additions to the Proposed Plan of Operations developed by the SCNF and cooperating agencies to address identified environmental and operational impacts and to provide analysis of a broad range of reasonable alternatives. Proposed changes and additions to the Proposed Plan of Operations would include:

Relocation of the TWSF to an alternative site with a footprint of 53 acres while maintaining the capacity of 2.5 million cubic yards that FCC proposes under Alternative II. The TWSF would be moved to the northeast of the mill and sized to accept the identified ore reserves and avoid direct and indirect impacts to wetlands. Water management for waters associated with the TWSF would be as described in the Proposed Plan of Operations considered under Alternative II, but modified to reflect the change in facility configuration. This TWSF site would allow expansion to a larger area to address additional ore reserves without impacting wetlands.

Modification of the TWSF closure cap would be required to provide greater rooting depth and to protect the low permeability liner from damage from trees. Land application treatment (LAT) would be used for water treatment and disposal which utilizes soil attenuation of metals to supplement water treatment and dispose of water in the Big Flat drainage. Long-term (potentially perpetual) post closure mine water capture from a lower level of mine workings would be used to maximize groundwater capture efficiency. The process water management pond would be increased in size and an additional storage pond

added to account for the water balance of this alternative. A NPDES discharge permit for discharge to Big Flat Creek via a groundwater connection from the LAT site would be required.

3.4 ALTERNATIVE IV - REDUCED SIZE OF TWSF, MODIFIED WATER TREATMENT TO REDUCE WASTE STREAM, SURFACE DISCHARGE TO BIG DEER CREEK AND BACKUP GROUNDWATER CAPTURE IN LOWER BUCKTAIL CREEK

Alternative IV incorporated changes and mitigation measures proposed by the Agencies in an attempt to reduce the risk of operational and environmental impacts, to provide analysis of a broad range of reasonable alternatives and to improve agency oversight of the mine operation.

Alternative IV is distinguished from Alternatives II and III in that the TWSF will be located to the southeast of the mill site as in Alternative II, but will be reduced in size to accommodate only the amount of ore currently identified by FCC. The water treatment system will be designed to meet requirements of direct discharge to surface water in Big Deer Creek but will not include reverse osmosis as a primary treatment step in order to reduce the amount of water treatment waste that will require on-site disposal. Alternative IV will require that FCC obtain a NPDES discharge permit and approval of a mixing zone for sulfate in Big Deer Creek. At the completion of mining, the decision to cease pumping from the mine will be made based on results of water quality monitoring and predictions of impacts to groundwater and surface water. Post closure groundwater capture wells will be installed and tested during the initial construction phase to confirm that the system will capture a sufficient amount of groundwater to protect downstream water quality. If the bedrock groundwater capture system is not adequate, an additional capture system will be installed in Bucktail alluvium to assure capture of the metals load necessary to protect water quality goals. Alternative IV will require amendment of slash (waste rock) backfill in the underground mines to reduce metals mobility.

3.5 ALTERNATIVE V - LOWER BUCKTAIL GROUNDWATER CAPTURE, WATER TREATMENT AT SITE OF BLACKBIRD TREATMENT PLANT AND SURFACE DISCHARGE TO BLACKBIRD CREEK

Alternative V would require a change in the location of the water treatment and discharge facility. In most other aspects, Alternative V is the same as Alternative IV. Alternative V is distinguished from Alternative II in that the Tailings and Waste Rock Storage Facility is reduced in size as in Alternative IV, and post-closure groundwater capture is supplemented by an alluvial groundwater/surface water capture system in lower Bucktail Creek. Alternative V is distinguished from Alternative III in that the TWSF is reduced in size to the minimum volume required for identified ore reserves and is located as in Alternative II to the southeast of the mill site. The storage pond is eliminated, and an alternative water treatment technology will be employed to meet discharge requirements to Blackbird Creek. Alternative V is distinguished from Alternative IV in that rather than constructing water treatment facilities at the ICP mill site, water would be pumped to the site of the Blackbird water treatment plant and treated there prior to discharge to Blackbird Creek. Alternative V

would require that FCC enter into an agreement with the Blackbird Mine Site Group/Noranda for use and maintenance of the water treatment system. FCC would be required to obtain a NPDES discharge permit into Blackbird Creek. Although Noranda currently discharges under CERCLA authority, the addition of FCC mine water to their treatment system would require changes to their agreements with EPA. Changes to the Blackbird water treatment system (including additional facilities at the site) would be required to handle the additional flow and to meet modified effluent limits. Alternative V has been developed because it appears to minimize physical disturbance and impacts to the existing environment by utilizing existing infrastructure.

3.6 ALTERNATIVES ELIMINATED FROM DETAILED CONSIDERATION

A number of alternatives, including pipeline locations and new roads construction, to the specific components of the proposed action were evaluated but eliminated from detailed consideration. A more detailed discussion of these alternatives appears in the FEIS (Chapter 2 – Alternatives Considered But Dismissed from Detailed Consideration), along with the rationale for dismissal. These potential alternatives were identified as a result of public participation as well as agency concerns. The five alternatives considered in the FEIS presented a range of reasonable alternatives designed to address the significant issues identified by the USDA Forest Service.

4.0 FINDINGS REQUIRED BY OTHER LAWS, EXECUTIVE ORDERS, AND RULES

Several federal laws and regulations apply to the USDA Forest Service decision to approve a Plan of Operations as proposed, or require changes and additions to the proposed Plan. As required by NEPA, an EIS describing the potential “significant environmental effects” that may result from this decision, and several alternatives, has been prepared. The scope of the action, a reasonable range of alternatives, and site specific environmental effects were assessed as required in the EIS.

National Forest Management Act (NFMA)

NFMA requires that all permits, contracts, and other instruments for the use and occupancy of NFS land be consistent with Forest LRMP’s. The operations under the Approved Plan of Operations will be consistent with the Salmon Forest Plan (1988), and no amendments to the Forest Plan are required. The Forest Plan also indicates that Forest lands open to mineral entry are to be managed to allow “conventional exploration and development with appropriate stipulations to protect soils resources, water quality and other surface resources.” Implementing the Approved Plan of Operations will satisfy that Plan requirement.

Biological Evaluations (BE’s) determined that operations under the Approved Plan of Operations will not affect aquatic or terrestrial sensitive species. This complies with USDA Forest Service manual 2670, ensuring that USDA Forest Service actions avoid effects that could cause a species to become threatened or endangered.

Endangered Species Act (ESA)

Section 7(a)(2) of the ESA requires Federal agencies to consult with the USFWS and NMFS, as appropriate, to ensure that their actions do not jeopardize the continued existence of species listed as threatened or endangered under ESA, or destroy or adversely modify their critical habitat. Watershed Analyses (Middle Panther Creek and Salmon Interface), were completed in accordance with PACFISH and INFISH. A Biological Assessment (BA) was completed and identified a potential threat of transportation spills that could affect federally listed threatened or endangered species.

The USDA Forest Service prepared BA’s and BE’s on federally listed terrestrial and aquatic threatened, endangered and sensitive species. The USDA Forest Service found that the proposed action is determined **LIKELY TO ADVERSELY AFFECT** federally threatened Snake River spring/summer Chinook salmon, threatened Snake River basin steelhead, and threatened Upper Columbia River population segment of bull trout. The proposed action is further **LIKELY TO ADVERSELY AFFECT** designated Critical Habitat for Chinook salmon and steelhead, and Essential Fish Habitat for Chinook salmon. The BA/BE’s were transmitted to USFWS and NMFS to initiate formal consultation on the determination of effects. NMFS issued a BO for potential impacts to Snake River spring/summer Chinook salmon and Snake River basin steelhead in May 2008. USFWS issued a Biological Opinion

for impacts to bull trout in May 2008. The BO's included specific conservation recommendations (terms and conditions) applicable to approval of the Plan of Operations (see section 1.3.9 of this ROD).

Essential Fish Habitat

Section 305(b) of the Magnuson Stevens Fishery Conservation and Management Act of 1996 requires Federal agencies to consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency may have an adverse effect on designated Essential Fish Habitat (EFH). The USDA Forest Service BA has determined that the approval of the Plan of Operations is likely to have an adverse effect on EFH for Chinook salmon and is also likely to adversely affect Critical Habitat for Chinook salmon and steelhead in the vicinity of the ICP. As stated in the above ESA discussion, consultation with NMFS was concluded in May 2008.

The Migratory Bird Treaty Act of 1918

Approval of the Plan of Operations has been found to be in compliance with requirements of the Migratory Bird Treaty Act (see terrestrial wildlife Idaho Cobalt BA and BE, 2007).

Water Pollution Control Act of 1972 (Clean Water Act)

The Federal Water Pollution Control Act of 1972 (PL 92-500) as amended in 1977 (PL 95-217) and 1987 (PL 100-4) is also known as the Federal Clean Water Act (CWA).

NPDES permits for discharges of process wastewater and stormwater will be required for the approved Plan of Operations. Section 404 of the CWA regulates discharge of dredge or fill material to wetlands and waters of the U.S.; a 404 permit will also be required for the approved Plan of Operations. The Clean Water Act establishes a non-degradation policy for all federally proposed projects to be accomplished through planning, application, and monitoring of Best Management Practices (BMPs). Identification of BMPs is mandated by Section 319 of the Water Quality Act of 1987 (also referred to as the Clean Water Act), which states, "It is national policy that programs for the control of non-point sources of pollution be developed and implemented." Sediment control BMPs are required for road construction and maintenance. The Stormwater permit(s) will also require BMPs for operational control of runoff and sediment.

The Clean Air Act, as amended in 1990

FCC will be required to obtain a State of Idaho Air Quality Permit for operation of certain equipment. Upon receipt of this permit, operations under the Approved Plan of Operations will be in compliance with State and Federal Clean Air Act requirements.

Federal Noxious Weed Act of 1974

FCC is required as a condition of the Approved Plan of Operations to prepare a weed management plan in coordination with the USDA Forest Service and Lemhi County.

Preparation and implementation of this plan will meet the requirements of the Noxious Weed Act.

National Historic Preservation Act (NHPA)

The USDA Forest Service completed a cultural resource survey of the area of potential effect of operations under the approved Plan of Operations in compliance with the requirements of Section 106 of the National Historic Preservation Act (16 U.S.C. 470 et seq.). Two sites potentially eligible for listing on the National Register of Historic Places and other pre-historic and historic sites were identified in the survey. The approved Plan of Operations will avoid potential impacts to all identified heritage resource sites.

Wetlands (Executive Order 11990)

Wetlands at several locations within the project area will be affected by construction and operations. Section 404 of the Clean Water Act authorizes the U.S. Army COE to issue permits for activities that will result in the placement of dredge or fill material in waters of the U.S., including wetlands. Before a permit can be issued, Section 404(b)(1) Guidelines require that projects avoid impacts to the extent possible, minimize impacts that cannot be avoided, and provide compensatory mitigation for impacts that occur. Alternative IV is estimated to impact a total of 0.2 acres of U.S. waters, including wetlands. FCC will be required by conditions in the approved Plan of Operations to obtain Section 404 approval from the U.S. Army Corps of Engineers prior to impacting the jurisdictional wetlands.

Floodplains (Executive Order 11988)

Operations under the approved Plan of Operations will have limited impacts to floodplains and USDA Forest Service approval of a Plan of Operations for the ICP is in compliance with Executive Order 11988. The only construction activities that will occur within a floodplain are improvements to existing roads and installation of the discharge pipeline. These activities are necessary for the project and no feasible alternative to their implementation was identified in the EIS analysis.

Environmental Justice (Executive Order 12898)

The concerns regarding bioaccumulation of metals were analyzed in the EIS through Cormix modeling, specifically addressing fish as a result of mine water discharge. Native American consumption health risks will be addressed by the EPA's issuance of a ROD for their National Pollutant Discharge Elimination Systems Permit. No discharge to surface waters will be authorized until the process is completed.

The USDA Forest Service's approval of the Plan of Operations will not result in disproportionate adverse human health or environmental effects to minority or low-income communities. The social and economic impacts identified with the project are primarily positive and the company is working with the local communities to address potential economic stresses associated with the mine work force.

Tribal Consultation and Coordination (Executive Order 13175)

The USDA Forest Service has consulted with the Shoshone-Bannock and Nez Perce Tribes during the development of the EIS. The Shoshone-Bannock provided correspondence to the SCNF on the ICP in October 2007. Primary consultation between the SCNF and Tribal entities has included meetings, conference calls, phone calls and letters. The Tribes were consulted prior to and throughout the planning process for this project. Each Tribe also received a copy of the DEIS. The USDA Forest Service received comments from the Nez Perce Tribe during the public comment period.

Idaho Roadless Area Management Rule (36 CFR 294.23(b))

The Idaho Roadless Area Management Rule (36 CFR 294 Subpart C), which became effective October 16, 2008, does not affect locatable mineral activities or mineral activities conducted pursuant to the General Mining Law of 1872.

Section 1.4.1 above discusses new road construction with the ICP within the West Panther Creek Roadless Area. I have concluded these new roads in the Roadless Area are reasonably incident to mining operations conducted under the mining laws. As such, the prohibitions and requirements of the Idaho Roadless Area Management Rule (36 CFR 294.23(b)), 73 Fed. Reg. 61490 (October 16, 2008) do not apply to my decision.

5.0 ENVIRONMENTALLY PREFERRED ALTERNATIVE

The identification of an environmentally preferred alternative is required by NEPA (40 CFR 1508.2(b)). The environmentally preferred alternative is the alternative that has the least impact on the physical and biological environment and which best protects, preserves, and enhances historic, cultural, and natural resources. Economic, social, technical, and agency mission factors are not considered in the identification of this alternative.

Alternative I (No Action) was not perceived to be an environmentally preferable alternative because it would not result in the substantial environmental benefits achieved through the road reclamation and road improvements that would occur under the action alternatives. Alternative V is the most environmentally preferable of the action alternatives. This alternative met the purpose and need for the proposal, included reasonable mitigation to protect resources, required the smallest overall physical disturbance, minimized the footprint and infrastructure requirements for post closure long-term water treatment and would have resulted in water quality improvements in Blackbird Creek. However, the USDA Forest Service does not have the authority to require FCC or BMSG to agree to use of BMSG's private property, water treatment plant or other facilities for the ICP. NEPA requires agencies to objectively evaluate all reasonable alternatives, including alternatives not within the jurisdiction of the lead agency (40 CFR 1502.14(c)). Chapter 4 of the FEIS contains a more detailed evaluation of impacts associated with the various alternatives.

6.0 FINANCIAL ASSURANCE

The USDA Forest Service is authorized to require an operator to furnish a bond or other financial assurance for Plans of Operations to assure reclamation of surface disturbances to prevent or control damage to the environment, to control erosion, landslides, water runoff and toxic materials and to provide for rehabilitation of fish and wildlife habitat (36 CFR 228.13). The USDA Forest Service has developed guidance for calculating the amount of financial assurance required for mining projects (USDA Forest Service, 2004). In developing the financial assurance amount for the ICP, the USDA Forest Service has followed the 2004 guidance and included costs to remove structures, regrade and recontour the surface, replace soil and revegetate the reclaimed land. The financial assurance also includes necessary administrative and overhead costs to complete the reclamation if the company were unable or unwilling to do so and costs for long-term water treatment, if such treatment were to be required to meet water quality requirements.

The estimated closure and reclamation costs for operations under the approved Plan of Operations described in this ROD were determined using a present net value analysis and are based on the preliminary designs available, including those from the ICP Plan of Operations. Unit costs for specific construction items were derived from RS Means cost data reference (Means, 2006), other cost data sources, or from site specific vendor quotes. The preliminary bond estimate will be updated as needed at the time the proponent chooses to furnish the required surety. The bond amount will be reviewed annually after approved operations begin to ensure its adequacy.

Components included in calculating the financial assurance include:

- Interim Operations and Maintenance
- Hazardous materials removal and disposal
- Operational water treatment
- Demolition and disposal
- Site re-grading, capping and other earthwork
- Revegetation
- Groundwater capture
- Post-closure Operations and Maintenance
- Post-closure water treatment and
- Indirect and overhead costs.

Indirect costs are based on guidance in USDA Forest Service Manual (USDA Forest Service, 2004) and input from USDA Forest Service Region 4 staff. Engineering redesign costs are based on a percentage of the site works costs only. Mobilization and demobilization costs are based on a percentage of the demolition, site works and revegetation costs only. A contingency of 15 percent of direct costs is consistent with general engineering practice. A 30-year real interest rate of 2.8 percent was obtained from Office of Management and Budget Circular A-94, January 2008.

Projected possible water treatment costs under the approved Plan of Operations were calculated using a conventional precipitation and solids removal system that produces a dewatered cake as the primary waste. It was estimated that two full time operators will be required to run the plant. The projected water treatment costs are calculated on an annual basis and one year of water treatment is included in the interim shutdown category. A separate category for post-closure water treatment is included, and for the purposes of calculating the financial assurance, the sum of the discounted annual costs for a 100-year period was used. The long-term water treatment estimate includes costs for offsite disposal of post-closure water treatment wastes and a 20 percent overhead and contingency component.

The estimated financial assurance requirement for the ICP is estimated to be \$44 million dollars plus or minus 20 percent. The final bond calculation will be completed following issuance of this ROD, completion of the administrative process and prior to approval of the Plan of Operations.

7.0 IMPLEMENTATION DATE

Upon completion of the administrative process and submittal by the ICP proponent of a modified Plan of Operation reflecting this decision, posting of a bond and receipt of an NPDES permit, the Plan would be approved.

8.0 ADMINISTRATIVE REVIEW AND APPEAL OPPORTUNITIES

The decision to approve a Plan of Operations for the ICP, with changes and additions described herein and in alternative IV of the FEIS, and the rationale supporting that decision, are documented in this ROD. This decision may be appealed as described below.

8.1 215 APPEALS

This decision is subject to appeal pursuant to USDA Forest Service regulations at 36 CFR 215. Appeals must meet the content requirements of 36 CFR 215.14. Only individuals or organizations who submitted comments or otherwise expressed interest in the project during the comment period may appeal. Appeals must be postmarked or received by the Appeal Deciding Officer within 45 days of the publication of this notice in The Recorder Herald Newspaper of Salmon, ID. This date is the exclusive means for calculating the time to file an appeal. Timeframe information from other sources should not be relied on. The Appeal Deciding Officer is Harv Forsgren, Regional Forester. Appeals must be sent to: Appeal Deciding Officer, Intermountain Region USDA Forest Service, 324 25th Street, Ogden, Utah 84401; or by fax to 801-625-5277; or by email to: appeals-intermtn-regional-office@fs.fed.us. Emailed appeals must be submitted in rich text (rtf) or Word (doc) and must include the project name in the subject line. Appeals may also be hand delivered to the above address, during regular business hours of 8:00 a.m. to 4:30 p.m. Monday through Friday.

8.2 PROPONENT'S APPEAL PROCESS (36 CFR 251, SUBPART C)

This decision is subject to appeal by the proponent pursuant to 36 CFR 228.14 & 251.82. Appeals must meet the content requirements of 36 CFR 251.90. The appeal must be postmarked or received by the Appeal Reviewing Officer within 45 days of the date the operator is notified of the decision. A notice of appeal, including the reasons for appeal, must be filed with: Regional Forester, Intermountain Region USDA Forest Service, 324 25th Street, Ogden, Utah 84401; or by fax to 801-625-5277; or by email to: appeals-intermtn-regional-office@fs.fed.us. Emailed appeals must be submitted in rich text (rtf) or Word (doc) and must include the project name in the subject line. Appeals may also be hand delivered to the above address, during regular business hours of 8:00 a.m. to 4:30 p.m. Monday through Friday. A copy of the notice of appeal must be filed simultaneously with William Wood, SCNF Supervisor.

9.0 CONTACT PERSON

For additional information on the mining, operation, and closure plan, this ROD, or the EIS, please contact:

Kimberly D. Nelson, District Ranger
Salmon-Cobalt Ranger District
US Forest Service, SCNF
311 McPherson St.
Salmon, ID 83467

or Phone: 208-756-5247

10.0 SIGNATURE AND DATE



WILLIAM A. WOOD
Forest Supervisor, Salmon-Challis National Forest

1/16/09

Date