

Executive Summary

This Executive Summary is intended to provide a brief overview of the proposed project, alternatives, and conclusions from the impact analyses. For the supporting documentation and detailed analyses, please see the full environmental impact statement (EIS).

Project Overview

Intercontinental Potash Corporation (USA) (ICP) is proposing to develop a new mine in southern Lea County, New Mexico, to extract polyhalite ore for the production of the sulfate of potash (SOP) and sulfate of potash magnesia (SOPM). SOP production involves two separate operations. The first operation is to mine raw polyhalite approximately 1,500 feet underground in the Rustler formation. Once mined, the polyhalite would be transported to the surface by a conveyor belt system in the ramp, crushed, calcined, leached, and granulated to produce saleable products. The final product would be moved by truck to a loadout facility near Jal, New Mexico, where it would be loaded on trains and shipped. The location of the proposed project facilities is displayed in **Figure ES-1**.

As proposed by ICP, the project area, which encompasses the proposed 50-year mine area, the shaft and ramp at the mine opening, processing facilities, water pipeline and well field, and railroad loading area with access roads and rail siding, includes a total of 31,137 acres. The surface land ownership consists of approximately 22 percent public lands managed by the U.S. Department of the Interior Bureau of Land Management (BLM), 53 percent managed by the State of New Mexico, and 25 percent privately owned. Approximately 55 percent of the minerals within the proposed mine area is owned by the federal government.

Purpose and Need for Project

The BLM is responsible for the balanced management of the public lands and resources and their various values in a fashion that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; combinations of uses that take into account the long-term needs of future generations for renewable and nonrenewable resources (BLM 1997).

Under the National Environmental Policy Act (NEPA), there is a requirement to present the purpose and need for a proposed project. The "Regulations for Implementing NEPA" from the Council on Environmental Quality, 40 Code of Federal Regulations §1502.13, state the following about the description of the purpose and need in an EIS.

"The statement shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action."

The purpose and need statement is intended to explain the reason that the proposed project is needed by the lead agency (BLM in this case) and serves as the basis for developing a reasonable range of alternatives to be analyzed in detail.

Potash is an important industrial mineral in wide demand in the U.S. and internationally. The BLM has the responsibility for the orderly and economic development of leasable minerals, including potash, as specified under 30 United States Code (USC) § 21a, the Mineral Leasing Act of 1920, as amended, and the Federal Land Policy and Management Act of 1976 (Public Law 94-579, 43 USC 35). The BLM has the duty to allow and encourage exploration for and development of leasable minerals subject to reasonable restrictions, provide for economically viable development of the potash resources, and to allow the proponent to exercise its right to develop mineral resources.

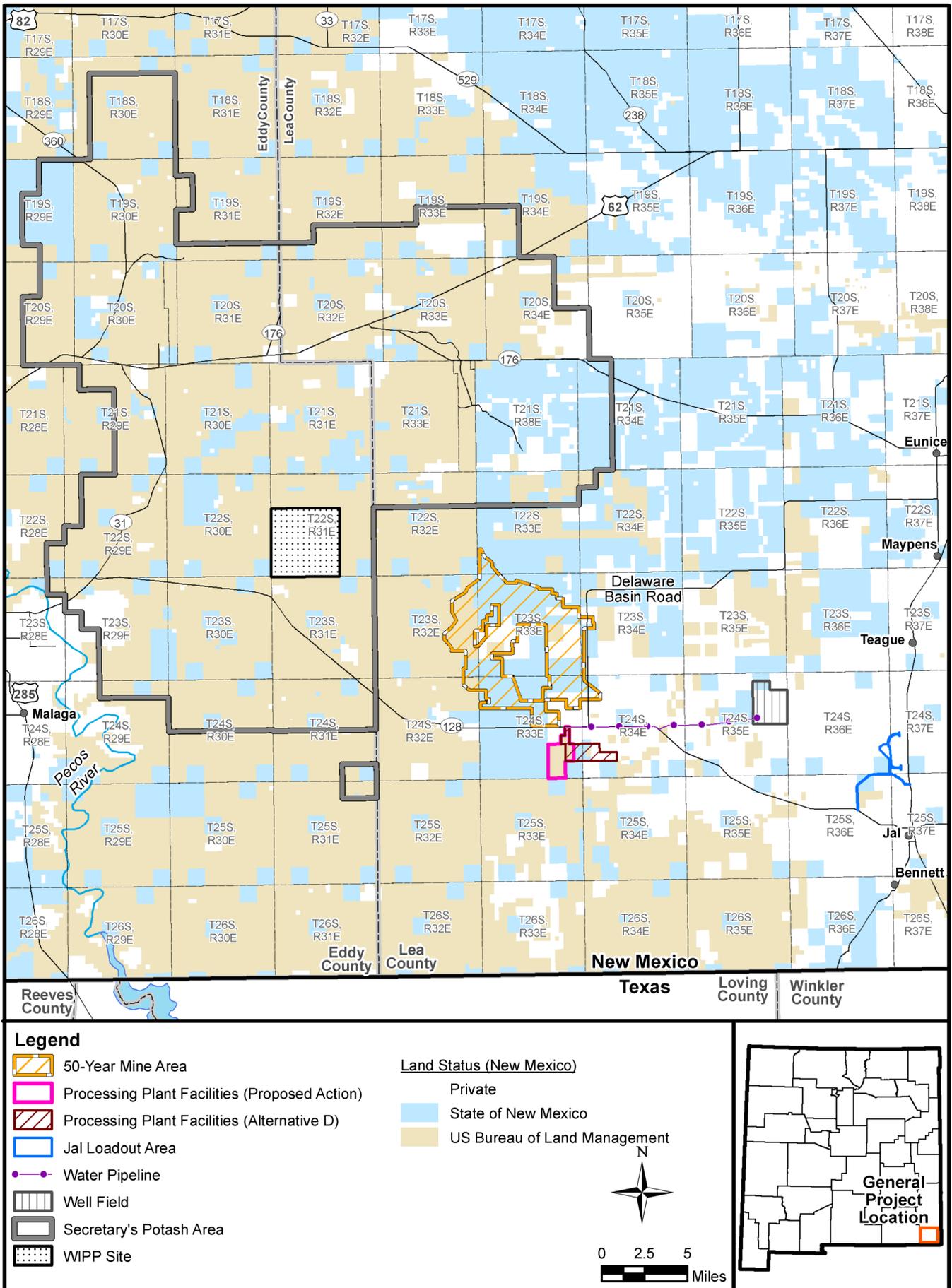


Figure ES-1 General Location and Surface Ownership of the Ochoa Mine Project Area

The purpose of the action is to provide access for technically viable development of the federal potash resources, as required by federal law and BLM policy. The BLM will evaluate and respond to ICP's proposal (Proposed Action) to construct, operate, maintain, and decommission a new mine to extract polyhalite ore, including approval of the mine plan of operations and associated rights-of-way (ROWs).

The proposed project would:

1. Construct a new underground mine, surface facilities associated with the mine and processing plant, water well and pipeline, and facilities for loading the finished product onto rail cars.
2. Utilize polyhalite to produce SOP and SOPM.

Decisions to be Made

This EIS provides the analysis upon which the BLM can base its decisions. The decisions to be made by the BLM are whether to approve ICP's Ochoa Mine Plan of Operations, requested ROWs, and preference right leases, and if so, under what terms and conditions.

Public Scoping

The BLM initiated the NEPA process by publishing the Notice of Intent to prepare an EIS in the Federal Register on January 3, 2012, and included a project description and BLM contact information. A project website (<http://www.nm.blm.gov/cfo/ochoaMine/>) was developed and was available for public access on January 3, 2012. As part of the public outreach effort, the BLM printed a project Bulletin that was distributed to approximately 300 interested parties including federal, state, and local agencies and governments on January 5, 2012, via the U.S. Postal Service and email. Three public scoping meetings were held on January 23 and 24, 2012, in Carlsbad, Jal, and Hobbs, to collect comments on the proposed project.

By the end of the 30-day public scoping period, BLM received a total of 21 comment submittals (letter, comment form, or emails) containing 125 individual comments. The comments were compiled and analyzed to identify issues and concerns.

A majority of the comments were related to concerns about future access to potential development of fluid minerals (oil and gas) and the potential effects to water resources and wells in the area due to drawdown caused by proposed water usage. Many comments were supportive of the proposed project because it would bring economic benefits to the area.

The number of comments by category is provided in **Table ES-1**. Some of the comments were assigned to more than one category, so they are counted more than once in the table total of 216 comments.

Table ES-1 Comments Received by Category

Category Name	Number of Comments
Air Quality	9
Cultural Resources	2
Cumulative Impacts	1
Environmental Justice	1
Geology	4
Health/Safety	10
Land Ownership/Adjustment	1

Table ES-1 Comments Received by Category

Category Name	Number of Comments
Leasing	5
Livestock Grazing/Range Management	4
Mitigation Measures	9
NEPA Process	13
Noise	1
Oil and Gas	32
Permits/Special Uses	2
Project Description	17
Project Support	14
Public Involvement	3
Realty/Land Use	13
Reclamation	2
Socioeconomics	20
Soils	2
Special Designations	1
Subsidence	9
Surface Disturbance	1
Threatened and Endangered Species	2
Travel Management	6
Vegetation/Botany	2
Visual/Scenic Resources	1
Water Resources	20
Wildlife	9
Total	216

Public Comments on Draft EIS

The Draft EIS was announced in a Notice of Availability (NOA) in the Federal Register on August 9, 2013. Nine hard copies and 32 compact discs of the Draft EIS were mailed to recipients in advance of the NOA, with the BLM distributing other hard copies and compact discs upon request. Public meetings were held on August 27 and 28, 2013, in Carlsbad, Jal, and Hobbs, New Mexico. Display advertisements and public service announcements were used to inform the public of the meetings, in addition to the Bulletin. A total of 63 members of the public attended one of the meetings.

During the 45-day public comment period from August 9 through September 23, 2013, the BLM received 29 comment letters on the Draft EIS from commenters ranging from private individuals living in the region; county, municipal, and state elected officials; economic development organizations; state and

federal agencies; mining companies; and oil and gas companies and service providers. After all 490 comments were categorized, the BLM prepared responses to each comment.

Tribal Consultation

Federal agencies are responsible for compliance with a host of laws, Executive Orders and Memoranda, treaties, departmental policies, and other mandates regarding their legal relationships with and responsibilities to Native Americans. The BLM Carlsbad Field Office contacted the following tribes on January 20, 2012, notifying them about the proposed Ochoa Mine Project, inviting their comments and participation as cooperating agencies. Four tribes or pueblos responded to the letter.

- Mescalero Apache Tribe
- Apache Tribe of Oklahoma
- Comanche Indian Tribe
- Pueblo of Isleta
- Kiowa Tribe of Oklahoma
- Ysleta del Sur Pueblo
- Hopi Tribal Council

During July and early August of 2012, the BLM staff met with the tribes and pueblos to discuss the proposed Ochoa Mine Project, as well as other Carlsbad Field Office projects. The meetings were designed to provide an opportunity for the BLM to collect information from the tribes regarding their concerns or issues associated with these projects.

On September 26, 2013, the BLM sent copies of a treatment plan for data recovery to the seven tribes or pueblos listed above. The treatment plan describes the proposed data recover of three archaeological sites that would be adversely affected by proposed project construction should the project be approved. The tribes and pueblos were asked to review and comment on the plan.

Cooperating Agencies

The BLM invited 33 federal and state agencies, counties, and municipalities to become cooperating agencies in letters sent to each organization on January 20, 2012. To date, seven responses have been received, of which five informally accepted the invitation to be a cooperating agency and two agencies declined. Four organizations signed formal memoranda of understanding to establish cooperating agency status with the BLM Carlsbad Field Office for the Ochoa Mine Project EIS: U.S. Department of Energy Carlsbad Field Office, New Mexico Environment Department, City of Eunice, and City of Jal.

Proposed Action and Alternatives

No Action

The No Action Alternative would deny the approval of the proposed project and would not grant the requested ROWs and preference right leases. Current land and resource uses would continue under current conditions in the project area.

Alternative A—Proposed Action

The Proposed Action would include approval of ICP's Ochoa Mine Plan of Operations (MPO), granting new ROWs, and approval of preference rights leases to allow the mining and processing of polyhalite ore to produce the fertilizer SOP and SOPM, components of agricultural fertilizer.

Following is a brief summary of ICP's proposed operations, projected to function for 50 years in Lea County, New Mexico. More detail on the components and activities associated with the Proposed Action is included in Section 2.4.2.

- Development of an underground mine to be accessed by a shaft and a ramp.
- Construction and operation of office and processing facilities including the ore processing plant, dry stack tailings pile, and evaporation ponds on BLM land.
- Full development of brackish water wells in the Capitan Reef Aquifer and a new pipeline to serve the processing plant and mine operations.
- Construction and operation of a railroad loadout facility near Jal, New Mexico, for shipment of the finished marketable potash product.

At the completion of the project, all project components and all disturbed areas would be reclaimed and infrastructure would be decommissioned.

Alternative B—Change Dry Stack Tailings Stockpile

Under Alternative B, there would be no change to the mining methods and operations, processing methods and buildings, and management of co-development described under the Proposed Action. The goal of this alternative is to reduce the volume or height to minimize the visual impacts of the tailings stockpile while allowing the BLM to approve the MPO, grant ROW requests, and issue preference rights leases for mining.

Alternative C—Establishment of Local Potash Order

Alternative C would not change the mining methods and operations and processing methods and buildings described under the Proposed Action. The goal of this alternative is to establish standards and guidelines for managing concurrent development of minerals while allowing the BLM to approve the MPO, grant ROW requests, and issue preference rights leases for mining. The guidelines would be implemented to make management decisions fairly and consistently regarding the development of both potash and fluid minerals.

Alternative D—Alternative Location for Tailings

An alternative location for the processing facilities was proposed during public scoping. There would be no change in the proposed mining methods and operations but the location of the evaporation ponds and tailings stockpile would be located to the east of the site described under the Proposed Action (Alternative A). The proposed location would require the use of state and private land as well as public land.

Preferred Alternative

The Preferred Alternative consists of a mixture of what the BLM considers the best features of Alternatives A, B, and C, as well as some new aspects incorporated in response to public comments and internal BLM concerns. The Preferred Alternative incorporates the same proposed mine area, mining methods, facilities in the shaft area, processing methods and water demands, well field and water pipeline, and loadout facilities as the Proposed Action. Compared to the Proposed Action, the Preferred Alternative includes a smaller tailings stockpile, additional monitoring and reclamation requirements, more formalized coordination with stakeholders, and a dispute resolution process.

Environmental Consequences

The resource-specific effects of the alternatives analyzed in detail (No Action, Proposed Action, Alternative B, Alternative C, Alternative D, and Preferred Alternative) were evaluated quantitatively and qualitatively, as appropriate based on available data and the nature of the resource analyzed. Detailed

descriptions of impacts are presented for each alternative in Chapter 4.0. A summary of the key points of the conclusions from the impact analyses is provided in **Table ES-2**. The summarized impacts assume the implementation of applicant-committed environmental protection measures and the BLM required environmental protection measures.

Cumulative impacts are the combination of the individual effects of multiple actions over time in the context of other development in the project area or the region. The individual effects may be minor when considered separately, but may be major or significant when considered in combination with all others in the region. For each resource, the Cumulative Effects Study Area was developed appropriate to the geographical extent of anticipated impacts.

The cumulative impact analysis focused primarily on reasonably foreseeable future actions that were known by the BLM at the time the analysis was performed. Their impacts on the region were considered in combination with the proposed Ochoa Mine Project to predict the potential cumulative effects of all actions combined on each of the resources analyzed in the EIS. While it is assumed that current activities, such as livestock grazing and dispersed recreation, would continue into the foreseeable future, the primary known future activity would be oil and gas development. Mining, oil and gas, and other energy development such as uranium enrichment and solar energy are key elements of the regional economy and social conditions. Other historically and economically important segments of the region's economic base are agriculture, recreation, tourism, and more recently in the Carlsbad area, retirement migration. Ongoing and proposed construction at the URENCO National Enrichment Facility near Eunice also has the potential to create cumulative social and economic effects.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Geology and Minerals						
Subsidence Hazards	No mine-related subsidence would occur. Natural subsidence due to dissolution of evaporite rocks would continue to develop topographic depressions slowly.	Mining-related subsidence would occur in areas overlying the 90 percent extraction rate of polyhalite ore. The maximum depth of subsidence at the surface would be 4 feet within 1,500 feet beyond the edge of the mine workings.	Same as Proposed Action, unless tailings are placed as backfill in the mine, providing fill in the mine void and less subsidence.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Minerals	No polyhalite would be recovered from the project region. Fluid mineral development would continue.	Polyhalite ore mining and oil and gas development would be developed jointly. Existing well casings in the 50-year mine area may require checking and additional treatment to ensure mine safety.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Paleontological Resources	No impacts to paleontological resources from mining operations would occur.	Potential impacts are small because proposed mine is within an area of low potential fossil yield.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Water						
Surface Water	No impacts to surface water would result from mining or processing operations.	Impacts to surface water quality and quantity would be avoided or reduced to less than significant levels by project design and operational controls, compliance with permit requirements, and implementation of environmental protection measures.	Same as Proposed Action.	Same as Proposed Action.	Similar to the Proposed Action. Placement of facilities on the playas and adjacent to defined ephemeral drainage networks would increase the potential for damage to project components and downstream land uses from severe runoff events.	Same as Proposed Action. Additional monitoring offers more potential for adaptive management if problems are encountered if the project is implemented.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Capitan Aquifer	Pumping of the Capitan Aquifer is likely to continue to supply water demands from the oil and gas industry. No project-related drawdown or effects to groundwater quality would occur.	Quantity: Pumping 4,000 gpm to supply water for processing would result in a maximum drawdown of the Capitan Aquifer of approximately 1,100 feet in the well field after 50 years of pumping. Recovery of the aquifer would begin when pumping ends. No effect on shallow groundwater quantity would result. Quality: An increase of salinity in the Capitan Aquifer may result. No effect on shallow groundwater quality would result.	Same as Proposed Action.			
Pecos River	Flows to the Pecos River would not be reduced as a result of the project.	Discharge to the Pecos River would be slightly reduced by 28 acre-feet per year (afy), or 0.06 percent of the average flow of 50,000 afy.	Same as Proposed Action.			

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Soils						
Long-term effects on soil productivity	None from the proposed project. Other surface-disturbing activities would continue.	1,663 acres of soil would be altered from project-related structures. All except the tailings stockpile (426 acres) would be available for other uses after project closure and reclamation.	Similar to Proposed Action. If the larger footprint for the tailings stockpile were implemented, more acreage (542 acres) would be unavailable for future uses. If the footprint for the tailings stockpile is smaller, there would be slightly less surface disturbance and more acreage available for future uses.	Same as Proposed Action.	Similar to the Proposed Action. There is the potential to impact a playa.	Similar to the Proposed Action, except the tailings stockpile is likely to be smaller if marketable products can be sold and removed from the site.
Air Quality						
Ambient air quality standards	None.	No exceedence of ambient air quality standards or Prevention of Significant Deterioration increment.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Ozone	No impacts.	Nitrogen oxide emissions for the project would be less than 1.3 percent of total Lea County emissions.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Sensitive areas	No impacts.	Not affected by emissions from project.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Climate Change						
Greenhouse gas (GHG) carbon dioxide equivalent emissions	None.	Negligible impacts to global climate change or state GHG emissions from construction and project operations.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Vegetation						
Dominant vegetation types disturbed (acres)	None.	Mesquite Upland Scrub: 2,270 acres: Mixed Desert Desert Scrub: 92 acres	Same as Proposed Action.	Same as Proposed Action.	Mesquite Upland Scrub: 1,831 acres: Creosote Desert Scrub: 332 acres	Same as Proposed Action.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Wildlife and Fish						
Terrestrial wildlife habitat	None.	Impacts from surface disturbance, habitat disruption, and habitat fragmentation would be relatively minor. Less mobile small game and nongame species likely to be the most affected by surface disturbance, especially during construction. Potential adverse impacts to migratory birds and bats from exposure to evaporation pond water would be minimized with the implementation of proposed design features and mitigation measures that include an active bird and bat deterrent program. No impacts to aquatic species.	Same as Proposed Action.	Same as Proposed Action.	Similar to the Proposed Action. Alternative D would affect one additional vegetation community, playa, that would not be affected under the other alternatives.	Same as Proposed Action.
Sensitive Species	None.	No adverse impacts to the 14 terrestrial wildlife sensitive species would occur.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Rangelands/ Livestock Grazing						
Animal unit months (AUMs) lost due to permanent facilities	None.	Approximately 218 AUMs and associated forage lost due to long-term project use.	Same as Proposed Action unless the larger tailings stockpile option were implemented. In that case, more acreage would be permanently unavailable for livestock grazing within the processing plant site at the end of the project. Should the tailings stockpile be reduced by selling some of the products, the footprint would be smaller and would affect fewer acres of forage.	Same as Proposed Action.	Same as Proposed Action.	Same as Alternative B with smaller tailings stockpile footprint.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Lands and Realty						
Effect on other land uses	None.	Changes in land use would primarily affect the processing plant site and the Jal loadout. Both would have major land use changes over the long term, although the processing plant site may be returned to livestock grazing at the end of the project, except for the dry stack tailings stockpile. During operations, traffic from the processing plant to Jal would result in at least a 10 percent increase from 2010 levels.	Same as Proposed Action.			
Recreation						
Effect on recreational uses	None.	Surface disturbance and land use changes would alter dispersed recreation activities that may occur where project facilities are proposed. In general, the effect on dispersed recreation would be minor.	Same as Proposed Action.			

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Visual Resources						
Changes to visual landscape	No change.	Strong contrast in form, line, and color from the finished dry stack tailings stockpile and processing buildings. Structures in Jal would be similar to surrounding development.	Slightly less impact than under the Proposed Action.	Same as Proposed Action.	There would be slightly fewer visual impacts to sensitive landowners from changes to the tailings stockpile location than under the Proposed Action, but increased visual impacts from NM 128.	Same as Alternative B.
Cultural Resources						
Effect on archaeological sites	None.	Potential direct effects to the 12 National Register of Historic Places-eligible sites from construction would be avoided or mitigated through data recovery. Further evaluation of site eligibility is needed at the Jal loadout. Potential loss of ineligible sites.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Hazardous Materials, Health and Safety						
Emergency plans	None.	Development of emergency response and spills plans, and health and safety training for employees would minimize potentially adverse impacts.	Same as Proposed Action.			
Socioeconomics, Environmental Justice						
Total Employment (# of employees)	None for project. Continuation of existing regional employment.	Short-term construction peak: 1,400 employees (months 7 – 18) Long-term operations: 496 including contract employees.	Same as Proposed Action.			
Indirect or Induced employment (# of employees)	None.	During construction peak: 728 employees During operations: 283 employees.	Same as Proposed Action.			
Population changes	Projected net growth of 24 percent in Lea County and 14 percent in Eddy County.	Peak construction short-term: Up to 2,432 Long-term operations: 1,293.	Same as Proposed Action.			
Housing demands	None for project; long-term increase projected for region.	Peak construction short-term: 1,179 units (53 percent temporary units) Long-term operations: 459 units.	Same as Proposed Action.			

Table ES-2 Summary of Environmental Impacts

Resources Affected	No Action	Proposed Action	Alternative B	Alternative C	Alternative D	Preferred Alternative
Federal and state mineral royalties, average annual	None from project. Current oil and gas royalties would continue.	Approximately \$13.8 million (51 percent federal).	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
New Mexico resources excise tax, average annual	None.	\$3.9 million at full production.	Same as Proposed Action. May be higher if some of the “waste” products were sold rather than stockpiled.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Local ad valorem/property taxes, average annual	None.	\$6 million.	Same as Proposed Action. May be higher if some of the “waste” products were sold rather than stockpiled.	Same as Proposed Action.	Same as Proposed Action.	Same as Proposed Action.
Environmental justice	No disproportionate adverse effects on minority or low-income populations.	Same as No Action.	Same as No Action.	Same as No Action.	Same as No Action.	Same as Proposed Action.

Acronyms and Abbreviations

°F	degrees Fahrenheit
µg/m ³	microgram per cubic meter
AADT	annual average daily traffic
AAQS	Ambient Air Quality Standard
ACHP	Advisory Council on Historic Preservation
ACT	Active
afy	acre-feet per year
AGFD	Arizona Game and Fish Department
amsl	above mean sea level
AO	Authorized Officer
APD	application for permit to drill (oil and gas)
APE	area of potential effect
APLIC	Avian Power Line Interaction Committee
AQCR	Air Quality Control Region
AQRV	air quality related value
AUM	animal unit month
BISON-M	Biota Information System of New Mexico
BLM	Bureau of Land Management
BMP	Best Management Practice
CAA	Clean Air Act
CAGW	Carlsbad Groundwater
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CWA	Clean Water Act
EIS	Environmental Impact Statement
EMT	emergency medical technician
EO	Executive Order
ESA	Endangered Species Act

FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FLAG	Federal Land Manager's Air Quality Related Values Workgroup
FLETC	Federal Law Enforcement Training Center
FLM	Federal Land Manager
FLPMA	Federal Land Policy and Management Act
FMR	federal mineral royalties
FR	Federal Register
GHG	greenhouse gas
GIS	geographic information system
gpm	gallon per minute
GRT	gross receipts tax
H ₂ S	hydrogen sulfide
H ₂ SO ₄	sulfuric acid
HAP	hazardous air pollutant
HUC	Hydrologic Unit Code
ICP	Intercontinental Potash Corporation (USA)
IMPLAN	Impact Analysis for PLANning
IMPROVE	Interagency Monitoring of Protected Visual Environments
IPCC	Intergovernmental Panel on Climate Change
km	kilometer
kV	kilovolt
LRMC	Lea Regional Medical Center
MACT	Maximum Achievable Control Technology
MBTA	Migratory Bird Treaty Act
mg/L	milligram per liter
mg/m ³	milligrams per cubic meter
MLA	Mineral Leasing Act of 1920
MLRA	Major Land Resource Area
Mm ⁻¹	inverse megameter
MMPA	Mining and Mineral Policy Act of 1970
MOU	Memorandum of Understanding
MPO	Mine Plan of Operations
MSHA	Mine Safety and Health Administration
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards

NAGPRA	Native American Graves Protection and Repatriation Act
NEF	Nuclear Enrichment Facility
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHD	National Hydrography Dataset
NHPA	National Historic Preservation Act
NLCS	National Landscape Conservation System
NM 128	New Mexico Highway 128
NM 18	New Mexico Highway 18
NMAAQS	New Mexico Ambient Air Quality Standards
NMAC	New Mexico Administrative Code
NMACP	New Mexico Avian Conservation Partners
NMDA	New Mexico Department of Agriculture
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NMED-AQB	New Mexico Environment Department-Air Quality Bureau
NMEMNRD	New Mexico Energy, Minerals, and Natural Resources Department
NMOSE	New Mexico Office of the State Engineer
NMSA	New Mexico Statutes Annotated
NMWQCC	New Mexico Water Quality Control Commission
NO ₂	nitrogen dioxide
NOA	Notice of Availability
NOI	Notice of Intent
NO _x	nitrogen oxides
NP	National Park
NPA	National Programmatic Agreement
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NWI	National Wetland Inventory
NWMA	Noxious Weeds Management Act
O ₃	ozone
OCD	Oil Conservation Division, NMEMNRD
OHV	off-highway vehicle
P&A	plugged and abandoned

P.L.	Public Law
Pb	lead
PFYC	Potential Fossil Yield Classification
PILT	payment in lieu of tax
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter of 10 microns or less
PM _{2.5}	particulate matter with an aerodynamic diameter of 2.5 microns or less
POD	Plan of Development
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTE	potential to emit
R	Range
RCRA	Resource Conservation and Recovery Act
RFD	Reasonable Foreseeable Development
RFFA	reasonably foreseeable future action
RMP	Resource Management Plan
RMPA	Resource Management Plan Amendment
ROD	Record of Decision
ROW	right-of-way
RV	recreational vehicle
SARA	Superfund Amendments and Reauthorization Act
SHPO	State Historic Preservation Officer
SO ₂	sulfur dioxide
SOP	sulfate of potash
SOPM	sulfate of potash magnesia
SPA	Secretary's Potash Area
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SSURGO	Soil Survey Geographic Database
SWD	salt water disposal
SWPPP	Storm Water Pollution Prevention Plan
T	Township
TA	temporarily abandoned
TCP	Traditional Cultural Property
TD	total depth (feet)
TDS	total dissolved solid
TOC	top of cement

TOSCA	Toxic Substances Control Act
tpy	ton per year
TSP	total suspended particulate
UNM-BBER	University of New Mexico, Bureau of Business and Economic Research
USC	United States Code
USDA	U.S. Department of Agriculture
USDI	U.S. Department of the Interior
USDOE	U.S. Department of Energy
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
VRI	visual resources inventory
VRM	Visual Resource Management
WBD	Watershed Boundary Dataset
WIPP	Waste Isolation Pilot Plant
WRCC	Western Regional Climate Center

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Appendix A

Lease Stipulations and Conditions of Approval for Secretary's Potash Area

Appendix B

Comments on Draft EIS and Responses