UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

June 1, 2011

David Alderman
Bureau of Land Management
Carlsbad Field Office
620 East Greene Street
Carlsbad, NM 88220-6292

Dear Mr. Alderman:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Impact Statement (DEIS) prepared by the Bureau of Land Management, Carlsbad Field Office, Carlsbad, New Mexico. Intrepid Potash, Inc. (Intrepid) is proposing to extract the potash remaining in inactive underground mine workings by constructing and operating an in-situ solution mine project in Eddy County, New Mexico.

EPA rates the DEIS as "**EC-2**" i.e., EPA has "Environmental Concerns and Requests Additional Information in the Final EIS (FEIS) ". The EPA's Rating System Criteria can be found here: http://www.epa.gov/oecaerth/nepa/comments/ratings.html. Detailed comments are enclosed with this letter which more clearly identify our concerns and the informational needs requested for incorporation into the Final EIS (FEIS).

EPA appreciates the opportunity to review the DEIS. Please send our office one copy of the FEIS and an internet link when it is sent to the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Federal Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20004. Our classification will be published on the EPA website, www.epa.gov, according to our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action. If you have any questions or concerns, please contact John MacFarlane of my staff at macfarlane.john@epa.gov or 214-665-7491 for assistance.

Sincerely,

Rhonda Smith
Chief, Office of Planning
and Coordination

Enclosure

DETAILED COMMENTS ON THE
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE
HB IN-SITU MINE PROJECT
EDDY COUNTY, NEW MEXICO

BACKGROUND: Intrepid Potash, Inc. (Intrepid) is proposing to extract the potash remaining in inactive underground mine workings by constructing and operating an in-situ solution mine project, located approximately 20 miles northeast of Carlsbad in Eddy County, New Mexico. The Draft Environmental Impact Statement (DEIS) analyzes the environmental effects of the Proposed Action, two action alternatives, and the No Action Alternative.

COMMENTS: The following are offered for your agency's consideration in completing the FEIS:

Air Quality

Section 4.5.8-Mitigation Measures (p. 4-61) indicates that recommended additional mitigation measures for project alternatives include development of a dust control plan prior to the start of construction activities. EPA encourages development of a dust control plan to govern construction activities, and any such plan should be in agreement with any applicable natural events action plans or erosion control regulations for the area.

EPA encourages the use of clean, lower-emissions equipment and technologies to reduce pollution. Further, EPA's final Highway Diesel and Nonroad Diesel Rules mandate the use of lower-sulfur fuels in nonroad and marine diesel engines beginning in 2007. Please include a discussion detailing measures the project will incorporate to reduce equipment emissions and the anticipated reductions in emissions.

Any demolition, construction, rehabilitation, repair, dredging or filling activities have the potential to emit air pollutants and we recommend best management practices be implemented to minimize the impact of any air pollutants. Furthermore, construction and waste disposal activities should be conducted in accordance with applicable local, state and federal statutes and regulations.

Wildlife and Fish

The Migratory Bird Treaty Act of 1918 (MBTA), as amended, provides that it is "unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill..." Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof. As stated in the DEIS, the evaporation ponds could pose a threat to avian migratory species. Pursuant to the MBTA, EPA encourages BLM to coordinate mitigation measures to protect migratory birds in relation to the proposed evaporation ponds with the U.S. Fish and Wildlife Service and the New Mexico Department of Game and Fish. Recommended mitigation measures are included in Section 4.8.8, p. 4-79.

Subsidence/Groundwater

The DEIS does not contain the data needed to evaluate the potential for collapse to be caused by the proposed project. Underground mining uses a process called room and pillar, where some of the material is left in place to support the roof. Removal of the mineral varies according to many factors, but typical removal rates are 75% stone, 60% coal, and 50% potash. If too much of the pillars are removed, the roof collapses. Depending on the depth, this could propagate to the surface. This is similar to the salt mining wells which have caused cave-ins in New Mexico and west Texas.

It is difficult to determine the potential of water contamination based on information provided in the DEIS. The chance that backfill injection will contribute to groundwater contamination is highly dependent on site conditions, including mine mineralogy, site hydrogeology, backfill characteristics, and injection practices. Please provide additional information on the potential for groundwater contamination and mitigation efforts if contamination were to happen. Intrepid's Mine Operations and Closure Plan should be included as an appendix to the FEIS to determine its effectiveness regarding pipeline monitoring, spill response, and remedial actions.

Socioeconomic, Environmental Justice, and Tribal

The poverty levels of Census Tract (CT) 9 (17.2%), as well as that of Block Group (BG) 1 (13.9%) of CT 9 are both lower than the State's percentage (18.4%). The percentages of minorities in CT 9 (36.9%) and in BG 1(37%) of CT 9 were also less than the State's (55.3%) minority percentage. Because no persons actually live within the project area and the closest residence is located approximately two miles from the project area boundary, there would be no significant adverse or disproportionate impacts to low-income or minority populations.

The Native American population of Eddy County is 0.3%, in contrast with the State's 8.9%. No permanent residences or archeological features were constructed within the project area by Tribal people for hundreds of years. The Tribes with the most potential interest in this project have been notified through the standard consultation process. Consultation was conducted with the following Tribes:

- Apache Tribe of Oklahoma;
- Comanche Indian Tribe;
- Hopi Tribe;
- Kiowa Tribe of Oklahoma;
- Mescalero Apache Tribe;
- Pueblo of Isleta; and
- Ysleta del Sur Pueblo.

Laws concerning cultural properties include certain provisions of the National Historic Preservation Act and the New Mexico Cultural Properties Act. Both of these laws are discussed in the DEIS. No Traditional Cultural Places or other places of cultural or religious significance in the project area have been identified by the Tribes. The Pueblo of Isleta and the Ysleta del Sur responded that the project will not impact either Pueblo's religious/cultural or traditional sites, but that they want to be notified should any discoveries be made. It appears, therefore, that no significant Tribal issues remain regarding this project.

The importance of preventing contamination of the surface water and groundwater cannot be emphasized enough. Low-income, minority farmers downstream of the Pecos River depend on irrigation

from the river to grow their crops, and if the Pecos River or the underlying aquifers become contaminated with petroleum or brine water, these farmers would be adversely impacted.

Cumulative Impacts

EPA is concerned about groundwater use by all sources in the general project area. Intrepid's proposed groundwater use will have a significant impact on the area's aquifers, especially the Rustler Formation and possibly the Caprock Formation. The proposed project is anticipated to induce a 7% to 64% reduction in spring/seep flux and at least a 200 foot (ft) drawdown of the Rustler Formation, and depending on the chosen alternative, a 52 ft drawdown of the Caprock Formation. Due to current drought conditions and past, present, and future uses, the area's groundwater resources are highly stressed. Aquifer drawdown can affect the biodiversity of the area by affecting surface and sub-surface hydrology, vegetation, wildlife, including rare and/or sensitive species, and soil conditions.

EPA recommends the FEIS include geographic and temporal boundaries for analyzing the cumulative impacts on all resources of concern. The analysis should include soil, vegetation, and surface and ground water, including domestic, agricultural, industrial, and commercial use. Groundwater withdrawal is projected to continue into the future. This will affect surface water quality and quantity and potentially contribute to the degradation of vegetation, soil, and wildlife. If the analysis determines that significant cumulative impacts would occur, a mitigation plan for these impacts should be included in the FEIS. A mitigation plan for impacts to groundwater resources could contain water conservation improvements for the entire potash mining process, including mills, forming partnerships with area residents, farmers, and public water systems, and partnering with city and county governments and the State's water resources administrator, the New Mexico Office of the State Engineer to promulgate new or improved water conservation guidance for mining operations.