

Quick Facts on HB In-Situ Solution Mine Project EIS

❖ Proposed Project

- Intrepid Potash, Inc. (Intrepid) is proposing to extract the potash remaining in inactive underground mine workings using a solution mining process.
- The solution mining process includes: water pumping, injection of brine into underground mine workings, extraction of mineral-rich brine, evaporation of water in pond system, and final processing to create a salable product.
- The project includes construction of facilities such as pipelines, evaporation ponds, extraction and injection wells, monitoring wells, and processing plant.

❖ BLM Decisions to be Made

- Whether to approve Intrepid's proposed project or any combination of the three EIS action alternatives. If approved, BLM must state the terms and conditions for implementation.
- How to modify Intrepid's potash leases to be in compliance with the allowable acreage per 43 CFR §3503.37, as amended

❖ Guide to EIS Organization and Content

- Chapter 1—Project background, purpose and need statement, summary of public involvement, relevant laws, policies, and permits
- Chapter 2—Description of alternatives analyzed in detail and those considered but eliminated, summary of applicable environmental protection measures, summary of key impacts
- Chapter 3—Description of the affected environment for natural, cultural, and economic resources
- Chapter 4—Analysis of direct and indirect environmental impacts for natural, cultural, and economic resources
- Chapter 5—Analysis of cumulative impacts of the proposed project, past and present actions in the vicinity, and reasonably foreseeable future projects
- Chapter 6—summary of agency and public coordination and tribal consultation; list of EIS preparers and reviewers
- Appendices—Guidance for management of the Secretary's Potash Area, current BLM lease stipulations and environmental protection measures, list of existing rights-of-way
- Other sections—Executive summary, reference list, glossary, index

❖ EIS Alternatives Analyzed in Detail

- No Action—Proposed project not approved, operations continue as currently implemented
- Alternative A, Proposed Action—As originally proposed by Intrepid with the addition of 3 Rustler wells in the northern portion of project area to be used for injectate into the inactive mine workings.
- Alternative B, Supplemental Water—Rustler water for injectate to be supplemented with water from the Caprock well fields; new or improved existing Caprock pipelines
- Alternative C, Buried Pipelines—Same as Proposed Action except all surface pipelines in project area would be buried

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❖ Key Potential Impacts Common to the Action Alternatives (A, B, and C)

- Subsidence—maximum of 0.6 foot depth
- Solid Minerals—increased recovery of potash reserves
- Oil and Gas—no change to the management and development under all alternatives
- Visual Resources—slight to moderate changes in viewshed, primarily due to evaporation pond construction under all alternatives
- Socioeconomics
 - 36 employees for operations under all alternatives
 - Population increase of 24 for operations phase under all alternatives
 - Additional annual federal mineral royalties—between \$2.3 million and \$4.7 million under all alternatives

❖ Key Potential Impacts that Differ by Action Alternative

- Caves—under alternatives A and C, up to 43 known caves may be affected by groundwater drawdown if they currently have standing water. Up to 38 caves under Alternative B.
- Groundwater
 - Maximum Rustler area drawdown: 200 feet, greatest extent is between 1,850 and 6,500 acres under Alternatives A and C; 200 feet, greatest extent is between 1,450 and 4,750 acres under Alternative B
 - Maximum Caprock area drawdown: 8 feet under Alternatives A and C, 52 feet under Alternative B
 - Maximum reduction in spring flow in project area—64% under Alternatives A and C, 31% under alternative B
 - Maximum reduction in flows out of Nash Draw—35% under Alternatives A and C, 25% under Alternative B
- Wildlife
 - Impacts to wildlife and special status species are expected to be minimal.
 - Changes to habitat from changes to plant communities due to drawdown are likely the biggest impacts on habitat from the project, greatest under Alternative A where Rustler drawdown would be the most extensive.
 - Under Alternative B, surface disturbance from construction or maintenance of the Caprock pipelines has the potential to affect sand dune lizard and lesser prairie-chicken habitat and recorded populations. Mitigation measures would minimize the impacts.
- Socioeconomics
 - Increase in employment: 259 employees for construction under Alternatives A and C, 272 for construction under Alternative B
 - Potential population increases: 210 for construction phase under Alternative A, 221 for construction under Alternative B, slightly higher number of employees for construction under Alternative C

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- Additional local annual property tax—between \$0.53 million and \$1.05 million under Alternatives A and C; slightly higher under Alternative B due to higher capital investment