

Kirkland High Quality Pozzolan Mine, Draft Mining and Reclamation Plan of Operations

Fact Sheet, Project Timeline, and Frequently Asked Questions

I. APPLICATION PROCESS – COMPLETED – SPRING 2017

- Determination on April 20, 2017 by the Bureau of Land Management (BLM) that the high quality pozzolan is an “uncommon variety.”
>> This “Memorandum Report” is available on the project website. This determination was not subject to appeal.
- BLM determined the project is regulated under the General Mining Act of 1872 (“3809” regulations).
- In accordance with Section 302 (b) of the Federal Land Policy and Management Act (FLPMA) of 1976, the BLM would ensure that approval of the project would not cause any unnecessary or undue degradation of the public lands.
- BLM accepted the Draft Mining and Reclamation Plan of Operations (Plan) on June 23, 2017.
>>This Plan (June 22, 2017 version) and letter (dated June 23, 2017) from the BLM to the Kirkland Mining Company are available on the project website.
- BLM accepted a Class III cultural resources inventory for the 160-acre proposed mine site.
>> This is a confidential report and is not subject to Freedom of Information Act request(s).
- BLM accepted a Biological Evaluation for the 160-acre proposed mine site.
>> This report is available on the project website.

II. PUBLIC SCOPING – IN-PROGRESS – SUMMER/FALL 2017

- On June 26, 2017 the BLM published a news release announcing the public scoping period. The BLM provided letter notification to approximately 143 residents within a 2-mile radius of the proposed mine site (Kirkland and Skull Valley). The notification included a link to the project website with additional information available.
- A public Open House was held on July 11, 2017 at the Skull Valley Community Center. Approximately 140 people were in attendance.
- On July 24, 2017 the BLM published a second press release announcing the extension of the public scoping period. Articles on the extension were published in the *Daily Courier* on July 19, 2017 and August 4, 2017; the *Wickenburg Sun* on July 19, 2017 and July 27, 2017; The *Yellow Sheet* on August 2, 2017; and the *Sedona Eye* on July 22, 2017. The BLM provided email or postcard notification to approximately 1,659 residents in the communities of Skull Valley, Kirkland, Yarnell, Congress, Peoples Valley and Prescott. The notifications included a link to the project website with additional information available, including Frequently Asked Questions.
- As of August 17, 2017, approximately 490 emails or comment letters have been received (approximately 754 pages). An email or comment letter may have more than one issue statement.
- There are also petitions that have been submitted to the BLM which primarily contain content that is outside the scope of this project (approximately 70 pages). Comments that are outside the scope are those statements that the BLM cannot use to develop what the issue is or how to mitigate it- statements such as “Save the Earth.”
- **Ninety percent** of the highly repetitive comments fall into the following four **issue categories**:
 - a) Potential impacts to air quality, at the mine site and along the unidentified transportation route from particulates including silica and vehicle emissions;
 - b) Potential impacts to groundwater from use of a well on private land in order to support dust suppression activities at the mine site;

- c) Potential impacts to communities along an unidentified transportation network from increased truck traffic and its potential impacts on county and state roads.
- d) Potential impacts to socioeconomics such as changes in local tax revenues, changes in employment from the mine, and general quality of life.
- The public scoping period started on June 26, 2017 and was extended until August 25, 2017.
- On August 23, 2017 the BLM announced a final extension of the public scoping period until September 11, 2017.
- The BLM would initiate consultation under the National Historic Preservation Act for the project. The consultation would include notifications to the following tribes which have ancestral lands in the area: Hualapai, Salt-River Pima Maricopa Indian Community, Yavapai-Prescott, and Pueblo Zuni.
- The BLM would initiate consultation with the Arizona State Historic Preservation Office regarding the National Register of Historic Places recommended eligible pre-historic site located within the footprint of the mine. The process may result in the development of a Historic Properties Treatment Plan which would authorize the data recovery of the site.

III. PUBLISH PUBLIC COMMENTS – FALL 2017

- All public comments received will be made available on the project website.
>>Personal identifying information such as personal names, address, email addresses, phone numbers etc. would first be redacted. Identifying information from organizations or other governmental entities would not be redacted.

IV. ADDITIONAL BASELINE STUDIES - FALL/WINTER 2017

In addition to the completed biological and cultural resources studies for the proposed mine site, the following baseline studies would be completed during the environmental analysis process:

- a) Preliminary jurisdictional determination with the U.S. Army Corps of Engineers whether streams in the proposed mine area are Waters of the US;
- b) Surface and subsurface testing for erionite;
- c) A Spill Prevention, Control and Countermeasure Plan;
- d) A Water Management Plan;
- e) A Overburden Management Plan
- f) A Hazardous and Solid Waste Management Plan;
- g) A Spill Contingency Plan;
- h) A Transportation Plan; and/or
- i) A Fire Prevention Plan.

To the extent allowed by law, these studies would made available when the BLM releases the “draft” environmental assessment (item V below).

V. PREPARE “DRAFT” ENVIRONMENTAL ASSESSMENT –WINTER 2017/2018

- Analyze a No Action Alternative and Proposed Action, at a minimum.
- Analyze other alternatives that meet the project’s purpose and need.
>>The *preliminary* purpose for the action is to respond to Kirkland Mining Company’s Draft Plan and provide opportunity for Kirkland Mining Company to conduct mining operations and development of associated infrastructure within Kirkland Mining Company’s unpatented mining claims on BLM-administered lands, pursuant to federal mining laws.
>>The *preliminary* need for the action is established by the BLM’s responsibility under the FLPMA, and Surface Management Regulations (43 CFR [Code of Federal Regulations] 3809), to respond to the Draft Plan and take action necessary to meet the performance standards in 43 CFR 3809 and prevent unnecessary or undue degradation of the subject BLM-administered lands. In addition, the BLM must determine whether any occupancy of BLM-administered lands proposed in the Draft Plan is in conformance with the regulations found at 43 CFR 3715.
>> An alternative meets the project purpose and need if it is ‘technically and economically’ feasible.

- An alternative has been suggested by some commenters- the use of rail for transportation of the mined material to secondary processing facilities (which have not been identified). The determination whether rail transportation is an economically feasible alternative has not been made.
- Analyze all potentially affected resources for direct, indirect and cumulative effects. Potentially affected resources include but are not limited to: air quality, water (surface/ground), wildlife, travel and transportation, noise and socioeconomics.
- The level of analysis to be in proportion to the potential effect and *after taking into account* any project design features, best management practices and mitigation.

VI. PUBLIC COMMENT ON “DRAFT” ENVIRONMENTAL ASSESSMENT – SPRING 2018

- Minimum 30-day public comment period and meeting(s) which may be a hearing, open house or other format.
- The “draft” environmental assessment would incorporate issue-based comments from scoping that meet the project purpose and need.
- The public will be asked for *substantive comments* on the analysis and any supporting reports.

VII. PREPARE “FINAL” ENVIRONMENTAL ASSESSMENT – SUMMER/FALL 2018

- Incorporates substantive comments from review of the “draft” environmental assessment.
- Provides summarized responses to substantive comments on the “draft” environmental assessment.

VIII. DECISIONS – WINTER 2018/2019

- If the BLM determines that potential effects are less than significant (43 CFR 1508.27) *after the incorporation of* project design features, best management practices and mitigation, the BLM would then issue a Finding of No Significant Impact and approve a Decision Record.
- The Mining and Reclamation Plan would then be approved, at which time Kirkland Mine Company could initiate mining activities. All approvals are subject to a 30-day appeal under 43 CFR 4.21

IX. FINAL MINING AND RECLAMATION PLAN AND FINANCIAL ASSURANCE FOR RECLAMATION – WINTER 2018/2019

- The Final Plan would then be finalized to incorporate any changes in the project and project mitigation measures that come out of the environmental assessment.
- Kirkland Mining Company will provide financial assurance to ensure reclamation of the mined site to a post-mine land use (required by the BLM regulations at 43 CFR Subpart 3809.401 (d)).

****All timeframes are tentative and are subject to change.****

***** FREQUENTLY ASKED QUESTIONS *****

1. When and How Many Opportunities are There for Public Input?

At least two. Public scoping, although not required by regulation, is the *first* of two formal opportunities for public participation and input. During public scoping, the focus is on the issues associated with a proposal, if there are means to minimize the effects, and are there alternatives that the BLM should consider. The second opportunity is when the BLM makes a "draft" environmental assessment available for review and comment. This document assesses the potential direct, indirect, and cumulative impacts from a project. Typically the "draft" environmental assessment assesses a No Action Alternative and Proposed Action. The document may also analyze any alternatives brought forward as a result of the scoping process. Typically both public participation and input periods allow comments for a minimum 30-days each. The *second* comment period would be for the "draft" environmental assessment could be in the spring 2018.

2. What is a Reasonable Alternative?

A "reasonable alternative" is one that is technically and economically feasible that meets the project purpose and need (see below). Said another way - can it be built/engineered? is it cost-effective or profitable? Who decides if an alternative is cost-effective or profitable? The applicant makes that determination, the BLM is not required to review the applicants financial records in order to make this determination.

3. What Types of Permits will be Required by Yavapai County?

The mine operation would likely fall under the Mining/Metallurgical Use Exemption. If approved by the Development Services Department, the mine would be exempt from Yavapai County Planning and Zoning Ordinances.

4. Will the Mining Operation be Regulated by a Noise Ordinance?

Trucks and other equipment will be muffled in accordance with applicable Arizona State law. Regulation of noise by Yavapai County would be covered by the Mining/Metallurgical Use Exemption.

5. Will the Addition of Trucks on Iron Springs Road Require any Permit from the Yavapai County Public Works Department?

No rights-of-way or permit would be needed from the Public Works Department for the addition of truck traffic on Iron Springs Road.

Kirkland would be required by the Yavapai County Public Works Department to assess the effects of the increased traffic on County roads. The traffic study would include information from historic and current traffic counts and assess the physical effects on the roads and road shoulders from weighted trucks. This traffic study will help determine signage requirements and any modifications that may be needed to the road shoulder at the mine site entry point to ensure integrity of the Iron Springs Road surface.

6. What are the Resources or Issues that the BLM will Analyze in the Upcoming Environmental Assessment?

Based on professional judgement of the BLM's interdisciplinary team, input from the environmental consultant, and review of two reports completed to date for the mine area (cultural resources and biological resources), the initial list of resources that would be analyzed include the following:

1. Socioeconomics
2. Air Quality
3. Cultural Resources
4. Migratory Birds
5. BLM Sensitive Species (Animals)
6. General Wildlife
7. Minerals/Mining
8. Soils
9. Vegetation

10. Visual Resources
11. Travel and Transportation Management
12. Water (Surface/Ground)

As additional studies are completed, additional resources may be determined to warrant analysis in the document.

The following resources *are not present* in the mine area:

1. Area of Critical Environmental Concern
2. Wilderness
3. Wilderness Study Area
4. Prime or Unique Farmlands
5. Lands with Wilderness Characteristics

7. Why is the BLM not Preparing an Environmental Impact Statement (EIS)?

Based on professional judgement of the BLM's interdisciplinary team, multiple site visits, and review of two reports completed for the project area (cultural resources and biological resources), the BLM has preliminary found that an environmental assessment is the minimum-level necessary to assess the potential impacts from the proposed mine. The term "significant" impact is based on the context and intensity of potential impacts (see 40 CFR 1508.27). By regulation, an EIS is required for mine projects of 640 acres and larger (this project involves 76 acres of public land) (see the BLM National Environmental Policy Handbook H-1790, Section 7.3).

Under the National Environmental Policy Act, the BLM will assess the following types of impacts by reviewing the proposed mines potential impacts:

- a) Short-term and/or long-term;
- b) Direct, indirect, and cumulative impacts; and
- c) Beneficial or adverse.

8. Will the BLM Make the Public Comments Available?

Yes, the BLM will make all public comments on this website. The BLM will remove all personal identifying information prior to release to the public on this project website. Personal identifying information that would be removed includes: names, addresses, phone numbers, and email addresses. The BLM anticipates the release of the public comments during the fall of 2017.

9. What is the Project's Preliminary Purpose and Need?

The BLM's *preliminary* purpose for action is to respond to Kirkland Mining Company's Draft Mining and Reclamation Plan of Operations and provide opportunity to Kirkland Mining Company's to conduct mining operations and development of associated infrastructure within Kirkland Mining Company's unpatented mining claims on BLM administered lands, pursuant to federal mining laws.

The BLM's *preliminary* need for the action is established by the BLM's responsibility under the Federal Land Policy and Management Act (FLPMA), and BLM Surface Management Regulations at 43 CFR 3809, to respond to the Draft Mining and Reclamation Plan of Operations and take action necessary to meet the performance standards in 43 CFR 3809 and prevent unnecessary or undue degradation of the subject BLM administered lands. In addition, the BLM must determine whether any occupancy of BLM administered land proposed in the Draft Mining and Reclamation Plan of Operations is in conformance with the regulations at 43 CFR 3715.

10. What Does Unnecessary or Undue Degredation Mean?

43 CFR 3809.5 defines unnecessary or undue degradation as "conditions, activities, or practices that:

- (1) Fail to comply with one or more of the following: the performance standards in § 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources;

(2) Are not "reasonably incident" to prospecting, mining, or processing operations as defined in § 3715.0-5 of this chapter; or

(3) Fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas."

Section (3) does not apply to this project.

11. Would Kirkland Mining Company Pay Property Taxes?

No, the 76-acre mine site is located on public land and is not subject to property taxes. For information search the internet on "Payment in Lieu of Taxes." All Kirkland Mining Company activities on private property and off-site would be subject to applicable property/sales taxes.

12. Can I Receive a Copy of the Following Documents/Reports?

A. The preliminary jurisdictional determination for Waters of the US? **No**, that process has not been initiated by Kirkland Mining Company. The BLM does not require that the determination be completed until later in the environmental analysis process.

B. The Water Management Plan; Overburden Management Plan; Hazardous and Solid Waste Management Plan; Spill Contingency Plan; Transportation Plan and/or Fire Prevention Plan as indicated in Section 2.3 of the Draft Mining and Reclamation Plan of Operations. **No**, these plans have not been developed yet- they will be written during the environmental analysis process.

C. The Class III Cultural Resources Survey of 160 Acres at Kirkland Mine in Yavapai, Arizona report. **No**, this report is confidential and not subject to a Freedom of Information Act disclosure.

D. The Spill Prevention, Control and Countermeasure Plan. **No**, this plan has not been developed.

13. What Minerals Are Locatable Under the Mining Law of 1872?

Rather than attempting to establish what minerals are locatable, it may be more practical to discuss what minerals are not locatable.

The number of locatable minerals authorized by the 1872 Mining Law has been substantially reduced by several subsequent Federal laws.

The Mineral Leasing Act of 1920, as amended, authorized that deposits of oil, gas, coal, potassium, sodium, phosphate, oil shale, native asphalt, solid and semisolid bitumen and bituminous rock ... may be acquired only through a mineral leasing system.

The Materials Act of July 31, 1947 (61 Stat. 681) amended by the Act of July 23, 1955 (69 Stat. 367), excluded common varieties of sand, stone, gravel, pumice, pumicite, cinders and clay. However, uncommon varieties of sand, stone, gravel, pumice, pumicite, cinders and exceptional clay are locatable. The Act of September 28, 1962 (76 Stat. 652), removed petrified wood from the locatable mineral category.

14. Are There Minerals That Were Never Locatable?

Even before the Materials Act of 1947, and the Act of July 23, 1955, many mineral materials were never locatable even though they could be marketed at a profit. In fact the Materials Act of 1947 was enacted to provide a means to dispose of them. Material in this category includes ordinary deposits of clay, limestone, fill material, etc. Non-locatable minerals generally have a normal quality and a value for ordinary uses.

15. What Are "Uncommon Variety" Minerals?

Section 601 of Title 30 of the United States Code authorizes the Secretary of the Interior to sell "common varieties" of "sand, stone, gravel, pumice, pumicite, cinders and clay." On July 23, 1955, Public Law 167 (69 Stat. 368; 30 USC 611) was passed to, among other things, prohibit further location of common variety minerals. The Act stated in part:

No deposit of common varieties of sand, stone, gravel, pumice, pumicite, or cinders and no deposit of petrified wood shall be deemed a valuable mineral deposit within the meaning of the mining laws of the United States so as to give effective validity to any mining claim hereafter located under such mining laws.

However, the Act went on to provide for an exception for "uncommon variety" minerals at 30 USC 611:

"Common varieties" as used in Sections 601, 603, and 611 to 615 of this title does not include deposits of such materials which are valuable because the deposit has some property giving it distinct and special value and does not include so-called "block pumice" which occurs in nature in pieces having one dimension of two inches or more.

Therefore, the statute clearly implies that "uncommon varieties" of such materials exist and are still locatable under the mining law. Uncommon varieties are "valuable because the deposit has some property giving it distinct and special value...."

16. What Special Provisions Apply to Minerals That May Be Common Variety Minerals if Proposed To Be Mined Under the 1872 Mining Law?

On mining claims located on or after July 23, 1955, a person must not initiate operations for minerals that may be "common variety" minerals, as defined, until BLM has prepared a mineral examination report, unless they obtain interim authorization. 43 CFR 3809.101

17. How Does BLM Determine a Mineral Is an Uncommon Variety?

BLM conducts a common variety determination and prepares a mineral report. A mineral report is generally the factual basis for a management decision.

A number of legal decisions have formulated and refined the tests used to determine whether a particular deposit is an uncommon variety. These tests are as follows:

- (1) there must be a comparison of the mineral deposit in question with other deposits of such minerals generally;
- (2) the mineral deposit in question must have a unique property;
- (3) the unique property must give the deposit a distinct and special value;
- (4) if the special value is for uses to which ordinary varieties of the mineral are put, the deposit must have some distinct and special value for such use;
- (5) and the distinct and special value must be reflected by the higher price which the material commands in the marketplace ... [or by] reduced costs or overhead so that the profit to the producer [is] substantially more.

18. Is the Material Being Proposed for Mining 'Carcinogenic?'

The primary material being mined is a tuff composed of volcanic ash and pumice. Even though this material has a high silica content, the silica is non-crystalline and *is not* listed as a 'carcinogen'. Only crystalline silica (for example quartz sand) when it is ground fine enough to be respirable is listed as a carcinogen. This operation has much less potential for the presence of crystalline silica, such as quartz sand, than most mines or quarries in silicate rocks, but the same dust control measures established for sand and gravel operations, quarries, and mines with higher potential crystalline silica will still be applied to this mine. Tests for other airborne carcinogens other than respirable crystalline silica are currently being performed and the results of those tests will be posted to the website as they become available, potentially by the end of 2017.