



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

June 3, 2022

Deborah Bradley
Coronado National Forest
Santa Catalina District
300 West Congress Street
Tuscon, Arizona 85701

Subject: Scoping Comments for the Wedgetail Exploration Drilling Project, Pima County, Arizona

Dear Deborah Bradley:

The U.S. Environmental Protection Agency has reviewed the U.S. Forest Service's notice to initiate a Draft Environmental Assessment for the above referenced project. The EPA's comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

Wedgetail Operations, LLC. proposes copper exploration activities in the Santa Catalina mountains on land managed by the Coronado National Forest in Pima County, Arizona. We are providing the enclosed comments to assist in the development of the Draft EA. The topics that the EPA recommends be fully analyzed and disclosed include impacts to water resources, air quality, environmental justice, biological resources, and cumulative impacts¹, among others.

We appreciate the opportunity to provide comments on this scoping notice and look forward to continued participation in the NEPA process. If you have any questions, please contact me at (415) 972-3093 or zellinger.andrew@epa.gov.

Sincerely,

Andrew Zellinger
Environmental Review Branch

Enclosure: EPA's Detailed Scoping Comments

¹ The Council for Environmental Quality recently restored the definition of 'effects' to require an evaluation of cumulative impacts on all resources in NEPA documents (40 CFR 1508.1). These include evaluating potential climate change effects (e.g., effects on water resources).

**EPA DETAILED SCOPING COMMENTS FOR THE WEDGETAIL EXPLORATION DRILLING PROJECT,
PIMA COUNTY, ARIZONA, JUNE 3, 2022**

Purpose and Need

The U.S. Environmental Protection Agency recommends that the Draft Environmental Assessment for the proposed project clearly identify the underlying purpose and need (40 CFR 1502.13). The purpose and need should be a clear, objective statement of the rationale for the proposed project, as it provides the framework for identifying project alternatives. The *purpose* of the proposed action is typically the specific objective(s) of the activity and is essential for defining the range of alternatives to be considered for the project. The *need* for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity.

Alternatives Analysis

The EPA recommends that Coronado National Forest explore and objectively consider a full range of alternatives and evaluate in detail all reasonable alternatives that fulfill the project's purpose and need. We encourage selection of alternatives that protect, restore, and enhance the environment, and we also support efforts to identify and select alternatives that maximize environmental benefits that avoid, minimize, and/or otherwise mitigate environmental impacts. An example of an alternative for a mineral exploration project is identifying an alternative water source.

Water Resources

Water Supply and Water Quality

In the Draft EA, estimate the quantity of water that the project would require for drilling and testing of the exploration wells as well as for the construction and maintenance of access roads. If groundwater will be used, identify the potentially affected groundwater basin, disclose any potential for subsidence, and discuss cumulative impacts to groundwater resources within the hydrographic basin. We recommend describing water supply reliability for the proposed project and discussing how existing and/or proposed sources may be affected due to trends in precipitation and groundwater recharge rates. Please identify the best available management practices or technologies that minimize or recycle water. We also recommend identifying the presence of surface water bodies, including the presence of springs and wetlands.

Stormwater Management

Under the federal Clean Water Act, any construction project disturbing a land area of one or more acres requires a construction stormwater discharge permit. The Draft EA should document applicable stormwater permitting requirements and discuss specific mitigation measures that may be necessary or beneficial in reducing adverse impacts to water quality and aquatic resources.

Wastewater Discharges

The Draft EA should also address the potential effects of project wastewater discharges. If hazardous materials are used during construction, drilling, or operation, document appropriate spill control and source water protection measures to prevent soil and groundwater contamination. Describe the potential environmental impacts on groundwater, surface water, springs, or wetlands.

Clean Water Act Section 404 Applicability

Confirm with the U.S. Army Corps of Engineers that there are no jurisdictional waters requiring a Clean Water Act Section 404 permit for discharge of dredged or fill materials into waters of the United States, including wetlands and "special aquatic sites." If potential impacts to waters of the U.S. are found, specify the acreage and channel lengths, habitat types, and functions and values of these waters.

Describe the potential environmental impacts and discuss alternatives to avoid or minimize those discharges, and potential measures to mitigate potential impacts.

Erosion Control

We recommend that the CNF consider the impacts of changing precipitation patterns on the project as part of its analysis of impacts to water resources, and commit to designing all erosion control, bypass, and diversion features to withstand longer precipitation frequency/duration models. Discuss the anticipated extent and depth of overland flows given a 500-year flood event, as compared to a 100-year event. Identify design considerations needed to accommodate future anticipated effects (e.g., increased intensity and severity of storms) such as upsizing the stormwater management system.

Air Quality

In the Draft EA, include a detailed discussion of ambient air conditions (existing conditions), National Ambient Air Quality Standards, and criteria pollutant non-attainment areas in the analysis area and vicinity. Such an evaluation is helpful in demonstrating compliance with state and federal air quality regulations and disclosing the potential impacts from temporary or cumulative degradation of air quality.

Estimate emissions of all air pollutants, including greenhouse gases, for construction and operations. Given the potential air quality impacts from construction and drilling activities, include direct, indirect, and cumulative effects, especially during construction. As an example, use of diesel engines powering the drilling rigs and air compressors/mud pumps could potentially generate significant levels of emissions. The Draft EA should specify emission sources and quantify these emissions. The Draft EA should analyze reasonable and practicable mitigation measures to reduce project-related greenhouse gas, fugitive dust, and other emissions. Typical mitigation measures include design changes to reduce construction and operations emissions, fugitive dust control measures, mobile and stationary source controls, and administrative controls.

Hazardous or Radioactive Materials/Waste Management

Drilling and servicing activities may involve the use and production of potentially hazardous materials. Potential health hazards include hydrogen sulfide, silica, noise, diesel particulates, hazardous chemicals, and naturally occurring radioactive material (NORM). Radionuclides or NORM may be concentrated or relocated as a result of human activity creating a pathway for radiation exposure. The concentrated or relocated material is called Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM). Therefore, we recommend the Draft EIS discuss the presence and levels of NORM that may be present in the project area ore bed, as well as potential radionuclides in overlying geological formations that will be drilled through during exploratory activities.

We also recommend the Draft EIS analyze the potential for the generation of TENORM. During drilling and subsequent ore processing there may be a potential for the concentration or relocation of material that would not otherwise pose an exposure pathway to the environment. An example of such a situation could be drilling fluids and piping that may become contaminated as a result of contact with radioactive isotopes such as uranium, thorium, radium, radium, lead and polonium. Therefore, we recommend the Draft EIS analyze the potential for the occurrence of TENORM. To characterize the potential for NORM and TENORM we recommend requiring verification sampling of the host formation and source water. In addition, we recommend that drill pipe and other equipment that may be exposed to NORM and develop TENORM be included in a sampling plan to assure there are no unintended radiological exposures.

If TENORM is anticipated, we recommend the Draft EIS explain how TENORM in material and equipment will be isolated and disposed of, as well as ways in which the generation of TENORM could be reduced or avoided. The Draft EA should address the potential direct, indirect, and cumulative impacts of waste generation, including hazardous waste. Identify the projected waste types and volumes, and expected storage, disposal, and management. Identify the applicability of federal hazardous waste requirements. Discuss how the generation of hazardous waste would be minimized. Discuss the likelihood that potential health hazards from exploration and testing could affect workers or the public and include an analysis of such health hazards within the Draft EA.

Biological Resources, Habitat, and Wildlife

Threatened and Endangered Species

We recommend that CNF work closely with the U.S. Fish and Wildlife Service and the Arizona Game and Fish Department to determine potential impacts of the project on plant and wildlife species, especially species classified rare, threatened, or endangered on either state or federal lists. We also recommend that the Draft EA:

- Identify and quantify which species and/or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Emphasis should be placed on the protection and recovery of species due to their status or potential status under the federal or state Endangered Species Act.
- Discuss the project's consistency with existing laws and regulations, including the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.
- Summarize, or include as an appendix in the Draft EA, the USFWS's biological assessment/opinion. Demonstrate that the preferred alternative is consistent with the biological assessment/opinion.
- Discuss mitigation measures to minimize impacts to special status species, describe the effectiveness of such measures to protect wildlife, and indicate how they would be implemented and enforced.

Other Wildlife Species

Identify and quantify other wildlife species might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species.

Invasive Species

In Draft EA, include measures that are consistent with Executive Order 13112 on Invasive Species. We suggest including any existing CNF direction for noxious weed management, a description of current conditions, and best management practices, which will be utilized to prevent, detect, and control invasives in the project area. Discuss measures that would be implemented to reduce the likelihood of introduction and spread of invasive species within the proposed project area. We encourage the CNF to promote integrated weed management, with prioritization of management techniques that focus on non-chemical treatments first, and mitigation to avoid herbicide transport to surface or ground waters. Early recognition and control of new infestations is critical to stop the spread of the infestation and avoid wider future use of herbicides, which could correspondingly have more adverse impacts on biodiversity, water quality and fisheries.

Reclamation

In the Draft EA, describe the reclamation of the proposed project area and include

- Acreage of each area targeted for reclamation, and describe the intended degree of treatment in each area.

- Timing of reclamation relative to exploration operations, procedures for concurrent reclamation activities, and duration of reclamation treatment.
- Standards for determining reclamation success and the means of assuring that all maintenance required for reclaimed areas would continue after operations cease or while operations are suspended.

Mitigation Measures

In the Draft EA, identify the mitigation measures (including control measures and design features) that the CNF would apply if potential adverse impacts to resources on affected lands are predicted. These measures could include equipment type or design requirements, emission standards or limitations, best management practices, add-on control technologies, setback distances from aquatic and biological resources and limitations on the density and/or pace of development.

Environmental Justice

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (February 16, 1994), directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations. It further directs agencies to develop a strategy for implementing environmental justice and providing minority and low-income communities access to public information and public participation. As such, we recommend that the CNF address adverse environmental effects of the proposed project on these communities and outline measures to mitigate for impacts.

We encourage the CNF to use EPA’s EJScreen and/or the most recent American Community Survey from the U.S. Census Bureau (i.e., 2016-2020) for the Draft EA to determine the presence of minority and low-income populations. However, it is important to note that minority and low-income can be measured in various ways.

A minority population does not need to meet a 50 percent standard if “the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.”² To best illustrate the presence of a minority population, we recommend that the CNF analyze block groups, the smallest geographical unit that the U.S. Census Bureau publishes data for. We caution using larger tracts in the analysis, such as counties or cities, as these may dilute the presence of minority populations. In addition, the NEPA Committee of the Federal Interagency Working Group on Environmental Justice has noted that, in some cases, it may be appropriate to use a threshold for identifying low-income populations that exceeds the poverty level.³

After CNF has determined if minority and low-income populations exist in the project area, we recommend that the Draft EA discuss whether these communities would be potentially affected by individual or cumulative actions of the proposed action. We also recommend addressing whether any of the alternatives would cause any disproportionate adverse impacts, such as higher exposure to toxins;

² Council on Environmental Quality. Environmental Justice: Guidance Under the National Environmental Policy Act. December 1997. Available at https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

³ Federal Interagency Working Group on Environmental Justice & NEPA Committee. Promising Practices for EJ Methodologies in NEPA Reviews. March 2016. Available at: https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

changes in existing ecological, cultural, economic, or social resources or access; cumulative or multiple adverse exposures from environmental hazards; or community disruption.

If it is determined that minority and low-income populations may be disproportionately impacted, describe in the Draft EA the measures taken by CNF to fully analyze the environmental effects of the action on minority communities and low-income populations and identify potential mitigation measures. Clearly identify a monitoring and adaptive management plan to ensure that mitigation is effective and successful.

Present opportunities for affected communities to provide input into the NEPA process. In the Draft EA, include information describing what was done to inform these communities about the project and the potential impacts it will have on their communities (notices, mailings, fact sheets, briefings, presentations, translations, newsletters, reports, community interviews, surveys, canvassing, telephone hotlines, question and answer sessions, stakeholder meetings, and on-scene information), what input was received from the communities, and how that input was utilized in the decisions that were made regarding the project.

Consultation with Tribal Governments

It is important that formal government-to-government consultation take place early in the scoping phase of the project to ensure that all issues are adequately addressed in the Draft EA. The principles for interactions with tribal governments are outlined in the presidential “Memorandum on Government-to-Government Relations with Native American Tribal Governments” (April 29, 1994) and Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments” (November 6, 2000).

In the Draft EA, summarize the results of tribal consultation and identify the main concerns expressed by tribes (if any), and how those concerns were addressed. As a resource, we recommend the document *Tribal Consultation: Best Practices in Historic Preservation*,⁴ published by the National Association of Tribal Historic Preservation Officers. The EPA Region 9 has a robust tribal program. If you need assistance with consultation or updated tribal contacts, please contact John (JR) Herbst at (619) 235-4787 or herbst.john@epa.gov.

National Historic Preservation Act

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act. Historic properties under the NHPA are properties that are included in the National Register of Historic Places or that meet the criteria for the NRHP. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Office/Tribal Historic Preservation Office. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be disclosed in the Draft EA. Section 106 of the NHPA requires that federal agencies consider the effects of their actions on cultural resources, following the regulation at 36 CFR 800.

In the Draft EA, discuss how the CNF would avoid or minimize adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area. Clearly discuss mitigation measures for archaeological sites and TCPs. We encourage the CNF to append any Memoranda of Agreements to the Draft EA, after redacting specific information about these sites that is sensitive and protected under Section 304 of the NHPA. We

⁴ National Association of Tribal Historic Preservation Officers. May 2005. *Tribal Consultation: Best Practices in Historic Preservation*. Available at http://www.nathpo.org/PDF/Tribal_Consultation.pdf.

also recommend providing a summary of all coordination with Tribes and with the State and Tribal Historic Preservation Offices, including identification of NRHP eligible sites and development of a Cultural Resource Management Plan.

Executive Order 13007

Executive Order 13007, “Indian Sacred Sites” (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the NRHP criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside the direct impact area the plan area may also have religiously significant ties to lands within the plan area and should be included in the consultation process.

In the Draft EA, address the existence of Indian sacred sites in the project areas, including seeps and springs, that may be considered spiritual sites by regional tribal nations. Discuss how the CNF would ensure that the proposed action would avoid or mitigate for the impacts to the physical integrity, accessibility, or use of sacred sites.