

May 6, 2021 Responses to CDRMS Is It Mining Form for Osprey Point Quarry

1. Legal Description – Osprey Point Quarry required for raising Gross Dam (Gross Reservoir Expansion Project) Section 19; Township 1S, Range 71; Boulder County; Located about 5 miles east of Pinecliff, Colorado.
2. Private Property - The Osprey Point Quarry site where material will be extracted to support construction of the Gross Dam raise is wholly within Denver Water property limits. [Refer to Figures 1, 2 and Section 2.1 of the Quarry Operations Plan.]
3. Material Description - The operations will primarily extract granodiorite and quartz monzonite material from rock outcroppings and/or excavated areas. [Refer to Section 3.2 of Quarry Operations Plan – Appendix A.]
4. Processing and Extraction - Material will be extracted with common drilling and blasting techniques supported by typical construction equipment such as drilling rigs, excavators, front end loaders and haul trucks. Equipment for processing the material includes primary crushers, secondary crushers, screens, washers and conveyors. [Refer to Section 2.2 of the Quarry Operations Plan.]
5. Use Location - Extracted material will be processed into aggregate, batched into concrete and only used onsite for the dam raise construction approximately 1 mile from the extraction site. [Refer to Figure 1 of the Quarry Operations Plan.]
6. Onsite Use Only - The extracted material will be processed onsite into concrete aggregate and batched into concrete which will be used for the dam raise construction.
7. No Offsite Use - The material will remain onsite on Denver Water property and National Forest System property within the Federal Energy Regulatory Commission (FERC) Project Boundary for which the dam raise is authorized. [Refer to Figure 1 of Quarry Operations Plan.]
8. Areal Extent - The proposed extraction area is approximately 16.87 acres (including overburden). Approximately 14.23 acres will be inundated within the new reservoir pool (El. 7406). Approximately 2.64 acres will remain visible above the raised reservoir pool. [Refer to Section 2.1 of the Quarry Operations Plan.]
9. Extraction Depth - The extraction excavation could reach depths of 211 feet from the top of cut at El. 7461 and the bottom of contingency rock at El. 7250. [Refer to Figure 4 and Section 2.1.3 of the Quarry Operations Plan.]
10. Extracted Quantity - The dam raise requires approximately 807,000 cubic yards of concrete (including waste). Denver Water anticipates extracting up to 1,238,000 cubic yards (including overburden) to create the required quantity of aggregate. [Refer to Figure 4 and Section 2.1.3 for of the Quarry Operations Plan.]
11. Explosives - The material extraction will require the use of explosives. [Refer to Sections 2.24 and 2.25 of the Quarry Operations Plan.]
12. No Tributary Groundwater Exposure Expected - Based on available data, the extraction excavation will not expose tributary groundwater. However, perched groundwater from surface runoff may be encountered during quarry excavation. [Refer to Section 2.3.2 of the Quarry Operations Plan.]

13. No Compensation - The sole purpose of the Osprey Point Quarry is to create concrete aggregate for the onsite Gross Dam raise. No compensation will be received by Denver Water in relationship to the development of the quarry.
14. Reclamation - The entire project, including the Osprey Point Quarry is regulated under two federal approvals, the U.S. Army Corps of Engineers (Corps) Section 404 permit and Record of Decision and the FERC License Amendment (Order) issued July 16, 2020, see links below. The Corps' Final Environmental Impact Statement (FEIS) was released in April, 2014, which details proposed practices and techniques to restore the site after completion of the project. The FERC Order also governs how the quarry area is reclaimed and restored.
  - a. The FEIS can be found at:  
<https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Colorado/EIS-Moffat/>
  - b. The Corps Section 404 Permit can be found at:  
<https://grossreservoir.org/wp-content/uploads/2018/02/090817-Final-Compressed-404-Permit.pdf>
  - c. The Corps Record of Decision can be found at:  
<https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Colorado/EIS-Moffat/>
  - d. The FERC License Amendment can be found at:  
<http://grossreservoir.org/wp-content/uploads/2020/07/20200716-FERC-Order.pdf>

The Quarry Reclamation Plan submitted to CDRMS on May 3, 2021 was developed based on these guiding documents. Please refer to that plan and the links above for additional information on reclamation of the 2.64 acres that will remain above the raised reservoir pool (El. 7406).

15. Government Permits - In July 2017 the U.S. Army Corps of Engineers approved the Gross Reservoir Expansion Project through issuance of its' 404 permit and Record of Decision. As noted above, in July 2020 the FERC issued an order to proceed with design and construction to expand Gross Reservoir in Boulder County.  
  
Links to the 404 Permit and FERC Order can be found in item 14 above.
16. Agency Participants – Yes, the City of Arvada is responsible for providing a portion of the funding for this project (17%). Denver Water is responsible for providing the remaining portion of the funding (83%) and for managing the planning, design and construction of the project.
17. Post Mining Use - The current site is the location of a recreation boat ramp. Post construction land use activities will change as the area will mostly be inundated by the new reservoir and the boat ramp relocated to a new area. The new land use activities will be authorized through the federal actions described in Items 14 and 15 above.
18. Extraction Equipment - Equipment used to extract the Osprey Point Quarry material include hydraulic rock drills, pneumatic rock drills, compressors, excavators, dozers, loaders, off highway haul trucks, and water trucks. [Refer to Section 2.2 of the Quarry Operations Plan.]