PLAN OF OPERATIONS

MONUMENT QUARRY
CA MINE ID #91-12-0025
(Humboldt County)
September 2010
Amended January 2011

Amended December 2025

Prepared by:

Humboldt County Public Works Department
Natural Resources Division
1106 Second Street
Eureka, CA 95501
(707) 445-7741

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GENERAL INFORMATION

Project:	Monument Quarry – California Mine ID # 91-12-0025 Renewal of Permit # CUP-45-94/SMP-07-94
Applicant:	Humboldt County Public Works Department (HCPW) 1106 Second Street Eureka, CA 95501
Parcel:	Assessor Parcel #205-031-049 (137.03 acres)
Owner/Surface Rights:	Humboldt Redwood Company (HRC) 125 Main St. Scotia, CA 95565
Production:	Estimated Annual: <25,000 cubic yards (yd^3) annually Estimated Total: Maximum of 35,000 yd^3 over 15 years
Acres:	Permitted: 4.5 acres Proposed: 4.5 acres

INTRODUCTION

The purpose of this project is to continue quarrying, crushing/sorting, and stockpiling of aggregate at the Monument Quarry for Humboldt County Department of Public Works (HCPW) road maintenance and road repair projects. This permit application proposes extraction of a total 35,000 yd^3 of aggregate over the life of the permit. Mining may consist of a single 25,000 yd^3 extraction, or smaller extractions, as frequently as annually, totaling 35,000 yd^3 over 15 years. See Reclamation Plan, attached Site Plan for proposed limits of operation.

LOCATION

Monument Quarry is located 3.3 miles southwest of the intersection of Wildwood Avenue and Monument in Rio Dell, California. The exact location is described as Monument Road, Post Mile 3.29. It is located in Section 13, Township 1 North, Range 1 West, H.B. & M. and can be seen on the Taylor Peak 7.5' USGS quadrangle map. The quarry is located within Assessor Parcel #205-031-049. See Reclamation Plan, attached maps.

PAST MINING ACTIVITIES

The quarry was originally developed along an exposed shale ridge top that separates Atwell Creek on the west from Dean Creek on the east, both are tributaries to the mainstem, Eel River. Although the extent of the deposit in unknown, it is estimated that operations by HCPW between 1955 and 1995 removed approximately 41,500 yd^3 from the ridge top, resulting in the quarry floor and face that existed when the site was first permitted. The 60,000 yd^3 surface mining permit issued in 1995 approved mining of aggregate from an existing rock quarry from 1995 to 2010. The quarry has been mined once during the life of that permit, that being in 2001, when 20,000-25,000 yd^3 was mined, processed and stockpiled onsite. At this time the quarry face is approximately 180 feet (ft) long x 22 ft high. The 2010 permit renewal allowed for a maximum of 35,000 yd^3 over a period of 15 years with individual extractions

As mentioned above, the site has been mined in the past and was already partially developed. A berm was constructed around the project area to control stormwater onsite. Two stockpile locations exist within the quarry proper, one at the extreme north end of the site and another near the southeast corner of the site. The quarry floor was formed to course stormwater towards the face and a retention basin located near the eastern perimeter of the site. During large storm events, stormwater does not have the opportunity to percolate into the ground and is stored in this basin. During the largest storm events, water is treated (BMPs) before being released from the site into the headwaters of Dean Creek.

PROPOSED MINING ACTIVITIES

HCPW proposes to quarry and process a maximum of 25,000-yd³ annually, for a total of 35,000 yd³ over the life of the proposed permit (15-years). Processing, sorting, and stockpiling are included in the proposed activities. See Reclamation Plan, Site Plan.

Air Quality & Natural Occurring Asbestos

In 2002 the California Air Resources Board approved an Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (Final Regulation Order Section 93105). The Monument Quarry is not located in an ultramafic rock unit and does not appear to contain asbestos, serpentine, or ultramafic rock. If in the event naturally occurring asbestos (NOA) is discovered at the site, the North Coast Unified Air Quality Management District will be notified/consulted immediately. Stringent dust control measures will be applied during quarrying, processing/sorting, and stockpiling operations and during activities associated with final reclamation. If NOA is left exposed it will be encapsulated by re-soiling during final reclamation.

The North Coast Unified Air Quality Management District is in non-attainment for Particulate Matter smaller than 10 microns in diameter (PM10) according to State of California Standards. Sources of PM10 in the project vicinity are from road and natural airborne dust, vehicle emissions, forest fires, and fires associated with forest management.

Dust Suppression

The method of wetting the quarry access road and quarry floor with water (supplied from an offsite source) will be utilized to control fugitive dust. An equipment dust suppression system is utilized during crushing operations. The system includes a large water storage tank located adjacent to the equipment. Offsite water is delivered to the storage tank via a water truck. Refilling is based on demand, typically every 2-3 days. An electric or portable gas-powered pump supplies water to strategically placed misters installed at the screen deck and conveyor head-pulleys. Misters may also be utilized on the cone and/or jaw, depending on the volume of dust generated by the material being processed.

Noise

Ambient noise levels in the quarry vicinity range from 30 to 80 dBA, and result from wind, birds, logging operations including helicopters, and vehicular traffic (Jake Brakes) on Monument Road. Noise contribution from quarry activities are in the low-80s dBA range, which is typical for this type of activity, with the loudest noise resulting from equipment backup horns, dump truck tailgates, and crushing equipment.

Access Roads

The access road leading into the quarry is approximately 150 ft in length and 20 ft wide. The road surface is at a ±8% grade for most of its length and is surfaced with hard-packed shale. The road will be wetted during the hours of operation to enhance surface armoring and to minimize the accumulation of dust since fine particulate on gravel roads contributes to wind erosion and offsite sediment discharge during first of the season storm events. The road is gated and locked when the site is not in use. Line of sight exists along the short roadway when traveling in either direction. Visibility is satisfactory to the south then exiting the quarry and is satisfactory to the north when vegetation growing on the inboard bank of the County Road is trimmed to grade.

Traffic Control

Traffic control will consist of placing warning signs along Monument Road in both directions from the quarry access road. It will not be necessary to detour or otherwise restrict traffic. Minor traffic delays may occur when vehicles encounter trucks leaving or entering the quarry. Incidental delays will be temporary, ending when extraction and processing activities are completed and trucks/equipment are removed from the site.

Quarrying

The mining method proposed is identical in nature to operations conducted by HCPW over the past 15 years (2010 permit period). Extraction will occur by ripping and breaking up the rock with a bulldozer or excavator. The material will then be pushed into temporary surge piles for processing. In the event localized hard rock is encountered, small-scale separation with charges may be performed. The quarry face will be maintained at a minimum of 1:1 slope, with 15 ft. wide bench located 22 ft. above the quarry floor. The proposed activity will include the retreat of the working face to the south approximately 60 ft. The alignment of the quarry face will remain consistent.

Mining and crushing will occur during daylight hours (sunrise to sunset), primarily on weekdays. The average time period from extraction to stockpiling will be about 4-6 weeks.

Aggregate Processing

A portable crusher assembly, consisting of jaw and cone crushers, conveyors, and a generator trailer will be temporarily located on the quarry floor. Quarried rock will be transported to the crusher via a front-end loader. Processed rock will be sorted and placed onsite in stockpiles and will later be utilized for road maintenance and winter storm damage repair projects. Once crushing activities are completed, the crusher assembly will be dismantled and removed from the area.

Fueling and Maintenance

All fueling, lubing, and equipment maintenance will be performed in a responsible manner. The designated staging/storage area for equipment, fuels, lubricants, and solvents related to quarrying activities will be restricted to a single location within the quarry site. Equipment will be inspected for leaks prior to starting each shift, following lunch breaks, and at end of shift each workday. Maintenance involving the removal/repair of hydraulic cylinders/hoses or of reservoirs containing hazardous products will be performed over impervious fabric resistant to Total Petroleum Hydrocarbons (TPH). A minimum of two sealed 5-gallon spill kits will be kept onsite at all times during extraction/processing operations. One sealed 5-gallon spill kit will be kept onsite during off-haul activities from the stockpile area. All activities related to fueling, lubing, and maintenance will be performed in the designated staging area unless equipment has been immobilized due to a mechanical failure. In these instances, every effort will be made to guard against and control spills. The functional condition of fuel transfer pumps, hose assemblies, and emergency shutoff switches will be evaluated prior to usage. Personnel tasked with

fueling will remain near the emergency shutoff switch during fueling operations. Topping off of fuel tanks will not occur. Fuels and lubricants will not be stored onsite after-hours or on weekends.

Either an electric or gasoline powered water pump may be used to supply water to the crushing equipment, dust suppression system. When a gasoline powered water pump is utilized, it will be situated over a drip pan or impervious fabric resistant to TPH and will be securely stored or removed from the site at end of shift each workday.

Hazardous Material Management

If leaks or spills occur in the area of operation during any extraction, processing, or stockpiling activities, they will be controlled immediately. All contaminated soil will be recovered from the site and stored in DOT approved containment vessels. All stored contaminated/hazardous material will be removed in a timely manner and disposed of at an approved disposal facility.

Annual Winterization

Each fall prior to the commencement of winter rains, the quarry floor will be finish graded to control stormwater and divert it towards the center of the site. A saturation trench, constructed near the toe of the quarry face to facilitate percolation and/or evaporate of onsite stormwater will be dredged on an as-needed basis. Furthermore, each end of the trench will be finish maintained at a 10:1 slope to ensure an escape routes for animals that may become trapped. If the existing stormwater containment berm around the exterior of the site has been damaged or breeched during extraction or end-haul activities, it will be reconstructed as necessary to control stormwater runoff prior to the commencement of winter rains. Any rebuilt sections of the berm will be straw mulched to reduce offsite sediment transport of fines associated with the activity. Stormwater control measures will be adequate to contain stormwater onsite during a 20-year/l hour intensity/magnitude storm event.

Regular Monitoring and Reporting

Monitoring will consist of regular visual inspections of the quarry by HCPW personnel for slope stability, stormwater management, berm integrity, and maintenance of the access road. Humboldt County Planning Division staff will inspect the quarry annually. Reporting will consist of annual reports to the local lead agency and CA Department of Conservation as required by the Surface Mining and Reclamation Act.

INTERIM RECLAMATION

As of fall, 2025, no reclamation has been undertaken due to the diminutive size of the site and the frequency of excavation and end-haul events. Since quarrying activities have generated little topsoil, interim efforts will be made to import local material to offset the need to locate and import soil from outlying areas following end-of-project and final reclamation. The County's interim reclamation activities are described in detail in the Amended Reclamation Plan (Rev-C) submitted as a supporting document to this Plan of Operations. Final reclamation will be undertaken following termination of HCPW quarrying operations.