

**SYNTHETIC MINOR OPERATING PERMIT (REVISION)  
ENGINEERING EVALUATION REPORT  
MISSION VALLEY ROCK COMPANY  
PLANT NUMBER 595  
APPLICATION NUMBER 945**

**BACKGROUND**

Mission Valley Rock Company has been operating an aggregate mining and processing plant at Sunol under a Synthetic Minor Operating Permit.

The company wants to replace two crushers (S-17 & S-18) with a new unit. This application has been submitted to obtain an Authority to Construct the replacement crusher (S-104). The new crusher has smaller maximum throughput capacity of 250 tons/hr compare to the combined capacity of 275 tons/hr for S-17 & S-18. The material throughput is not proposed to be increased, and therefore there is no increase in emissions.

The application covers the following source:

S-104 Rock Crusher, Norgberg 300 hp electric, 250 tph max. capacity.

**EMISSION CALCULATIONS**

There will be no increase in plant wide particulate emissions due to the replacement source. However, emissions from the new source will be accounted towards plant cumulative increase.

Particulate emissions (PM-10) from the crusher are calculated on the basis of the material throughput, PM-10 emission factor of 0.0024 lb/ton for uncontrolled tertiary crushing operation (Ref.: U.S.E.P.A., AP-42, Table 11.19.2-2), and abatement factor of 0.5 for water spray.

$$\begin{aligned} \text{PM-10 emissions} &= (0.0024 \text{ lb/ton})(858,000 \text{ tpy})(0.5) \\ &= 1,030 \text{ lbs/yr} \\ &= 0.52 \text{ tpy} \end{aligned}$$

**PLANT CUMULATIVE INCREASE**

$$\begin{aligned} \text{PM-10: } &6.977 \text{ tpy (current)} + 0.52 \text{ tpy (new)} \\ &= 7.497 \text{ tpy (new total)} \end{aligned}$$

**BACT AND OFFSET REQUIREMENTS**

The PM-10 emissions from the crusher are not subject to the BACT requirement of Regulation 2-2-301 because emissions from the crusher are less than 10 lb/day.

The PM-10 emissions from the crusher are not subject to the offset requirements of Regulation 2-2-303 because the facility is not a major facility.

**PSD MODELING REQUIREMENTS**

The PM-10 emissions from the crusher are not subject to the modeling requirements of Regulation 2-2-304.3 because the facility is not a major facility, and this application is not for a major modification of the facility.

**STATEMENT OF COMPLIANCE**

The facility is in compliance with the applicable requirements of Regulation 2, Rule 6, Major Facility Review (Section 2-6-423.6, Revisions). The facility wide PM-10 emissions will remain less than 95 tons per year (excluding certain emissions as set forth in the federal Clean Air Act).

The PM-10 emissions from the crusher are expected to comply with the requirements of Regulation 6, Particulate Matter and visible emissions.

BACT, OFFSET, and PSD modeling requirements for particulate emissions are not triggered as per explanation given in the respective sections of this report.

The project is ministerial in nature (PHBK Chapter 11.6) per Regulation 2-1-311, Ministerial Projects, and therefore is not subject to the CEQA review requirements of Regulation 2-1-310, Applicability of CEQA.

NSR, NSPS, and NESHAPS do not apply.

**PERMIT CONDITIONS**

The existing condition #15322 is revised to include S-104 & A-104, and delete S-17, S-18, A-17, and A-18.

**RECOMMENDATIONS**

Recommend Mission Valley Rock Company be issued an Authority to Construct the source described in the background section of this report.

BY \_\_\_\_\_