



Request for Coverage under the General Air Quality Permit for New or Modified Minor Source Hot Mix Asphalt Plants and Stone Quarrying, Crushing, and Screening Facilities in Indian Country

Technical Support Document

Permittee: Granite Construction Incorporated
80 Pond Road
Yakima, Washington 98901

Project Name: Granite - Omak Facility

Location: 249-B Rodeo Trail Drive, Okanogan, Washington 98840

Source Contact: Keven Samuelson, (509) 930-4863, keven.samuelson@gcinc.com

Date: September 22, 2016
Permit #: R10TNSR00300

Background

The Clean Air Act (CAA) provides the U.S. Environmental Protection Agency (EPA) with broad authority to protect air resources throughout the nation, including air resources in Indian Country. Unlike States, Indian Tribes are not required to develop CAA new source review (NSR) permitting programs. See, e.g., Indian Tribes: Air Quality Planning and Management, 63 Fed. Reg. 7253 (Feb. 12, 1998) (also known as the Tribal Authority Rule). In the absence of an adequately implemented the EPA-approved NSR program on the Colville Reservation, the EPA has the authority to implement a Federal Implementation Plan (FIP) in order to protect tribal air resources from impacts due to the construction of new or modified stationary sources of air pollutants. In 2011, the EPA finalized the Tribal NSR Rule, codified at 40 CFR Part 49, as part of a FIP under the CAA for Indian Country. 76 Fed. Reg. 38748 (July 1, 2011). Among other requirements, the Tribal NSR Rule set forth procedures and terms under which the Agency would administer a minor NSR permitting program in Indian Country.

As part of the Tribal NSR Rule, the EPA adopted the option of developing general permits for certain categories of minor sources to which the Tribal NSR Rule would apply. The purpose of a general permit is to provide for the protection of air quality while simplifying the permit issuance process for similar facilities in order to minimize the burden on the reviewing authority and the regulated sources. The EPA finalized the General Air Quality Permit for New or Modified Minor Source Hot Mix Asphalt Plants (HMA General Permit) and Stone Quarrying, Crushing, and Screening Facilities (SQCS General Permit) in Indian Country effective June 1, 2015 (80 Fed. Reg. 25068 (May 1, 2015)). New and modified minor sources that are true minor sources or major sources seeking to become synthetic minor sources may apply for coverage under the HMA and SQCS General Permits if their potential to emit for new, modified, and existing units is below major source thresholds and the source can meet the throughput limits and other terms and conditions set forth in the General Permits. Sources seeking coverage under these General Permits must also demonstrate that they meet certain additional eligibility criteria.

Request for Coverage under HMA and SQCS General Permits

On July 20, 2016, the EPA Region 10 received an initial Request for Coverage under the HMA and SQCS General Permits from Granite Construction Incorporated (Granite) to operate as a synthetic minor source for their pre-existing facility in Okanogan, Washington. On August 8, 2016, the EPA Region 10 received a revised Request for Coverage under the HMA and SQCS General Permits from Granite. The project for which HMA and SQCS General Permits coverage is sought is the continued operation of a pre-existing hot mix asphalt plant and stone quarrying, crushing, screening facility, which will entail operation of the pre-existing portable equipment at the facility's quarry in Okanogan, Washington (the Project).

Granite is considered the "Applicant" and the "Permittee" for the Project. This Technical Support Document (TSD) describes our analysis of the Applicant's Request for Coverage for the Project and our determinations concerning this request.

The Project will be located at the Granite – Omak facility at 249-B Rodeo Trail Drive, Okanogan, Washington, 98840, at an existing quarry within the Colville Indian Reservation, in Okanogan County, Washington.

The geographic area where the Project will be located is designated attainment/unclassifiable under the CAA for all National Ambient Air Quality Standards (NAAQS) pollutants.

Approval of Request for General Permit Coverage

The EPA has carefully reviewed the Request for Coverage, and other relevant information, to determine whether the Project meets all of the criteria to qualify it to apply for coverage under these General Permits. Based on our review of, and in reliance on, all of the information and representations provided in the Request for Coverage, the EPA has determined that the Project meets all such criteria and is eligible for coverage under the HMA and SQCS General Permits, and is approving the Request for Coverage for the Project. The EPA's review with respect to some of these criteria is discussed in more detail below in this TSD.

The EPA's Approval of Request for Coverage for the Project is based in part on representations by Granite in the Request for Coverage that the engines powering the equipment at the HMA plant and SQCS facility are nonroad (mobile) engines that will operate at the site for a period of less than one year. These engines are the only engines powering the equipment at the site, and the Request for Coverage represents that these engines will have a total duration of less than one year. We note that if such engines and/or replacement engines intended to perform the same or a similar function are intended to be utilized for the hot mix asphalt plant and stone quarrying, crushing, and/or screening operations at the Granite - Omak facility for a period of at least one calendar year (or for a shorter time, if operations are conducted on a seasonal basis for consecutive seasons), or are actually utilized for this length of time, the engines would be considered stationary sources and subject to further requirements under the HMA and SQCS General Permits, and the HMA plant and SQCS facility would not be eligible for coverage based on the current Request for Coverage, which does not indicate that stationary engines will be utilized for the Project. Thus, to conduct hot mix asphalt and stone quarrying, crushing, and screening operations at the Granite - Omak facility for a longer period would require an additional request for coverage and approval under the HMA and SQCS General Permits and compliance with these General Permits' requirements for stationary engines, or, alternatively, approval under an individual permit

issued pursuant to the Tribal NSR program or other applicable NSR program implemented by the EPA depending on the magnitude of the source's potential emissions.

Equipment Description

Table 1. List of Affected Emission Units Covered by this Approval of Request for HMA General Permit Coverage

ID #	Description of Affected Emission Units	Control Technology	Date of Manufacture
91-124	Drum Mix Dryer; 75.6 MMBtu/hour;	Baghouse (fabric filter) or Wet Scrubber	1996
83-398	Virgin Collector; 200 tons/hour	Uncontrolled	Pre-1996
80-1980	Virgin Belt Scale; 200 tons/hour	Uncontrolled	Pre-1996
86-746	Virgin Slinger; 200 tons/hour	Uncontrolled	Pre-1996
80-1963	Recycled Asphalt Pavement (RAP) Conveyor; 100 tons/hour	Uncontrolled	Pre-1996
83-390	RAP Conveyor; 100 tons/hour	Uncontrolled	Pre-1996
80-1963	RAP Screen; 100 tons/hour	Uncontrolled	Pre-1996
83-398	Cold Feeder 1; 50 tons/hour	Uncontrolled	Pre-1996
83-398	Cold Feeder 2; 50 tons/hour	Uncontrolled	Pre-1996
83-398	Cold Feeder 3; 50 tons/hour	Uncontrolled	Pre-1996
83-390	BIN RAP Feeder; 40 tons/hour	Uncontrolled	Pre-1996
86-810	Silo 1; 100 tons/hour	Uncontrolled	Pre-1996
86-811	Silo 2; 100 tons/hour	Uncontrolled	Pre-1996
86-807	Asphalt Oil Above-Ground Tank; Electrically Heated; 20,000 gallons	Uncontrolled	Pre-1996
86-808	Asphalt Oil Above-Ground Tank; Electrically Heated; 10,000 gallons	Uncontrolled	Pre-1996
03-1864	Propane Above-Ground Tank; 20,000 gallons	Uncontrolled	Pre-1996
85-509	Diesel Fuel Above-Ground Tank; 10,000 gallons	Uncontrolled	Pre-1996

Table 2. List of Affected Emission Units Covered by this Approval of Request for SQCS General Permit Coverage

ID #	Description of Affected Emission Units	Control Technology	Date of Manufacture
001	Jaw Crusher; Pioneer; 800 tons/hour	Pressurized Spray and Enclosure	2013
002	Cone Crusher; JCI 54 inches; 600 tons/hour	Pressurized Spray and Enclosure	2013

ID #	Description of Affected Emission Units	Control Technology	Date of Manufacture
003	Rolls Crusher; 55 inches x 30 inches; 250 tons/hour	Pressurized Spray and Enclosure	2013
004	Rolls Crusher; 55 inches x 30 inches; 250 tons/hour	Pressurized Spray and Enclosure	2013
005	Cone Screen; 6 x 16 Twin JCI Deck; 500 tons/hour	Water Spray Bar	2013
006	Roll Screen; 6 x 16 Twin JCI Deck; 250 tons/hour	Water Spray Bar	2013
007	Roll Screen; 6 x 16 Twin JCI Deck; 250 tons/hour	Water Spray Bar	2013
6-10	Conveyors, 30 inches x 40 feet; 250,000 tons per year	Uncontrolled	2013

The following equipment for the Project was also identified in the Request for Coverage.

Table 3. Other Equipment

ID #	Description of Other Equipment	Make/Model	Date of Manufacture
008	Portable Generator Engine; 1093 horsepower ¹	Caterpillar C27	2009 - 2015
009	Portable Generator Engine; 1093 horsepower ¹	Caterpillar C27	2009 - 2015

¹ – Based on information provided in the Request for Coverage, Equipment Units 008 and 009 are exempt from the requirements for stationary engines in the SCQS General Permit because they will remain at the Granite’s quarry for less than 12 consecutive months from the date the source commences operation and will not be replaced by engines performing the same or similar function. Per 40 CFR 49.153(c)(1), the Federal Minor New Source Review Program in Indian Country does not apply to these nonroad (mobile) engines.

Eligibility Criteria

Based upon our review of the Request for Coverage, we have determined the Project qualifies for the HMA and SQCS General Permits because it meets the following criteria:

- The Project is for a synthetic minor source hot mix asphalt plant co-located with a stone quarrying, crushing, and screening facility.
- The Project only processes non-metallic materials (*i.e.*, recycled asphalt pavement, sand, gravel, rock, or stone).
- The Project is located in an attainment area for ozone, and diesel fuel use for all affected units will be less than 18,275 gallons per calendar month. Note: The portable engines in Table 3 are not subject to this limit, as discussed elsewhere in this TSD.
- The Project will process less than 73,000 tons per month based on a 12-month rolling average from the drum mix asphalt plant.
- The Project will process less than 730,000 tons of raw material throughput per month based on a 12-month rolling average from the stone quarrying, crushing, and screening facility.

- As discussed further below, the Applicant has met the eligibility criteria related to listed species and historic properties.

Potential to Emit (in tons/year)

Potential to emit (PTE) means the maximum capacity of a stationary source to emit an air pollutant under its physical and operational design. The HMA and SQCS General Permits include enforceable physical or operational limitations on the maximum capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation and/or on the type or amount of material combusted, stored, or processed. PTE is meant to be a worst case emissions calculation and is used in many cases to determine the applicability of federal CAA requirements. Actual emissions are typically lower than PTE. Our evaluation of whether the Project qualifies for the HMA and SQCS General Permits included consideration of the limitations on PTE in the HMA and SQCS General Permits.

The Tribal NSR Rule establishes specific PTE thresholds for new or modified stationary sources that trigger the requirement to obtain a preconstruction permit under the Tribal Minor NSR program. See Table 4.

Table 4. Tribal Minor NSR Permitting Thresholds (tons per year)

Pollutant	Nonattainment Areas	Attainment Areas
CO	5	10
NOx	5	10
SO2	5	10
VOC	2	5
PM	5	10
PM10	1	5
PM2.5	0.6	3
Lead	0.1	0.1
Fluorides	NA	1
Sulfuric acid mist	NA	2
Hydrogen sulfide	NA	2
Total reduced sulfur	NA	2
Reduced sulfur compounds	NA	2

Projects at new or modified sources that must obtain Tribal Minor NSR program preconstruction permits based on PTE at or above these Tribal minor NSR thresholds may qualify for coverage under a Tribal Minor NSR general permit in lieu of obtaining a site-specific permit. In order to qualify for the HMA and SQCS General Permits, the new or modified source must have a PTE below the major NSR source thresholds, and meet criteria related to the size of equipment and maximum production rates at the source and other eligibility criteria. If a new or modified source does not meet the specified criteria, the source does not qualify for coverage under the HMA and SQCS General Permits and must apply for a site-specific Tribal NSR permit or other applicable NSR permit.

In this case, Granite determined that the Project triggered the preconstruction permit requirements under the Tribal Minor NSR Rule and is seeking to obtain coverage under the HMA and SQCS General Permits in lieu of obtaining a site-specific permit. As such, we have taken into account the enforceable limitations under the HMA and SQCS General Permits in determining the PTE for the Project, whether it is a major source, and whether it is eligible for the HMA and SQCS General Permits.

The Project's PTE does not exceed the applicable CAA NSR major source thresholds in attainment areas (250 tons per year for each pollutant). See Table 5 and 6. Accordingly, the Project's potential emissions are at a level that potentially qualifies it for coverage under the HMA and SQCS General Permits.

Table 5. HMA Plant Potential to Emit (PTE) Summary (includes controls)

Unit	Pollutant (tons/year)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
91-124	28.9	20.1	2.54	9.64	33.3	113.9	28.0
91-126 and 91-128	0.971	0.97	0.97	-	-	2.15	14.10
80-1963 (Conveying), 83-390, 83-398, 80- 1980, 86-746	21.02	7.71	7.71	-	-	-	-
80-1963 (screening)	0.96	0.32	0.02	-	-	-	-
Storage Piles	5.01	2.37	0.36	-	-	-	-
Total	56.88	31.52	11.60	9.64	33.29	116.03	42.13

Table 6. SQCS Facility Potential to Emit (PTE) Summary (includes controls)

Unit	Pollutant (tons/year)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
001, 002, 003, 004, 005, 006, 007 and 6- 10	57.20	4.31	0.21	-	-	-	-
Storage Piles	2.15	1.02	0.15	-	-	-	-
Engine/Generator	-	-	-	-	-	-	-
Total	59.34	5.33	0.37	-	-	-	-

Listed Species-Related Eligibility Criteria

The EPA developed eligibility criteria related to species that are listed as endangered or threatened under the federal Endangered Species Act that applicants must satisfy to qualify for coverage under the HMA and SQCS General Permits. Appendix A to the Request for Coverage form for the HMA and SQCS General Permits provides detailed screening procedures for applicants to follow to assess the potential impacts of their sources on federally-listed species and their critical habitat. To be eligible for coverage under a General Permit, sources must demonstrate that they have satisfactorily completed the screening procedures and that they meet one of the species-related eligibility criteria, provide sufficient documentation supporting the criterion selected, and obtain confirmation from the EPA that they have done so.

The Request for Coverage states that the Project meets Criterion B of Appendix A with respect to listed species protection. The Request for Coverage attached the relevant documentation pertaining to the Project and supporting the selection of Criterion B of Appendix A. Based on habitat requirements and an analysis of the available habitat within the boundaries of the proposed Project and the action area, the documentation shows that listed species and/or critical habitat could exist in the Project's action area. In an email, dated July 27, 2015, to the U.S. Fish and Wildlife Service (FWS) the applicant requested that the FWS review the Project and provide their feedback. In response, the FWS in an email, dated June 29, 2015, indicated that based on the information provided to them that adverse effects to listed threatened or endangered species or their critical habitat are not likely provided that there is not an impact on the Okanogan River. In an email, dated June 21, 2016, the EPA requested the input of the National Marine Fisheries Service (NMFS) regarding any concerns they may have on listed species and/or critical habitat in the area in and around the Project and provided the same information to the NMFS as was provided to the FWS including the FWS' concern regarding impacts to the Okanogan River. As follow up to this email, the EPA then spoke by phone that same day with the NMFS and the NMFS indicated to the EPA that adverse effects to listed threatened or endangered species or their critical habitat are not likely based on the same representations made by the applicant to the FWS. The applicant has represented that stormwater runoff is completely contained on-site and therefore will not impact the Okanogan River. The applicant further represented that there is no reasonable expectation that their operations will negatively affect the Okanogan River nor its tributaries and no activity will occur near or in any riparian buffer or floodplain within the Okanogan River Basin. The documentation in our record demonstrates that the continued operation of the project is not likely to cause any adverse effects to the listed threatened or endangered species or their critical habitat. After review and consideration of this information and documentation, the EPA agrees that the Applicant has completed the species-related screening procedures and has demonstrated, providing appropriate documentation, that the proposed Project meets Criterion B of the listed species-related eligibility criteria for coverage under the HMA and SQCS General Permits.

Historic Properties-Related Eligibility Criteria

The EPA developed the screening process in Appendix B of the Request for Coverage form to enable source owners/operators to appropriately consider the potential impacts, if any, resulting from the construction, modification, and/or operation of a new or modified emission source on historic properties and, if applicable, determine whether actions can be taken to mitigate any such impacts. To be eligible for coverage under the HMA and SQCS General Permits, sources must demonstrate that they have satisfactorily completed the screening procedures and that they meet one of the historic property-related

eligibility criteria, provide sufficient documentation supporting the criterion selected, and obtain confirmation from the EPA that they have done so.

With respect to the Project, the Applicant indicated in the Request for Coverage that the screening process in Appendix B of the Request for Coverage form had been completed to determine if the construction, modification or operation of the Project has the potential to cause effects to historic properties. The Request for Coverage indicated that no historic properties would be affected by the Project. This conclusion was based on the fact that the source is an existing quarry and prior earth disturbances preclude the existence of historic properties in the area, both in the quarry and on the access roads. The Request for Coverage also included a search of the National Register of Historic Places which did not indicate any historic sites in or around the Project. The applicant consulted the Confederated Tribes of the Colville Reservation, which provided no objection to the finding of “no historic properties affected”.

The EPA has concluded that the Applicant has demonstrated that it has satisfactorily completed the historic property-related screening procedures and that the Project meets one of the historic property-related eligibility criteria -- in this case, “no historic properties affected” -- and that the Applicant has provided sufficient documentation supporting the criterion selected. The EPA has concluded that the Project is consistent with the historic property-related eligibility criterion for coverage under the HMA and SQCS General Permits, based on the documentation provided in the Request for Coverage (and consultation with the Confederated Tribes of the Colville Reservation).

Public Participation

As described in 40 CFR 49.157, issuance of general permits pursuant to the Tribal NSR Rule must meet public participation requirements. Before issuing a permit under the Tribal NSR program, the EPA must prepare a draft permit and must provide adequate public notice to ensure that the affected community and the general public have access to the draft permit information. The public notice must provide an opportunity for a 30-day public comment period and notice of a public hearing, if any, on the draft permit. Consistent with these requirements, during the development of the proposed HMA and SQCS General Permits, the EPA followed the applicable public participation process and received numerous comments. The EPA considered and addressed these comments in its issuance of the final HMA and SQCS General Permits (See 80 FR 25068).

For coverage of a particular source under the HMA and SQCS General Permits, the EPA’s analysis of whether the source is within the category of emissions sources to which these General Permits applies, including whether the source meets the criteria to be eligible for coverage under the general permits, must be made available to the public. The EPA has described its analysis in this TSD, which will be made available, along with the EPA’s Approval of Request for General Permit Coverage for the Project under the HMA and SQCS General Permits and certain supporting documentation, on the EPA website at: <https://www.epa.gov/caa-permitting/air-permits-issued-epa-region-10>

These documents, and the entire administrative record for this Approval of Request for Coverage, can also be obtained by contacting Bryan Holtrop at the EPA address or phone number listed below. All documents will be available for review at the EPA Region X office indicated below, during regular business hours. Due to building security procedures, please call Bryan Holtrop at (206) 553-4473 at least 24 hours in advance to arrange a visit.

Bryan Holtrop (OAW-150)
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Hard copies of these documents can be mailed to individuals upon request in accordance with Freedom of Information Act requirements as described on the EPA Region 10 website at <https://www.epa.gov/foia/forms/contact-us-about-freedom-information-act-and-foia-requests#r10>.

The EPA is also making this TSD and our Approval of Request for Coverage for the Project, and certain other supporting documentation, available for review at:

Air Quality Program
The Confederated Tribes of the Colville Reservation
P.O. Box 150
Nespelem, Washington 99155
(509) 634-2418

The EPA's Approval of Request for Coverage for the Project is a final agency action for purposes of judicial review, only for the issue of whether the Project qualifies for coverage under the HMA and SQCS General Permits. 40 CFR 49.156(e)(6). Any petition for review of this approval action must be filed in the United States Court of Appeals for the appropriate circuit pursuant to CAA section 307(b).