

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

# **Technical Support Document**

Permittee:	Peak Sand and Gravel, Inc. P.O. Box 405 Sandpoint, Idaho 83864
Project Name:	Peak Portable Stone Quarrying, Crushing, and Screening Plant #2
Location:	Hard Rock Plummer Pit (previously disturbed portion of the quarry only) 1.5 miles east of Plummer, Idaho, on Highway 5 Benewah County Coeur d'Alene Indian Reservation
Source Contact:	Matt Peak (208) 255-2611 greg@peaksandandgravel.com
Date:	August 9, 2018
Permit #:	R10TNSR01600

# 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. In 2011, the EPA finalized the Tribal New Source Review (NSR) Rule, codified at 40 CFR Part 49, as part of a Federal Implementation Plan in order to protect tribal air resources from impacts due to the construction of new or modified stationary sources of air pollutants. 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. See 40 CFR 49.156. The purpose of a general permit is to provide for the protection of air quality while simplifying the permit issuance process for similar facilities 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 Stone Quarrying, Crushing, and Screening Facilities in Indian Country (SQCS General Permit) 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 SQCS General Permit 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 this General Permit must also demonstrate that they meet certain additional eligibility criteria.

This Technical Support Document (TSD) describes Region 10's analysis of the Applicant's Request for Coverage for the Project and our determinations concerning this request.

### **Request for Coverage under SQCS General Permit**

On May 21, 2018, Region 10 received an initial Request for Coverage under the Stone Quarrying, Crushing, and Screening (SQCS) General Permit from Peak Sand and Gravel, Inc., Plant #2 (Peak) to construct and operate a stone quarrying, crushing, and screening facility as a new synthetic minor source at the Hard Rock Plummer Pit, 1.5 miles east of Plummer, Idaho, within the exterior boundaries of the Coeur d'Alene Indian Reservation (the Project). This Request for Coverage was certified and signed as being true, accurate and complete by Matt Peak on May 21, 2018. Peak is considered the "Applicant" and the "Permittee" for the Project. On July 30, 2018, Peak indicated that the SQCS may be co-located with a hot mix asphalt (HMA) plant. Peak is considered the "Applicant" and the "Permittee" for the Project.

The Project may be co-located with a HMA facility and will comply with conditions 16 and 19.e of the SQCS General Permit to limit combined emissions of regulated NSR pollutants to less than 100 tons per year.

#### Approval of Request for General Permit Coverage

Based on a review of and reliance on the information and representations provided in the Request for Coverage and other relevant information, Region 10 has determined that the Project qualifies for coverage under the SQCS General Permit because it meets the required criteria. In particular, and as further described below:

- The Project is for a new synthetic minor SQCS facility that processes non-metallic materials (i.e., sand, gravel, rock or stone) utilizing some combination of primary, secondary, tertiary, or fine crushers and screens and is located within Indian Country.
- The Project is located in an attainment/classifiable area for all National Ambient Air Quality Standards (NAAQS) pollutants.
- The Project may be co-located with a HMA plant and will comply with Conditions 16 and 19.e of the SQCS General Permit to limit combined emissions of regulated NSR pollutants to less than 100 tons per year.
- Pursuant to Conditions 16 and 19.e of the SQCS General Permit the facility will process less than 730,000 tons of raw material per month, based on a 12-month rolling average and use less than 18,275 gallons of diesel fuel per calendar month in all combustion devices.
- The Applicant has met the eligibility criteria related to federally-listed species and has completed the screening process for historic properties.

This Approval and the SQCS General Permit authorize the Permittee to operate the Project within the exterior boundaries of the Coeur d'Alene Indian Reservation at the location (within the previously disturbed portion of the quarry only) described on page 1 of the Approval. Region 10's review with respect to the criteria is discussed in more detail below.

#### **Project Description**

Peak proposes to construct (locate) and operate a portable SQCS plant potentially co-located with an HMA plant within the previously disturbed portion of the Hard Rock Plummer Pit only. The Hard Rock Plummer Pit is an active quarry.

Peak SQCS Flant #2 List of Affected Emissions Units Covered by this Approval				
ID #	Description of Affected Emission Units	Controls		
0703	Primary Crusher: Nordberg C110, 725 tons/hour capacity,	Water Spray		
	manufactured 2005	1 5		
0601	Secondary Crusher: Eljay 54II Cone w/ JCI Screen, 725 tons/hour capacity, manufactured 1996	Water Spray		
0608	Secondary Crusher: Nordberg 13/52 Cone, 725 tons/hour capacity, manufactured 1996	Water Spray		
0602	Tertiary Crusher: Nordberg HP400 Cone, 725 tons/hour capacity, manufactured 2005	Water Spray		
0604	Tertiary Crusher: ISC 77 Impact, 725 tons/hour capacity, manufactured 1997	Water Spray		
0907	Screen: JCI 6x20 2-Deck, 725 tons/hour capacity, manufactured 2001	Water Spray		
0911	Screen: JCI 8x20 3-Deck, 725 tons/hour capacity, manufactured 2001	Water Spray		
0904	Screen: Simplicity 6x16 3-Deck, 725 tons/hour capacity, manufactured 1997	Water Spray		
0503, 0522, 0523, 0532, 0534, 0535, 0536, 0540, 0541, 0542, 0547	11 Conveyors, 725 tons/year capacity	Water Spray		
0405	Primary Generator: Caterpillar 3512, 1250 kW, 1340 capacity, manufactured 1992; uses #2 Diesel fuel	None		
0407	Backup Generator: Isuzu 60 kVa Multiquip, 54 kW, 64 horsepower capacity, manufactured 1998, uses #2 Diesel fuel	None		

Peak SQCS Plant #2 List of Affected	Emissions Units	Covered by thi	s Annroval
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# Ambient Air Quality

The geographic area where the Project will be located is designated as attainment/unclassifiable under the CAA for all National Ambient Air Quality Standards (NAAQS) pollutants. The available information on air quality in the area shows that ambient concentrations are well below the levels of the NAAQS. The SQCS General Permit contains limits on emissions and operations sufficient to ensure that the potential emissions from the SQCS facility are not a major source and to ensure that emissions would not cause or contribute to a violation of any NAAQS. Therefore, Region 10 believes that the SQCS General Permit is appropriately protective of the NAAQS.

Peak Sand and Gravel, Inc. TSD for Approval of SQCS General Permit Coverage

#### 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 SQCS General Permit includes 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 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 SQCS General Permit included consideration of the limitations on PTE in the SQCS General Permit.

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.

Tribai Wintor NSK Fernitting Thresholds (tons per year)				
Pollutant	Nonattainment Areas	Attainment Areas		
СО	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		

**Tribal Minor NSR Permitting Thresholds (tons per year)** 

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. To qualify for the SQCS General Permit, 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 SQCS General Permit and must apply for a site-specific Tribal NSR permit or other applicable NSR permit.

In this case, Peak determined that the Project triggered the preconstruction permit requirements under the Tribal Minor NSR Rule and is seeking to obtain coverage under the SQCS General Permit in lieu of obtaining a site-specific permit. As such, Region 10 has factored in the enforceable limitations under the SQCS General Permit in determining the PTE for the Project, whether it is a major source, and whether it is eligible for the SQCS General Permit.

The Project's PTE will be limited to below 100 tons per year for the NAAQS pollutants and 250 tons per year for PM (which is not a NAAQS pollutant) making the Project a synthetic minor source for Title V and NSR major source thresholds in attainment areas. The potential emissions contained in the Table below are based on the material throughput limits and fuel consumption limits for co-located SQCS facilities and HMA plants that are specified in the respective general permits. For more information about how these emissions were calculated please see the <u>Background Document: General Air Quality</u> <u>Permit for New or Modified Minor Source Stone Quarrying, Crushing, and Screening Facilities in Indian Country (PDF)(19 pp, 773 K, 03/23/15) at https://www.epa.gov/sites/production/files/2017-03/documents/stone\_quarrying\_background\_document\_version\_1.0.pdf. Accordingly, the Project's potential emissions are at a level that qualifies it for coverage under the SQCS General Permit co-located with an HMA plant.</u>

As shown below, the Project's potential emissions are at a level that qualifies it for coverage under the SQCS General Permit.

	Pollutant (tons/year)						
Process	PM	<b>PM</b> <sub>10</sub>	<b>PM</b> <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Co-located SQCS	86	63	30	18	90	78	27
Facility and HMA Plant							

SQCS and HMA Co-located (Controlled) Potential to Emit Summary

# Listed Species-Related Eligibility Criteria

The EPA developed eligibility criteria related to species that are listed as threatened or endangered under the federal Endangered Species Act (ESA) that applicants must satisfy to qualify for coverage under the SQCS General Permit. Appendix A to the Request for Coverage form for the SQCS General Permit 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 D of Appendix A with respect to listed species protection. The Request for Coverage included information pertaining to the Project and supporting their selection of Criterion D of Appendix A. Based on habitat requirements and an analysis of the available habitat within the boundaries of the proposed Project location and the respective action area, the information shows that the construction and operation of the SQCS facility are not likely to cause any adverse effects to the listed threatened or endangered species or their critical habitat.

Based on information from the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) there are no listed mammal species in Benewah County and the only aquatic species listed is the bull trout. This same information also indicates there are two listed plant species, which are the spalding's catchfly and water howelia.

To address aquatic ESA concerns, Peak has indicated that there are berms around the site to prevent runoff from flowing into Little Plummer Creek which is just north of the site. The SQCS facility will be located and operating in a previously disturbed portion of the Hard Rock Plummer Pit. By requiring the SQCS facility to locate and operate within the previously disturbed area of the existing quarry, Peak will not disturb new soil or presumably any threatened plants. Based on this information, the FWS indicated that there would be a no effect determination to the listed species and their critical habitat. NMFS indicated that there are no listed species (e.g. steelhead trout) or critical habitats within and around the Project area for which they have jurisdiction.

After review and consideration of this information, Region 10 agrees that the Applicant has completed the species-related screening procedures and has demonstrated, providing appropriate information, that the proposed Project meets Criterion B (instead of Criterion D) of the listed species-related eligibility criteria for coverage under the SQCS General Permit. Per Appendix A of the Request for Coverage, this Project would meet Criterion B because the construction and operation of the SQCS facility are not likely to cause any adverse effects to the listed threatened or endangered species or their critical habitat in and around the Project area.

#### Historic Properties-Related Eligibility Criteria

EPA engaged in the National Historic Preservation Act (NHPA) Section 106 process when the General Permit was issued. Requests for approval under the General Permit are not subject to NHPA Section 106, but are subject to the NHPA screening requirements in Appendix B of the Request for Coverage. The EPA developed the screening process in Appendix B of the Request for Coverage 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 emissions source on historic properties that are listed or eligible for listing on the National Register of Historic Places and, if applicable, determine whether actions can be taken to mitigate any such impacts. To be eligible for coverage under the SQCS General Permit, 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 had been completed to determine if the construction or operation of the Project has the potential to cause affects to historic properties. The Request for Coverage indicated that no historic properties would be affected by the Project. This conclusion was in part based on a "Archaeological and Historical Survey Report" dated August 8, 2001, which determined that no cultural properties were identified within the 6 acres of planned expansion of the Hard Rock Plummer Pit. The other 8 acres of the site have been in use as a quarry and prior earth disturbances preclude the existence of historic properties within the Hark Rock Plummer Pit. On the Coeur d'Alene Indian Reservation, the Tribal Historic Preservation Officer (THPO) is the lead for the historical preservation program. Region 10 contacted the THPO requesting their input on the proposed site location regarding historic properties and cultural issues. The THPO responded she visited the site and did not have a concern regarding historic properties at the Hard Rock Plummer Pit.

Peak Sand and Gravel, Inc. TSD for Approval of SQCS General Permit Coverage Region 10 has concluded that the Project meets the historic property-related eligibility criteria "no historic properties affected." Region 10 has concluded that the Project is consistent with the historic property-related eligibility criterion for coverage under the SQCS General Permit.

#### **Environmental Justice**

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

The EPA believes the human health or environmental risk associated with this action will not have disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations. The EPA's primary goal in developing the SQCS General Permit is to ensure that air resources in Indian Country will be protected in the manner intended by the CAA. The SQCS General Permit will limit adverse impacts by restricting operations and emissions. In addition, the SQCS General Permit is part of a flexible preconstruction permitting program for minor sources in Indian Country that is comparable to similar programs in neighboring states to create a more level regulatory playing field for owners and operators within and outside of Indian Country. The SQCS General Permit reduces an existing disparity by filling the regulatory gap.

Region 10 believes that the SQCS General Permit is appropriately protective of the NAAQS with respect to the Project. Compliance with the NAAQS is emblematic of achieving a level of public health protection that demonstrates that a proposed facility will not have disproportionately high and adverse human health or environmental effects on minorities or low-income populations. See, e.g., In re Shell Offshore Inc., 13 EA.D. 357, 404-5 (EAB 2007).

# **Tribal Consultation**

Region 10 provided a copy of the request for coverage application as well as a copy of the draft approval letter and technical support document to the Coeur d'Alene tribal environmental authority. Region 10 sent a letter to the Chairman of the Coeur d'Alene Tribe offering consultation on this EPA permitting action on July 9, 2018. The Coeur d'Alene Tribe did not request consultation.

#### **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 SQCS General Permit, the EPA followed the applicable public participation process and received numerous comments.

Peak Sand and Gravel, Inc. TSD for Approval of SQCS General Permit Coverage The EPA considered and addressed these comments in its issuance of the final SQCS General Permit (See 80 Fed. Reg. 25068 (May 1, 2015)).

In contrast, a 30-day public comment period under 40 CFR 49.157 is not required for an approval of a request for coverage of a particular source under a General Permit. Region 10 posts the request for coverage on its website prior to the issuance of any decision to approve or deny the request for coverage and requests the public to submit any concerns about the applicant's eligibility to construct under the General Permit. Region 10's air permits website is found at: <u>https://www.epa.gov/caa-permitting/caa-permitting-epas-pacific-northwest-region</u>.

Region 10's Approval of the Request for Coverage for the Project is a final agency action for purposes of judicial review only for the issue of whether the Project is eligible for coverage under the SQCS General Permit (see 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).