



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: CPM Development Corporation, dba
Central Washington Concrete
P.O. Box 3366
Spokane, Washington 99220

Project Name: Central Washington Concrete Stone Quarrying, Crushing and Screening Facility –
Wapato Quarry

Location: Wapato Quarry
2131 Lateral 1 Road, Wapato, Washington
Yakima County
Yakama Reservation
Latitude: 46.477744° N; Longitude: 120.493859° W

Source Contact: Ms. Jana McDonald
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Date: February 23, 2021

Permit #: R10TNSR02201 (replaces R10TNSR02200)

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 where there is no EPA-approved NSR program (see 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 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 Stone Quarrying, Crushing and Screening Facilities (SQCS General Permit) in Indian Country effective June 1, 2015 (see 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 the 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 Permit. 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 March 11, 2019, Region 10 received an official Request for Coverage under the SQCS General Permit from Central Washington Concrete to construct and operate a SQCS facility synthetic minor source on the Yakama Reservation (the Project). The request included one location, the Wapato Quarry, which is within the exterior boundaries of the Yakama Reservation in Washington state. This plant has been previously approved for operation at the Toppenish Quarry at 441 E. McDonald Road, Toppenish, Washington (Permit Approval # R10TNSR00400; September 28, 2016). Additional information was requested by Region 10 on April 10, 2019, and received on April 26, 2019. The Applicant was notified that the application was complete on May 1, 2019.

The original Approval for Coverage under the SQCS General Permit, for operation at the Wapato Quarry, was issued to Central Washington Concrete on June 3, 2019. On October 8, 2020, Region 10 received a notification, from Central Washington Concrete, a tertiary crusher was to be replaced with a newer unit. Specifically, the Nordberg HP400 tertiary crusher (I.D. #520) manufactured in 2004 with a capacity of 500 tons per hour will be replaced by a KPI-JCI K400+ tertiary crusher (I.D. #540) manufactured in 2018 with the same capacity. The change in equipment did not affect the source's allowable emissions because the replacement crusher will serve the same purpose with the same capacity. Region 10 is administratively revising the Approval to update the affected emission units associated with the source. On January 8, 2021, Region 10 sent an electronic copy of the revision request to the Yakama Nation environmental staff. No concerns regarding the revision were raised.

Central Washington Concrete may co-locate the SQCS plant with a hot mix asphalt (HMA) plant. The HMA approval is being processed as a separate Region 10 action, as explained below. Central Washington Concrete is considered the "Applicant" and the "Permittee" for the Project.

Approval of Request for General Permit Coverage

Based on a review of and reliance on all of 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 all of the required criteria. In particular, and as further described below:

- The Project is for a synthetic minor SQCS plant that only processes nonmetallic materials with a combination of crushers and screens and is located within Indian Country.
- The Project is located in an attainment, unclassifiable or attainment/unclassifiable area for all National Ambient Air Quality Standards (NAAQS) pollutants.

- The Project will 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-regulated pollutants to less than 100 tons per year.
- 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 Yakama Reservation at the location described on page 1 of this TSD (Wapato Quarry).

Project Description

The Wapato Quarry is an active quarry. Interstate Concrete & Asphalt dba Columbia Asphalt & Ready Mix currently is approved to operate an SQCS plant at the Wapato Quarry (Permit # R10TNSR01300; May 25, 2018). Central Washington Concrete is a CPM Development Corporation business. Both Interstate Concrete & Asphalt and CPM Development Corporation are subsidiaries of CRH Americas Materials. L.S. Wapato L.L.C. owns the property and mining rights at Wapato Quarry.

Central Washington Concrete proposes to construct (locate) and operate a portable SQCS plant at the Wapato Quarry. The SQCS plant has a design capacity of 500 tons per hour of crushed rock (see the emission unit descriptions below). Central Washington Concrete’s SQCS plant may be co-located with a hot mix asphalt plant at Wapato Quarry. The hot mix asphalt plant approval will be processed separately from this permit action. Central Washington Concrete has requested to be subject to the co-location requirements in the SQCS General Permit.

Central Washington Concrete SQCS Plant List of Affected Emission Units

ID #	Description of Affected Emission Units	Controls
500	Primary Crusher: Nordberg C110; manufactured 2008; 500 tons/hour capacity	Water Spray
510	Secondary Crusher: Nordberg HP400; manufactured 1998; 500 tons/hour capacity	Water Spray
530	Tertiary Crusher: Nordberg HP300; manufactured 1998; 500 tons/hour capacity	Water Spray
540	Tertiary Crusher: KPI-JCI K400+; manufactured 2018; 500 tons/hour capacity*	Water Spray
400	Regular Screen: JCI 5x20; manufactured 2004; 500 tons per hour capacity	Water Spray
420	Regular Screen: JCI 5x20; manufactured 1997; 500 tons per hour capacity	Water Spray
421	Regular Screen: JCI 5x20; manufactured 1997; 500 tons per hour capacity	Water Spray
430	Jaw Feeder: manufactured 2008; 500 tons/hour capacity	None
701	Main Bunker Loadout: 500 tons/hour capacity	None
702	Chip Bunker Loadout: 500 tons/hour capacity	None
101	Conveyor: Jaw plant under conveyor; 500 tons/hour capacity	None
102	Conveyor: Under feed conveyor; 500 tons/hour capacity	None
201	Conveyor: Std cone cross conveyor; 500 tons/hour capacity	None
202	Conveyor: Std cone cross conveyor #2; 500 tons/hour capacity	None
203	Conveyor: Under scalp screen conveyor; 500 tons/hour capacity	None
204	Conveyor: Conveyor to wash plant #1; 500 tons/hour capacity	None
205	Conveyor: Conveyor to wash plant #2; 500 tons/hour capacity	None

ID #	Description of Affected Emission Units	Controls
206	Conveyor: Pea conveyor; 500 tons/hour capacity	None
207	Conveyor: Pea gravel conveyor; 500 tons/hour capacity	None
208	Conveyor: ¾ cross conveyor; 500 tons/hour capacity	None
209	Conveyor: ¾ round conveyor; 500 tons/hour capacity	None
210	Conveyor: Drain rock conveyor; 500 tons/hour capacity	None
211	Conveyor: Sand conveyor; 500 tons/hour capacity	None
212	Conveyor: Kolburg radial stacker conveyor; 500 tons/hour capacity	None
TNK1	Diesel Storage Tank: 4000 gallon capacity; above ground	None

*Original 2019 approval was for a Nordberg HP400 crusher (previously, Unit ID#520), tertiary crusher replaced in 2020.

Ambient Air Quality

The geographic area where the Project will be located is designated attainment or attainment/unclassifiable under the CAA for all NAAQS pollutants. The area experiences high ambient fine particulate matter (PM_{2.5}) levels, approaching the ambient standard of 35 micrograms per cubic meter (ug/m³), caused primarily by wood stove use during wintertime inversions. During the road construction season (March through November), with the exception of wildfire events, daily PM_{2.5} levels measured in Wapato and Yakama, the nearest monitoring locations, rarely exceed 20 ug/m³ and are typically around 10 ug/m³ or less. The SQCS General Permit contains limits on emissions and operations sufficient to ensure that the SQCS plant is not a major source and to ensure that emissions would not cause or contribute to a violation of any NAAQS. Region 10 believes that the SQCS General Permit is appropriately protective of the NAAQS (see 80 Fed. Reg. at 25085). The SQCS General Permit contains requirements that limit PM_{2.5} emissions, as does the HMA General Permit. Based on the requirements in the SQCS General Permit and the HMA General Permit, that elevated PM_{2.5} levels in the area are associated with wood stove usage during wintertime inversions, and that the Project and the associated HMA is expected to operate primarily from March to November, when wood stove usage and wintertime inversions are generally not a concern, Region 10 does not have reason to be concerned that operation of the Project in compliance with the HMA General Permit and the SQCS operations in compliance with the SQCS General Permit would cause or contribute to a NAAQS or PSD increment violation. Region 10, therefore, believes that the SQCS General Permit, in conjunction with the HMA General Permit, is appropriately protective of the NAAQS.

Regarding high PM_{2.5} ambient pollution levels caused by wildfires during the road construction season, NAAQS violations attributed to wildfires may qualify as exceptional events and be excluded in determining attainment of the NAAQS under EPA's Exceptional Event Rule (40 CFR 50.14). Nonetheless, the EPA has the authority to address emissions detrimental to public health and welfare under the Federal Air Rules for Reservations and under the CAA. Under 40 CFR 49.137, if the EPA determines that air pollutants are approaching, or have reached, levels that could lead to a threat to human health, the agency is authorized to declare air pollution alerts, warnings or emergencies. During an air pollution warning or air pollution emergency, the EPA may issue an order to any air pollution source requiring such source to curtail or eliminate the emissions. The agency also has the authority to issue an order pursuant to Section 303 of the CAA to require an owner or operator to immediately reduce or cease the emission of air pollutants that are presenting an imminent and substantial endangerment to public health or welfare or to the environment.

Emissions

A source in an attainment area must obtain a major source construction permit if its emissions of regulated NSR pollutants will be greater than 100 tons per year for listed source categories and 250 tons per year for non-listed categories. A source in an attainment area must obtain a major source operating permit if its emissions will be greater than 100 tons per year for regulated pollutants and 250 tons per year for PM. A source must obtain a minor NSR permit if its emissions are less than the major source construction permitting thresholds, but more than the minor NSR permitting thresholds in the table below. Permit limitations, also called synthetic minor limits, are considered in determining whether a source will be a major source.

Tribal Minor NSR Permitting Thresholds (tons per year)

Pollutant	Nonattainment Areas	Attainment Areas
CO	5	10
NO _x	5	10
SO ₂	5	10
VOC	2	5
PM	5	10
PM ₁₀	1	5
PM _{2.5}	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

A new or modified source that is required to obtain a minor NSR permit may qualify for coverage under a minor NSR general permit in lieu of obtaining a site-specific permit. To qualify for the General Permit, the new or modified source must meet the eligibility criteria in the Request for Approval (see the Approval of Request for General Permit Coverage section above) and be able to comply with the limitations in the General Permit. If a new or modified source does not meet the specified criteria or cannot comply with the limitations in the General Permit, the source does not qualify for coverage under the General Permit and must apply for a site-specific minor NSR permit or other applicable NSR permit.

The SQCS General Permit includes enforceable physical or operational limitations on the maximum capacity of the source to emit air pollutants, including air pollution control equipment and restrictions on the type or amount of material combusted, stored, or processed. The permit is designed to ensure emissions remain below the major source construction and operating permit thresholds. The SQCS General Permit also includes restrictions designed to limit emissions below the major source permitting thresholds. When an SQCS facility is co-located (two operations functioning as one source at the same location) with a HMA plant, emissions from both sources must be totaled to determine the applicable permitting program. Both general permits include special limitations that apply to co-located sources to ensure that the total emissions from both operations are less than the major source permitting thresholds.

The potential emissions contained in the table below are based on the material throughput limits and fuel consumption limitations for co-located HMA plants and SQCS plants that are specified in the respective general permits and assume compliance with those limitations. For more information about how these emissions were calculated, please see the [Background Document: General Air Quality Permit for New or Modified Minor Source Stone Quarrying, Crushing, and Screening Facilities in Indian Country](https://www.epa.gov/tribal-air/5-source-categories-stone-quarrying-crushing-and-screening-facilities-final-rule) at <https://www.epa.gov/tribal-air/5-source-categories-stone-quarrying-crushing-and-screening-facilities-final-rule>.

SQCS & HMA Plant (Controlled) Potential to Emit Summary

Process	Pollutant (tons/year)						
	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
SQCS & HMA Source-wide Emissions	86	63	30	18	90	78	27

Our evaluation of whether the Project qualifies for coverage under the SQCS General Permit included consideration of past compliance information. No compliance records indicate that the source cannot comply with the limitations in the SQCS General Permit. Accordingly, the source is eligible for coverage under the SQCS General Permit.

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 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 Applicant’s Request for Coverage includes a plot plan and states that the Project meets Criterion A of Appendix A with respect to listed species protection, referring to the previous GP coverage approval for Columbia Asphalt & Ready Mix’s SQCS plant (Permit # R10TNSR01300; May 25, 2018). When approving the Columbia’s project in 2016, Region 10 concluded that the project met Criterion A because no federally-listed threatened or endangered species or designated critical habitats of such species are likely to occur within the action area for the Project. This was based upon the review and input from the Central Washington Field Office of the U.S. Fish and Wildlife Service (FWS).

After review and consideration of this information, Region 10 agrees that the Applicant has completed the species-related screening procedures and has demonstrated by providing the appropriate information and documentation that the proposed Project meets Criterion A of the listed species-related eligibility criteria for coverage under the SQCS General Permit. Per Appendix A of the Request for Coverage, this SQCS plant would meet Criterion A because no federally-listed threatened or endangered species or designated critical habitats of such species are likely to occur within the action area for the Project.

Historic Properties-Related Eligibility Criteria

The 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 emission source on historic properties that are either listed on 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 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 impact area is an existing quarry and prior earth disturbances on part of the site have diminished the likelihood that historic properties exist on the Wapato Quarry site. Other operations at this site received approval from the EPA in 2018.

On the Yakama Reservation, the Tribal Historic Preservation Officer (THPO) is the lead for the historical preservation program. Region 10 contacted the THPO for input on the proposed site location regarding historic properties and cultural issues. After reviewing the information available and the proposed site location, the THPO concluded in an email on April 26, 2019, that she had no comments because the work will be occurring in a site that had prior approval and had been heavily disturbed. Region 10 has concluded that the Project meets the historic property-related eligibility criteria “no historic properties affected” and 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 was 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 and creates 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.

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

Tribal Consultation

The applicant sent an electronic copy of the SQCS application and supporting information to the Yakama Nation environmental staff on March 19, 2019. Region 10 forwarded an electronic copy to the THPO on March 22, 2019. Additional information was shared with the tribal staff as it was received. Region 10 sent a letter to the Chairman of the Yakama Nation Tribal Council on March 25, 2019, offering consultation on this EPA permitting action. The Yakama Nation did not request formal Government to Government consultation regarding the Project. On April 23, 2019, tribal environmental staff informed Region 10 that they had no air quality concerns about the project.

On January 8, 2021, Region 10 sent an electronic copy of the revision request (replacement of tertiary crusher unit ID# 520 with a new unit) to the Yakama Nation environmental staff. No concerns regarding the revision were raised.

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. 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 posted the request for coverage on its website on about March 21, 2019, prior to the issuance of any decision to approve or deny the request for coverage and requested the public to submit any concerns about the applicant's eligibility to construct under the General Permit. Region 10's air permits website can be found at: <https://www.epa.gov/caa-permitting/caa-permitting-epas-pacific-northwest-region>.

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).