

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

#### TECHNICAL SUPPORT DOCUMENT

**Permittee:** Oscar Renda Contracting, Inc.

608 Henrietta Creek Rd. Roanoke, Texas 76262

**Project Name:** Navajo Nation Crushing/Screening Operation

**Location:** Near US Highway 491, between Twin Lakes and Naschitti, New Mexico and

within Navajo Nation tribal land (part of the Navajo-Gallup Water Supply

Project (NGWSP))

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Facility ID#: 30

Application #: 2018-003-GP

### Summary

Oscar Renda Contracting, Inc. (ORCI) applied for coverage under the General Air Quality Permit for New or Modified Minor Source Stone Quarrying, Crushing, and Screening Facilities in Indian Country (SQCS General Permit). ORCI proposes to construct and operate a portable aggregate

crushing/screening operation (Project), which is called the Navajo Nation Crushing/Screening Operation, located within the Navajo Nation tribal land in McKinley and San Juan Counties, New Mexico. The Project is part of the Navajo-Gallup Water Supply Project (NGWSP) in San Juan County, New Mexico, which is a federal project operated by the Bureau of Reclamation (BOR) to divert water from the San Juan River and Navajo Reservoir to the Navajo Nation, Jicarilla Apache Nation, and the city of Gallup, New Mexico. The United States Environmental Protection Agency (EPA), Region 9 has reviewed ORCI's application for coverage and finds that the proposed facility qualifies for coverage under the General Permit. This Technical Support Document (TSD) describes the legal and factual basis for our approval.

#### **Background**

The Clean Air Act (CAA) provides the 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 EPA-approved NSR program, the EPA has the authority to implement a Federal Implementation Plan (FIP) in order to protect air resources from impacts due to the construction of new or modified stationary sources of air pollutants on tribal lands. 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.

The Navajo Nation does not have an EPA-approved NSR program, so the EPA is the permitting authority for new or modified stationary sources of air pollutants. The EPA reviews applications and issues permits for the construction and operation of new and modified stationary sources on tribal land in accordance with the Tribal NSR Rule.

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 Stone Quarrying, Crushing, and Screening Facilities in Indian Country effective June 1, 2015. 80 Fed. Reg. 25068 (May 1, 2015). New and modified minor sources may apply for coverage under the SQCS General Permit if the total 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 must also demonstrate that they meet all eligibility criteria.

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

On February 21, 2018, the EPA Region 9 received a Request for Coverage under the SQCS General Permit from ORCI for the construction and operation of a portable aggregate crushing/screening operation within the Navajo Nation tribal land in McKinley and San Juan Counties, New Mexico. The

portable aggregate crushing/screening operation will be used to process and provide material to the NGWSP, which is a federal project operated by the BOR to divert water from the San Juan River and Navajo Reservoir to the Navajo Nation, Jicarilla Apache Nation, and the city of Gallup, New Mexico. The NGWSP will include the construction of two water treatment plants, 280 miles of pipeline, 24 pumping plants, and numerous water regulation and storage facilities. ORCI's portable aggregate crushing/screening operation will be operated near US Highway 491, between Twin Lakes and Naschitti, New Mexico.

On March 21, 2018, the EPA sent a letter to ORCI indicating that their application was complete. 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.

#### **Process Description**

ORCI's portable aggregate crushing/screening operation is called the Navajo Nation Crushing/Screening Operation. It consists of three portable screening units and two portable crushing units. All of the portable screening units are Powerscreen Warrior 1800s, and all of the portable crushing units are Powerscreen Trakpactor 500s.

#### Powerscreen Warrior 1800

Aggregate material that is mined onsite is transported to one of the three Powerscreen Warrior 1800s units and transferred (EPNs S1-1, S2-1, & S3-1) to the unit's hopper. Material from the hopper is transferred via a conveyor to the screen (EPNs S11-2, S2-2, & S3-2). Large material caught by the top deck of the screen is transferred to a conveyor to be stockpiled (EPN STK). Smaller material caught by the second deck is transferred to a conveyor to be stockpiled (EPN STK). Material that is not caught by the screen decks is transferred (EPNs S1-3, S2-3, & S3-3) to a conveyor to be stockpiled (EPN STK).

#### <u>Powerscreen Trakpactor 500</u>

Aggregate material that is mined onsite is transported to one of the two Powerscreen Trakpactor 500s units and transferred (EPNs C1-1 & C2-1) to the unit's grizzly hopper. Smaller material that is not caught by the grizzly hopper falls onto a conveyor beneath the grizzly hopper to be transferred to a material stockpile (EPN STK). Larger material that is caught by the grizzly hopper is fed into the unit's crusher (EPNs C1-2 & C2-2) to be processed. Material processed by the crusher falls onto a conveyor to be stockpiled (EPN STK).

### **Equipment Description**

The subject facility will have a maximum production rate of 300 tons per hour (TPH) and 8,760,000 tons per year (TPY) at a maximum operating schedule of 24 hours per day, 7 days per week, and 52

<sup>&</sup>lt;sup>1</sup> See https://www.permits.performance.gov/projects/536306001

weeks per year. The proposed aggregate crushing/screening operation equipment will include the equipment listed within the table below.

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

ID#	Description	Make/Model Equipment Size		Controls / Fuel	Year
S1	Screener	Powerscreen Warrior 1800	300 TPH	Water Sprays	New
S2	Screener	Powerscreen Warrior 1800	300 TPH	Water Sprays	New
S3	Screener	Powerscreen Warrior 1800	300 TPH	Water Sprays	New
C1	Crusher	Powerscreen Trakpactor 500	300 TPH	Water Sprays	New
C2	Crusher	Powerscreen Trakpactor 500	300 TPH	Water Sprays	New
E1*	Screening Unit Generators	CAT C4.4	110 HP	Water Sprays	New
E2*	Screening Unit Generators	CAT C4.4	110 HP	Diesel	New
E3*	Screening Unit Generators	CAT C4.4	110 HP	Diesel	New
E4*	Crushing Unit Generators	CAT C13	440 HP	Diesel	New
E5*	Crushing Unit Generators	CAT C13	440 HP	Diesel	New
STK	Stockpiles / Loading / Unloading		13,140,000 Maximum Material Transferred		-

<sup>\*</sup>The portable generator engines are exempt mobile sources per 40 CFR § 49.153.

The generator engines at this facility are not stationary engines. The engines meet the definition of "nonroad engines" in 40 CFR 49.123(a) as the units are designed to be portable, are not regulated by a federal new source performance standard promulgated under section 111 of the CAA, and will not remain at a location for more than 12 consecutive months. As nonroad engines, the units meet the definition of a "mobile source" under 40 CFR 49.123(a). Per 40 CFR 49.153(c)(1), the Federal Minor NSR Program in Indian Country does not apply to mobile sources. Emissions and fuel usage data were not accounted for as these units are exempt.

OCRI will utilize permanently mounted spray bars installed at the inlet and outlet of all crushers, at all shaker screens, and at all material transfer points. OCRI will water each road, parking lot, or other area at the plant site used by vehicles to minimize dust emissions. OCRI will also water stockpiles, as needed, to minimize dust emissions.

### **Eligibility Criteria**

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

- The Project is a new true minor source stone quarrying, crushing, and screening facility that will be
  used to process and provide material to a nearby pipeline project that is taking place near US
  Highway 491, between Twin Lakes and Naschitti, New Mexico and within Navajo Nation land;
- The Project will be a portable stone quarrying, crushing, and screening facility;
- The Project will not involve construction or modification of a major source stone quarrying, crushing, and screening facility;
- The Project will be located on the Navajo Nation tribal land;
- The Project will process non-metallic materials (i.e., sand, gravel, rock or stone);
- The Project will utilize primary crushers or screeners;
- The Project will be located in an attainment, unclassifiable, or attainment/unclassifiable area for criteria pollutants (i.e., it will not be located in any nonattainment area);
- The projected monthly throughput of rock, stone, sand, gravel, and aggregate (in tons) to be
  processed at the Project will be 730,000 tons per month, which is less than 1,100,000 tons of raw
  material throughput per month based on a 12-month rolling average;
- The projected monthly usage of diesel fuel (in gallons) for all stationary combustion sources (e.g., boilers) at the Project will be 4000 gallons per month, which is less than a combined total of 24,200 gallons of diesel fuel per calendar month;
- ORCI has demonstrated that it meets Criterion A of Appendix A with respect to the protection of any and all species that are federally listed as threatened or endangered under the Endangered Species Act (ESA) or of habitat that is federally designated as "critical habitat" under the ESA (see Listed Species-Related Eligibility Criteria section below); and
- ORCI has completed the screening process pursuant to the National Historic Preservation Act (NHPA) (see Historic Properties-Related Eligibility Criteria section below).

### 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. PTE is meant to be a worst-case emissions calculation and is used in many cases to determine the applicability of federal CAA requirements. 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 hours of operation and/or on the type or amount of material combusted, stored, or processed. Our evaluation of whether the Project qualifies for the SQCS General Permit included consideration of the limitations and controls required by 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. Table 3 lists the minor and major source thresholds pursuant to 40 CFR 49.153 (Tribal Minor NSR), 40 CFR Part 52.21(b)(1)(i)(b) (*PSD Major Source*), and 40 CFR Part 71 (*title V Major Source*).<sup>2</sup> If post-control emissions for each regulated NSR pollutant are above the applicable thresholds, then the relevant CAA permitting requirements apply for that pollutant. See Table 1.

Table 1: Tribal Minor NSR Permitting Thresholds (tons per year)

Regulated NSR pollutant	Tribal Minor NSR thresholds for attainment areas (tpy)		Title V Major Source thresholds (tpy)	
Carbon monoxide (CO)	10	250	100	
Nitrogen oxides (NO <sub>x</sub> )	10	250	100	
Sulfur dioxide (SO <sub>2</sub> )	10	250	100	
Volatile Organic Compounds (VOC)	5	250	100	
PM	10	250	100	
PM <sub>10</sub>	5	250	100	
PM <sub>2.5</sub>	3	250	100	
Lead	0.1			
Fluorides	1			
Sulfuric acid mist	2			
Hydrogen sulfide (H <sub>2</sub> S)	2			
Total reduced sulfur (including H₂S)	2			
Reduced sulfur compounds (including H <sub>2</sub> S)	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 SQCS General Permit, the new or modified source must have a PTE (without controls) below the major

<sup>&</sup>lt;sup>2</sup> See 40 CFR part 71.2, *Definition of Major Source (Paragraph 2)*. The major source threshold under 40 CFR part 71 is 100 tons per year (tpy) for this area.

source thresholds in Table 1 or accept restrictions contained within the permit that reduces its PTE to below major source thresholds (synthetic minor source).<sup>3</sup> 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, ORCI 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.

Table 2: Facility-wide Potential to Emit Summary (without controls)

Process	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	СО	voc
Sand, Gravel, Rock Crushing, Screening, Conveying	1234.62	303.19	0.00		-	1	
Storage Piles	1.24	0.59	0.09				
Engine/Generator	1.75	1.75	1.75	10.86	3.71	42.40	13.32
Total	1237.61	305.53	1.84	10.86	3.71	42.40	13.32

Table 3: Facility-wide Potential to Emit (PTE) Summary (includes controls)

Process	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NOx	СО	VOC
Sand, Gravel, Rock Crushing, Screening, Conveying	18.40	10.50	0.14	0.00			
Storage Piles	1.24	0.59	0.09	-			
Engine/Generator	1.75	1.75	1.75	10.86	3.71	42.40	13.32
Total PTE	21.40	12.84	1.97	10.85	3.71	42.40	13.32

### **Listed Species-Related Eligibility Criteria**

The EPA developed eligibility criteria related to species that are listed as endangered or threatened under the 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 it provides detailed screening procedures for applicants to follow to assess the potential impacts of their sources on

<sup>&</sup>lt;sup>3</sup> According to 40 CFR 49.152, a "[s]ynthetic minor source means a source that otherwise has the potential to emit regulated NSR pollutants in amounts that are at or above those for major sources in §49.167, §52.21 or §71.2 of this chapter, as applicable, but that has taken a restriction so that its potential to emit is less than such amounts for major sources." (emphasis added). Restrictions taken to create the synthetic minor source must be enforceable as a practical matter.

federally-listed species and their critical habitat. To be eligible for coverage under the 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 A of Appendix A with respect to listed species protection, which states "No federally-listed threatened or endangered species or designated critical habitat(s) of such species are likely to occur within the action area for your project." The applicant provided an ESA Biological Opinion dated February 26, 2009 (Biological Opinion # 2-22-01-F-532) issued by the New Mexico Ecological Services Field Office of the United States Fish and Wildlife Service (FWS) for the NGWSP. The Project work is covered by and will take place within the guidelines of the ESA Biological Opinion for the NGWSP.

The Request for Coverage application also included a June 2017 biological evaluation provided to the BOR for the Project area at Reaches 9-11 in the map below (see Figure 1). No designated or proposed critical habitat was found within or near the Project area. No protected plants were observed. A number of avian and wildlife species were observed in the project area, such as prairie dogs and burrowing owls, and the biological evaluation provided a number of mitigation measures, such as clearing vegetation outside the principal avian breeding season to reduce impacts and staying on approved access roads and not driving over burrows located off the access roads with either rubber or metal tracks.

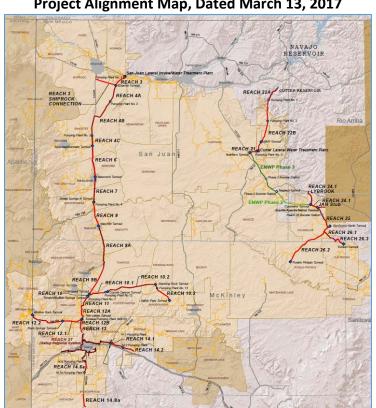


Figure 1: Navajo Gallup Water Supply Project Bureau of Reclamation Project Alignment Map, Dated March 13, 2017

The Request for Coverage application also included a February 12, 2018 letter to ORCI from the FWS. This letter included a list of 12 threatened, endangered, or candidate species that may occur in the proposed Project area and/or may be affected by the proposed project.

ORCI has completed the species-related screening procedures and has demonstrated, with appropriate documentation, that the proposed Project meets Criterion A of the listed species-related eligibility criteria for coverage under the SQCS General Permit.

#### **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 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, ORCI 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 application includes a cultural resource inventory report for Reach 10, dated February 9, 2018, that identified 13 historic sites along Reach 10. The Request for Coverage application also includes a cultural resource inventory report for Reach 11, dated January 25, 2018, that identified 4 historic sites along Reach 11. These cultural resource reports were previously submitted to the BOR. According to ORCI's application, the BOR has performed the necessary desktop and field reviews to determine that the implementation of the pipeline project and its on-site support activities, including the construction and operation of the Project (i.e., the Navajo Nation Crushing/Screening Operation), will not impact any nearby historic properties.

In a March 21, 2018 email to the EPA from the Navajo Nation Historic Preservation Department (NNHPD), the NNHPD gave cultural resource approval for the Project provided that all work regarding the Project should take place within the surveyed areas for the waterline corridor. Therefore, ORCI has demonstrated that it 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." Further, ORCI provided sufficient documentation supporting the criterion selected.

### **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. 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). The EPA's final action and supporting documentation for the SQCS General Permit can be assessed at the EPA website link below:

https://www.epa.gov/tribal-air/general-permits-and-permits-rule-final-action-5-source-categories-april-17-2015

This permit action provides ORCI coverage under the SQCS General Permit. Public participation for this permit action, in accordance with 40 CFR 49.157, consists of making the application, and EPA's analysis and permit decision available for public inspection as specified in the Public Availability of Information section this TSD.

### **Approval of Request for General Permit Coverage**

The EPA has carefully reviewed the Request for Coverage and other relevant information and evaluated whether the Project meets the criteria qualifying it for coverage under this general permit. Based on our review of, and in reliance on, the information and representations provided in ORCI's Request for Coverage, the EPA has determined that the Project meets all such criteria and is eligible for coverage under the SQCS General Permit. The EPA is therefore approving the Request for Coverage for the Project.

## **Public Availability of Information**

For coverage of a particular source under the SQCS General Permit, the EPA's analysis of whether the source is within the category of emissions sources to which this general permit applies, including whether the source meets the criteria to be eligible for coverage under the general permit, must be made available to the public. 40 CFR 49.157(a)(5). 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 SQCS General Permit and certain supporting documentation, on the EPA website at:

#### http://www.epa.gov/caa-permitting/tribal-nsr-permits-region-9

These documents, and the entire administrative record for this Approval of Request for Coverage, can also be obtained by contacting Shaheerah Kelly at the EPA address or phone number listed below. All documents will be available for review at the EPA Region 9 office indicated below, during regular business hours. Due to building security procedures, please call Shaheerah Kelly at (415) 947-4156 at least 24 hours in advance to arrange a visit.

Shaheerah Kelly (AIR-3) U.S. Environmental Protection Agency, Region 9 75 Hawthorne St. San Francisco, CA 94105

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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 9 website at <a href="http://www.epa.gov/region9/foia/">http://www.epa.gov/region9/foia/</a>.

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:

Navajo Nation Environmental Protection Agency Air Quality Control Program Route 112, North Bldg. #2837 P.O. Box 529 Fort Defiance, AZ 86504 (928) 871-6790

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 SQCS General Permit. 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).