



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8**

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Ref: 8P-AR

Ms. Deb Koenig  
Regulatory Manager  
Crossfire Aggregate Services, LLC  
820 Airport Drive  
Durango, Colorado 81303

NOV - 3 2015

Re: Crossfire Aggregate Services, LLC, Crossfire Bonds Gravel Pit  
Permit #TMNSR-SU-000412-2015.001, Final Minor New Source Review Permit

Dear Ms. Koenig:

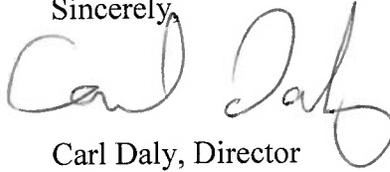
The Environmental Protection Agency Region 8 has completed its review of Crossfire Aggregate Services, LLC's request to obtain a true minor source permit to construct pursuant to the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR Part 49 for the Crossfire Bonds Gravel Pit located on the Southern Ute Indian Reservation, La Plata County, Colorado. Based on the information submitted in Crossfire Aggregate Services, LLC's application, the EPA hereby issues the enclosed final MNSR permit to construct for the Crossfire Bonds Gravel Pit. Please review each condition carefully and note any restrictions placed on this source.

A 30-day public comment period was held from May 6, 2015 to June 5, 2015. The EPA received comments from the Honorable Clement J. Frost, Chairman of the Southern Ute Indian Tribal Council (the Tribe), on June 2, 2015. No other comments were received during the public comment period. The EPA's responses to the public comments are enclosed. The EPA made several revisions to the permit based on the Tribe's comments. The final permit will be effective on December 3, 2015.

Pursuant to 40 CFR 49.159, within 30 days after the final permit decision has been issued, any person who commented on the specific terms and conditions of the draft permit may petition the Environmental Appeals Board to review any term or condition of the permit. Any person who failed to comment on the specific terms and conditions of this permit may petition for administrative review only to the extent that the changes from the draft to the final permit or other new grounds were not reasonably ascertainable during the public comment period. The 30-day period within which a person may request review begins with this dated notice of the final permit decision. If an administrative review of the final permit is requested, the specific terms and conditions of the permit that are the subject of the request for review must be stayed.

If you have any questions concerning the enclosed final permit, please contact Claudia Smith of my staff at (303) 312-6520.

Sincerely,

A handwritten signature in cursive script that reads "Carl Daly". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Carl Daly, Director  
Air Program

Enclosures (2)

cc: Tom Johnson, Director, Southern Ute Indian Tribe Environmental Program  
Mark Hutson, Air Quality Program Director, Southern Ute Indian Tribe Environmental Program  
Gregg Donaldson, Tegre Corporation  
Greg Cates, Environmental Safety Solutions, Inc.

## **EPA Responses to Comments from the Southern Ute Indian Tribe on the Proposed Permit to Construct for the Crossfire Bonds Gravel Pit Pursuant to the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR Part 49**

*Note: The Tribe's comments, quoted verbatim below, refer to sections as written in the proposed permit, but in EPA's responses to the comments, we cross-reference sections as written in the final permit, which may differ from the proposed permit.*

### **1. "Permit Condition I.C.1. and I.G. – Construction and Operational Requirements and Reporting Requirements**

The Tribe requests the addition of a permit provision limiting the short-term maximum throughput for the rock crusher to 100 tons per hour. This is the maximum throughput represented in the permit application. Rock crushing units are prone to extreme wear and require periodic maintenance and replacement. A permit provision clearly identifying the short-term maximum throughput for the unit would create enforceability and help to ensure that an existing unit is not modified to increase throughput or a larger rock crusher is not installed at a later date. These types of modifications could potentially cause the source to be out of compliance with the short-term National Ambient Air Quality Standards (NAAQS) for PM<sub>2.5</sub> and PM<sub>10</sub> or trigger the requirements of 40 CFR 60, Subpart OOO for portable rock crushers with a maximum throughput equal to or greater than 150 tons per hour. Recordkeeping requirements should be added to verify that the hourly maximum throughput is not or cannot be exceeded."

*EPA Response: We agree that the requested addition of a short-term throughput limit based on the maximum annual operational design throughput represented in the permit application would help demonstrate compliance with the short-term NAAQS for PM<sub>2.5</sub> and PM<sub>10</sub>. Therefore, we have added a short-term maximum operational design throughput of 100 tons per hour for the rock crusher to Table 1 in Condition I.C.1. of the final permit, as well as associated recordkeeping requirements for hourly production through the rock crusher (Condition I.G.4(a) of the final permit). Please note that Permit Condition I.G.1. of the final permit requires Crossfire to maintain records of manufacturer specifications, including those for the rock crusher, which serves as added assurance that the rock crusher will not be replaced with one of greater capacity.*

### **2. "Permit Condition I.C.3. – Construction and Operational Requirements**

The proposed permit incorporates distance requirements to prevent operation of the portable rock crusher less than 150 feet from the property line but omits the 1,000 feet distance requirement from a residence as presented under Part 3, Question 6 of *Stone Quarrying Crushing and Screening Questionnaire (Version 1.0 dated November 14, 2013)* and in the general permit for Stone Quarrying Crushing and Screening (SQCS). Incorporating a distance limitation requirement for residences in the permit, especially for a portable rock crushing unit, is critical in preventing negative health effects, nuisance dust conditions and NAAQS exceedances at the property line."

*EPA Response: It was the EPA's intent to base the majority of the conditions in the proposed permit on conditions that would be finalized in the General Air Quality Permit for New or Modified Minor Source Stone Quarrying, Crushing, and Screening Facilities in Indian Country. At the time the proposed MNSR permit was being developed the general permit had only been proposed, so the EPA based conditions in the proposed permit on those in the proposed general permit (version dated December 12, 2013). The omission of the residential distance requirement in the proposed general permit was inadvertent. However, Version 1.0 The Stone Quarrying crushing and Screening Questionnaire, dated March 13, 2015, is the final and effective version of the questionnaire and does not contain the requirements for minimum distances of rock crushers from property lines or residences. The final version of the general permit (last modified April 6, 2015 and accessible online at <http://www.epa.gov/air/tribal/tribalnsr.html>) and the questionnaire were issued on April 20, 2015, prior to the start of the public comment period for the proposed MNSR permit. We did not realize at the time that the final documents no longer contained the setback provisions that were in the proposed general permit and questionnaire. Therefore, we did not remove those provisions from the proposed permit prior to the public comment period.*

*As stated in the preamble for the final general permit (80 FR 25068), the EPA did not include the provisions for minimum distances from property lines and residences in the final questionnaire and general permit because there was no EPA analysis demonstrating the benefits of requiring the setbacks, and the EPA lacked sufficient information to incorporate them. Additionally, the ongoing enforceability of the residential distance provision was questionable because a source has no control over new residences locating near the property after construction has commenced.*

*Given the relatively high background concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> in the vicinity of the proposed source (measured at the nearest air quality monitor that measures those pollutants, the Durango Monitor (AQS# 08-067-00004)), we believe the provision prohibiting operation of the portable rock crusher within 150-feet of the property line is appropriate to help minimize impacts of emissions at the property line, consequently it remains in the final MNSR permit. However, we did not add to the final permit a provision prohibiting operation of the portable rock crusher within 1,000 feet of the nearest residence. It would be difficult for the source to continuously comply with such a condition as the source has no control over residences locating near the property after construction.*

### 3. **“Permit Condition I.F.6.(c)(i) – Performance Test Requirements**

Permit Condition I.F.6.(c)(i) specifies a modification to EPA test Method 9 performance test which requires the observer to stand a distance of at least 15 feet from the ‘engine exhaust’. This is inconsistent with the emission control requirements for this rock crushing and concrete batching facility which has no opacity limit for the diesel generator engine, but requires opacity limitations for other particulate matter release points.”

*EPA Response: We agree that the reference to engine exhaust in the proposed permit condition is inconsistent with the particulate matter release points that are subject to opacity limits in the proposed permit. The use of the phrase “engine exhaust” was an inadvertent error. Condition I.F.7.(c)(i) in the final permit has been changed to read: “The observer shall stand at least 15 feet from the emissions*

source,” which is consistent with the general permit for Stone Quarrying, Crushing, and Screening Facilities in Indian country.

4. **“Permit Condition I.F.7 – Monitoring Requirements – Additional Performance Tests**

The Tribe is concerned the initial and subsequent 60 month performance testing requirements to verify compliance with opacity limits under this permit provision are insufficient to ensure compliance. The Tribe requests that the EPA include provisions to require monitoring of visible emissions using EPA Reference Method 9 at least annually.

Emissions represented in the TMNSR permit application for this facility are based on emission factors and control factors, and opacity limits in this permit are designed to ensure control techniques are effective and control equipment is functioning. The General Requirements of 40 CFR 49.155(a)(1) require that each permit contains monitoring, recordkeeping, and reporting, sufficient to assure compliance with the emission limitations, including surrogate emission limitations such as an opacity limitation.

While the permit appropriately requires weekly visible emissions surveys for point source and fugitive visible emissions using EPA Reference Method 22, the permit also includes units subject to specified opacity limits. EPA Reference Method 22 is not quantitative as is EPA Reference Method 9, therefore, emission units subject to opacity limitations should require annual EPA Reference Method 9 observations. Also, annual EPA Reference Method 9 performance testing validates the accuracy of weekly EPA Reference Method 22 observations.”

*EPA Response: We have not made the requested change in the final permit to require annual Method 9 performance tests as a result of the comment. This site-specific permit imposes all the legal obligations that the published general permit for Stone Quarrying, Crushing, and Screening Facilities in Indian country, which the EPA has determined meets the requirements of the Clean Air Act and 40 CFR Part 49. . This permit’s performance testing requirements are consistent with those in the general permit, which also imposes opacity limits. Like paragraph 30 of the general permit, Condition I.F.8 of the final permit specifies that the EPA may require Method 9 performance testing at any time. Additionally, like paragraph 27 of the general permit, Condition I.F.5. of the final permit specifies that if visible emissions are detected during a weekly Method 22 visible emissions survey, the Permittee must either take corrective action within 24 hours to ensure that no visible emissions are detected while the source is operating, or demonstrate compliance with the opacity emission limits using a Method 9 performance test. The EPA does not anticipate that this minor source poses any concerns about additional emissions beyond those addressed by the general permit, and thus we do not see the need to add additional or more stringent testing than the general permit requires. Further, we believe this permit’s approach is more stringent than a once a year Method 9 test because it requires the source to ensure that no visible emissions are present multiple times throughout the year. The most cost effective compliance option, Method 22 visible emission surveys, while not technically quantitative or requiring annual recertification by the observer, results in correction of detected visible emissions to essentially 0%,*

while Method 9 tests for compliance with the opacity limits allow for visible emissions up to a certain percentage.

5. **“Technical Support Document: Background Ambient Air Concentrations for the Project Area**

Table 4 of the TSD presents background concentrations for inclusion when evaluating NAAQS compliance for all criteria pollutants. The background concentration for the 24-hr PM<sub>10</sub> NAAQS is presented as ‘Less than one exceedance per year (2011-2014).’ Please find attached the monitoring data for PM<sub>10</sub> from Durango AIRSID 08-067-7003 for monitoring years 2010 through 2013. These data indicate that La Plata County, Colorado frequently experiences episodic, elevated concentrations of PM<sub>10</sub> during the months of April and May, concurrent with the operating schedule of the proposed facility. When evaluating whether a proposed site may cause or contribute to an exceedance of the NAAQS, these background concentration data should be considered.”

*EPA Response: The exceedances of the 24-hr PM<sub>10</sub> NAAQS at the Durango Monitor (AQS# 08-067-00004, not 08-067-7003 as indicated in the comment) were caused by high wind dust events that are flagged as exceptional events in AQS. Flagged exceedances should not be used for NAAQS compliance purposes (see 40 CFR 50.14). One value on April 16, 2013 of 419 µg/m<sup>3</sup> has not been submitted to the EPA for concurrence, but it has been flagged in the system. There were no other exceedances at this monitor. Since the time that the Technical Support Document (TSD) and proposed permit were made available for public comment, the 2014 data has become available in AQS. Updated data for 2014 background concentrations of 24-hour PM<sub>10</sub> at the Durango Monitor indicate that for the most recent 3-year period (2012-2014), there were no exceedances of the NAAQS, flagged or otherwise. The highest value was measured at 38 µg/m<sup>3</sup> which is only 25% of the NAAQS.*

*The estimated allowable emissions listed for the proposed facility in the TSD that was made available for public comment (which was based on the permit application) indicated an estimated increase in maximum potential to emit (PTE) PM<sub>10</sub> emissions of 7.007 tpy. This amount is below the level at or above which we typically require an applicant to do more than a qualitative narrative analysis of the anticipated impacts of a proposed project (that level is based on the PSD significant emission rates at 40 CFR 52.21).*

*Since the close of the public comment period and as a result of our request for assistance in responding to comment 8 below, the applicant reevaluated PM, PM<sub>10</sub>, and PM<sub>2.5</sub> PTE calculations for the proposed project. The applicant discovered certain calculation errors had been made and submitted revised PTE calculations to the EPA in several emails between June 15, 2015 and July 6, 2015. The PTE for PM<sub>10</sub> was revised to 18.980 tpy, which increased the PTE to a level above which we typically require an Air Quality Impact Assessment (AQIA) with a stepped approach to modeling beginning with a simple screening analysis (e.g., the EPA provides a free screening software called AERSCREEN on their website at: [http://www3.epa.gov/ttn/scram/dispersion\\_screening.htm](http://www3.epa.gov/ttn/scram/dispersion_screening.htm)). If the emissions increases predicted by the screen do not demonstrate an increase in ambient concentrations of a pollutant by more*

than the significant impact levels (SILs), no further modeling is necessary. The SIL for the 24-hr  $PM_{10}$  NAAQS is  $5 \mu\text{g}/\text{m}^3$ .

We required the applicant to conduct a screening analysis in AERSCREEN based on the corrected production rates and PTE (i.e., 18.980 tpy  $PM_{10}$ ). We received the AERSCREEN analysis via email on August 7, 2015. Crossfire indicated in the submittal that they had revised the  $PM_{10}$  PTE a second time to account for a subsequent change in their proposed facility configuration and emission controls. The revised PTE for  $PM_{10}$  was 13.055 tpy. Crossfire made the decision to install shrouds at all drop points at the rock crushing operation that would not be equipped with misters rather than just the misters at the select drop points as originally proposed. As a result of the changes, the most current revised  $PM_{10}$  PTE is now back at a level below which we typically require the stepped modeling procedure. However, Crossfire performed the screen anyway using the most updated proposed facility configuration and production rates. The screen, performed with these latest emissions calculations and facility configuration, indicated a projected maximum  $PM_{10}$  concentration of  $78.11 \mu\text{g}/\text{m}^3$  at a distance of 493 meters from the proposed locations of emission sources covered by this permit. Crossfire noted that the majority of the project fence line is further away than 480 meters from the proposed location of the emissions sources. Crossfire requested that no further screening or modeling be required based on screening analyses being known to overestimate concentrations in almost all scenarios and based on the following noted discrepancies:

- Actual distribution of sources will be further apart than the 750 foot lateral dimension used.
- The location of the pit on a hill will make the measurements at ground level lower than those shown in the screening scenario.
- The majority of the project fence line is further away than the 480m peak concentration.
- The emission factors are based on all equipment running at the same time.
- Project is limited in the hours it can operate and will likely not operate crushing and concrete batching during the worst atmospheric conditions (night).
- Deposition was not calculated for dust. Most  $PM_{10}$  in this screening is known to be geologic dust.
- Screeners and conveyors are likely to be taller than the assumed vertical dimension which means that dust will disperse more before reaching the fence line.

We note that even if you add the background concentration at the nearest monitor of  $38 \mu\text{g}/\text{m}^3$  to the maximum screened 24-hour concentration of  $78.11 \mu\text{g}/\text{m}^3$ , the total is more than  $33 \mu\text{g}/\text{m}^3$  below the NAAQS of  $150 \mu\text{g}/\text{m}^3$ . Although the most recently revised  $PM_{10}$  emissions calculations are below the level (based on the PSD significant emission rate for  $PM_{10}$  of 15 tpy at 40 CFR 52.21), at or above which the EPA generally considers requiring an AQIA<sup>1</sup> with some level of modeling for a proposed true minor source in an area attaining the NAAQS, the screening result provided in the revised application indicates an increase in ambient concentrations at the fence line that is greater than the SIL of  $5 \mu\text{g}/\text{m}^3$ .

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<sup>1</sup> The EPA in Region 8 has developed an informal internal guidance for regional permit engineers for determining whether or not to require an AQIA with refined modeling for proposed true minor sources applying for MNSR permits. This is a general description of that guidance which helps inform case-specific decisions to require refined modeling.

*However, because the conservative AERSCREEN analysis does not predict a NAAQS violation at the fence line, and the revised application proposes greater fugitive dust control measures than originally proposed, we did not require Crossfire to perform additional refined modeling using the dispersion modeling software called AERMOD, which the EPA provides for free on their website at: [http://www3.epa.gov/ttn/scram/dispersion\\_prefrec.htm](http://www3.epa.gov/ttn/scram/dispersion_prefrec.htm). Instead, we enhanced the conditions for fugitive dust control in the final permit. We added a requirement to measure daily average wind speed using a hand-held or automated equipment-mounted anemometer. We also added requirements to administer additional contingency measures for fugitive dust control at rock crushing and screening operations and concrete batch plant production operations if daily average wind speeds exceed 30 miles per hour. These conditions are consistent with requirements imposed on sources of fugitive dust emissions by the Colorado Air Pollution Control Division (APCD) and the Utah Division of Air Quality (UDAQ) in PM<sub>10</sub> non-attainment areas<sup>2</sup>.*

*We have determined that the proposed project will not likely cause or contribute to a violation of the PM<sub>10</sub> NAAQS if Crossfire complies with the conditions of the final MNSR permit.*

## **6. “Permit and Technical Support Document: Summary Sections**

The proposed permit and TSD present that the SQCS facility “will only generally operate during the summer season.” Crossfire Aggregate Services has represented in their application that the facility may operate 8,760 hours per year and emission representations are based on this operating schedule. Since there are no enforceable limits on the hours of operation in the permit, implying that an operating schedule of only three months per year is misrepresentative of the permit application, not enforceable, and creates confusion for the tribal members and the public as to the duration of operations each year.”

*EPA Response: We agree that the informational descriptor of seasonal operations represented by the applicant and included in the proposed permit has created confusion and have removed it from the final permit. Prior to submitting the permit application, we advised Crossfire to calculate the PTE for the proposed facility assuming there are no enforceable emission controls or operational limitations (i.e. uncontrolled emissions). Based on the estimated maximum capacity throughput of the proposed rock crusher (less than 150 tons per hour), the gravel pit would not be subject to the federally enforceable requirements of the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants at 40 CFR Part 60, Subpart OOO. Therefore, any emission controls that Crossfire has proposed for their new facility are not considered federally enforceable, and cannot be accounted for when calculating PTE for the purposes of determining the federal permitting requirements that apply. Crossfire will first need to obtain the MNSR permit it has applied for from the EPA requiring those*

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<sup>2</sup> Utah Rule R307-309-5 General Requirements for Fugitive Dust, accessed online at <http://www.rules.utah.gov/publicat/code/r307/r307-309.htm#E5>, and the AQPD minor operating permit for a Carder, Inc. sand and gravel facility northwest of Lamar, Colorado discussed on page 167 of the Technical Support Document for the Lamar Exceptional Events Occurring on: February 8, 2013, April 9, 2013, May 1, 2013, May 24, 2013, May 25, 2013, May 28, 2013, December 24, 2013, prepared by the APCD, dated April 20, 2015 (a copy may be obtained from the EPA upon request).

*proposed emission controls before they are considered federally enforceable. According to the information provided by Crossfire, facility-wide uncontrolled PTE calculations assuming full time operations (8,760 hours per year) indicated that the facility would be a true minor source under MNSR, with proposed allowable (controlled) emissions far below the major source thresholds under the Prevention of Significant Deterioration (PSD) Permit Program at 40 CFR Part 52. Therefore, Crossfire determined that it was not necessary to request an enforceable requirement to limit the hours of operation to represent planned actual operations, as it would require unnecessary monitoring and recordkeeping. The statement that Crossfire generally plans to only operate seasonally, for a few months a year, is indicative of typical aggregate mining and rock crushing operations, and was intended for informational purposes only, to emphasize that the actual emissions from the source will most likely be significantly below the permitted allowable emissions. However, after discussions with the Southern Ute Tribe Air Quality Program clarifying the comments submitted on the proposed permit, other rock crushing and concrete batch plant operations on the Southern Ute Indian Reservation and in the area have been observed to operate during all months of a calendar year.*

## 7. **“Public Notice Document**

The Public Notice document states ‘The impacts to local air quality from the proposed project are not expected to be significant and should not have an adverse impact on attainment of the NAAQS. We have determined that an AQIA modeling analysis is not required for this permit action.’ The Tribe is concerned that this assumption is unsound since EPA has based demonstration of compliance with the NAAQS for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) on general permit (GP) data for SQCS and Concrete Batch plants from other states. Specifically, demonstration of NAAQS compliance relies heavily on an air quality model prepared by the State of Washington to support a GP for SQCS. In this model, the state determined that a source processing 1,500,000 tons per year of rock, with a 150’ setback from the property lines would not exceed the 150 µg/m<sup>3</sup>, 24-hr NAAQS for Particulate Matter less than 10 microns in diameter (PM<sub>10</sub>).

This air quality model was completed on June 8, 2006 and the work pre-dates the December 14, 2012 primary 24-hr NAAQS for PM<sub>2.5</sub>. The State of Washington air quality model referenced by the EPA in the Background Document: True Minor Source Quarrying, Crushing, and Screening Facilities General Permit (Version 1.0 dated November 14, 2013) as sufficient demonstration of compliance for NAAQS for this source does not address PM<sub>2.5</sub> NAAQS compliance. Therefore, given that:

- 1) The current primary 24-hr NAAQS standard for PM<sub>2.5</sub> is 35 µg/m<sup>3</sup>;
- 2) The PM<sub>2.5</sub> concentration supplied as background in Table 4, Page 9 of the TSD, is 14 µg/m<sup>3</sup>; and
- 3) The background PM<sub>2.5</sub> concentration is almost half of the 24-hr NAAQS increment for this criteria pollutant and concurrent operation of this source during an exceptional event could contribute to a NAAQS exceedance for PM<sub>2.5</sub>.

How can compliance with the primary 24-hr NAAQS for PM<sub>2.5</sub> be assumed for the Southern Ute Indian Reservation in the absence of relevant modeling data to support such a claim?”

*EPA Response: Permit conditions in the proposed permit were based on the General Air Quality Permit for New or Modified Minor Source Stone Quarrying, Crushing, and Screening Facilities in Indian Country. However, demonstration of compliance with the NAAQS for the proposed facility was based on air quality data specific to the area of the proposed permit. As discussed in the response to comment 5 above, exceptional events and otherwise flagged values in AQS should not be used for determination of NAAQS compliance purposes. The estimated allowable emissions listed for the proposed facility in the TSD made available for public comment indicated an estimated maximum potential PM<sub>2.5</sub> emissions increase of 0.099 tpy. Since the close of the public comment period and in response to comment 8 below, the applicant revised the configuration of the proposed project to include shrouds at all drop points in the rock crushing operation that are not equipped with misters. The applicant subsequently reevaluated PM, PM<sub>10</sub>, and PM<sub>2.5</sub> PTE calculations for the proposed project and then submitted revised PTE calculations to the EPA. The PTE for PM<sub>2.5</sub> was revised to 1.915 tpy. The revised PM<sub>2.5</sub> PTE is still below the level (based on the significant emission rate of 10 tpy for PM<sub>2.5</sub> at 40 CFR 52.21) at or above which the EPA generally considers requiring an AQIA with some level of modeling for a proposed true minor source in an area attaining the NAAQS. The decision to require modeling at that level is case-specific and is based on consideration of other criteria<sup>3</sup> also being met, including, but not limited to, high background concentrations (e.g., greater than 33% of the NAAQS) and low stack heights or emission release points (e.g. 5 meters or less). While the 24-hour average background concentration of PM<sub>2.5</sub> is considered high, estimated potential emissions are low and an increase of less than 3 tpy PM<sub>2.5</sub> is unlikely to have a noticeable impact on PM<sub>2.5</sub> background concentrations.*

#### 8. **“Permit Application, Proposed Permit and Technical Support Documentation Representations**

There are several potential technical discrepancies concerning the permit application, proposed permit and TSD. Based on representations in the Concrete Batch Plant Emission Rate Calculation Worksheet (Worksheet) provided with the application, it appears the company calculated Potential to Emit (PTE) based on 2,400 yds<sup>3</sup>/yr. However, the permit authorizes a daily production of 150 yds<sup>3</sup>/day equating to a yearly production of up to 54,750 yds<sup>3</sup>/yr, as presented on page 7 of the TSD. Therefore, the PTE calculations for the concrete batch plant may require further evaluation as the annual emission rates represented may be lower than annual emissions authorized by the permit.

There is also some inconsistency in the maximum design capacity of the concrete batch plant. The Worksheet also represents that the maximum hourly concrete production is 150 yds<sup>3</sup>/hr and the permit authorizes 150 yds<sup>3</sup>/day, a substantially lower concrete production rate. The Worksheet indicates that to make 2,400 yards of concrete it takes 589 tons of cement. On Table 1 of the permit, the facility is permitted for 88 tons of cement per consecutive 12-month period, considerably less cement than is required to manufacture 54,750 yds<sup>3</sup>/yr.”

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<sup>3</sup> See previous footnote 1.

*EPA Response: According to clarification from the applicant, via email correspondence between June 22 and July 2, 2015, and in a revised application submitted on August 18, 2015, the concrete production rate listed on the Worksheet in the original application (provided during public comment) was correct at 150 yds<sup>3</sup>/hr. The 150 yds<sup>3</sup>/day rate listed in the note on the Worksheet and in the Process Description portion of the application were typos. However, that incorrect rate is what the applicant used when inputting parameters to the Worksheet for the PTE calculations. That was also the rate that we referenced to develop the proposed permit. Table 1 and condition I.E.1. of the permit have been revised to list the maximum production rate for the concrete batch plant as 150 yds<sup>3</sup>/hr (which translates to 1,314,000 yds<sup>3</sup>/yr). These changes do not result in proposed emissions increases that differ significantly from those reported in the original application.*

*Regarding, the maximum annual usage numbers for cement and fly ash (referred to as “supplement” in the original permit application), the applicant had inadvertently transposed the numbers in the Emission Point List in the application. It should have read 589 tons of cement and 88 tons of fly ash. In drafting the permit, we referenced the Emission Point List in the application to develop Table 1 of the permit thereby perpetuating the error. The applicant indicated in an email dated June 22, 2015 that a standard mix was used for the calculations, including 1,865 lb/yd<sup>3</sup> aggregate, 1,428 lb/yd<sup>3</sup> sand, 491 lb/yd<sup>3</sup> cement, and 73 lb/yd<sup>3</sup> fly ash required to make 1 yd<sup>3</sup> of concrete. This mix was not consistent with the Emission Point List in the application. Additionally, that email clarified that a more accurate mix for the proposed facility is 1,671 lb/yd<sup>3</sup> aggregate, 1,367 lb/yd<sup>3</sup> sand, 450 lb/yd<sup>3</sup> cement, and 100 lb/yd<sup>3</sup> fly ash. These corrected numbers were also reflected in the August 18, 2015 revised application submitted to the EPA. The maximum annual usage rates for cement and fly ash have been revised in the final permit accordingly and are 295,650 tons of cement and 65,700 tons of fly ash in any consecutive 12-month period.*

## 9. **“Permit Application Representations**

The Tribe requests clarification as to screening operations. The diagram entitled Rock Crusher in the permit application indicates a multiple screening units and drop points, separating aggregate into six sizes in a continuous, progressive process. However, in the application process description under Rock Crushing it states that “only one screen will be used at a time.” Emission representations in the application are based on single size screening operations. Please confirm that only one screen can be used at a time. Is it possible for all screens to operate simultaneously?”

*EPA Response: The applicant confirmed in an email dated June 22, 2015 that only one screen size can be used at a time, as listed in the process description in the original application. The consultant acknowledged that the process diagram may be confusing regarding the note. Drop Points DP-07 through DP-10 are on the conveyer belt.*

10. **“La Plata County Land Use Permit Application**

The La Plata County Land Use Permit application, available upon request at [planning@co.laplata.co.us](mailto:planning@co.laplata.co.us), outlines future plans for a hot-mix asphalt plant to be co-located with the SCQS and concrete batch plants. Although the hot-mix asphalt plant would require Clean Air Act permitting prior to construction, it is imperative that a close evaluation of the current permit application’s PTE representations be performed to establish emission limitations appropriate for protection of the NAAQS.”

*EPA Response: The EPA evaluates proposed projects for air pollution control permitting based on the information provided in the application. The applicant is responsible for providing accurate data, emissions calculations, and other information. The application for the Crossfire Bonds Gravel Pit did not contain any mention of future plans for colocation of a hot-mix asphalt batch plant. We agree with the commenter that a hot-mix asphalt plant at the location of the Crossfire Bonds Gravel Pit would require Clean Air Act permitting prior to construction if potential emissions exceed the minimum thresholds in the MNSR Rule. Additionally, an applicant must demonstrate that co-located construction projects proposed within a certain contemporaneous timeframe are not part of the same construction project in accordance with 40 CFR 52.21 and EPA guidance.<sup>4</sup> In light of the information the commenter provided on the La Plata County Land Use Permit application, we asked the applicant to provide any details regarding a planned co-located hot-mix asphalt batch plant and its business plan relationship with the proposed gravel pit and concrete batch plant project to be permitted. The applicant’s air permitting consultant confirmed in an email dated June 18, 2015 that while Crossfire had applied for approval of a hot-mix asphalt plant in the land use permit prior to finalizing plans for the site, it had no plans to install a hot-mix asphalt plant at the site of the Crossfire Bonds Gravel Pit.*

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<sup>4</sup> June 13, 1989 guidance “Limiting Potential to Emit in New Source Permitting,” - EPA concluded that it is not only improper but also in violation of the Clean Air Act to construct a source or major modification with a minor source permit when there is intent to operate as a major source or major modification. Permits with conditions that do not reflect a source’s planned mode of operation are sham permits, are void from the beginning and cannot shield a source from the requirement to undergo major NSR preconstruction review.

United States Environmental Protection Agency  
Region 8 Air Program  
1595 Wynkoop Street  
Denver, CO 80202



**Air Pollution Control  
Minor Source Permit to Construct**

**40 CFR 49.151**

**#TMNSR-SU-000412-2015.001**

*Permit to construct to establish legally and practically enforceable limitations and requirements for emissions sources at a new facility*

**Permittee:**

Crossfire Aggregate Services, LLC

**Permitted Facility:**

Crossfire Bonds Gravel Pit  
Southern Ute Indian Reservation  
La Plata County, Colorado

## Summary

On January 13, 2015, the EPA received an application from Crossfire Aggregate Services, LLC (Crossfire) requesting a permit for a true minor new source of air pollutant emissions in accordance with the requirements of the Tribal Minor New Source Review (MNSR) Permit Program at 40 CFR Part 49. The EPA made a proposed permit available for public inspection and comment from May 6 - June 5, 2015. The Southern Ute Indian Tribe submitted comments on the proposed permit. On August 18, 2015, Crossfire submitted a revised application to replace the January 13, 2015, application, which contained additional proposed emission controls, changes in proposed facility configuration, and corrections in emissions calculations. The EPA addressed the comments on the proposed permit and the application revisions in this final permit action.

Through this permit action, the EPA is approving construction of a new aggregate mining and concrete production facility consisting of a portable and seasonal rock crushing plant (onsite approximately 3 months of every year, generally summer months) and a fixed concrete batch production plant within the federally recognized exterior boundaries of the Southern Ute Indian Reservation in La Plata County, Colorado. The proposed facility is estimated to be a true minor source of criteria pollutants with respect to the MNSR Permit Program.

This permit contains production, capacity, and emission control requirements, and associated monitoring, recordkeeping, and reporting requirements, for the facility and/or certain pollutant emission-generating units or activities approved for construction and installation.

The EPA determined that this approval will not contribute to violations of the National Ambient Air Quality Standards (NAAQS), or have potentially adverse effects on ambient air.

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## **I. Conditional Permit to Construct**

### **A. General Information**

Facility: Crossfire Bonds Gravel Pit  
Permit number: TMNSR-SU-000412-2015.001  
SIC Code and SIC Description: 1442 – Construction Sand and Gravel

Site Location:  
Crossfire Bonds Gravel Pit  
SW ¼ Sec 36, T33N, R10W &  
N ½ Sec 1, T32N, R10W  
Latitude 37.054362N, Longitude -107.88974W  
Southern Ute Indian Reservation  
La Plata County, Colorado

Corporate Office Location:  
Crossfire Aggregate Services, LLC  
820 Airport Drive  
Durango, CO 81303

The equipment listed in this permit may only be operated by Crossfire Aggregate Services, LLC (Crossfire) at the location described above.

### **B. Applicability**

1. This Conditional Permit to Construct is being issued under authority of the MNSR Permit Program at 40 CFR Part 49.
2. Any conditions for this facility or any specific pollutant emission-generating units or activities at this facility established pursuant to any permit to construct issued under the authority of the Prevention of Significant Deterioration Permit Program at 40 CFR Part 52 (PSD) or the MNSR Permit Program shall continue to apply.
3. By issuing this permit, the EPA does not assume any risk of loss which may occur as a result of the operation of the permitted facility by the Permittee, Owner, and/or Operator, if the conditions of this permit are not met by the Permittee, Owner, and/or Operator.

### **C. Construction and Operational Requirements**

1. The Permittee is approved to install and operate the emissions-generating units or activities at up to the maximum operational design identified in Table 1.

Table 1. Approved Emissions Units and/or Activities and Maximum Operational Design

Description	Maximum Operational Design
<b><i>Stone Quarrying, Rock Crushing and Screening Operation</i></b>	
Rock Crusher (portable and seasonal use): <ul style="list-style-type: none"> <li>• Rock Loading Hopper and 10 Other Drop Points</li> <li>• Jaw Crusher</li> <li>• Crushed Rock Screen</li> <li>• Sand and Aggregate Conveyor System</li> <li>• Wash Plant Hopper</li> <li>• Radial Stacker</li> <li>• Rock and Crushed Rock Truck Loading and Unloading</li> </ul>	100 tons aggregate per hour and 876,000 tons aggregate in any consecutive 12-month period
Rock Crusher Diesel-Fired Compression Ignition Electric Power Generating Engine (portable and seasonal use)	1,200 horsepower (hp)
Mined and Crushed Rock Material Storage Piles	16,846 tons stone in any consecutive 12-month period; 0.5 acres surface area occupied; 6 screened gravel stockpiles at 50 tons each, 300 tons total at any given time
<b><i>Concrete Batch Plant</i></b>	
Crushed Rock Truck Unloading Point	2,357,316 tons crushed stone in any consecutive 12-month period
Loading Hopper Sand Bin	898,119 tons sand in any consecutive 12-month period
2- Loading Hopper Aggregate Bins	898,119 tons aggregate each in any consecutive 12-month period
Sand Weigh Hopper Bin	1,097,847 tons sand in any consecutive 12-month period
2- Aggregate Weigh Hopper Bins	1,097,847 tons aggregate each in any consecutive 12-month period
Sand Loading Point	898,119 tons sand in any consecutive 12-month period
2 - Aggregate Loading Points	1,097,847 tons aggregate each in any consecutive 12-month period
Cement Storage Silo	295,650 tons cement in any consecutive 12-month period
Fly Ash Storage Silo	65,700 tons fly ash in any consecutive 12-month period
Cement and Fly Ash Enclosed Pipe/Screw Conveyor System	140 tons cement per hour
Concrete Mixing Truck Loading Point	140 tons cement per hour
Concrete Mixing Truck Filter	140 tons cement per hour
Concrete Truck Mixing	150 cubic yards concrete per hour
Propane-Fired Water Heater (for concrete mixing)	2.25 Million British thermal units per hour (MMBtu/hr)

2. The Permittee shall maintain and operate each approved emission unit or activity, including any associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions of MNSR regulated pollutants and considering the manufacturer’s recommended operating procedures at all times, including periods of startup,

shutdown, maintenance, and malfunction. The EPA will determine whether the Permittee is using acceptable operating and maintenance procedures based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the facility.

3. The Permittee shall not locate any pollutant emission-generating units or activities less than 150 feet from the nearest property boundary.
4. Only the emission units and activities that are operated and controlled as specified in this permit are approved for installation under this permit.
5. Emissions limitations shall apply at all times, unless otherwise specified in this permit.

**D. Rock Crushing Emissions Control Requirements**

1. *Rock Crusher Compression Ignition Generator Engine:*

- (a) The engine shall be certified to the applicable Tier standards in 40 CFR 89.112 and 40 CFR 1039.101 through 1039.104, for all pollutants, for the same model year and maximum engine power of 1,200 hp for the particular engine used.
- (b) The engine shall combust only diesel or biodiesel fuel.
- (c) Diesel and biodiesel shall contain no more than 0.0015 percent sulfur by weight.
- (d) Fuel consumption in the engine shall not exceed 529,542 gallons in any consecutive 12-month period.

2. *Stone Quarrying, Rock Crushing, and Screening Operations:*

- (a) Emissions from the jaw crusher, the crushed rock screens, the rock crusher drop points, material storage piles, and all other release points of particulate matter emissions identified for the stone quarrying, rock crushing, and screening operations in Table 1 of this permit shall be controlled by wet suppression.
  - (i) A wet suppression misting system shall be installed, operated and maintained on the rock crusher to control particulate matter emissions from drop points DP-01, DP-02, and DP-03 identified in the Rock Crusher diagram in Appendix C of this permit;
  - (ii) All other drop points identified in Appendix C of this permit shall be equipped with shrouds; and
  - (iii) All other affected emissions units or activity release points shall be periodically sprayed with water or other dust suppressant as needed to meet the respective opacity limits in this permit.
- (b) The Permittee shall comply with the fugitive dust control plan in Appendix B of this permit.

- (c) Emissions from stone quarrying, rock crushing, and screening operations shall not exceed:
  - (i) 12 percent opacity for rock crushers; and
  - (ii) 7 percent opacity at all other affected emissions units or activity release points.
  
- (d) The opacity limits in paragraph (c) above shall not apply when average daily wind speed exceeds 30 miles per hour, as measured by a hand-held or automated equipment-mounted anemometer or equivalent device, if the Permittee is in compliance with the Fugitive Dust Control Plan in Appendix B of this permit and administers at least one of the following contingency measures:
  - (i) Hourly wet suppression;
  - (ii) Additional chemical stabilization; or
  - (iii) Cease or reduce fugitive dust-producing operations.
  
- (e) Truck dumping of processed material into the rock loading hopper or wash plant hopper is exempt from the emission limits in Condition D.2(c) of this permit.

**E. Concrete Batch Emissions Control Requirements**

1. Source-wide production of concrete shall not exceed 150 cubic yards per hour.
2. Each storage silo (cement and fly ash) shall be equipped with an audible alarm or automatic shutoff system that warns when the silo is full. Loading operations shall not be conducted without an operational warning or shutoff device.
3. Each concrete mixing truck loading point, storage silo (cement and fly ash), loading hopper bin (sand and aggregate), and weigh hopper bin (sand and aggregate) shall be vented to a fabric or cartridge filter capable of reducing particulate matter emissions by 99% or greater. The filter systems can be a centralized system.
4. A suction shroud or other pickup device shall be installed at each concrete batch plant material drop point (sand and aggregate) identified in the Concrete Batch Plant Flow Diagram in Appendix C of this permit and vented to a fabric or cartridge filter system capable of reducing particulate matter emissions by 99% or greater.
5. Workspaces near the loading and unloading of trucks and product shall be well lit during non-daylight hours when the permitted source is in operation.
6. Visible emissions from each affected emissions unit, including, but not limited to, cement truck mixer, storage silo (cement and fly ash), loading hopper bin (sand and aggregate), weigh hopper bin (sand and aggregate), sand and aggregate conveyor, material loading point, and roadway shall not exceed 10 percent opacity based on a six-minute average.
7. The Permittee shall comply with the Fugitive Dust Control Plan in Appendix B of this permit.
8. The opacity limit in paragraph 6 above shall not apply when average daily wind speed exceeds 30 miles per hour, as measured by a hand-held or automated equipment-mounted anemometer or equivalent device, if the Permittee is in compliance with the Fugitive Dust Control Plan in Appendix B of this permit and administers at least one of the following contingency measures:

- (a) Hourly wet suppression;
- (b) Additional chemical stabilization; or
- (c) Cease or reduce fugitive dust-producing operations.

**F. Monitoring Requirements**

1. *Wet Suppression System Monitoring:* At least once during each calendar month the permitted source operates, the Permittee shall inspect to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee shall initiate corrective action within 24 hours and shall manually implement wet suppression, in accordance with the Fugitive Dust Control Plan in Appendix B of this permit, at all affected drop points until corrective action on the wet suppression system is completed.
2. *Silo Warning System Inspections:* Once per calendar month in which the permitted source operates, the Permittee shall inspect each silo warning system to ensure the devices are free from dust. Each device shall also be tested to ensure proper operation. The Permittee shall take appropriate corrective action to restore each device to normal operation.
3. *Fabric/Cartridge Filter Inspections:* At least once per calendar month in which the permitted source operates, the Permittee shall inspect the interior and exterior of the fabric cartridge/filters for evidence of leaking, damaged, and/or missing filters, and take appropriate corrective actions to restore filters to proper operation before resuming normal operations.
4. *Wind Speed Measurements:* At least three times during each calendar day of operations, the Permittee shall measure and record the maximum wind speed over a 1 minute observation period at the location of primary rock crushing and screening operations and the location of concrete batch plant production operations, using a hand-held or automated equipment-mounted anemometer or equivalent device. A daily average wind speed shall be calculated upon obtaining the third measurement to determine if the additional contingency measures in sections D.2(d) and E.8. of this permit shall be administered.
5. *Visible Emissions Survey:* At least once during each calendar week in which the permitted source operates, the Permittee shall perform a visible emissions survey of all affected emissions units or activity release points subject to the opacity limits in Conditions D.2(c) and E.6 of this permit. The survey shall be performed during daylight hours, while the facility is in operation, and by an individual trained in EPA Method 22. If visible emissions are detected during the survey, the Permittee shall either:
  - (a) Take corrective action so that within 24 hours no visible emissions are detected from any affected emissions units while they are in operation; or
  - (b) Demonstrate compliance with the opacity limit at all affected emissions units that discharged visible emissions during the survey using EPA Method 9 by an individual trained and certified in Method 9.
6. *Fugitive Emissions Survey:* At least once during each calendar week in which the facility operates, the Permittee shall survey the facility for visible fugitive emissions. If fugitive

emissions are detected crossing the property line, the Permittee shall take corrective actions according to the Fugitive Dust Control Plan in Appendix B of this permit.

7. *Initial Performance Test:* Within 60 days after achieving the maximum production rate at which the facility will operate the affected emissions units or activities, but not later than 180 days after initial startup of the facility, the Permittee shall conduct an initial performance test to verify compliance with the applicable opacity limits in Conditions D.2(c) and E.6 of this permit. Performance tests shall meet the following requirements:
  - (a) Performance tests shall be conducted according to a test plan submitted to the EPA at least 45 days prior to the performance test;
  - (b) Performance tests shall be conducted while the facility is operating under typical operating conditions;
  - (c) Performance tests shall be conducted using EPA test Method 9 from 40 CFR part 60, Appendix A with the following modifications:
    - (i) The observer shall stand at least 15 feet from the emissions source;
    - (ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emissions sources; and
    - (iii) Water used for wet suppression shall not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible;
    - (iv) The duration of each Method 9 test shall be at least 30 minutes; and
    - (v) Compliance with each opacity limit shall be determined based on the average of at least five six-minute averages.
8. *Additional Performance Tests:* Subsequent performance tests meeting the criteria of the initial performance test in Condition F.7 of this permit shall be performed whenever required by the EPA, but at least every 60 months of operation.

#### **G. Recordkeeping Requirements**

1. The Permittee shall maintain the permit application and all documentation supporting that application, including manufacturer or vendor specifications, for the duration of time that the affected emissions unit(s) is covered under this permit.
2. The Permittee shall retain all records required by this permit for a period of at least 5 years from the date the record was created.
3. Records shall be kept at the facility or the location that has day-to-day operational control over the facility.
4. The Permittee shall maintain records of the following:
  - (a) The amounts of crushed rock, stone, sand, and gravel produced (tons) each hour, month, and consecutive 12-month periods;

- (b) The types and quantities of fuel combusted in the rock crusher compression ignition generator engine, recorded each month and consecutive 12-month period;
- (c) Daily hours of operation;
- (d) The amounts of concrete produced daily (cubic yards).
- (e) The dates and results of each wet suppression system monitoring performed pursuant to Condition F.1 of this permit, any corrective action taken as a result of each survey, and the outcome of any corrective action taken;
- (f) The dates and results of each daily average wind speed calculation pursuant to Condition F.4 of this permit and any contingency measures administered pursuant to Conditions D.2(d) and E.8. as a result of excess daily average wind speed calculations.
- (g) The dates and results of each visible emissions survey performed pursuant to Condition F.5 of this permit. At a minimum, records shall include:
  - (i) The name of the person, company or entity conducting the survey;
  - (ii) Whether visible emissions were detected from any affected emissions unit;
  - (iii) Any corrective action taken;
  - (iv) The result of the corrective action; and
  - (v) The results of any Method 9 tests performed.
- (h) The dates and results of each fugitive emissions survey performed pursuant to Condition F.6 of this permit, any corrective action taken as a result of each survey, and the result of any corrective action taken; and
- (i) The results of each performance test conducted pursuant to Conditions F.7 and F.8 of this permit. At a minimum, the Permittee shall maintain records of:
  - (i) The date of each test;
  - (ii) Each test plan;
  - (iii) Any documentation required to approve an alternate test method;
  - (iv) Test conditions, including the amounts and types of products produced and the operating parameters of any control equipment;
  - (v) The results of each test; and
  - (vi) The name of the company or entity conducting the analysis.

## **H. Notification and Reporting Requirements**

1. *Notification of construction or modification, and operations:* The Permittee shall submit to the EPA a written or electronic notice within 30 days from when the Permittee begins actual construction, and when the Permittee begins operations or resumes operation.
2. *Annual Reports*
  - (a) The Permittee shall submit to the EPA an annual report no later than March 15 of each calendar year. The annual report shall cover the period from January 1 to December 31 of the previous calendar year. All reports shall be certified to truth and accuracy by the person primarily responsible for Clean Air Act compliance for the Permittee.
  - (b) The report shall include:
    - (i) An evaluation of the permitted source's compliance status with the requirements in this permit;
    - (ii) Summaries of the required monitoring and recordkeeping in this permit; and
    - (iii) Summaries of deviation reports submitted pursuant to this permit.
3. *Notification of Change in Ownership or Operator:* If the permitted source changes ownership or operator, then the Permittee shall submit to the EPA a written or electronic notice within 90 days before or after the change in ownership or operator is effective. In the report, the Permittee shall provide the reviewing authority a written agreement containing a specific date for the transfer of ownership or operator, and an effective date on which the new owner or operator assumes partial and/or full coverage and liability under this permit. The submittal shall identify the previous owner or operator, and update the name, street address, mailing address, contact information, and any other information about the permitted source if it would change as a result of the change of ownership or operator. The Permittee shall ensure that the permitted source remains in compliance with this permit during any such transfer of ownership.
4. *Notification of closure:* The Permittee shall submit to the EPA a report of any permanent or indefinite closure in writing within 90 days after the cessation of all operations at the permitted source. The notification shall identify the owner, the current location, and the last operating location of the permitted source. It is not necessary to submit a report of closure for regular seasonal closures.

*[Note: to help meet notification requirements, the EPA has developed forms "OWN" (for notifications of change in ownership) and "CLOSURE" (for notifications of facility closure). The forms may be found on the EPA's website at: <http://www2.epa.gov/region8/tribal-minor-new-source-review-permitting>.]*

5. Any documents required to be submitted under this permit, shall be submitted to:

U.S. Environmental Protection Agency, Region 8  
Office of Enforcement, Compliance & Environmental Justice  
Air Toxics and Technical Enforcement Program, 8ENF-AT  
1595 Wynkoop Street  
Denver, Colorado 80202

Documents may be submitted electronically to [R8AirReportEnforcement@epa.gov](mailto:R8AirReportEnforcement@epa.gov).

6. *Deviation Reports:* The Permittee shall promptly submit to the EPA a written report of any deviations of permit requirements, including deviations attributable to startups, shutdowns, and malfunctions.
  - (a) The deviation report shall include: the identity of the affected emissions unit or activity where the deviation occurred; the nature, duration, and probable cause of the deviation; and any corrective actions or preventative measures taken to minimize emissions from the deviation and to prevent future deviations.
  - (b) A “prompt” deviation report is one that is post marked or submitted via electronic mail to [R8AirReportEnforcement@epa.gov](mailto:R8AirReportEnforcement@epa.gov) as follows:
    - (i) Within 72 hours of discovery for deviations from any opacity limit in this permit; and
    - (ii) By March 15 for the discovery of a deviation of recordkeeping or other permit conditions during the preceding calendar year that do not affect the Permittee’s ability to meet the emissions limitations in this permit.
7. The Permittee shall submit a report for any required performance test to the EPA within 60 days after completing the tests, in accordance with the performance test recordkeeping requirements in this permit.
8. The Permittee shall submit any record or report required by this permit upon EPA request.

## **II. General Provisions**

### **A. Conditional Approval:**

Pursuant to the authority of 40 CFR 49.151, the EPA hereby conditionally grants this permit to construct. This authorization is expressly conditioned as follows:

1. *Document Retention and Availability:* This permit and any required attachments shall be retained and made available for inspection upon request at the location set forth herein.
2. *Permit Application:* The Permittee shall abide by all representations, statements of intent and agreements contained in the application submitted by the Permittee. The EPA shall be notified 10 days in advance of any significant deviation from this permit application as well as any plans, specifications or supporting data furnished.
3. *Permit Deviations:* The issuance of this permit may be suspended or revoked if the EPA determines that a significant deviation from the permit application, specifications, and supporting data furnished has been or is to be made. If the proposed source is constructed, operated, or modified not in accordance with the terms of this permit, the Permittee will be subject to appropriate enforcement action.
4. *Compliance with Permit:* The Permittee shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the permitted facility/source. Noncompliance with any permit term or condition is a violation of this permit and may constitute

a violation of the Clean Air Act and is grounds for enforcement action and for a permit termination or revocation.

5. *Fugitive Emissions:* The Permittee shall take all reasonable precautions to prevent and/or minimize fugitive emissions during the construction period.
6. *National Ambient Air Quality Standard and PSD Increment:* The permitted source shall not cause or contribute to a National Ambient Air Quality Standard violation or a PSD increment violation.
7. *Compliance with Federal and Tribal Rules, Regulations, and Orders:* Issuance of this permit does not relieve the Permittee of the responsibility to comply fully with all other applicable federal and tribal rules, regulations, and orders now or hereafter in effect.
8. *Enforcement:* It is not a defense, for the Permittee, in an enforcement action, to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
9. *Modifications of Existing Emissions Units/Limits:* For proposed modifications, as defined at 40 CFR 49.152(d), that would increase an emissions unit's allowable emissions of pollutants above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit modification pursuant to the MNSR regulations approving the increase. For a proposed modification that is not otherwise subject to review under the PSD or MNSR regulations, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR 49.159(f).
10. *Relaxation of Legally and Practically Enforceable Limits:* At such time that a new or modified source within this permitted facility/source or modification of this permitted facility/source becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of the permitted facility/source to otherwise emit a pollutant, such as a restriction on hours of operation, then the requirements of the PSD regulations shall apply to the source or modification as though construction had not yet commenced on the source or modification.
11. *Revise, Reopen, Revoke and Reissue, or Terminate for Cause:* This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee, for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. The EPA may reopen this permit for a cause on its own initiative, e.g., if this permit contains a material mistake or the Permittee fails to assure compliance with the applicable requirements.
12. *Severability Clause:* The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.
13. *Property Rights:* This permit does not convey any property rights of any sort or any exclusive privilege.

14. *Information Requests:* The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating this permit or to determine compliance with this permit. For any such information claimed to be confidential, the Permittee shall also submit a claim of confidentiality in accordance with 40 CFR Part 2, Subpart B.
15. *Inspection and Entry:* The EPA or its authorized representatives may inspect this permitted facility/source during normal business hours for the purpose of ascertaining compliance with all conditions of this permit. Upon presentation of proper credentials, the Permittee shall allow the EPA or its authorized representative to:
  - (a) Enter upon the premises where this permitted facility/source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of this permit;
  - (b) Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this permit;
  - (c) Inspect, during normal business hours or while this permitted facility/source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
  - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements; and
  - (e) Record any inspection by use of written, electronic, magnetic and photographic media.
16. *Permit Effective Date:* This permit is effective immediately upon issuance unless comments resulted in a change in the proposed permit, in which case the permit is effective 30 days after issuance. The Permittee may notify the EPA, in writing, that this permit or a term or condition of it is rejected. Such notice should be made within 30 days of receipt of this permit and should include the reason or reasons for rejection.
17. *Permit Transfers:* Permit transfers shall be made in accordance with 40 CFR 49.159(f). The Air Program Director shall be notified in writing at the address shown below if the company is sold or changes its name.

U.S. Environmental Protection Agency, Region 8  
Office of Partnerships and Regulatory Assistance  
Tribal Air Permitting Program, 8P-AR  
1595 Wynkoop Street  
Denver, Colorado 80202

18. *Invalidation of Permit:* Unless the permitted source of emissions is an existing source, this permit becomes invalid if construction is not commenced within 18 months after the effective date of this permit, construction is discontinued for 18 months or more, or construction is not completed within a reasonable time. The EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between the construction of the approved phases of a phased construction project. The

Permittee shall commence construction of each such phase within 18 months of the projected and approved commencement date.

19. *Notification of Start-Up*: The Permittee shall submit a notification of the anticipated date of initial start-up of this permitted source to the EPA within 60 days of such date, unless this permitted source of emissions is an existing source.

**B. Authorization:**

Authorized by the United States Environmental Protection Agency, Region 8



11/3/2015

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Carl Daly, Director  
Air Program

Date

## Appendix A

### Definitions

Note: All terms not defined herein shall have the meaning given them in the Clean Air Act, in 40 CFR parts 60, 61, and 63, in the PSD regulations at 40 CFR Part 52, or in the MNSR regulations at 40 CFR Part 49. The following terms shall have the specific meanings given them. Definitions in this section were taken or derived from the definitions for the equivalent word in 40 CFR Parts 60 and 63, or from commonly used English language dictionaries.

For the purposes of this permit to construct:

*Biodiesel* means a combustion fuel made from fatty acids of methyl esters that complies with the specifications of ASTM 6751.

*Cause* means with respect to the EPA's ability to terminate a permitted source's coverage under a permit that:

1. The Permittee is not in compliance with the provisions of this permit;
2. The EPA determines that the emissions resulting from the construction or modification of the permitted source significantly contribute to NAAQS violations, which are not adequately addressed by the requirements in this permit;
3. The EPA has reasonable cause to believe that the Permittee obtained approval of the request for a permit by fraud or misrepresentation; or
4. The Permittee failed to disclose a material fact required by the request for a permit or the regulations applicable to the permitted source of which the applicant had or should have had the knowledge at the time the Permittee submitted the request for a permit.

*Construction* means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of an emissions unit that would result in a change of emissions.

*Maintenance* means the routine recurring work required to keep an emissions unit in such condition that it may be continuously utilized, at its original or designed capacity and efficiency, for its intended purpose.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Permittee* means the owner or operator of the permitted source.

*Permitted source* means the facility (stone quarrying, crushing, and screening operation and concrete batch plant) for which the EPA has issued this permit to construct.

*Startup* means the setting in operation of an affected facility for any purpose.

*Shutdown* means the cessation of operation of an affected facility for any purpose.

## Appendix B

### Fugitive Dust Control Plan

1. *Site Roadways and Plant Yard*
  - (a) The dust on the site roadways/plant yard shall be controlled by applications of water, calcium chloride or other acceptable fugitive dust control compound approved by the reviewing authority. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits.
  - (b) All paved roadways/plant yards shall be swept as needed between applications.
  - (c) Any material spillage on roads shall be cleaned up immediately.
  
2. *Rock Crushing and Screening Operations*
  - (a) The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.
  - (b) The transfer point from the re-circulating belt to the feed belt shall be equipped with an enclosed chute.
  - (c) Where practical, drop points shall be equipped with shrouds or screens to reduce particulate emissions.
  
3. *Material Storage Piles*
  - (a) Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.
  - (b) Stockpiles shall be watered on an as needed basis in order to meet the opacity limits. Also, equipment to apply water or dust suppressant shall be available at the site, or on call for use at the site, within any given operating day.
  
4. *Truck Traffic*
  - (a) Vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within six (6) inches of the top of any side board, side panel or tail gate; otherwise, the truck shall be tarped.
  - (b) A speed limit sign of 10 miles-per-hour or lower shall be posted on site so that it is visible to truck traffic.
  
5. *Corrective Actions:* If corrective action needs to be taken, the Permittee shall consider and use one or more of the following options: adjust the watering and/or sweeping frequencies, reduce drop distances, increase cover, and/or take other actions to reduce fugitive dust emissions.
  
6. *Revegetation:* All disturbed areas no longer in use shall be revegetated within one year of discontinuing use.

## Appendix C

### Rock Crusher and Concrete Batch Plant Process Flow Diagrams



# Concrete Batch Plant Flow Diagram

Source: Crossfire Aggregate Services, LLC, Air Permit Application, New, For Crossfire Bonds Gravel Pit, La Plata County, Revised August 18, 2015.  
Prepared by Environmental Safety Solutions, Inc.

