State of Utah

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Department of
Environmental Quality

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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

RN125750006

October 16, 2020

Bill King
Sunroc Corporation
730 North 1500 West
Orem, UT 84057

Dear Bill King,

Re: Engineer Review:
Modification to AO DAQE-AN125750005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-Fired Engines)
Project Number: N125750006

The DAQ requests a company representative (Title V Responsible Official for enhanced Approval Order application) review and sign the attached Engineer Review (ER). This ER identifies all applicable elements of the New Source Review permitting program. Sunroc Corporation should complete this review within **10 business days** of receipt.

Sunroc Corporation should contact **Mr. Tim DeJulis** at (385) 306-6523 if there are questions or concerns with the review of the draft permit conditions. Upon resolution of your concerns, please email tdejulis@utah.gov the signed cover letter to Mr. Tim DeJulis. Upon receipt of the signed cover letter, the DAQ will prepare an ITA for a 30-day public comment period. At the completion of the comment period, the DAQ will address any comments and will prepare an AO for signature by the DAQ Director.

If Sunroc Corporation does not respond to this letter within **10 business days,** the project will move forward without source concurrence. If Sunroc Corporation has concerns that cannot be resolved and the project becomes stagnant, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____
(Signature & Date)

UTAH DIVISION OF AIR QUALITY
ENGINEER REVIEW

SOURCE INFORMATION

Project Number	N125750006
Owner Name	Sunroc Corporation
Mailing Address	730 North 1500 West Orem, UT, 84057
Source Name	Sunroc Corporation- Portable Equipment - Temporary Locations
Source Location	Not permanently based at a site. Portable Source, UT
SIC Code	1442 (Construction Sand & Gravel)
Source Contact	Bill King
Phone Number	(801) 222-3306
Email	billking@clydeinc.com
Project Engineer	Mr. Tim DeJulis, Engineer
Phone Number	(385) 306-6523
Email	tdejulis@utah.gov
Notice of Intent (NOI) Submitted	June 26, 2020
Date of Accepted Application	July 17, 2020

SOURCE DESCRIPTION

General Description
This AO is issued to Sunroc Corp. for the purpose of operating a portable source that belongs to the nonmetallic mineral processing industry, including aggregate, concrete, and hot mix asphalt plants. The plants subject to this AO shall be temporarily operated for a period of not more than 180 working days at any location. A relocation shall not exceed 365 consecutive days at any location in the State of Utah.

Prior to commencement of operation at a location, the owner/operator shall submit a Notice of Temporary Relocation to the Director and obtain a Temporary Relocation Approval Letter. If the owner/operator operates at a location in compliance with the AO, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment.

Compliance with the opacity limits and operating practices contained in the conditions of the AO shall be considered as application of BACT. The emission control measures required in the conditions of this AO shall apply to all of the locations at which the source approved by this AO operates. The source may be required to adopt additional measures for controlling emissions to address location-specific concerns.

This AO limits the source to emissions that are below the major source threshold, making it a "Synthetic Minor" source. NSPS, 40 CFR Part 60, Subparts A, I, OOO, and IIII, and MACT, 40 CFR 63, Subparts A and ZZZZ regulations apply to this portable source. This source is considered a Title V area source.

NSR Classification:
Minor Modification at Minor Source

Source Classification
Located in
Portable Source County
Airs Source Size: SM

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

Project Proposal
Modification to AO DAQE-AN125750005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-Fired Engines)

Project Description
The portable source belongs to the nonmetallic mineral processing industry, including aggregate processing plants, concrete batch plants, hot mix asphalt plants, and stationary diesel-fired engines.

EMISSION IMPACT ANALYSIS

DAQ modeled a generic aggregate site to determine the appropriate operating conditions for this AO. Ambient air quality impacts are smaller in the daytime hours than in the nighttime hours. To minimize impacts, the times of operation were limited. Sources will be allowed to operate from 6:00 am to 10:00 pm. A permit condition is included in this AO to reflect the time restriction of operation. More stringent times of operation may be included in different areas of the State. If a source wants to operate outside these times, the source must submit modeling with the temporary relocation letter to demonstrate that the NAAQS are met. [Last updated July 21, 2020]

Review of BACT for New/Modified Emission Units

1. **BACT review regarding Process Equipment**

The process equipment for this portable source include the following:

A. Aggregate Equipment (Crushers, Screens, Conveyors)
B. Concrete Batch Plants
C. Hot Mix Asphalt Plants
D. Stationary Diesel-Fired Engines

A. Aggregate Equipment (Crushers, Screens, Conveyor Transfer Points)

The following opacity limitations shall not be exceeded for the following aggregate equipment:
Crushers - 12%
Screens - 7%
Conveyor Transfer Points - 7%
Feeders - 7%
Stackers - 7%
Water sprays will control the emissions from crushers, screens, conveyors, feeders, and stackers. Sprays will operate as needed to comply with the above opacity limits.

B. Concrete Batch Plants

Fabric filters will control the emissions from concrete batch plants, the batching operations, and associated silos. The fabric filters will reduce visible emissions to 7% opacity or less. Any boiler/water heater used will use natural gas and/or propane as fuel. Any boiler/water heater shall be limited to 10% opacity.

C. Hot Mix Asphalt Plants

The hot mix asphalt plants may use propane, natural gas, fuel oil, on-specification used oil or any combination of these fuels as fuel. A baghouse will control the emissions from the drum mixer. The baghouse will reduce visible emissions to 10% opacity or less. In addition, the baghouse will reduce the concentration of PM_{10} in the exhaust to 0.024 grains per dscf or less. To ensure the baghouse is operating correctly, the baghouse pressure drop shall be between 3 and 7 inches of water column. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less.

D. Stationary Diesel-Fired Engines

The NSR Section recommends the following as BACT for stationary diesel engines:
1. Proper engine tuning and maintenance
2. Visible emissions shall be 20% opacity or less
3. Sulfur content of fuel shall be 15 ppm or less
4. Compliance with the applicable federal standards contained in
a. 40 CFR 60, NSPS, Subpart IIII, and
b. 40 CFR 63, MACT, Subpart ZZZZ. [Last updated October 6, 2020]

2. **BACT review regarding Process Equipment part 2**

BACT review regarding Fugitive Emissions and Fugitive Dust
To ensure fugitive emissions and fugitive dust will be controlled, the owner/operator will be

required to submit a FDCP for each location with the temporary relocation letter. Fugitive emissions and fugitive dust will be generated from the following:

A. Haul Roads
B. Storage Piles
C. Conveyor Drop Points
D. Material Handling Operations

A. Haul Roads

Wet suppression (or other chemical treatment) will control the emissions from haul roads. To ensure the wet suppression is adequate, visible emissions from haul roads will not exceed 20% opacity on site and 10% at the property boundary.

B. Storage Piles

Routine water application will control the emissions from storage piles. To ensure the water application is of sufficient frequency, visible emissions from storage piles will not exceed 20% opacity on site and 10% at the property boundary.

C. Conveyor Drop Points,

Water sprays will control the emissions from conveyor drop points. Sprays will operate as needed to reduce visible emissions to 20% opacity or less on site and 10% at the property boundary.

D. Material Handling Operations,

Water application will control the emissions from material handling operations. To ensure the water application is of sufficient frequency, visible emissions from material handling will not exceed 20% opacity on site and 10% at the property boundary.
[Last updated October 6, 2020]

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.A THE APPROVED EQUIPMENT

II.A.1	**Portable Source** Including: Aggregate Processing Equipment, Concrete Batching Equipment, Hot Mix Asphalt Equipment, and Diesel-Fired Engines
II.A.3 NEW	**Aggregate Processing Plants** These plants may be subject to NSPS Subpart OOO Requirements These plants include: A. Crushers B. Screens C. Wash Plants D. Conveyors, Feeders, Hoppers, and Stackers

II.A.4 NEW	**Concrete Batch Plants** These plants include: A. Central-Mix Concrete Batch Plants B. Truck-Mix Concrete Batch Plants C. Baghouses, Bin Vents, Dust Collectors and Fabric Filters D. Storage Silos - Contents include: i. Cement ii. Fly Ash iii. Lime iv. Concrete Additives E. Boilers & Water Heaters i. Fuel: Natural Gas/Propane ii. Rating: less than 10 MMBtu/hr each F. Conveyors, Feeders, Hoppers, Pugmills, and Stackers
II.A.5 NEW	**Hot Mix Asphalt Plants** These plants may be subject to NSPS Subpart I Requirements These plants include: A. Drum-Mix Hot Mix Asphalt Plants B. Baghouses, Bin Vents, Dust Collectors and Fabric Filters C. Storage Silos - Contents include: i. Lime ii. Hot Mix Asphalt iii. RAP iv. Hot Mix Asphalt Additives D. Conveyors, Feeders, Hoppers, Mixers, Pugmills, and Stackers
II.A.6 NEW	**Stationary Diesel-Fired Engines** These stationary engines produce mechanical or electrical power to operate the plants in this AO. These stationary engines are subject to MACT Subpart ZZZZ Requirements These stationary engines may be subject to NSPS Subpart IIII Requirements
II.A.7 NEW	**Storage Tanks** Contents include: A. Asphalt Cement B. Diesel Fuel C. On-Specification Used Oil D. Gasoline E. Propane

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.B REQUIREMENTS AND LIMITATIONS

II.B.1 NEW	**Notice of Temporary Relocation:**
II.B.1.a NEW	The owner/operator shall submit a Notice of Temporary Relocation and obtain a Temporary Relocation Approval Letter prior to operating a portable source at any location. [R307-401-8]
II.B.1.a.1 NEW	Notices of Temporary Relocation shall include the following information (Form 15a is available from the DAQ): A. The address and driving directions of the proposed location B. A list of the equipment to be operated at the proposed location, including: 1. The type of equipment 2. The rated capacity of the equipment 3. The date of manufacture of the equipment C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the plant boundary is located within one mile of these buildings) D. The expected startup and completion dates for operating at the proposed location. E. The expected hours of operation, including start and stop times F. The emission control measures that the owner/operator proposes to adopt for each emission point at each location; including a FDCP specific to the proposed location G. A reference to this AO [R307-401-8]
II.B.2 NEW	**Temporary Relocation Approval Letter:**
II.B.2.a NEW	The owner/operator shall operate and conduct its operations of the aggregate processing plants, the concrete batch plants, the hot mix asphalt plants, and the diesel-fired engines in accordance with the terms and conditions of this AO and the terms and conditions of the Temporary Relocation Approval Letter issued by the Director for each relocation. In the case of any discrepancy between the conditions of this AO and the Temporary Relocation Approval Letter, the owner/operator shall comply with the site-specific requirements in the Temporary Relocation Approval Letter. [R307-401-8]

II.B.2.a.1 NEW	Portable sources that plan to relocate to a stationary source listed in the Utah PM_{10} or $PM_{2.5}$ State Implementation Plan (SIP) shall comply with the standards and adopt the control strategies listed in the PM_{10} or $PM_{2.5}$ SIP for the stationary source in addition to the requirements of this AO and the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3 NEW	**Operations at Temporary Locations:**
II.B.3.a NEW	The owner/operator may temporarily relocate this portable source to any temporary location. The temporary relocation shall not exceed 180 working days and shall not exceed 365 consecutive days. If a temporary relocation is expected to exceed 180 working days, the owner/operator shall submit an NOI in accordance with R307-401 for a permanent source and obtain a valid AO prior to the end of the 180 working days. [R307-401-17]
II.B.3.a.1 NEW	The owner/operator shall keep and maintain the following records on site: A. The initial relocation date at each location B. Working days at each location C. Consecutive days at each location [R307-401-17]
II.B.3.a.2 NEW	The owner/operator shall submit records of the working days at each site and the consecutive days at each site to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.b NEW	The owner/operator shall not exceed the daily production limit specified in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3.b.1 NEW	The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Director or the Director's representative. [R307-401-8]
II.B.3.b.2 NEW	The owner/operator shall keep and maintain the following production records on site for all periods that the portable source is in operation at any location: A. The date production occurs at each location B. The production for that date at each location C. The total production at each location [R307-401-8]
II.B.3.b.3 NEW	The owner/operator shall submit records of the actual production rate to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.c NEW	The owner/operator shall only operate between 6:00 AM and 10:00 PM each day. The hours of operation may be altered upon approval of the Director; however, any request for a change in these hours shall include modeling showing that all NAAQS are met. [R307-401-8]

II.B.3.c.1 NEW	The owner/operator shall keep and maintain the following records of operation for all periods that the portable source is in operation at any location: A. The time operations began each day at each location B. The time operations ended each day at each location [R307-401-8]
II.B.3.d NEW	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any installation of this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3]
II.B.3.d.1 NEW	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3, R307-305-3]
II.B.4 NEW	**Emission Estimates and Emissions Inventory:**
II.B.4.a NEW	The owner/operator shall estimate the actual emissions that resulted from operating at each location. These emissions shall be summarized for each piece of equipment, each source of fugitive dust, and each source of fugitive emissions at the completion of operation at each location. The Director may require a summary of emissions for each location at any time. [R307-401-8, R307-150-1]
II.B.4.a.1 NEW	Records of actual emissions shall be kept for each location. Records of actual emissions shall include the following: A. The emission factors used to estimate emissions for each location B. All variables (production, hours of operation, haul road lengths, etc.) used in the emission estimates for each location C. The actual emissions from each location, which includes emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions [R307-401-8, R307-150-1]
II.B.5 NEW	**Haul Roads and Fugitive Dust Sources:**
II.B.5.a NEW	The owner/operator shall comply with a FDCP consistent with R307-309-6 for each location. The FDCP for a location shall address the control of all fugitive dust sources at that location. [R307-401-8]
II.B.5.b NEW	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary for each temporary location. [R307-205-4, R307-309-5, R307-401-8]

II.B.5.b.1 NEW	Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.c NEW	The owner/operator shall use water application or other control options contained in R307-309 to minimize emissions from fugitive dust and fugitive emissions sources, including haul roads, storage piles, and disturbed areas. Controls shall be applied to ensure the opacity limits in this AO are not exceeded. [R307-309, R307-401-8]
II.B.6 NEW	**Aggregate Processing Plants:**
II.B.6.a NEW	The owner/operator shall not allow visible emissions from any crusher subject to this AO to exceed 12 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.b NEW	The owner/operator shall not allow visible emissions from any screen subject to this AO to exceed 7 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.c NEW	The owner/operator shall not allow visible emissions from any conveyor transfer point subject to this AO to exceed 7 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.d NEW	The owner/operator shall not allow visible emissions from any conveyor drop point at each temporary location to exceed 20 percent opacity. [R307-205-4, R307-309-5, R307-401-8]
II.B.6.e NEW	The owner/operator shall install water sprays on all crushers, all screens, all conveyor transfer points, and all conveyor drop points at each location to control emissions. Sprays shall operate as required to ensure the opacity limits in this AO are not exceeded. [R307-401-8]
II.B.6.f NEW	The owner/operator shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles associated with each crusher, screen, and conveyor. If the owner/operator finds that water is not flowing properly during an inspection of the water spray nozzles, the owner/operator shall initiate corrective action within 24 hours and complete corrective action as expediently as practical. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.f.1 NEW	Records of the water sprays inspections shall be kept and maintained in a logbook for all periods when the plant is in operation. The records shall include the following items: A. Date the inspections were made B. Any corrective actions taken C. Control mechanism used if sprays are not operating. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.7 NEW	**Crushers, Screens, and Conveyors subject to NSPS Subpart OOO:**

II.B.7.a NEW	The owner/operator shall conduct an initial performance test for all crushers, screens, and conveyor transfer points subject to this AO that are subject to NSPS OOO. Performance tests shall meet the limitations specified in Table 3 to Subpart OOO. [40 CFR 60 Subpart OOO]
II.B.7.a.1 NEW	Initial performance tests for fugitive emissions limits shall be conducted according to 40 CFR 60.675(c). The owner or operator may use methods and procedures specified in 40 CFR 60.675(e) as alternatives to the reference methods and procedures specified in 40 CFR 60.675(c). [40 CFR 60 Subpart OOO]
II.B.7.a.2 NEW	The owner/operator shall keep and maintain records of the initial performance test for each crusher, screen, and conveyor for the life of the equipment. The record of the initial performance test must be made available to the Director or the Director's representative upon request. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.8 NEW	**Concrete Batch Plants:**
II.B.8.a NEW	The owner/operator shall not allow visible emissions from any concrete batch plant and the associated equipment subject to this AO to exceed 7 percent opacity. [R307-401-8]
II.B.8.b NEW	Each storage silo associated with a concrete batch plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9 NEW	**Hot Mix Asphalt Plants:**
II.B.9.a NEW	The owner/operator shall use natural gas, propane, fuel oil, on-specification used oil as defined in R315-15, or any combination thereof as fuel in the hot mix asphalt plants subject to this AO. [R307-401-8]
II.B.9.b NEW	The sulfur content of any fuel oil burned in the hot mix asphalt plants subject to this AO shall not exceed 15 ppm by weight. [R307-401-8]
II.B.9.b.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of fuel oil shall be either by the owner/operator's own testing or by test reports from the fuel oil marketer. [R307-203-1, R307-401-8]
II.B.9.b.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in fuel oil. Records of the test certifications shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]
II.B.9.c NEW	The owner/operator shall use a baghouse to control particulate emissions from each hot mix asphalt plant dryer subject to this AO. [R307-401-8]
II.B.9.d NEW	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the differential pressure across each baghouse. The static pressure differential across each baghouse shall be between 3.0 to 7.0 inches of water column. [R307-401-8]

II.B.9.d.1 NEW	The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. The pressure gauge shall be calibrated according to the manufacturer's instructions at least once every 12 months. [R307-401-8]
II.B.9.d.2 NEW	The owner/operator shall record the reading of the pressure gauge at least once per operating day. [R307-401-8]
II.B.9.e NEW	Each storage silo associated with a hot mix asphalt plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9.f NEW	The owner/operator shall not allow visible emissions from any baghouse, bin vent, dust collector or fabric filter associated with a hot mix asphalt plant subject to this AO to exceed 10 percent opacity. [R307-401-8]
II.B.9.g NEW	Concentrations in the exhaust stream from each asphalt drum mixer subject to this AO shall not exceed 0.030 grains/dscf of TSP, 0.024 grains/dscf of PM_{10}, and 0.024 grains/dscf of $PM_{2.5}$. [R307-401-8]
II.B.9.g.1 NEW	Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below: Emission Point: Drum Mixer exhaust passing through the baghouse Pollutant Testing Status Test Frequency PM * # PM_{10} ** @ $PM_{2.5}$ ** @ * Initial compliance testing is required for each plant. The initial test date shall be performed as soon as possible and in no case later than 180 days after the startup of a new or modified emission source. A compliance test is required on a modified emission point that has an emission rate limit. ** Initial test is not required unless specified by the Director. # Initial test is required. Subsequent tests shall only be performed for PM_{10}. @ Test every three years after the date of the most recent stack test, or sooner if required by the Director. The Director may require the owner/operator to perform a stack test at any time. [R307-165, R307-401-8]

II.B.9.g.2 NEW	A. Notification: At least 30 days prior to conducting any emission testing required under any part of UAC, R307, the owner or operator shall notify the Director of the date, time and place of such testing and shall submit a source test protocol to the Director. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. If directed by the Director, the owner/operator shall attend a pretest conference. The pretest conference shall include representation from the owner/operator, the tester, and the Director. B. Reporting: Upon completion of the DAQ accepted testing methods, the owner/operator shall submit a copy of the results from each performance test as conducted to the Director within 60 days after the test has been completed. C. Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. D. Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Director. E. PM 40 CFR 60, Appendix A, Method 5 or other EPA-approved testing method, as acceptable to the Director. [R307-165, R307-401-8]

II.B.9.g.3 NEW	F. $PM_{10}/PM_{2.5}$ For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a, or other EPA-approved testing method, as acceptable by the Director. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured shall be considered PM_{10}. The portion of the filterable particulate emissions considered $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. The portion of the filterable particulate emissions considered PM_{10} and $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration. The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes. G. Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Director, to give the results in the specified units of the emission limitation. H. Test Conditions All tests shall be conducted in accordance with R307-165-4. [R307-165, R307-401-8]
II.B.10 NEW	**Stationary Diesel-Fired Engines:**
II.B.10.a NEW	The owner/operator shall comply with the applicable requirements in 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII for all stationary engines. An engine is considered a stationary engine if the engine meets the definition of "stationary reciprocating internal combustion engine (RICE)" in 40 CFR 63.6675 or "stationary internal combustion engine" in 40 CFR 60.4219. In determining whether an engine is considered a stationary engine, the time the engine remains at a location shall be considered. 40 CFR 1068.30 states that an engine is a stationary engine if: A. The engine remains at a location for more than 12 consecutive months. B. The engine remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, R307-401-8]

II.B.10.b NEW	The owner/operator shall not allow visible emissions from any stationary diesel-fired engine subject to this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3, R307-401-8]
II.B.10.c NEW	The sulfur content of any fuel oil or diesel fuel burned in a stationary diesel-fired engine subject to this AO shall not exceed 15 ppm. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.10.c.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of diesel fuel shall be either by the owner/operator's own testing or by test reports from the diesel fuel marketer. [R307-203-1, R307-401-8]
II.B.10.c.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in diesel fuel. Records of the test certification shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]

PERMIT HISTORY

When issued, the approval order shall supersede (if a modification) or will be based on the following documents:

Supersedes	DAQE-AN12570005-09 dated August 12, 2009
Is Derived From	NOI dated June 30, 2020

REVIEWER COMMENTS

1. **Comment regarding NSPS, MACT, & Title V Applicability:**

NSPS

NSPS Subpart I applies to owners and operators of a hot mix asphalt facility that commenced construction after June 11, 1973. The hot mix asphalt plants at this portable source were manufactured after June 11, 1973; therefore, NSPS Subpart I applies to this AO for portable equipment.

NSPS Subpart OOO applies to each crusher, screening operation, and belt conveyor in fixed or portable nonmetallic mineral processing plants manufactured after August 31 1983. The portable equipment in this AO is used to process nonmetallic minerals according to 40 CFR 60.671; therefore, NSPS Subpart OOO applies to this AO for portable equipment.

NSPS Subpart IIII applies to owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006. The stationary engines at this portable source were manufactured after April 1, 2006; therefore, NSPS Subpart IIII applies to this AO for stationary diesel-fired engines.

MACT

40 CFR 63 MACT Subpart ZZZZ applies to owners and operators of stationary RICE at a major or area source of HAP emissions. This source will have stationary RICE at an area source of HAP emissions; therefore, MACT Subpart ZZZZ will apply to the stationary engines at this source.

Title V

Title V of the 1990 Clean Air Act (Title V) applies to the following:

1. Any major source
2. Any source subject to a standard, limitation, or other requirement under Section 111 of the Act, Standards of Performance for New Stationary Sources;
3. Any source subject to a standard or other requirement under Section 112 of the Act, Hazardous Air Pollutants.
4. Any Title IV affected source.

The portable equipment in this AO is not part of a major source or a Title IV source, and is not subject to 40 CFR 61 requirements, but the facility is subject to 40 CFR 60 NSPS Subpart I and OOO requirements. Therefore, Title V applies to the source where this portable equipment operates. [Last updated July 21, 2020]

2. **Comment regarding Recordkeeping:**
This AO contains numerous recordkeeping requirements to demonstrate compliance. To assist the owner/operator, this Review Comment lists all the records that are required by this AO.

1. The initial relocation date at each location
2. Working days at each location
3. Consecutive days at each location
4. The date production occurs at each location
5. The production for each date at each location
6. The total production at each location
7. The time operations began each day at each location
8. The time operations ended each day at each location
9. The emission factors used to estimate emissions for each location
10. All variables used in the emission estimates for each location
11. The emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions at each location
12. Date the water spray inspections were made
13. Any corrective actions taken for the water sprays
14. Control mechanism used if sprays are not operating.
15. The initial performance test for each affected facility as defined in NSPS Subpart OOO
16. The certification of sulfur content in fuel oil used in the asphalt plants
17. The pressure gauge reading for each day of operation
18. The applicable records contained in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ for each stationary engine subject to this AO.
19. The certification of sulfur content in diesel fuel used in the stationary engines

[Last updated July 21, 2020]

3. **Comment regarding Reporting:**
R307-401-17 requires that "records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days." The owner/operator must submit this information to be in compliance with R307-401-17. [Last updated July 21, 2020]

4. **Comment regarding Hot Mix Asphalt Plant Condensable PM Emissions:**
Condensable PM emissions shall not be used for compliance demonstration during stack testing; however, condensable PM emissions shall be used for inventory purposes. There are several reasons condensable PM emissions will not be used for compliance demonstration.

A. NSPS Subpart I does not limit condensable PM emissions. DAQ is unaware of any other regulation that limits PM emissions, including condensable PM emissions, from hot mix asphalt plants. Since federal regulations only limit filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

B. The control device used to control PM emissions from a hot mix asphalt plant is a baghouse. A baghouse is unable to control condensable PM emissions from a hot mix asphalt plant. One of the purposes of a stack test is to ensure the control device is operating correctly. Since the baghouse can only control filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

C. The majority of uncontrolled emissions from a hot mix asphalt plant is filterable emissions. Based on AP-42, an uncontrolled 400 tph hot mix asphalt plant will emit 11,200 pounds of filterable

PM per hour and 7.8 pounds of condensable PM per hour. The amount of uncontrolled filterable PM emissions is over 1,400 times higher than the condensable PM emissions. Since the uncontrolled filterable PM emissions are so high, only filterable PM emissions will be tested for compliance demonstration.

D. Condensable PM emissions can vary depending on the fuel being combusted, the burner, the material being fed into the hot mix asphalt plant, and other factors. It is inappropriate to put a single limit in a permit that could apply to different locations, different plants, different materials, and different fuels. Due to the high variability of these factors, condensable emissions will not be used for compliance demonstration for this portable source.

Due to the reasons above, condensable PM emissions will not be tested for compliance demonstration; however, condensable PM emissions will be used for inventory purposes. The Director may require an emissions inventory at any time according to R307-150-1(4). Because this source is a Title V area source, this source is required to pay Title V fees according to R307-415-9. Both filterable and condensable PM emissions are considered chargeable pollutants; therefore, the owner/operator must test for condensable PM emissions for inventory purposes.
[Last updated July 21, 2020]

5. **Comment regarding Definition of Stationary Engines:**
definition of stationary internal combustion engine in NSPS Subpart IIII (40 CFR 60.4219) is as follows:

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

The definition of nonroad engine in 40 CFR 1068.30 is as follows:

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.
[Last updated July 21, 2020]

6. **Comment regarding Definition of Stationary Engines part 2:**
40 CFR 1068.31 has the following requirements:

(b) A stationary engine becomes a new nonroad engine if-

(1) It is used in an application that meets the criteria specified in paragraphs (1)(i) or (ii) in the definition of "nonroad engine" in §1068.30.

(2) It meets the criteria specified in paragraph (1)(iii) of the definition of "nonroad engine" in §1068.30 and is moved so that it fails to meet (or no longer meets) the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30.

(c) A stationary engine does not become a new nonroad engine if it is moved but continues to meet the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30 in its new location. For example, a transportable engine that is used in a single specific location for 18 months and is later moved to a second specific location where it will remain for at least 12 months is considered to be a stationary engine in both locations. Note that for stationary engines that are neither portable nor transportable in actual use, the residence-time restrictions in the definition of "nonroad engine" generally do not apply.

(e) A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if-

(1) At any time, it meets the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If we determine that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location.

(2) It is otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411).
[Last updated July 21, 2020]

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

RN125750006

August 26, 2020

Bill King
Sunroc Corporation
730 North 1500 West
Orem, UT 84057

Dear Bill King,

Re: Engineer Review:
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)
Project Number: N125750006

The DAQ requests a company representative (Title V Responsible Official for enhanced Approval Order application) review and sign the attached Engineer Review (ER). This ER identifies all applicable elements of the New Source Review permitting program. Sunroc Corporation should complete this review within **10 business days** of receipt.

Sunroc Corporation should contact **Mr. Tim DeJulis** at (385) 306-6523 if there are questions or concerns with the review of the draft permit conditions. Upon resolution of your concerns, please email tdejulis@utah.gov the signed cover letter to Mr. Tim DeJulis. Upon receipt of the signed cover letter, the DAQ will prepare an ITA for a 30-day public comment period. At the completion of the comment period, the DAQ will address any comments and will prepare an AO for signature by the DAQ Director.

If Sunroc Corporation does not respond to this letter within **10 business days,** the project will move forward without source concurrence. If Sunroc Corporation has concerns that cannot be resolved and the project becomes stagnant, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____
(Signature & Date)

UTAH DIVISION OF AIR QUALITY
ENGINEER REVIEW

SOURCE INFORMATION

Project Number	N125750006
Owner Name	Sunroc Corporation
Mailing Address	730 North 1500 West Orem, UT, 84057
Source Name	Sunroc Corporation- Portable Equipment - Temporary Locations
Source Location	Not permanently based at a site. Portable Source, UT
SIC Code	1442 (Construction Sand & Gravel)
Source Contact	Bill King
Phone Number	(801) 222-3306
Email	bill.king@clydeinc.com
Project Engineer	Mr. Tim DeJulis, Engineer
Phone Number	(385) 306-6523
Email	tdejulis@utah.gov
Notice of Intent (NOI) Submitted	June 26, 2020
Date of Accepted Application	July 17, 2020

SOURCE DESCRIPTION

General Description
Sunroc Corp. has requested a modification to the AO DAQE-AN12570005-09. This AO is issued to Sunroc Corp. for the purpose of operating a portable source that belongs to the nonmetallic mineral processing industry, including aggregate, concrete, batch plants, hot mix asphalt plants, and stationary diesel-fired engines. The plants subject to this AO shall be temporarily operated for a period of not more than 180 working days at any location. A relocation shall not exceed 365 consecutive days at any location in the State of Utah.

Prior to commencement of operation at a location, the owner/operator shall submit a Notice of Temporary Relocation to the Director and obtain a Temporary Relocation Approval Letter. If the owner/operator operates at a location in compliance with the AO, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment.

Compliance with the opacity limits and operating practices contained in the conditions of the AO shall be considered as application of BACT. The emission control measures required in the conditions of this AO shall apply to all of the locations at which the source approved by this AO operates. The source may be required to adopt additional measures for controlling emissions to address location-specific concerns.

This AO limits the source to emissions that are below the major source threshold, making it a "Synthetic Minor" source. NSPS, 40 CFR Part 60, Subparts A, I, OOO, and IIII, and MACT, 40 CFR 63, Subparts A and ZZZZ regulations apply to this portable source. This source is considered a Title V area source.

NSR Classification:
Minor Modification at Minor Source

Source Classification
Located in
Portable Source County
Airs Source Size: SM

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

Project Proposal
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)

Project Description
Sunroc Corp. has requested a modification to its AO DAQE-AN12570005-09. The portable source belongs to the nonmetallic mineral processing industry, including aggregate processing plants, concrete batch plants, hot mix asphalt plants, and stationary diesel-fired engines.

EMISSION IMPACT ANALYSIS

DAQ modeled a generic aggregate site to determine the appropriate operating conditions for this AO. Ambient air quality impacts are smaller in the daytime hours than in the nighttime hours. To minimize impacts, the times of operation were limited. Sources will be allowed to operate from 6:00 am to 10:00 pm. A permit condition is included in this AO to reflect the time restriction of operation. More stringent times of operation may be included in different areas of the State. If a source wants to operate outside these times, the source must submit modeling with the temporary relocation letter to demonstrate that the NAAQS are met. [Last updated July 21, 2020]

Review of BACT for New/Modified Emission Units

1. **BACT review regarding Process Equipment**
The process equipment for this portable source include the following:

A. Aggregate Equipment (Crushers, Screens, Conveyors)
B. Concrete Batch Plants
C. Hot Mix Asphalt Plants
D. Stationary Diesel-Fired Engines

A. Aggregate Equipment (Crushers, Screens, Conveyor Transfer Points)

The following opacity limitations shall not be exceeded for the following aggregate equipment:
Crushers - 12%
Screens - 7%
Conveyor Transfer Points - 7%
Feeders - 7%
Stackers - 7%
Water sprays will control the emissions from crushers, screens, conveyors, feeders, and stackers. Sprays will operate as needed to comply with the above opacity limits.

B. Concrete Batch Plants

Fabric filters will control the emissions from concrete batch plants, the batching operations, and associated silos. The fabric filters will reduce visible emissions to 7% opacity or less. Any boiler/water heater used will use natural gas and/or propane as fuel. Any boiler/water heater shall be limited to 10% opacity.

C. Hot Mix Asphalt Plants

The hot mix asphalt plants may use propane, natural gas, fuel oil, on-specification used oil or any combination of these fuels as fuel. A baghouse will control the emissions from the drum mixer. The baghouse will reduce visible emissions to 10% opacity or less. In addition, the baghouse will reduce the concentration of PM_{10} in the exhaust to 0.024 grains per dscf or less. To ensure the baghouse is operating correctly, the baghouse pressure drop shall be between 3 and 7 inches of water column. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less.

D. Stationary Diesel-Fired Engines

The NSR Section recommends the following as BACT for stationary diesel engines:
1. Proper engine tuning and maintenance
2. Visible emissions shall be 20% opacity or less
3. Sulfur content of fuel shall be 15 ppm or less
4. Compliance with the applicable federal standards contained in
a. 40 CFR 60, NSPS, Subpart IIII, and
b. 40 CFR 63, MACT, Subpart ZZZZ. [Last updated July 21, 2020]

2. **BACT review regarding** Fugitive Emissions and Fugitive Dust
BACT review regarding Fugitive Emissions and Fugitive Dust
To ensure fugitive emissions and fugitive dust will be controlled, the owner/operator will be

required to submit a FDCP for each location with the temporary relocation letter. Fugitive emissions and fugitive dust will be generated from the following:

A. Haul Roads
B. Storage Piles
C. Conveyor Drop Points
D. Material Handling Operations

A. Haul Roads

Wet suppression (or other chemical treatment) will control the emissions from haul roads. To ensure the wet suppression is adequate, visible emissions from haul roads will not exceed 20% opacity on site and 10% at the property boundary.

B. Storage Piles

Routine water application will control the emissions from storage piles. To ensure the water application is of sufficient frequency, visible emissions from storage piles will not exceed 20% opacity on site and 10% at the property boundary.

C. Conveyor Drop Points

Water sprays will control the emissions from conveyor drop points. Sprays will operate as needed to reduce visible emissions to 20% opacity or less on site and 10% at the property boundary.

D. Material Handling Operations

Water application will control the emissions from material handling operations. To ensure the water application is of sufficient frequency, visible emissions from material handling will not exceed 20% opacity on site and 10% at the property boundary.
[Last updated July 21, 2020]

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.A THE APPROVED EQUIPMENT

II.A.1	**Portable Source** Including: Aggregate Processing Equipment, Concrete Batching Equipment, Hot Mix Asphalt Equipment, and Diesel-Fired Engines
II.A.2 NEW	**Aggregate Processing Plants** These plants may be subject to NSPS Subpart OOO Requirements These plants include: A. Crushers B. Screens C. Wash Plants D. Conveyors, Feeders, Hoppers, and Stackers

II.A.3 NEW	**Concrete Batch Plants** These plants include: A. Central-Mix Concrete Batch Plants B. Truck-Mix Concrete Batch Plants C. Baghouses, Bin Vents, Dust Collectors and Fabric Filters D. Storage Silos - Contents include: i. Cement ii. Fly Ash iii. Lime iv. Concrete Additives E. Boilers & Water Heaters i. Fuel: Natural Gas/Propane ii. Rating: less than 10 MMBtu/hr each F. Conveyors, Feeders, Hoppers, Pugmills, and Stackers
II.A.4 NEW	**Hot Mix Asphalt Plants** These plants may be subject to NSPS Subpart I Requirements These plants include: A. Drum-Mix Hot Mix Asphalt Plants B. Baghouses, Bin Vents, Dust Collectors and Fabric Filters C. Storage Silos - Contents include: i. Lime ii. Hot Mix Asphalt iii. RAP iv. Hot Mix Asphalt Additives D. Conveyors, Feeders, Hoppers, Mixers, Pugmills, and Stackers
II.A.5 NEW	**Stationary Diesel-Fired Engines** These stationary engines produce mechanical or electrical power to operate the plants in this AO. These stationary engines are subject to MACT Subpart ZZZZ Requirements These stationary engines may be subject to NSPS Subpart IIII Requirements
II.A.6 NEW	**Storage Tanks** Contents include: A. Asphalt Cement B. Diesel Fuel C. On-Specification Used Oil D. Gasoline E. Propane

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.B REQUIREMENTS AND LIMITATIONS

II.B.1 NEW	**Notice of Temporary Relocation:**
II.B.1.a NEW	The owner/operator shall submit a Notice of Temporary Relocation and obtain a Temporary Relocation Approval Letter prior to operating a portable source at any location. [R307-401-8]
II.B.1.a.1 NEW	Notices of Temporary Relocation shall include the following information (Form 15a is available from the DAQ): A. The address and driving directions of the proposed location B. A list of the equipment to be operated at the proposed location, including: 1. The type of equipment 2. The rated capacity of the equipment 3. The date of manufacture of the equipment C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the plant boundary is located within one mile of these buildings) D. The expected startup and completion dates for operating at the proposed location E. The expected hours of operation, including start and stop times F. The emission control measures that the owner/operator proposes to adopt for each emission point at each location; including a FDCP specific to the proposed location G. A reference to this AO [R307-401-8]
II.B.1.b NEW	
II.B.2 NEW	**Temporary Relocation Approval Letter:**
II.B.2.a NEW	The owner/operator shall operate and conduct its operations of the aggregate processing plants, the concrete batch plants, the hot mix asphalt plants, and the diesel-fired engines in accordance with the terms and conditions of this AO and the terms and conditions of the Temporary Relocation Approval Letter issued by the Director for each relocation. In the case of any discrepancy between the conditions of this AO and the Temporary Relocation Approval Letter, the owner/operator shall comply with the site-specific requirements in the Temporary Relocation Approval Letter. [R307-401-8]

II.B.2.a.1 NEW	Portable sources that plan to relocate to a stationary source listed in the Utah PM_{10} or $PM_{2.5}$ State Implementation Plan (SIP) shall comply with the standards and adopt the control strategies listed in the PM_{10} or $PM_{2.5}$ SIP for the stationary source in addition to the requirements of this AO and the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3 NEW	**Operations at Temporary Locations:**
II.B.3.a NEW	The owner/operator may temporarily relocate this portable source to any temporary location. The temporary relocation shall not exceed 180 working days and shall not exceed 365 consecutive days. If a temporary relocation is expected to exceed 180 working days, the owner/operator shall submit an NOI in accordance with R307-401 for a permanent source and obtain a valid AO prior to the end of the 180 working days. [R307-401-17]
II.B.3.a.1 NEW	The owner/operator shall keep and maintain the following records on site: A. The initial relocation date at each location B. Working days at each location C. Consecutive days at each location [R307-401-17]
II.B.3.a.2 NEW	The owner/operator shall submit records of the working days at each site and the consecutive days at each site to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.b NEW	The owner/operator shall not exceed the daily production limit specified in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3.b.1 NEW	The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Director or the Director's representative. [R307-401-8]
II.B.3.b.2 NEW	The owner/operator shall keep and maintain the following production records on site for all periods that the portable source is in operation at any location: A. The date production occurs at each location B. The production for that date at each location C. The total production at each location [R307-401-8]
II.B.3.b.3 NEW	The owner/operator shall submit records of the actual production rate to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.c NEW	The owner/operator shall only operate between 6:00 AM and 10:00 PM each day. The hours of operation may be altered upon approval of the Director; however, any request for a change in these hours shall include modeling showing that all NAAQS are met. [R307-401-8]

II.B.3.c.1 NEW	The owner/operator shall keep and maintain the following records of operation for all periods that the portable source is in operation at any location: A. The time operations began each day at each location B. The time operations ended each day at each location [R307-401-8]
II.B.3.d NEW	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any installation of this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3]
II.B.3.d.1 NEW	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3, R307-305-3]
II.B.4 NEW	**Emission Estimates and Emissions Inventory:**
II.B.4.a NEW	The owner/operator shall estimate the actual emissions that resulted from operating at each location. These emissions shall be summarized for each piece of equipment, each source of fugitive dust, and each source of fugitive emissions at the completion of operation at each location. The Director may require a summary of emissions for each location at any time. [R307-401-8, R307-150-1]
II.B.4.a.1 NEW	Records of actual emissions shall be kept for each location. Records of actual emissions shall include the following: A. The emission factors used to estimate emissions for each location B. All variables (production, hours of operation, haul road lengths, etc.) used in the emission estimates for each location C. The actual emissions from each location, which includes emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions [R307-401-8, R307-150-1]
II.B.5 NEW	**Haul Roads and Fugitive Dust Sources:**
II.B.5.a NEW	The owner/operator shall comply with a FDCP consistent with R307-309-6 for each location. The FDCP for a location shall address the control of all fugitive dust sources at that location. [R307-401-8]
II.B.5.b NEW	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary for each temporary location. [R307-205-4, R307-309-5, R307-401-8]

II.B.5.b.1 NEW	Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.c NEW	The owner/operator shall use water application or other control options contained in R307-309 to minimize emissions from fugitive dust and fugitive emissions sources, including haul roads, storage piles, and disturbed areas. Controls shall be applied to ensure the opacity limits in this AO are not exceeded. [R307-309, R307-401-8]
II.B.6 NEW	**Aggregate Processing Plants:**
II.B.6.a NEW	The owner/operator shall not allow visible emissions from any crusher subject to this AO to exceed 12 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.b NEW	The owner/operator shall not allow visible emissions from any screen subject to this AO to exceed 7 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.c NEW	The owner/operator shall not allow visible emissions from any conveyor transfer point subject to this AO to exceed 7 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.d NEW	The owner/operator shall not allow visible emissions from any conveyor drop point at each temporary location to exceed 20 percent opacity. [R307-205-4, R307-309-5, R307-401-8]
II.B.6.e NEW	The owner/operator shall install water sprays on all crushers, all screens, all conveyor transfer points, and all conveyor drop points at each location to control emissions. Sprays shall operate as required to ensure the opacity limits in this AO are not exceeded. [R307-401-8]
II.B.6.f NEW	The owner/operator shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles associated with each crusher, screen, and conveyor. If the owner/operator finds that water is not flowing properly during an inspection of the water spray nozzles, the owner/operator shall initiate corrective action within 24 hours and complete corrective action as expediently as practical. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.f.1 NEW	Records of the water sprays inspections shall be kept and maintained in a logbook for all periods when the plant is in operation. The records shall include the following items: A. Date the inspections were made B. Any corrective actions taken C. Control mechanism used if sprays are not operating [40 CFR 60 Subpart OOO, R307-401-8]
II.B.7 NEW	**Crushers, Screens, and Conveyors subject to NSPS Subpart OOO:**

II.B.7.a NEW	The owner/operator shall conduct an initial performance test for all crushers, screens, and conveyor transfer points subject to this AO that are subject to NSPS OOO. Performance tests shall meet the limitations specified in Table 3 to Subpart OOO. [40 CFR 60 Subpart OOO]
II.B.7.a.1 NEW	Initial performance tests for fugitive emissions limits shall be conducted according to 40 CFR 60.675(c). The owner or operator may use methods and procedures specified in 40 CFR 60.675(e) as alternatives to the reference methods and procedures specified in 40 CFR 60.675(c). [40 CFR 60 Subpart OOO]
II.B.7.a.2 NEW	The owner/operator shall keep and maintain records of the initial performance test for each crusher, screen, and conveyor for the life of the equipment. The record of the initial performance test must be made available to the Director or the Director's representative upon request. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.8 NEW	**Concrete Batch Plants:**
II.B.8.a NEW	The owner/operator shall not allow visible emissions from any concrete batch plant and the associated equipment subject to this AO to exceed 7 percent opacity. [R307-401-8]
II.B.8.b NEW	Each storage silo associated with a concrete batch plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9 NEW	**Hot Mix Asphalt Plants:**
II.B.9.a NEW	The owner/operator shall use natural gas, propane, fuel oil, on-specification used oil as defined in R315-15, or any combination thereof as fuel in the hot mix asphalt plants subject to this AO. [R307-401-8]
II.B.9.b NEW	The sulfur content of any fuel oil burned in the hot mix asphalt plants subject to this AO shall not exceed 15 ppm by weight. [R307-401-8]
II.B.9.b.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of fuel oil shall be either by the owner/operator's own testing or by test reports from the fuel oil marketer. [R307-203-1, R307-401-8]
II.B.9.b.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in fuel oil. Records of the test certifications shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]
II.B.9.c NEW	The owner/operator shall use a baghouse to control particulate emissions from each hot mix asphalt plant dryer subject to this AO. [R307-401-8]
II.B.9.d NEW	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the differential pressure across each baghouse. The static pressure differential across each baghouse shall be between 3.0 to 7.0 inches of water column. [R307-401-8]

<table>
<tr><td>II.B.9.d.1
NEW</td><td>The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. The pressure gauge shall be calibrated according to the manufacturer's instructions at least once every 12 months. [R307-401-8]</td></tr>
<tr><td>II.B.9.d.2
NEW</td><td>The owner/operator shall record the reading of the pressure gauge at least once per operating day. [R307-401-8]</td></tr>
<tr><td>II.B.9.e
NEW</td><td>Each storage silo associated with a hot mix asphalt plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]</td></tr>
<tr><td>II.B.9.f
NEW</td><td>The owner/operator shall not allow visible emissions from any baghouse, bin vent, dust collector or fabric filter associated with a hot mix asphalt plant subject to this AO to exceed 10 percent opacity. [R307-401-8]</td></tr>
<tr><td>II.B.9.g
NEW</td><td>Concentrations in the exhaust stream from each asphalt drum mixer subject to this AO shall not exceed 0.030 grains/dscf of TSP, 0.024 grains/dscf of PM_{10}, and 0.024 grains/dscf of $PM_{2.5}$. [R307-401-8]</td></tr>
<tr><td>II.B.9.g.1
NEW</td><td>Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

Emission Point: Drum Mixer exhaust passing through the baghouse

<table>
<tr><th>Pollutant</th><th>Testing Status</th><th>Test Frequency</th></tr>
<tr><td>PM</td><td>*</td><td>#</td></tr>
<tr><td>PM_{10}</td><td>**</td><td>@</td></tr>
<tr><td>$PM_{2.5}$</td><td>**</td><td>@</td></tr>
</table>
* Initial compliance testing is required for each plant. The initial test date shall be performed as soon as possible and in no case later than 180 days after the startup of a new or modified emission source. A compliance test is required on a modified emission point that has an emission rate limit.

** Initial test is not required unless specified by the Director.

Initial test is required. Subsequent tests shall only be performed for PM_{10}.

@ Test every third calendar year, or sooner if required by the Director, not exceeding 42 months between tests. Tests may be required if the source is suspected to be in violation with other conditions of this AO.

[R307-401-8, R307-165]</td></tr>
</table>

II.B.9.g.2 NEW	A. Notification: At least 30 days prior to conducting any emission testing required under any part of UAC, R307, the owner or operator shall notify the Director of the date, time and place of such testing and shall submit a source test protocol to the Director. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. If directed by the Director, the owner/operator shall attend a pretest conference. The pretest conference shall include representation from the owner/operator, the tester, and the Director. B. Reporting: Upon completion of the DAQ accepted testing methods, the owner/operator shall submit a copy of the results from each performance test as conducted to the Director within 60 days after the test has been completed. C. Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. D. Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Director. E. PM 40 CFR 60, Appendix A, Method 5 or other EPA-approved testing method, as acceptable to the Director F. $PM_{10}/PM_{2.5}$ For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a, or other EPA-approved testing method, as acceptable by the Director. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured shall be considered PM_{10}. The portion of the filterable particulate emissions considered $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. The portion of the filterable particulate emissions considered PM_{10} and $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration. The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes. G. Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary

	conversion factors determined by the Director, to give the results in the specified units of the emission limitation. H. Test Conditions All tests shall be conducted in accordance with R307-165-4. [R307-401-8, R307-165]
II.B.10 NEW	**Stationary Diesel-Fired Engines:**
II.B.10.a NEW	The owner/operator shall comply with the applicable requirements in 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII for all stationary engines. An engine is considered a stationary engine if the engine meets the definition of "stationary reciprocating internal combustion engine (RICE)" in 40 CFR 63.6675 or "stationary internal combustion engine" in 40 CFR 60.4219. In determining whether an engine is considered a stationary engine, the time the engine remains at a location shall be considered. 40 CFR 1068.30 states that an engine is a stationary engine if: A. The engine remains at a location for more than 12 consecutive months. B. The engine remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.10.b NEW	The owner/operator shall not allow visible emissions from any stationary diesel-fired engine subject to this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3, R307-401-8]
II.B.10.c NEW	The sulfur content of any fuel oil or diesel fuel burned in a stationary diesel-fired engine subject to this AO shall not exceed 15 ppm. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.10.c.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of diesel fuel shall be either by the owner/operator's own testing or by test reports from the diesel fuel marketer. [R307-203-1, R307-401-8]
II.B.10.c.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in diesel fuel. Records of the test certification shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]

PERMIT HISTORY

When issued, the approval order shall supersede (if a modification) or will be based on the following documents:

Supersedes	DAQE-AN12570005-09 dated August 12, 2009
Is Derived From	NOI dated June 30, 2020

REVIEWER COMMENTS

1. **Comment regarding NSPS, MACT, & Title V Applicability:**

NSPS

NSPS Subpart I applies to owners and operators of a hot mix asphalt facility that commenced construction after June 11, 1973. The hot mix asphalt plants at this portable source were manufactured after June 11, 1973; therefore, NSPS Subpart I applies to this AO for portable equipment.

NSPS Subpart OOO applies to each crusher, screening operation, and belt conveyor in fixed or portable nonmetallic mineral processing plants manufactured after August 31 1983. The portable equipment in this AO is used to process nonmetallic minerals according to 40 CFR 60.671; therefore, NSPS Subpart OOO applies to this AO for portable equipment.

NSPS Subpart IIII applies to owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006. The stationary engines at this portable source were manufactured after April 1, 2006; therefore, NSPS Subpart IIII applies to this AO for stationary diesel-fired engines.

MACT

40 CFR 63 MACT Subpart ZZZZ applies to owners and operators of stationary RICE at a major or area source of HAP emissions. This source will have stationary RICE at an area source of HAP emissions; therefore, MACT Subpart ZZZZ will apply to the stationary engines at this source.

Title V

Title V of the 1990 Clean Air Act (Title V) applies to the following:

1. Any major source
2. Any source subject to a standard, limitation, or other requirement under Section 111 of the Act, Standards of Performance for New Stationary Sources;
3. Any source subject to a standard or other requirement under Section 112 of the Act, Hazardous Air Pollutants.
4. Any Title IV affected source.

The portable equipment in this AO is not part of a major source or a Title IV source, and is not subject to 40 CFR 61 requirements, but the facility is subject to 40 CFR 60 NSPS Subpart I and OOO requirements. Therefore, Title V applies to the source where this portable equipment operates. [Last updated July 21, 2020]

2. **Comment regarding Recordkeeping:**
This AO contains numerous recordkeeping requirements to demonstrate compliance. To assist the owner/operator, this Review Comment lists all the records that are required by this AO.

1. The initial relocation date at each location
2. Working days at each location
3. Consecutive days at each location
4. The date production occurs at each location
5. The production for each date at each location
6. The total production at each location
7. The time operations began each day at each location
8. The time operations ended each day at each location
9. The emission factors used to estimate emissions for each location
10. All variables used in the emission estimates for each location
11. The emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions at each location
12. Date the water spray inspections were made
13. Any corrective actions taken for the water sprays
14. Control mechanism used if sprays are not operating
15. The initial performance test for each affected facility as defined in NSPS Subpart OOO
16. The certification of sulfur content in fuel oil used in the asphalt plants
17. The pressure gauge reading for each day of operation
18. The applicable records contained in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ for each stationary engine subject to this AO
19. The certification of sulfur content in diesel fuel used in the stationary engines

[Last updated July 21, 2020]

3. **Comment regarding Reporting:**
R307-401-17 requires that "records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days." The owner/operator must submit this information to be in compliance with R307-401-17. [Last updated July 21, 2020]

4. **Comment regarding Hot Mix Asphalt Plant Condensable PM Emissions:**
Condensable PM emissions shall not be used for compliance demonstration during stack testing; however, condensable PM emissions shall be used for inventory purposes. There are several reasons condensable PM emissions will not be used for compliance demonstration.

A. NSPS Subpart I does not limit condensable PM emissions. DAQ is unaware of any other regulation that limits PM emissions, including condensable PM emissions, from hot mix asphalt plants. Since federal regulations only limit filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

B. The control device used to control PM emissions from a hot mix asphalt plant is a baghouse. A baghouse is unable to control condensable PM emissions from a hot mix asphalt plant. One of the purposes of a stack test is to ensure the control device is operating correctly. Since the baghouse can only control filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

C. The majority of uncontrolled emissions from a hot mix asphalt plant is filterable emissions. Based on AP-42, an uncontrolled 400 tph hot mix asphalt plant will emit 11,200 pounds of filterable

PM per hour and 7.8 pounds of condensable PM per hour. The amount of uncontrolled filterable PM emissions is over 1,400 times higher than the condensable PM emissions. Since the uncontrolled filterable PM emissions are so high, only filterable PM emissions will be tested for compliance demonstration.

D. Condensable PM emissions can vary depending on the fuel being combusted, the burner, the material being fed into the hot mix asphalt plant, and other factors. It is inappropriate to put a single limit in a permit that could apply to different locations, different plants, different materials, and different fuels. Due to the high variability of these factors, condensable emissions will not be used for compliance demonstration for this portable source.

Due to the reasons above, condensable PM emissions will not be tested for compliance demonstration; however, condensable PM emissions will be used for inventory purposes. The Director may require an emissions inventory at any time according to R307-150-1(4). Because this source is a Title V area source, this source is required to pay Title V fees according to R307-415-9. Both filterable and condensable PM emissions are considered chargeable pollutants; therefore, the owner/operator must test for condensable PM emissions for inventory purposes.
[Last updated July 21, 2020]

5. **Comment regarding Definition of Stationary Engines:**
The definition of stationary internal combustion engine in NSPS Subpart IIII (40 CFR 60.4219) is as follows:

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

The definition of nonroad engine in 40 CFR 1068.30 is as follows:

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.
[Last updated July 21, 2020]

6. **Comment regarding Definition of Stationary Engines part 2:**
40 CFR 1068.31 has the following requirements:

(b) A stationary engine becomes a new nonroad engine if-

(1) It is used in an application that meets the criteria specified in paragraphs (1)(i) or (ii) in the definition of "nonroad engine" in §1068.30.

(2) It meets the criteria specified in paragraph (1)(iii) of the definition of "nonroad engine" in §1068.30 and is moved so that it fails to meet (or no longer meets) the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30.

(c) A stationary engine does not become a new nonroad engine if it is moved but continues to meet the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30 in its new location. For example, a transportable engine that is used in a single specific location for 18 months and is later moved to a second specific location where it will remain for at least 12 months is considered to be a stationary engine in both locations. Note that for stationary engines that are neither portable nor transportable in actual use, the residence-time restrictions in the definition of "nonroad engine" generally do not apply.

(e) A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if-

(1) At any time, it meets the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If we determine that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location.

(2) It is otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411).
[Last updated July 21, 2020]

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

RN125750006

August 26, 2020

Bill King
Sunroc Corporation
730 North 1500 West
Orem, UT 84057

Dear Bill King,

Re: Engineer Review:
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)
Project Number: N125750006

The DAQ requests a company representative (Title V Responsible Official for enhanced Approval Order application) review and sign the attached Engineer Review (ER). This ER identifies all applicable elements of the New Source Review permitting program. Sunroc Corporation should complete this review within **10 business days** of receipt.

Sunroc Corporation should contact **Mr. Tim DeJulis** at (385) 306-6523 if there are questions or concerns with the review of the draft permit conditions. Upon resolution of your concerns, please email tdejulis@utah.gov the signed cover letter to Mr. Tim DeJulis. Upon receipt of the signed cover letter, the DAQ will prepare an ITA for a 30-day public comment period. At the completion of the comment period, the DAQ will address any comments and will prepare an AO for signature by the DAQ Director.

If Sunroc Corporation does not respond to this letter within **10 business days,** the project will move forward without source concurrence. If Sunroc Corporation has concerns that cannot be resolved and the project becomes stagnant, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____
(Signature & Date)

UTAH DIVISION OF AIR QUALITY
ENGINEER REVIEW

SOURCE INFORMATION

Project Number	N125750006
Owner Name	Sunroc Corporation
Mailing Address	730 North 1500 West Orem, UT, 84057
Source Name	Sunroc Corporation- Portable Equipment - Temporary Locations
Source Location	Not permanently based at a site. Portable Source, UT
SIC Code	1442 (Construction Sand & Gravel)
Source Contact	Bill King
Phone Number	(801) 222-3306
Email	bill.king@clydeinc.com
Project Engineer	Mr. Tim DeJulis, Engineer
Phone Number	(385) 306-6523
Email	tdejulis@utah.gov
Notice of Intent (NOI) Submitted	June 26, 2020
Date of Accepted Application	July 17, 2020

SOURCE DESCRIPTION

General Description
Sunroc Corp. has requested a modification to the AO DAQE-AN12570005-09. This AO is issued to Sunroc Corp. for the purpose of operating a portable source that belongs to the nonmetallic mineral processing industry, including aggregate, concrete, and hot mix asphalt plants. The plants subject to this AO shall be temporarily operated for a period of not more than 180 working days at any location. A relocation shall not exceed 365 consecutive days at any location in the State of Utah.

Prior to commencement of operation at a location, the owner/operator shall submit a Notice of Temporary Relocation to the Director and obtain a Temporary Relocation Approval Letter. If the owner/operator operates at a location in compliance with the AO, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment.

Compliance with the opacity limits and operating practices contained in the conditions of the AO shall be considered as application of BACT. The emission control measures required in the conditions of this AO shall apply to all of the locations at which the source approved by this AO operates. The source may be required to adopt additional measures for controlling emissions to address location-specific concerns.

This AO limits the source to emissions that are below the major source threshold, making it a "Synthetic Minor" source. NSPS, 40 CFR Part 60, Subparts A, I, OOO, and IIII, and MACT, 40 CFR 63, Subparts A and ZZZZ regulations apply to this portable source. This source is considered a Title V area source.

NSR Classification:
Minor Modification at Minor Source

Source Classification
Located in
Portable Source County
Airs Source Size: SM

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

Project Proposal
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)

Project Description
Sunroc Corp. has requested a modification to its AO DAQE-AN12570005-09. The portable source belongs to the nonmetallic mineral processing industry, including aggregate processing plants, concrete batch plants, hot mix asphalt plants, and stationary diesel-fired engines.

EMISSION IMPACT ANALYSIS

DAQ modeled a generic aggregate site to determine the appropriate operating conditions for this AO. Ambient air quality impacts are smaller in the daytime hours than in the nighttime hours. To minimize impacts, the times of operation were limited. Sources will be allowed to operate from 6:00 am to 10:00 pm. A permit condition is included in this AO to reflect the time restriction of operation. More stringent times of operation may be included in different areas of the State. If a source wants to operate outside these times, the source must submit modeling with the temporary relocation letter to demonstrate that the NAAQS are met. [Last updated July 21, 2020]

Review of BACT for New/Modified Emission Units

1. **BACT review regarding Process Equipment**

The process equipment for this portable source include the following:

A. Aggregate Equipment (Crushers, Screens, Conveyors)
B. Concrete Batch Plants
C. Hot Mix Asphalt Plants
D. Stationary Diesel-Fired Engines

A. Aggregate Equipment (Crushers, Screens, Conveyor Transfer Points)

The following opacity limitations shall not be exceeded for the following aggregate equipment:
Crushers - 12%
Screens - 7%
Conveyor Transfer Points - 7%
Feeders - 7%
Stackers - 7%
Water sprays will control the emissions from crushers, screens, conveyors, feeders, and stackers. Sprays will operate as needed to comply with the above opacity limits.

B. Concrete Batch Plants

Fabric filters will control the emissions from concrete batch plants, the batching operations, and associated silos. The fabric filters will reduce visible emissions to 7% opacity or less. Any boiler/water heater used will use natural gas and/or propane as fuel. Any boiler/water heater shall be limited to 10% opacity.

C. Hot Mix Asphalt Plants

The hot mix asphalt plants may use propane, natural gas, fuel oil, on-specification used oil or any combination of these fuels as fuel. A baghouse will control the emissions from the drum mixer. The baghouse will reduce visible emissions to 10% opacity or less. In addition, the baghouse will reduce the concentration of PM_{10} in the exhaust to 0.024 grains per dscf or less. To ensure the baghouse is operating correctly, the baghouse pressure drop shall be between 3 and 7 inches of water column. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less.

D. Stationary Diesel-Fired Engines

The NSR Section recommends the following as BACT for stationary diesel engines:
1. Proper engine tuning and maintenance
2. Visible emissions shall be 20% opacity or less
3. Sulfur content of fuel shall be 15 ppm or less
4. Compliance with the applicable federal standards contained in
a. 40 CFR 60, NSPS, Subpart IIII, and
b. 40 CFR 63, MACT, Subpart ZZZZ. [Last updated July 21, 2020]

2. **BACT review regarding Process Equipment part 2**

BACT review regarding Fugitive Emissions and Fugitive Dust
To ensure fugitive emissions and fugitive dust will be controlled, the owner/operator will be

required to submit a FDCP for each location with the temporary relocation letter. Fugitive emissions and fugitive dust will be generated from the following:

A. Haul Roads
B. Storage Piles
C. Conveyor Drop Points
D. Material Handling Operations

A. Haul Roads

Wet suppression (or other chemical treatment) will control the emissions from haul roads. To ensure the wet suppression is adequate, visible emissions from haul roads will not exceed 20% opacity on site and 10% at the property boundary.

B. Storage Piles

Routine water application will control the emissions from storage piles. To ensure the water application is of sufficient frequency, visible emissions from storage piles will not exceed 20% opacity on site and 10% at the property boundary.

C. Conveyor Drop Points,

Water sprays will control the emissions from conveyor drop points. Sprays will operate as needed to reduce visible emissions to 20% opacity or less on site and 10% at the property boundary.

D. Material Handling Operations,

Water application will control the emissions from material handling operations. To ensure the water application is of sufficient frequency, visible emissions from material handling will not exceed 20% opacity on site and 10% at the property boundary.
[Last updated July 21, 2020]

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
~~I.8~~	~~The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]~~

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.A THE APPROVED EQUIPMENT

II.A.1	**Portable Aggregate & Concrete Batching Equipment** Portable Aggregate and Concrete Production Operations.
II.A.2 NEW	**Aggregate Processing Plants** These plants may be subject to NSPS Subpart OOO Requirements These plants include: A. Crushers B. Screens C. Wash Plants D. Conveyors, Feeders, Hoppers, and Stackers

II.A.3 NEW	**Concrete Batch Plants** These plants include: A. Central-Mix Concrete Batch Plants B. Truck-Mix Concrete Batch Plants C. Baghouses, Bin Vents, Dust Collectors and Fabric Filters D. Storage Silos - Contents include: i. Cement ii. Fly Ash iii. Lime iv. Concrete Additives E. Boilers & Water Heaters i. Fuel: Natural Gas/Propane ii. Rating: less than 10 MMBtu/hr each F. Conveyors, Feeders, Hoppers, Pugmills, and Stackers
II.A.4 NEW	**Hot Mix Asphalt Plants** These plants may be subject to NSPS Subpart I Requirements These plants include: A. Drum-Mix Hot Mix Asphalt Plants B. Baghouses, Bin Vents, Dust Collectors and Fabric Filters C. Storage Silos - Contents include: i. Lime ii. Hot Mix Asphalt iii. RAP iv. Hot Mix Asphalt Additives D. Conveyors, Feeders, Hoppers, Mixers, Pugmills, and Stackers
II.A.5 NEW	**Stationary Diesel-Fired Engines** These stationary engines produce mechanical or electrical power to operate the plants in this AO. These stationary engines are subject to MACT Subpart ZZZZ Requirements These stationary engines may be subject to NSPS Subpart IIII Requirements
II.A.6 NEW	**Storage Tanks** Contents include: A. Asphalt Cement B. Diesel Fuel C. On-Specification Used Oil D. Gasoline E. Propane

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.B REQUIREMENTS AND LIMITATIONS

II.B.1 NEW	**Notice of Temporary Relocation:**
II.B.1.a NEW	The owner/operator shall submit a Notice of Temporary Relocation and obtain a Temporary Relocation Approval Letter prior to operating a portable source at any location. [R307-401-8]
II.B.1.a.1 NEW	Notices of Temporary Relocation shall include the following information (Form 15a is available from the DAQ): A. The address and driving directions of the proposed location B. A list of the equipment to be operated at the proposed location, including: 1. The type of equipment 2. The rated capacity of the equipment 3. The date of manufacture of the equipment C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the plant boundary is located within one mile of these buildings) D. The expected startup and completion dates for operating at the proposed location. E. The expected hours of operation, including start and stop times F. The emission control measures that the owner/operator proposes to adopt for each emission point at each location; including a FDCP specific to the proposed location G. A reference to this AO [R307-401-8]
II.B.1.b NEW	A copy of the lease agreement between the lessee/owner and the lessor/operator shall be submitted to the Director, attention: Compliance Section, with the Notice of Temporary Relocation for each temporary location. The copy of the lease agreement (deemed to be a full and complete lease agreement copy without including financial information regarding monthly rental/lease payment and other operator-specific information with no relevance to this AO) shall contain the applicable portable plants and equipment subject to this AO. The lessor/operator is responsible for complying with any and all conditions of this AO. Should any violations occur, the party responsible for the violation shall assume responsibility of any and all fines, penalties, costs, interest and actual attorney's fees incurred pursuant to the terms of the attending lease agreement and this AO. [R307-401-8]
II.B.2 NEW	**Temporary Relocation Approval Letter:**

II.B.2.a NEW	The owner/operator shall operate and conduct its operations of the aggregate processing plants, the concrete batch plants, the hot mix asphalt plants, and the diesel-fired engines in accordance with the terms and conditions of this AO and the terms and conditions of the Temporary Relocation Approval Letter issued by the Director for each relocation. In the case of any discrepancy between the conditions of this AO and the Temporary Relocation Approval Letter, the owner/operator shall comply with the site-specific requirements in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.2.a.1 NEW	Portable sources that plan to relocate to a stationary source listed in the Utah PM_{10} or $PM_{2.5}$ State Implementation Plan (SIP) shall comply with the standards and adopt the control strategies listed in the PM_{10} or $PM_{2.5}$ SIP for the stationary source in addition to the requirements of this AO and the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3 NEW	**Operations at Temporary Locations:**
II.B.3.a NEW	The owner/operator may temporarily relocate this portable source to any temporary location. The temporary relocation shall not exceed 180 working days and shall not exceed 365 consecutive days. If a temporary relocation is expected to exceed 180 working days, the owner/operator shall submit an NOI in accordance with R307-401 for a permanent source and obtain a valid AO prior to the end of the 180 working days. [R307-401-17]
II.B.3.a.1 NEW	The owner/operator shall keep and maintain the following records on site: A. The initial relocation date at each location B. Working days at each location C. Consecutive days at each location [R307-401-17]
II.B.3.a.2 NEW	The owner/operator shall submit records of the working days at each site and the consecutive days at each site to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.b NEW	The owner/operator shall not exceed the daily production limit specified in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3.b.1 NEW	The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Director or the Director's representative. [R307-401-8]

II.B.3.b.2 NEW	The owner/operator shall keep and maintain the following production records on site for all periods that the portable source is in operation at any location: A. The date production occurs at each location B. The production for that date at each location C. The total production at each location [R307-401-8]
II.B.3.b.3 NEW	The owner/operator shall submit records of the actual production rate to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.c NEW	The owner/operator shall only operate between 6:00 AM and 10:00 PM each day. The hours of operation may be altered upon approval of the Director; however, any request for a change in these hours shall include modeling showing that all NAAQS are met. [R307-401-8]
II.B.3.c.1 NEW	The owner/operator shall keep and maintain the following records of operation for all periods that the portable source is in operation at any location: A. The time operations began each day at each location B. The time operations ended each day at each location [R307-401-8]
II.B.3.d NEW	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any installation of this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3]
II.B.3.d.1 NEW	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3, R307-305-3]
II.B.4 NEW	**Emission Estimates and Emissions Inventory:**
II.B.4.a NEW	The owner/operator shall estimate the actual emissions that resulted from operating at each location. These emissions shall be summarized for each piece of equipment, each source of fugitive dust, and each source of fugitive emissions at the completion of operation at each location. The Director may require a summary of emissions for each location at any time. [R307-401-8, R307-150-1]

II.B.4.a.1 NEW	Records of actual emissions shall be kept for each location. Records of actual emissions shall include the following: A. The emission factors used to estimate emissions for each location B. All variables (production, hours of operation, haul road lengths, etc.) used in the emission estimates for each location C. The actual emissions from each location, which includes emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions [R307-401-8, R307-150-1]
II.B.5 NEW	**Haul Roads and Fugitive Dust Sources:**
II.B.5.a NEW	The owner/operator shall comply with a FDCP consistent with R307-309-6 for each location. The FDCP for a location shall address the control of all fugitive dust sources at that location. [R307-401-8]
II.B.5.b NEW	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary for each temporary location. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.b.1 NEW	Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.c NEW	The owner/operator shall use water application or other control options contained in R307-309 to minimize emissions from fugitive dust and fugitive emissions sources, including haul roads, storage piles, and disturbed areas. Controls shall be applied to ensure the opacity limits in this AO are not exceeded. [R307-309, R307-401-8]
II.B.6 NEW	**Aggregate Processing Plants:**
II.B.6.a NEW	The owner/operator shall not allow visible emissions from any crusher subject to this AO to exceed 12 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.b NEW	The owner/operator shall not allow visible emissions from any screen subject to this AO to exceed 7 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.c NEW	The owner/operator shall not allow visible emissions from any conveyor transfer point subject to this AO to exceed 7 percent opacity. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.d NEW	The owner/operator shall not allow visible emissions from any conveyor drop point at each temporary location to exceed 20 percent opacity. [R307-205-4, R307-309-5, R307-401-8]

II.B.6.e NEW	The owner/operator shall install water sprays on all crushers, all screens, all conveyor transfer points, and all conveyor drop points at each location to control emissions. Sprays shall operate as required to ensure the opacity limits in this AO are not exceeded. [R307-401-8]
II.B.6.f NEW	The owner/operator shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles associated with each crusher, screen, and conveyor. If the owner/operator finds that water is not flowing properly during an inspection of the water spray nozzles, the owner/operator shall initiate corrective action within 24 hours and complete corrective action as expediently as practical. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.6.f.1 NEW	Records of the water sprays inspections shall be kept and maintained in a logbook for all periods when the plant is in operation. The records shall include the following items: A. Date the inspections were made B. Any corrective actions taken C. Control mechanism used if sprays are not operating. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.7 NEW	**Crushers, Screens, and Conveyors subject to NSPS Subpart OOO:**
II.B.7.a NEW	The owner/operator shall conduct an initial performance test for all crushers, screens, and conveyor transfer points subject to this AO that are subject to NSPS OOO. Performance tests shall meet the limitations specified in Table 3 to Subpart OOO. [40 CFR 60 Subpart OOO]
II.B.7.a.1 NEW	Initial performance tests for fugitive emissions limits shall be conducted according to 40 CFR 60.675(c). The owner or operator may use methods and procedures specified in 40 CFR 60.675(e) as alternatives to the reference methods and procedures specified in 40 CFR 60.675(c). [40 CFR 60 Subpart OOO]
II.B.7.a.2 NEW	The owner/operator shall keep and maintain records of the initial performance test for each crusher, screen, and conveyor for the life of the equipment. The record of the initial performance test must be made available to the Director or the Director's representative upon request. [40 CFR 60 Subpart OOO, R307-401-8]
II.B.8 NEW	**Concrete Batch Plants:**
II.B.8.a NEW	The owner/operator shall not allow visible emissions from any concrete batch plant and the associated equipment subject to this AO to exceed 7 percent opacity. [R307-401-8]
II.B.8.b NEW	Each storage silo associated with a concrete batch plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9 NEW	**Hot Mix Asphalt Plants:**

II.B.9.a NEW	The owner/operator shall use natural gas, propane, fuel oil, on-specification used oil as defined in R315-15, or any combination thereof as fuel in the hot mix asphalt plants subject to this AO. [R307-401-8]
II.B.9.b NEW	The sulfur content of any fuel oil burned in the hot mix asphalt plants subject to this AO shall not exceed 15 ppm by weight. [R307-401-8]
II.B.9.b.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of fuel oil shall be either by the owner/operator's own testing or by test reports from the fuel oil marketer. [R307-203-1, R307-401-8]
II.B.9.b.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in fuel oil. Records of the test certifications shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]
II.B.9.c NEW	The owner/operator shall use a baghouse to control particulate emissions from each hot mix asphalt plant dryer subject to this AO. [R307-401-8]
II.B.9.d NEW	The owner/operator shall install a manometer or magnehelic pressure gauge to measure the differential pressure across each baghouse. The static pressure differential across each baghouse shall be between 3.0 to 7.0 inches of water column. [R307-401-8]
II.B.9.d.1 NEW	The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. The pressure gauge shall be calibrated according to the manufacturer's instructions at least once every 12 months. [R307-401-8]
II.B.9.d.2 NEW	The owner/operator shall record the reading of the pressure gauge at least once per operating day. [R307-401-8]
II.B.9.e NEW	Each storage silo associated with a hot mix asphalt plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9.f NEW	The owner/operator shall not allow visible emissions from any baghouse, bin vent, dust collector or fabric filter associated with a hot mix asphalt plant subject to this AO to exceed 10 percent opacity. [R307-401-8]
II.B.9.g NEW	Concentrations in the exhaust stream from each asphalt drum mixer subject to this AO shall not exceed 0.030 grains/dscf of TSP, 0.024 grains/dscf of PM_{10}, and 0.024 grains/dscf of $PM_{2.5}$. [R307-401-8]

II.B.9.g.1 NEW	Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below: Emission Point: Drum Mixer exhaust passing through the baghouse Pollutant — Testing Status — Test Frequency TSP — * — # PM_{10} — ** — @ $PM_{2.5}$ — ** — @ * Initial compliance testing is required for each plant. The initial test date shall be performed as soon as possible and in no case later than 180 days after the startup of a new or modified emission source. A compliance test is required on a modified emission point that has an emission rate limit. ** Initial test is not required unless specified by the Director. # Initial test is required. Subsequent tests shall only be performed for PM_{10}. @ Test every third calendar year, or sooner if required by the Director, not exceeding 42 months between tests. Tests may be required if the source is suspected to be in violation with other conditions of this AO. [R307-401-8, R307-165]

II.B.9.g.2 NEW	A. Notification: At least 30 days prior to conducting any emission testing required under any part of UAC, R307, the owner or operator shall notify the Director of the date, time and place of such testing and shall submit a source test protocol to the Director. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. If directed by the Director, the owner/operator shall attend a pretest conference. The pretest conference shall include representation from the owner/operator, the tester, and the Director. B. Reporting: Upon completion of the DAQ accepted testing methods, the owner/operator shall submit a copy of the results from each performance test as conducted to the Director within 60 days after the test has been completed. C. Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. D. Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Director. E. TSP 40 CFR 60, Appendix A, Method 5 or other EPA-approved testing method, as acceptable to the Director F. $PM_{10}/PM_{2.5}$ For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a, or other EPA-approved testing method, as acceptable by the Director. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured shall be considered PM_{10}. The portion of the filterable particulate emissions considered $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. The portion of the filterable particulate emissions considered PM_{10} and $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration. The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes. G. Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary

	conversion factors determined by the Director, to give the results in the specified units of the emission limitation. H. Test Conditions All tests shall be conducted in accordance with R307-165-4. [R307-401-8, R307-165]
II.B.10 NEW	**Stationary Diesel-Fired Engines:**
II.B.10.a NEW	The owner/operator shall comply with the applicable requirements in 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII for all stationary engines. An engine is considered a stationary engine if the engine meets the definition of "stationary reciprocating internal combustion engine (RICE)" in 40 CFR 63.6675 or "stationary internal combustion engine" in 40 CFR 60.4219. In determining whether an engine is considered a stationary engine, the time the engine remains at a location shall be considered. 40 CFR 1068.30 states that an engine is a stationary engine if: A. The engine remains at a location for more than 12 consecutive months. B. The engine remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.10.b NEW	The owner/operator shall not allow visible emissions from any stationary diesel-fired engine subject to this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3, R307-401-8]
II.B.10.c NEW	The sulfur content of any fuel oil or diesel fuel burned in a stationary diesel-fired engine subject to this AO shall not exceed 15 ppm. [40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, R307-401-8]
II.B.10.c.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of diesel fuel shall be either by the owner/operator's own testing or by test reports from the diesel fuel marketer. [R307-203-1, R307-401-8]
II.B.10.c.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in diesel fuel. Records of the test certification shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]

PERMIT HISTORY

When issued, the approval order shall supersede (if a modification) or will be based on the following documents:

Supersedes	DAQE-AN12570005-09 dated August 12, 2009
Is Derived From	NOI dated June 30, 2020

REVIEWER COMMENTS

1. **Comment regarding NSPS, MACT, & Title V Applicability:**

NSPS

NSPS Subpart I applies to owners and operators of a hot mix asphalt facility that commenced construction after June 11, 1973. The hot mix asphalt plants at this portable source were manufactured after June 11, 1973; therefore, NSPS Subpart I applies to this AO for portable equipment.

NSPS Subpart OOO applies to each crusher, screening operation, and belt conveyor in fixed or portable nonmetallic mineral processing plants manufactured after August 31 1983. The portable equipment in this AO is used to process nonmetallic minerals according to 40 CFR 60.671; therefore, NSPS Subpart OOO applies to this AO for portable equipment.

NSPS Subpart IIII applies to owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006. The stationary engines at this portable source were manufactured after April 1, 2006; therefore, NSPS Subpart IIII applies to this AO for stationary diesel-fired engines.

MACT

40 CFR 63 MACT Subpart ZZZZ applies to owners and operators of stationary RICE at a major or area source of HAP emissions. This source will have stationary RICE at an area source of HAP emissions; therefore, MACT Subpart ZZZZ will apply to the stationary engines at this source.

Title V

Title V of the 1990 Clean Air Act (Title V) applies to the following:

1. Any major source
2. Any source subject to a standard, limitation, or other requirement under Section 111 of the Act, Standards of Performance for New Stationary Sources;
3. Any source subject to a standard or other requirement under Section 112 of the Act, Hazardous Air Pollutants.
4. Any Title IV affected source.

The portable equipment in this AO is not part of a major source or a Title IV source, and is not subject to 40 CFR 61 requirements, but the facility is subject to 40 CFR 60 NSPS Subpart I and OOO requirements. Therefore, Title V applies to the source where this portable equipment operates. [Last updated July 21, 2020]

2. **Comment regarding Recordkeeping:**
This AO contains numerous recordkeeping requirements to demonstrate compliance. To assist the owner/operator, this Review Comment lists all the records that are required by this AO.

1. The initial relocation date at each location
2. Working days at each location
3. Consecutive days at each location
4. The date production occurs at each location
5. The production for each date at each location
6. The total production at each location
7. The time operations began each day at each location
8. The time operations ended each day at each location
9. The emission factors used to estimate emissions for each location
10. All variables used in the emission estimates for each location
11. The emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions at each location
12. Date the water spray inspections were made
13. Any corrective actions taken for the water sprays
14. Control mechanism used if sprays are not operating.
15. The initial performance test for each affected facility as defined in NSPS Subpart OOO
16. The certification of sulfur content in fuel oil used in the asphalt plants
17. The pressure gauge reading for each day of operation
18. The applicable records contained in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ for each stationary engine subject to this AO.
19. The certification of sulfur content in diesel fuel used in the stationary engines

[Last updated July 21, 2020]

3. **Comment regarding Reporting:**
R307-401-17 requires that "records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days." The owner/operator must submit this information to be in compliance with R307-401-17. [Last updated July 21, 2020]

4. **Comment regarding Hot Mix Asphalt Plant Condensable PM Emissions:**
Condensable PM emissions shall not be used for compliance demonstration during stack testing; however, condensable PM emissions shall be used for inventory purposes. There are several reasons condensable PM emissions will not be used for compliance demonstration.

A. NSPS Subpart I does not limit condensable PM emissions. DAQ is unaware of any other regulation that limits PM emissions, including condensable PM emissions, from hot mix asphalt plants. Since federal regulations only limit filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

B. The control device used to control PM emissions from a hot mix asphalt plant is a baghouse. A baghouse is unable to control condensable PM emissions from a hot mix asphalt plant. One of the purposes of a stack test is to ensure the control device is operating correctly. Since the baghouse can only control filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

C. The majority of uncontrolled emissions from a hot mix asphalt plant is filterable emissions. Based on AP-42, an uncontrolled 400 tph hot mix asphalt plant will emit 11,200 pounds of filterable

PM per hour and 7.8 pounds of condensable PM per hour. The amount of uncontrolled filterable PM emissions is over 1,400 times higher than the condensable PM emissions. Since the uncontrolled filterable PM emissions are so high, only filterable PM emissions will be tested for compliance demonstration.

D. Condensable PM emissions can vary depending on the fuel being combusted, the burner, the material being fed into the hot mix asphalt plant, and other factors. It is inappropriate to put a single limit in a permit that could apply to different locations, different plants, different materials, and different fuels. Due to the high variability of these factors, condensable emissions will not be used for compliance demonstration for this portable source.

Due to the reasons above, condensable PM emissions will not be tested for compliance demonstration; however, condensable PM emissions will be used for inventory purposes. The Director may require an emissions inventory at any time according to R307-150-1(4). Because this source is a Title V area source, this source is required to pay Title V fees according to R307-415-9. Both filterable and condensable PM emissions are considered chargeable pollutants; therefore, the owner/operator must test for condensable PM emissions for inventory purposes.
[Last updated July 21, 2020]

5. **Comment regarding Definition of Stationary Engines:**
definition of stationary internal combustion engine in NSPS Subpart IIII (40 CFR 60.4219) is as follows:

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

The definition of nonroad engine in 40 CFR 1068.30 is as follows:

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.
[Last updated July 21, 2020]

6. **Comment regarding Definition of Stationary Engines part 2:**
40 CFR 1068.31 has the following requirements:

(b) A stationary engine becomes a new nonroad engine if-

(1) It is used in an application that meets the criteria specified in paragraphs (1)(i) or (ii) in the definition of "nonroad engine" in §1068.30.

(2) It meets the criteria specified in paragraph (1)(iii) of the definition of "nonroad engine" in §1068.30 and is moved so that it fails to meet (or no longer meets) the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30.

(c) A stationary engine does not become a new nonroad engine if it is moved but continues to meet the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30 in its new location. For example, a transportable engine that is used in a single specific location for 18 months and is later moved to a second specific location where it will remain for at least 12 months is considered to be a stationary engine in both locations. Note that for stationary engines that are neither portable nor transportable in actual use, the residence-time restrictions in the definition of "nonroad engine" generally do not apply.

(e) A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if-

(1) At any time, it meets the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If we determine that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location.

(2) It is otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411).
[Last updated July 21, 2020]

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds

State of Utah

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Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

RN125750006

August 7, 2020

Bill King
Sunroc Corporation
730 North 1500 West
Orem, UT 84057

Dear Bill King,

Re: Engineer Review:
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)
Project Number: N125750006

The DAQ requests a company representative (Title V Responsible Official for enhanced Approval Order application) review and sign the attached Engineer Review (ER). This ER identifies all applicable elements of the New Source Review permitting program. Sunroc Corporation should complete this review within **10 business days** of receipt.

Sunroc Corporation should contact **Mr. Tim DeJulis** at (801) 536-4012 if there are questions or concerns with the review of the draft permit conditions. Upon resolution of your concerns, please email tdejulis@utah.gov the signed cover letter to Mr. Tim DeJulis. Upon receipt of the signed cover letter, the DAQ will prepare an ITA for a 30-day public comment period. At the completion of the comment period, the DAQ will address any comments and will prepare an AO for signature by the DAQ Director.

If Sunroc Corporation does not respond to this letter within **10 business days,** the project will move forward without source concurrence. If Sunroc Corporation has concerns that cannot be resolved and the project becomes stagnant, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____
(Signature & Date)

UTAH DIVISION OF AIR QUALITY
ENGINEER REVIEW

SOURCE INFORMATION

Project Number	N125750006
Owner Name	Sunroc Corporation
Mailing Address	730 North 1500 West Orem, UT, 84057
Source Name	Sunroc Corporation- Portable Equipment - Temporary Locations
Source Location	Not permanently based at a site. Portable Source, UT
SIC Code	1442 (Construction Sand & Gravel)
Source Contact	Bill King
Phone Number	(801) 222-3306
Email	billking@clydeinc.com
Project Engineer	Mr. Tim DeJulis, Engineer
Phone Number	(801) 536-4012
Email	tdejulis@utah.gov
Notice of Intent (NOI) Submitted	June 26, 2020
Date of Accepted Application	July 17, 2020

SOURCE DESCRIPTION

General Description
Sunroc Corp. has requested a modification to the AO DAQE-AN12570005-09. This AO is issued to Sunroc Corp. for the purpose of operating a portable source that belongs to the nonmetallic mineral processing industry, including aggregate, concrete, and hot mix asphalt plants. The plants subject to this AO shall be temporarily operated for a period of not more than 180 working days at any location. A relocation shall not exceed 365 consecutive days at any location in the State of Utah.

Prior to commencement of operation at a location, the owner/operator shall submit a Notice of Temporary Relocation to the Director and obtain a Temporary Relocation Approval Letter. If the owner/operator operates at a location in compliance with the AO, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment.

Compliance with the opacity limits and operating practices contained in the conditions of the AO shall be considered as application of BACT. The emission control measures required in the conditions of this AO shall apply to all of the locations at which the source approved by this AO operates. The source may be required to adopt additional measures for controlling emissions to address location-specific concerns.

This AO limits the source to emissions that are below the major source threshold, making it a "Synthetic Minor" source. NSPS, 40 CFR Part 60, Subparts A, I, OOO, and IIII, and MACT, 40 CFR 63, Subparts A and ZZZZ regulations apply to this portable source. This source is considered a Title V area source.

NSR Classification:
Minor Modification at Minor Source

Source Classification
Airs Source Size: SM

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

Project Proposal
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)

Project Description
Sunroc Corp. has requested a modification to its AO DAQE-AN12570005-09. The portable source belongs to the nonmetallic mineral processing industry, including aggregate processing plants, concrete batch plants, hot mix asphalt plants, and stationary diesel-fired engines.

EMISSION IMPACT ANALYSIS

DAQ modeled a generic aggregate site to determine the appropriate operating conditions for this AO. Ambient air quality impacts are smaller in the daytime hours than in the nighttime hours. To minimize impacts, the times of operation were limited. Sources will be allowed to operate from 6:00 am to 10:00 pm. A permit condition is included in this AO to reflect the time restriction of operation. More stringent times of operation may be included in different areas of the State. If a source wants to operate outside these times, the source must submit modeling with the temporary relocation letter to demonstrate that the NAAQS are met. [Last updated July 21, 2020]

Review of BACT for New/Modified Emission Units

1. **BACT review regarding Process Equipment**

The process equipment for this portable source include the following:

A. Aggregate Equipment (Crushers, Screens, Conveyors)
B. Concrete Batch Plants
C. Hot Mix Asphalt Plants
D. Stationary Diesel-Fired Engines

A. Aggregate Equipment (Crushers, Screens, Conveyor Transfer Points)

The following opacity limitations shall not be exceeded for the following aggregate equipment:

Crushers - 12%
Screens - 7%
Conveyor Transfer Points - 7%
Feeders - 7%
Stackers - 7%

Water sprays will control the emissions from crushers, screens, conveyors, feeders, and stackers. Sprays will operate as needed to comply with the above opacity limits.

B. Concrete Batch Plants

Fabric filters will control the emissions from concrete batch plants, the batching operations, and associated silos. The fabric filters will reduce visible emissions to 7% opacity or less. Any boiler/water heater used will use natural gas and/or propane as fuel. Any boiler/water heater shall be limited to 10% opacity.

C. Hot Mix Asphalt Plants

The hot mix asphalt plants may use propane, natural gas, fuel oil, on-specification used oil or any combination of these fuels as fuel. A baghouse will control the emissions from the drum mixer. The baghouse will reduce visible emissions to 10% opacity or less. In addition, the baghouse will reduce the concentration of PM_{10} in the exhaust to 0.024 grains per dscf or less. To ensure the baghouse is operating correctly, the baghouse pressure drop shall be between 3 and 7 inches of water column. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less.

D. Stationary Diesel-Fired Engines

The NSR Section recommends the following as BACT for stationary diesel engines:

1. Proper engine tuning and maintenance
2. Visible emissions shall be 20% opacity or less
3. Sulfur content of fuel shall be 15 ppm or less
4. Compliance with the applicable federal standards contained in

a. 40 CFR 60, NSPS, Subpart IIII, and
b. 40 CFR 63, MACT, Subpart ZZZZ. [Last updated July 21, 2020]

2. **BACT review regarding Process Equipment part 2**

BACT review regarding Fugitive Emissions and Fugitive Dust
To ensure fugitive emissions and fugitive dust will be controlled, the owner/operator will be required to submit a FDCP for each location with the temporary relocation letter. Fugitive emissions and fugitive dust will be generated from the following:

A. Haul Roads
B. Storage Piles
C. Conveyor Drop Points
D. Material Handling Operations

A. Haul Roads

Wet suppression (or other chemical treatment) will control the emissions from haul roads. To ensure the wet suppression is adequate, visible emissions from haul roads will not exceed 20% opacity on site and 10% at the property boundary.

B. Storage Piles

Routine water application will control the emissions from storage piles. To ensure the water application is of sufficient frequency, visible emissions from storage piles will not exceed 20% opacity on site and 10% at the property boundary.

C. Conveyor Drop Points,

Water sprays will control the emissions from conveyor drop points. Sprays will operate as needed to reduce visible emissions to 20% opacity or less on site and 10% at the property boundary.

D. Material Handling Operations,

Water application will control the emissions from material handling operations. To ensure the water application is of sufficient frequency, visible emissions from material handling will not exceed 20% opacity on site and 10% at the property boundary.
[Last updated July 21, 2020]

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
I.7	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.A THE APPROVED EQUIPMENT

II.A.1	**Portable Aggregate & Concrete Batching Equipment** Portable Aggregate and Concrete Production Operations.
II.A.2 NEW	**Portable Source** Including: Aggregate Processing Equipment, Concrete Batching Equipment, Hot Mix Asphalt Equipment, and Diesel-Fired Engines
II.A.3 NEW	**Aggregate Processing Plants** These plants may be subject to NSPS Subpart OOO Requirements These plants include: A. Crushers B. Screens C. Wash Plants D. Conveyors, Feeders, Hoppers, and Stackers

II.A.4 NEW	**Concrete Batch Plants** These plants include: A. Central-Mix Concrete Batch Plants B. Truck-Mix Concrete Batch Plants C. Baghouses, Bin Vents, Dust Collectors and Fabric Filters D. Storage Silos - Contents include: i. Cement ii. Fly Ash iii. Lime iv. Concrete Additives E. Boilers & Water Heaters i. Fuel: Natural Gas/Propane ii. Rating: less than 10 MMBtu/hr each F. Conveyors, Feeders, Hoppers, Pugmills, and Stackers
II.A.5 NEW	**Hot Mix Asphalt Plants** These plants may be subject to NSPS Subpart I Requirements These plants include: A. Drum-Mix Hot Mix Asphalt Plants B. Baghouses, Bin Vents, Dust Collectors and Fabric Filters C. Storage Silos - Contents include: i. Lime ii. Hot Mix Asphalt iii. RAP iv. Hot Mix Asphalt Additives D. Conveyors, Feeders, Hoppers, Mixers, Pugmills, and Stackers
II.A.6 NEW	**Stationary Diesel-Fired Engines** These stationary engines produce mechanical or electrical power to operate the plants in this AO. These stationary engines are subject to MACT Subpart ZZZZ Requirements These stationary engines may be subject to NSPS Subpart IIII Requirements
II.A.7 NEW	**Storage Tanks** Contents include: A. Asphalt Cement B. Diesel Fuel C. On-Specification Used Oil D. Gasoline E. Propane

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.B REQUIREMENTS AND LIMITATIONS

II.B.1 NEW	**Notice of Temporary Relocation:**
II.B.1.a NEW	The owner/operator shall submit a Notice of Temporary Relocation and obtain a Temporary Relocation Approval Letter prior to operating a portable source at any location. [R307-401]
II.B.1.a.1 NEW	Notices of Temporary Relocation shall include the following information (Form 15a is available from the DAQ): A. The address and driving directions of the proposed location B. A list of the equipment to be operated at the proposed location, including: 1. The type of equipment 2. The rated capacity of the equipment 3. The date of manufacture of the equipment C. A site diagram showing the general equipment location on site (to scale), and the distance to the nearest houses, barns or commercial operations (to scale if the plant boundary is located within one mile of these buildings) D. The expected startup and completion dates for operating at the proposed location. E. The expected hours of operation, including start and stop times F. The emission control measures that the owner/operator proposes to adopt for each emission point at each location; including a FDCP specific to the proposed location G. A reference to this AO. [R307-401-8]
II.B.2 NEW	**Temporary Relocation Approval Letter:**
II.B.2.a NEW	The owner/operator shall operate and conduct its operations of the aggregate processing plants, the concrete batch plants, the hot mix asphalt plants, and the diesel-fired engines in accordance with the terms and conditions of this AO and the terms and conditions of the Temporary Relocation Approval Letter issued by the Director for each relocation. In the case of any discrepancy between the conditions of this AO and the Temporary Relocation Approval Letter, the owner/operator shall comply with the site-specific requirements in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.2.a.1 NEW	Portable sources that plan to relocate to a stationary source listed in the Utah PM_{10} or $PM_{2.5}$ State Implementation Plan (SIP) shall comply with the standards and adopt the control strategies listed in the PM_{10} or $PM_{2.5}$ SIP for the stationary source in addition to the requirements of this AO and the Temporary Relocation Approval Letter. [R307-401-8]

II.B.3 NEW	**Operations at Temporary Locations:**
II.B.3.a NEW	The owner/operator may temporarily relocate this portable source to any temporary location. The temporary relocation shall not exceed 180 working days and shall not exceed 365 consecutive days. If a temporary relocation is expected to exceed 180 working days, the owner/operator shall submit an NOI in accordance with R307-401 for a permanent source and obtain a valid AO prior to the end of the 180 working days. [R307-401-17]
II.B.3.a.1 NEW	The owner/operator shall keep and maintain the following records on site: A. The initial relocation date at each location B. Working days at each location C. Consecutive days at each location. [R307-401-17]
II.B.3.a.2 NEW	The owner/operator shall submit records of the working days at each site and the consecutive days at each site to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.b NEW	The owner/operator shall not exceed the daily production limit specified in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3.b.1 NEW	The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Director or the Director's representative. [R307-401-8]
II.B.3.b.2 NEW	The owner/operator shall keep and maintain the following production records on site for all periods that the portable source is in operation at any location: A. The date production occurs at each location B. The production for that date at each location C. The total production at each location. [R307-401-8]
II.B.3.b.3 NEW	The owner/operator shall submit records of the actual production rate to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.c NEW	The owner/operator shall only operate between 6:00 AM and 10:00 PM each day. The hours of operation may be altered upon approval of the Director; however, any request for a change in these hours shall include modeling showing that all NAAQS are met. [R307-401-8]
II.B.3.c.1 NEW	The owner/operator shall keep and maintain the following records of operation for all periods that the portable source is in operation at any location: A. The time operations began each day at each location B. The time operations ended each day at each location. [R307-401-8]

II.B.3.d NEW	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any installation of this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3]
II.B.3.d.1 NEW	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3, R307-305-3]
II.B.4 NEW	**Emission Estimates and Emissions Inventory:**
II.B.4.a NEW	The owner/operator shall estimate the actual emissions that resulted from operating at each location. These emissions shall be summarized for each piece of equipment, each source of fugitive dust, and each source of fugitive emissions at the completion of operation at each location. The Director may require a summary of emissions for each location at any time. [R307-150-1, R307-401-8]
II.B.4.a.1 NEW	Records of actual emissions shall be kept for each location. Records of actual emissions shall include the following: A. The emission factors used to estimate emissions for each location B. All variables (production, hours of operation, haul road lengths, etc.) used in the emission estimates for each location C. The actual emissions from each location, which includes emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions. [R307-150-1, R307-401-8]
II.B.5 NEW	**Haul Roads and Fugitive Dust Sources:**
II.B.5.a NEW	The owner/operator shall comply with a FDCP consistent with R307-309-6 for each location. The FDCP for a location shall address the control of all fugitive dust sources at that location. [R307-401-8]
II.B.5.b NEW	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary for each temporary location. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.b.1 NEW	Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.c NEW	The owner/operator shall use water application or other control options contained in R307-309 to minimize emissions from fugitive dust and fugitive emissions sources, including haul roads, storage piles, and disturbed areas. Controls shall be applied to ensure the opacity limits in this AO are not exceeded. [R307-309, R307-401-8]

II.B.6 NEW	**Aggregate Processing Plants:**
II.B.6.a	The owner/operator shall not allow visible emissions from any crusher on site to exceed 15 percent opacity. [40 CFR 60 Subpart OOO]
II.B.6.b	The owner/operator shall install water sprays on all crushers on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. [R307-401]
II.B.7 NEW	**Crushers, Screens, and Conveyors subject to NSPS Subpart OOO:**
II.B.7.a	The owner/operator shall not allow visible emissions from any conveyor transfer point on site to exceed 10 percent opacity. [40 CFR 60 Subpart OOO]
II.B.7.b	The owner/operator shall not allow visible emissions from any conveyor drop point on site to exceed 20 percent opacity. [R307-205] &. [R307-309]
II.B.7.c	The owner/operator shall install water sprays on all unenclosed conveyor transfer points on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. [R307-401]
II.B.8 NEW	**Concrete Batch Plants:**
II.B.8.a NEW	The owner/operator shall not allow visible emissions from any concrete batch plant and the associated equipment subject to this AO to exceed 7 percent opacity. [R307-401-8]
II.B.8.b NEW	Each storage silo associated with a concrete batch plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9 NEW	**Hot Mix Asphalt Plants:**
II.B.9.a NEW	The owner/operator shall use natural gas, propane, fuel oil, on-specification used oil as defined in R315-15, or any combination thereof as fuel in the hot mix asphalt plants subject to this AO. [R307-401-8]
II.B.9.b NEW	The sulfur content of any fuel oil burned in the hot mix asphalt plants subject to this AO shall not exceed 15 ppm by weight. [R307-401-8]
II.B.9.b.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of fuel oil shall be either by the owner/operator's own testing or by test reports from the fuel oil marketer. [R307-401-8]
II.B.9.b.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in fuel oil. Records of the test certifications shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]
II.B.9.c NEW	The owner/operator shall use a baghouse to control particulate emissions from each hot mix asphalt plant dryer subject to this AO. [R307-401-8]

II.B.9.c.1 NEW	The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. The pressure gauge shall be calibrated according to the manufacturer's instructions at least once every 12 months. [R307-401-8]
II.B.9.c.2 NEW	The owner/operator shall record the reading of the pressure gauge at least once per operating day. [R307-401-8]
II.B.9.d NEW	Each storage silo associated with a hot mix asphalt plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9.e NEW	The owner/operator shall not allow visible emissions from any baghouse, bin vent, dust collector or fabric filter associated with a hot mix asphalt plant subject to this AO to exceed 10 percent opacity. [R307-401-8]
II.B.9.f NEW	Concentrations in the exhaust stream from each asphalt drum mixer subject to this AO shall not exceed 0.030 grains/dscf of TSP, 0.024 grains/dscf of PM_{10}, and 0.024 grains/dscf of $PM_{2.5}$. [R307-401-8]
II.B.9.f.1 NEW	Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below: Emission Point: Drum Mixer exhaust passing through the baghouse Pollutant — Testing Status — Test Frequency TSP — * — # PM_{10} — ** — @ $PM_{2.5}$ — ** — @ * Initial compliance testing is required for each plant. The initial test date shall be performed as soon as possible and in no case later than 180 days after the startup of a new or modified emission source. A compliance test is required on a modified emission point that has an emission rate limit. ** Initial test is not required unless specified by the Director. # Initial test is required. Subsequent tests shall only be performed for PM_{10}. @ Test every third calendar year, or sooner if required by the Director, not exceeding 42 months between tests. Tests may be required if the source is suspected to be in violation with other conditions of this AO. [R307-165, R307-401-8]

II.B.9.f.2 NEW	A. Notification: At least 30 days prior to conducting any emission testing required under any part of UAC, R307, the owner or operator shall notify the Director of the date, time and place of such testing and shall submit a source test protocol to the Director. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. If directed by the Director, the owner/operator shall attend a pretest conference. The pretest conference shall include representation from the owner/operator, the tester, and the Director. B. Reporting: Upon completion of the DAQ accepted testing methods, the owner/operator shall submit a copy of the results from each performance test as conducted to the Director within 60 days after the test has been completed. C. Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. D. Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Director. E. TSP 40 CFR 60, Appendix A, Method 5 or other EPA-approved testing method, as acceptable to the Director F. $PM_{10}/PM_{2.5}$ For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a, or other EPA-approved testing method, as acceptable by the Director. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured shall be considered PM_{10}. The portion of the filterable particulate emissions considered $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. The portion of the filterable particulate emissions considered PM_{10} and $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration. The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes. G. Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary

	conversion factors determined by the Director, to give the results in the specified units of the emission limitation. H. Test Conditions All tests shall be conducted in accordance with R307-165-4. [R307-165, R307-401-8]
II.B.10 NEW	**Stationary Diesel-Fired Engines:**
II.B.10.a	The owner/operator shall not allow visible emissions from any stationary diesel engine on site to exceed 20 percent opacity. [R307-201] &. [R307-305]
II.B.10.b	The owner/operator shall use #1, #2 or a combination of #1 and #2 diesel fuel in the diesel engines listed in this AO. [R307-401]
II.B.10.c NEW	The sulfur content of any fuel oil or diesel burned in the generators listed in this AO shall not exceed 15 ppm. [R307-401]
II.B.10.c.1	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of diesel fuel shall be either by the owner/operator's own testing or by test reports from the diesel fuel marketer. [R307-203]
II.B.11	**All Screens shall be subject to the following:**
II.B.11.a	The owner/operator shall not allow visible emissions from any screen on site to exceed 10 percent opacity. [40 CFR 60 Subpart OOO]
II.B.11.b	The owner/operator shall install water sprays on all screens on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. [R307-401]

PERMIT HISTORY

When issued, the approval order shall supersede (if a modification) or will be based on the following documents:

Supersedes	DAQE-AN12570005-09 dated August 12, 2009
Is Derived From	NOI dated June 30, 2020

REVIEWER COMMENTS

1. **Comment regarding NSPS, MACT, & Title V Applicability:**

NSPS

NSPS Subpart I applies to owners and operators of a hot mix asphalt facility that commenced construction after June 11, 1973. The hot mix asphalt plants at this portable source were manufactured after June 11, 1973; therefore, NSPS Subpart I applies to this AO for portable equipment.

NSPS Subpart OOO applies to each crusher, screening operation, and belt conveyor in fixed or portable nonmetallic mineral processing plants manufactured after August 31 1983. The portable equipment in this AO is used to process nonmetallic minerals according to 40 CFR 60.671; therefore, NSPS Subpart OOO applies to this AO for portable equipment.

NSPS Subpart IIII applies to owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006. The stationary engines at this portable source were manufactured after April 1, 2006; therefore, NSPS Subpart IIII applies to this AO for stationary diesel-fired engines.

MACT

40 CFR 63 MACT Subpart ZZZZ applies to owners and operators of stationary RICE at a major or area source of HAP emissions. This source will have stationary RICE at an area source of HAP emissions; therefore, MACT Subpart ZZZZ will apply to the stationary engines at this source.

Title V

Title V of the 1990 Clean Air Act (Title V) applies to the following:

1. Any major source
2. Any source subject to a standard, limitation, or other requirement under Section 111 of the Act, Standards of Performance for New Stationary Sources;
3. Any source subject to a standard or other requirement under Section 112 of the Act, Hazardous Air Pollutants.
4. Any Title IV affected source.

The portable equipment in this AO is not part of a major source or a Title IV source, and is not subject to 40 CFR 61 requirements, but the facility is subject to 40 CFR 60 NSPS Subpart I and OOO requirements. Therefore, Title V applies to the source where this portable equipment operates. [Last updated July 21, 2020]

2. **Comment regarding Recordkeeping:**
This AO contains numerous recordkeeping requirements to demonstrate compliance. To assist the owner/operator, this Review Comment lists all the records that are required by this AO.

1. The initial relocation date at each location
2. Working days at each location
3. Consecutive days at each location
4. The date production occurs at each location
5. The production for each date at each location
6. The total production at each location
7. The time operations began each day at each location
8. The time operations ended each day at each location
9. The emission factors used to estimate emissions for each location
10. All variables used in the emission estimates for each location
11. The emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions at each location
12. Date the water spray inspections were made
13. Any corrective actions taken for the water sprays
14. Control mechanism used if sprays are not operating.
15. The initial performance test for each affected facility as defined in NSPS Subpart OOO
16. The certification of sulfur content in fuel oil used in the asphalt plants
17. The pressure gauge reading for each day of operation
18. The applicable records contained in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ for each stationary engine subject to this AO.
19. The certification of sulfur content in diesel fuel used in the stationary engines

[Last updated July 21, 2020]

3. **Comment regarding Reporting:**
R307-401-17 requires that "records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days." The owner/operator must submit this information to be in compliance with R307-401-17. [Last updated July 21, 2020]

4. **Comment regarding Hot Mix Asphalt Plant Condensable PM Emissions:**
Condensable PM emissions shall not be used for compliance demonstration during stack testing; however, condensable PM emissions shall be used for inventory purposes. There are several reasons condensable PM emissions will not be used for compliance demonstration.

A. NSPS Subpart I does not limit condensable PM emissions. DAQ is unaware of any other regulation that limits PM emissions, including condensable PM emissions, from hot mix asphalt plants. Since federal regulations only limit filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

B. The control device used to control PM emissions from a hot mix asphalt plant is a baghouse. A baghouse is unable to control condensable PM emissions from a hot mix asphalt plant. One of the purposes of a stack test is to ensure the control device is operating correctly. Since the baghouse can only control filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

C. The majority of uncontrolled emissions from a hot mix asphalt plant is filterable emissions. Based on AP-42, an uncontrolled 400 tph hot mix asphalt plant will emit 11,200 pounds of filterable

PM per hour and 7.8 pounds of condensable PM per hour. The amount of uncontrolled filterable PM emissions is over 1,400 times higher than the condensable PM emissions. Since the uncontrolled filterable PM emissions are so high, only filterable PM emissions will be tested for compliance demonstration.

D. Condensable PM emissions can vary depending on the fuel being combusted, the burner, the material being fed into the hot mix asphalt plant, and other factors. It is inappropriate to put a single limit in a permit that could apply to different locations, different plants, different materials, and different fuels. Due to the high variability of these factors, condensable emissions will not be used for compliance demonstration for this portable source.

Due to the reasons above, condensable PM emissions will not be tested for compliance demonstration; however, condensable PM emissions will be used for inventory purposes. The Director may require an emissions inventory at any time according to R307-150-1(4). Because this source is a Title V area source, this source is required to pay Title V fees according to R307-415-9. Both filterable and condensable PM emissions are considered chargeable pollutants; therefore, the owner/operator must test for condensable PM emissions for inventory purposes.
[Last updated July 21, 2020]

5. **Comment regarding Definition of Stationary Engines:**
definition of stationary internal combustion engine in NSPS Subpart IIII (40 CFR 60.4219) is as follows:

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

The definition of nonroad engine in 40 CFR 1068.30 is as follows:

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.
[Last updated July 21, 2020]

6. **Comment regarding Definition of Stationary Engines part 2:**
40 CFR 1068.31 has the following requirements:

(b) A stationary engine becomes a new nonroad engine if-

(1) It is used in an application that meets the criteria specified in paragraphs (1)(i) or (ii) in the definition of "nonroad engine" in §1068.30.

(2) It meets the criteria specified in paragraph (1)(iii) of the definition of "nonroad engine" in §1068.30 and is moved so that it fails to meet (or no longer meets) the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30.

(c) A stationary engine does not become a new nonroad engine if it is moved but continues to meet the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30 in its new location. For example, a transportable engine that is used in a single specific location for 18 months and is later moved to a second specific location where it will remain for at least 12 months is considered to be a stationary engine in both locations. Note that for stationary engines that are neither portable nor transportable in actual use, the residence-time restrictions in the definition of "nonroad engine" generally do not apply.

(e) A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if-

(1) At any time, it meets the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If we determine that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location.

(2) It is otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411).
[Last updated July 21, 2020]

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds

State of Utah
GARY R. HERBERT
SPENCER J. COX

Department of
Environmental Quality
L. Scott Baird

DIVISION OF AIR QUALITY
Bryce C. Bird

RN125750006

November 2, 2020

Bill King
Sunroc Corporation
730 North 1500 West
Orem, UT 84057

Dear Bill King,

Re: Engineer Review:
Modification to AO DAQE-AN125750005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-Fired Engines)
Project Number: N125750006

The DAQ requests a company representative (Title V Responsible Official for enhanced Approval Order application) review and sign the attached Engineer Review (ER). This ER identifies all applicable elements of the New Source Review permitting program. Sunroc Corporation should complete this review within **10 business days** of receipt.

Sunroc Corporation should contact **Mr. Tim DeJulis** at (385) 306-6523 if there are questions or concerns with the review of the draft permit conditions. Upon resolution of your concerns, please email tdejulis@utah.gov the signed cover letter to Mr. Tim DeJulis. Upon receipt of the signed cover letter, the DAQ will prepare an ITA for a 30-day public comment period. At the completion of the comment period, the DAQ will address any comments and will prepare an AO for signature by the DAQ Director.

If Sunroc Corporation does not respond to this letter within **10 business days,** the project will move forward without source concurrence. If Sunroc Corporation has concerns that cannot be resolved and the project becomes stagnant, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____ 11/13/2020
(Signature & Date)

195 North 1950 West • Salt Lake City, UT
Mailing Address: P.O. Box 144820 • Salt Lake City, UT 84114-4820
Telephone (801) 536-4000 • Fax (801) 536-4099 • T.D.D. (801) 903-3978
www.deq.utah.gov

Utah Division of Air Quality
New Source Review Section

Date 6/22/2020
Company Sunroc Corporation
Site/Source Portable Source (Aggregate, Hot Mix Asphalt, Concrete Batch Plants, Diesel Fired Engines)

Form 15c

Portable General Permit Application

An Approval Order to construct must be approved before any equipment can be operated. Please refer to the *Approval Order* application instructions for specific details required to complete the application. Please print or type all information requested. All information requested herein must be completed and submitted before an engineering review can be completed. Please contact the New Source Review Section of the Division of Air Quality with any questions at (801) 536-4000. Written inquiries may be addressed to: Division of Air Quality, New Source Review Section, P.O. Box 144820, Salt Lake City, Utah 84114-4820.

General Owner And Facility Information

1. Company name and address:
Sunroc Corporation
730 N 1500 W
Orem, Ut 84057
Phone No.: (801) 802-6900
FAX No.: ( )

2. Company contact for environmental issues:
Bill King, Property/Environmental Specialist
730 N 1500 W
Orem, Ut 84057
Phone No.: (801) 222-3306
FAX No.: ( )
E-mail address: billking@clydeinc.com

3. Owners name and address:
Sunroc Corporation
730 N 1500 W
Orem, Ut 84057
Phone no.: (801) 802-6900
FAX no.: ( )
E-mail address: billking@clydeinc.com

4. Identify any current Approval Order(s):

AO# DAQE-AN0125750005-09 Date _____ AO# _____ Date _____
AO# _____ Date _____ AO# _____ Date _____
AO# _____ Date _____ AO# _____ Date _____

5. If request for modification, previous permit # and date: DAQE-AN 0125750005-09 DATE: 08 / 12 / 2009

6. Type of operation: ☒ Aggregate Processing Plants ☒ Asphalt Plants ☒ Concrete Batch Plants

7. Total company employees greater than 100?
☒ Yes ☐ No

8. Standard Industrial Classification Code
[1] [4] [4] [2] (Construction Sand & Gravel)

9. Application for:
☒ New equipment ☒ Modification
☐ Existing equipment operating without permit

10. For new equipment or modification, enter estimated start date: 8/20/2020

11. For change of permittee, enter date of occurrence: NA

12. For existing equipment in operation without prior permit, enter initial operation date: NA

13. Has equipment been modified, moved or the capacity increased since November 29, 1969: ☒ Yes ☐ No
If yes: Specify what equipment: All equipment

14. Equipment list (Table 1 and 2 Attach as Appendix A) Curshing/Screening Spreads, Concrete Batch Plants, Hot Mix Asphalt Plants, Diesel Fired Generators		
15. I hereby certify that the information and data submitted in and with this application is completely true, accurate and complete, based on reasonable inquiry and to the best of my knowledge and belief. Signature: Bill King Title: Property/Environmental Specialist		
16. Bill King Name (Typed or printed)	17. Telephone Number: (801)222-3306	18. Date: 6/22/2020

General Permit Application
Form 15c
Instructions

1. Identify the name, address, phone number, and fax number of the legal entity that operates the equipment.
2. Identify the person who is to be contacted regarding this application; also include the phone number and fax number of this person.
3. If you are not the owner of the equipment under this application, enter the name, address, phone number, and fax number of the owner.
4. List any valid Approval Orders (AO) which are for equipment at this site.
5. Indicate previous AO number (if any) and date for AO modification.
6. State the type of operation.
7. Indicate if the total number of people employed by your company is over 100 people.
8. Using the provided list of business codes (page 8), enter the code which best describes your business activity at this facility.
9. Check all applicable boxes
   Existing Equipment Operating Without permit - equipment which has been in operation without a prior permit issued by the state.
   Modification - existing equipment which is physically altered by the removal, addition, or non-identical replacement of parts.
10. Enter the start date new equipment or modification.
11. For cases in this category, enter the future date when the change is anticipated.
12. For this category of equipment, enter the date when this equipment was first operated.
13. This is for equipment that was operated before November 29, 1969. Indicate whether equipment has been moved, modified or increased capacity since that date. Specify what equipment this includes.
14. Attach as Table 1 and 2 to the application a list of all portable equipment (NSPS/MACT - Table 1 and Non-NSPS - Table 2) that is owned or operated by the company. Forms are available from DAQ for these two tables.
15. Signature of authorized company agent.
16. Name of signing party.
17. Telephone number of signing party.
18. Date of application.

Additional information may be required for some projects. If so, the reviewing engineer will contact the individual listed in question number 2.

Tim Dejulis <tdejulis@utah.gov>

Sunroc - Portable Permit Engineering Review

2 messages

Tim Dejulis <tdejulis@utah.gov> Thu, Nov 5, 2020 at 3:24 PM
To: Bill King <billking@clydeinc.com>

Bill,

Here is the engineering review for Sunroc's portable permit. Please take a careful look at this and if everything is satisfactory, then sign the first page and return it to my attention. Otherwise, we can discuss anything. Thank you.

Timothy DeJulis, P.E.

195 N. 1950 W. Salt Lake City, Utah 84116

P:385-306-6523 F:801-536-4000 tdejulis@utah.gov

UTAH DEPARTMENT of ENVIRONMENTAL QUALITY
AIR QUALITY

RN125750006-20.v 5.docx
154K

Bill King <billking@clydeinc.com> Fri, Nov 13, 2020 at 11:06 AM
To: Tim Dejulis <tdejulis@utah.gov>

Tim,

Attached is the signed cover page for the Sunroc Portable Permit.

Thanks for your help.

Bill King

From: Tim Dejulis <tdejulis@utah.gov>
Sent: Thursday, November 5, 2020 3:24 PM
To: Bill King <billking@clydeinc.com>
Subject: Sunroc - Portable Permit Engineering Review

Bill,

Here is the engineering review for Sunroc's portable permit. Please take a careful look at this and if everything is satisfactory, then sign the first page and return it to my attention. Otherwise, we can discuss anything. Thank you.

Timothy DeJulis, P.E.

195 N. 1950 W. Salt Lake City, Utah 84116

P:385-306-6523 F:801-536-4000 tdejulis@utah.gov

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State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

RN125750006

August 5, 2020

Sam Bernard
Sunroc Corporation
730 North 1500 West
Orem, UT 84057

Dear Sam Bernard,

Re: Engineer Review:
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-
Fired Engines)
Project Number: N125750006

The DAQ requests a company representative (Title V Responsible Official for enhanced Approval Order application) review and sign the attached Engineer Review (ER). This ER identifies all applicable elements of the New Source Review permitting program. Sunroc Corporation should complete this review within **10 business days** of receipt.

Sunroc Corporation should contact **Mr. Tim DeJulis** at (801) 536-4012 if there are questions or concerns with the review of the draft permit conditions. Upon resolution of your concerns, please email tdejulis@utah.gov the signed cover letter to Mr. Tim DeJulis. Upon receipt of the signed cover letter, the DAQ will prepare an ITA for a 30-day public comment period. At the completion of the comment period, the DAQ will address any comments and will prepare an AO for signature by the DAQ Director.

If Sunroc Corporation does not respond to this letter within **10 business days,** the project will move forward without source concurrence. If Sunroc Corporation has concerns that cannot be resolved and the project becomes stagnant, the DAQ Director may issue an Order prohibiting construction.

Approval Signature _____
(Signature & Date)

UTAH DIVISION OF AIR QUALITY
ENGINEER REVIEW

SOURCE INFORMATION

Project Number	N125750006
Owner Name	Sunroc Corporation
Mailing Address	730 North 1500 West Orem, UT, 84057
Source Name	Sunroc Corporation- Portable Equipment - Temporary Locations
Source Location	Not permanently based at a site. Portable Source, UT
SIC Code	1442 (Construction Sand & Gravel)
Source Contact	Bill King
Phone Number	(801) 222-3306
Email	billking@clydeinc.com
Project Engineer	Mr. Tim DeJulis, Engineer
Phone Number	(801) 536-4012
Email	tdejulis@utah.gov
Notice of Intent (NOI) Submitted	June 26, 2020
Date of Accepted Application	July 17, 2020

SOURCE DESCRIPTION

General Description
Sunroc Corp. has requested a modification to the AO DAQE-AN12570005-09. This AO is issued to Sunroc Corp. for the purpose of operating a portable source that belongs to the nonmetallic mineral processing industry, including aggregate, concrete, and hot mix asphalt plants. The plants subject to this AO shall be temporarily operated for a period of not more than 180 working days at any location. A relocation shall not exceed 365 consecutive days at any location in the State of Utah.

Prior to commencement of operation at a location, the owner/operator shall submit a Notice of Temporary Relocation to the Director and obtain a Temporary Relocation Approval Letter. If the owner/operator operates at a location in compliance with the AO, the Notice of Temporary Relocation, and the Temporary Relocation Approval Letter, dispersion modeling results have determined that there will be no adverse impacts on air quality at the nearest residence or commercial establishment.

Compliance with the opacity limits and operating practices contained in the conditions of the AO shall be considered as application of BACT. The emission control measures required in the conditions of this AO shall apply to all of the locations at which the source approved by this AO operates. The source may be required to adopt additional measures for controlling emissions to address location-specific concerns.

This AO limits the source to emissions that are below the major source threshold, making it a "Synthetic Minor" source. NSPS, 40 CFR Part 60, Subparts A, I, OOO, and IIII, and MACT, 40 CFR 63, Subparts A and ZZZZ regulations apply to this portable source. This source is considered a Title V area source.

NSR Classification:
Minor Modification at Minor Source

Source Classification
Located in
Portable Source County
Airs Source Size: SM

Applicable Federal Standards
NSPS (Part 60), A: General Provisions
NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

Project Proposal
Modification to AO DAQE-AN133710005-09 for a Portable Source (Aggregate, Hot Mix Asphalt, Concrete, and Diesel-Fired Engines)

Project Description
Sunroc Corp. has requested a modification to its AO DAQE-AN12570005-09. The portable source belongs to the nonmetallic mineral processing industry, including aggregate processing plants, concrete batch plants, hot mix asphalt plants, and stationary diesel-fired engines.

EMISSION IMPACT ANALYSIS

DAQ modeled a generic aggregate site to determine the appropriate operating conditions for this AO. Ambient air quality impacts are smaller in the daytime hours than in the nighttime hours. To minimize impacts, the times of operation were limited. Sources will be allowed to operate from 6:00 am to 10:00 pm. A permit condition is included in this AO to reflect the time restriction of operation. More stringent times of operation may be included in different areas of the State. If a source wants to operate outside these times, the source must submit modeling with the temporary relocation letter to demonstrate that the NAAQS are met. [Last updated July 21, 2020]

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
	Change (TPY)	Total (TPY)

Note: Change in emissions indicates the difference between previous AO and proposed modification.

Review of BACT for New/Modified Emission Units

1. **BACT review regarding Process Equipment**
BACT review regarding Process Equipment
The process equipment for this portable source include the following:

A. Aggregate Equipment (Crushers, Screens, Conveyors)
B. Concrete Batch Plants
C. Hot Mix Asphalt Plants
D. Stationary Diesel-Fired Engines

A. Aggregate Equipment (Crushers, Screens, Conveyor Transfer Points)

The following opacity limitations shall not be exceeded for the following aggregate equipment:
Crushers - 12%
Screens - 7%
Conveyor Transfer Points - 7%
Feeders - 7%
Stackers - 7%
Water sprays will control the emissions from crushers, screens, conveyors, feeders, and stackers. Sprays will operate as needed to comply with the above opacity limits.

B. Concrete Batch Plants

Fabric filters will control the emissions from concrete batch plants, the batching operations, and associated silos. The fabric filters will reduce visible emissions to 7% opacity or less. Any boiler/water heater used will use natural gas and/or propane as fuel. Any boiler/water heater shall be limited to 10% opacity.

C. Hot Mix Asphalt Plants

The hot mix asphalt plants may use propane, natural gas, fuel oil, on-specification used oil or any combination of these fuels as fuel. A baghouse will control the emissions from the drum mixer. The baghouse will reduce visible emissions to 10% opacity or less. In addition, the baghouse will reduce the concentration of PM_{10} in the exhaust to 0.024 grains per dscf or less. To ensure the baghouse is operating correctly, the baghouse pressure drop shall be between 3 and 7 inches of water column. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less.

D. Stationary Diesel-Fired Engines

The NSR Section recommends the following as BACT for stationary diesel engines:
1. Proper engine tuning and maintenance
2. Visible emissions shall be 20% opacity or less
3. Sulfur content of fuel shall be 15 ppm or less
4. Compliance with the applicable federal standards contained in
a. 40 CFR 60, NSPS, Subpart IIII, and
b. 40 CFR 63, MACT, Subpart ZZZZ. [Last updated July 21, 2020]

2. **BACT review regarding Process Equipment part 2**

BACT review regarding Fugitive Emissions and Fugitive Dust
To ensure fugitive emissions and fugitive dust will be controlled, the owner/operator will be required to submit a FDCP for each location with the temporary relocation letter. Fugitive emissions and fugitive dust will be generated from the following:

A. Haul Roads
B. Storage Piles
C. Conveyor Drop Points
D. Material Handling Operations

A. Haul Roads

Wet suppression (or other chemical treatment) will control the emissions from haul roads. To ensure the wet suppression is adequate, visible emissions from haul roads will not exceed 20% opacity on site and 10% at the property boundary.

B. Storage Piles

Routine water application will control the emissions from storage piles. To ensure the water application is of sufficient frequency, visible emissions from storage piles will not exceed 20% opacity on site and 10% at the property boundary.

C. Conveyor Drop Points,

Water sprays will control the emissions from conveyor drop points. Sprays will operate as needed to reduce visible emissions to 20% opacity or less on site and 10% at the property boundary.

D. Material Handling Operations,

Water application will control the emissions from material handling operations. To ensure the water application is of sufficient frequency, visible emissions from material handling will not exceed 20% opacity on site and 10% at the property boundary.
[Last updated July 21, 2020]

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]
I.7	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.A THE APPROVED EQUIPMENT

II.A.1	**Portable Aggregate & Concrete Batching Equipment**
II.A.2	**Jaw Crusher** Capacity: 125 tph Manufacture Date: ~Prior to 1983 Manufacturer: Cedarapids Model Number: 22 x 36
II.A.3	**Cone Crusher** Capacity: 125 tph Manufacture Date: ~Prior to 1983 Manufacturer: Symons Model Number: Standard
II.A.4	**Cone Crusher** Capacity: 187 tph Manufacture Date: 1965 Manufacturer: El Jay Model Number: 45 STD Serial Number: 138

II.A.5	**Fast Track Jaw Crusher** Capacity: 400 tph Manufacture Date: 2006 Model Number: FT2650 NSPS Applicable: Subpart OOO	 Manufacturer: Pioneer Serial Number: 405677
II.A.6	**30 x 42 Jaw Crusher** Capacity: 275 tph Manufacture Date: 1992 Serial Number: 37-005 NSPS Applicable: Subpart OOO	 Manufacturer: Armadillo
II.A.7	**32 x 42 Jaw Crusher** Capacity: 375 tph Manufacture Date: 1984 Serial Number: 33832 NSPS Applicable: Subpart OOO	 Manufacturer: Cedarapids
II.A.8	**Remco 8500 Crusher** Capacity: 250 tph Manufacture Date: 2002 Model Number: 8500 Sand Max NSPS Applicable: Subpart OOO	 Manufacturer: Remco Serial Number: 8550302-141
II.A.9	**VSI Sand Max Crusher** Capacity: 250 tph Manufacture Date: 2007 Model Number: dd-sand 4080-304-14 NSPS Applicable: Subpart OOO	 Manufacturer: Remco Serial Number: 4080-0307-109
II.A.10	**Jaw Crusher/Grizzly** Capacity: 230 tph Manufacture Date: 1956 Model Number: 20 x 36	 Manufacturer: Universal Serial Number: 20081
II.A.11	**Jaw Crusher and Feeder** Capacity: 150 tph Manufacture Date: ~1989 Model Number: 24 x 36 NSPS Applicable: Subpart OOO	 Manufacturer: Cedarapids Serial Number: Feeder: 813-0FA4A-147
II.A.12	**Jaw Crusher/Feeder** Capacity: 350 tph Manufacturer: Austin Western Model Number: 25 x 40 NSPS Applicable: Subpart OOO	 Serial Number: 6-680
II.A.13	**Jaw Crusher/Feeder/Grizzly** Capacity: 265 tph Manufacturer: Cedarapids Model Number: 22 x 36 NSPS Applicable: Subpart OOO	
II.A.14	**Jaw Crusher/Screen** Capacity: 110 tph Manufacture Date: 1955 Model Number: 18 x 36	 Manufacturer: Cedarapids Serial Number: 16063

II.A.15	**Cone Crusher/Screen Plant**	
	Capacity: 350 tph	
	Manufacture Date: 1959	Manufacturer: Symons
	Model Number: 48" STD	Serial Number: 40693
II.A.16	**54" Cone Crusher & 5' x 16' Screen Plant**	
	Capacity: 330 tph	
	Manufacture Date: 1979	Manufacturer: El Jay
	Serial Number: 42E0579	
II.A.17	**54" Cone Crusher & Screen Plant**	
	Capacity: 330 tph	
	Manufacture Date: ~1987	Manufacturer: El Jay & Cedarapids
	Model Number: 80-71531130	Serial Number: 20400065
	NSPS Applicable: Subpart OOO	
II.A.18	**54" Fine Head Cone Crusher w/ 5' x 14' Screen**	
	Capacity: 210 tph	
	Manufacture Date: 1988	Manufacturer: El Jay
	Serial Number: 23CO592	
	NSPS Applicable: Subpart OOO	
II.A.19	**Cone Crusher/Screen Plant**	
	Capacity: 330 tph	
	Manufacture Date: 1998	Manufacturer: El Jay
	Model Number: 54 STD	Serial Number: 42CO 228
	NSPS Applicable: Subpart OOO	
II.A.20	**Cone Crusher/Screen Plant**	
	Capacity: 480 tph	
	Manufacture Date: 1999	Manufacturer: JCI
	Model Number: 1400 LS	Serial Number: 99CO3H1400LS
	NSPS Applicable: Subpart OOO	
II.A.21	**Cone Crusher/Screen Plant**	
	Capacity: 385 tph	
	Manufacture Date: 2000	Manufacturer: JCI
	Model Number: 1200 LS	Serial Number: 0000361200LS
	NSPS Applicable: Subpart OOO	
II.A.22	**Impact Crusher with Screen**	
	Capacity: 250 tph	
	Manufacture Date: 1997	Manufacturer: Fabtec
	Serial Number: W14297	
	NSPS Applicable: Subpart OOO	
II.A.23	**Incline Screen**	
	Capacity: 125 tph	
	Manufacture Date: ~Prior to 1983	Manufacturer: Cay
	Model Number: 5' x 16'	
II.A.24	**Screen Plant**	
	Capacity: 50 tph	
	Manufacture Date: ~Prior to 1983	Manufacturer: Kolberg
	Model Number: 2D48	Serial Number: 1221-48-8-77-2
II.A.25	**Screen Plant**	
	Capacity: 125 tph	
	Manufacture Date: 1965	Manufacturer: Barber Green
	Serial Number: P550Y115	

II.A.26	**5' x 18', 3-deck Screen** Capacity: 300 tph Manufacture Date: 1976	 Manufacturer: Fasoli
II.A.27	**6' x 20', 3-deck Asphalt Screen** Capacity: 528 tph Manufacture Date: 1998 Serial Number: 98H20D32 NSPS Applicable: Subpart OOO	 Manufacturer: JCI
II.A.28	**Powergrid 800 Screen** Capacity: 350 tph Manufacture Date: 2007 Model Number: 800 NSPS Applicable: Subpart OOO	 Manufacturer: Power Screen Serial Number: 72-21-402
II.A.29	**5' x 16', 3-deck Screen and Screw** Capacity: 200 tph Manufacture Date: 1997 Serial Number: 4297 NSPS Applicable: Subpart OOO	 Manufacturer: Fabtec
II.A.30	**6' x 20', 3-deck Screen** Capacity: 528 tph Manufacture Date: 1998 Serial Number: OOLP17B32 NSPS Applicable: Subpart OOO	 Manufacturer: JCI
II.A.31	**7' x 20', 3-deck Wet Screen** Capacity: 350 tph Manufacture Date: 2005 Serial Number: 5051611 NSPS Applicable: Subpart OOO	 Manufacturer: JCI
II.A.32	**7' x 20', 3-deck Wet Screen** Capacity: 450 tph Manufacture Date: 1999 NSPS Applicable: Subpart OOO	 Manufacturer: JCI
II.A.33	**Screen Plant** Capacity: 600 tph Manufacture Date: 2004 Model Number: JCI 7203 NSPS Applicable: Subpart OOO	 Manufacturer: JCI Serial Number: S041248
II.A.34	**Screen Plant** Capacity: 250 tph Manufacturer: Allis-Chalmers Model Number: Rippleflow NSPS Applicable: Subpart OOO	 Serial Number: 9167
II.A.35	**Screen/Screw** Capacity: 200 tph Manufacture Date: 1994 Model Number: LF4123-24 NSPS Applicable: Subpart OOO	 Manufacturer: El Jay Serial Number: 32F2294

II.A.36	**6' x 16' Seco Screen** Capacity: 450 tph Manufacture Date: 1992 Serial Number: 3616-101 NSPS Applicable: Subpart OOO	Manufacturer: Seco
II.A.37	**Seco Screen and 36 x 25 Screw** Capacity: 270 tph Manufacture Date: 1997 Model Number: 6 x 18 3-deck NSPS Applicable: Subpart OOO	Manufacturer: Seco Serial Number: 11692
II.A.38	**Trackscreen** Capacity: 300 tph Manufacture Date: 2006 Model Number: FNGKT NSPS Applicable: Subpart OOO	Manufacturer: Astec Serial Number: 62492
II.A.39	**Track-mounted Screen Plant (self-contained)** Capacity: 125 hp/300 tph Manufacture Date: 2008 Model Number: FT5162i NSPS Applicable: Subpart OOO	Manufacturer: JCI Serial Number: P080498
II.A.40	**11 Station Classifier** Capacity: 300 tph Manufacture Date: 1999 Serial Number: 16379	Manufacturer: Eagle Iron Works
II.A.41	**11 Station Classifier** Capacity: 300 tph Manufacture Date: 2005 Serial Number: 17110	Manufacturer: Eagle Iron Works
II.A.42	**Water Clarifier** Capacity: 2400 gpm Manufacture Date: 2005 Model Number: 56-10	Serial Number: Shop Built
II.A.43	**44" Single Screw** Capacity: 175 tph Manufacture Date: 1999 Serial Number: 16378	Manufacturer: Eagle Iron Works
II.A.44	**36" Single Screw** Capacity: 100 tph Manufacture Date: 1990 Serial Number: 7164	Manufacturer: Eagle Iron Works
II.A.45	**36" Sand Screw** Capacity: 100 tph Manufacture Date: 2005 Serial Number: 17113	Manufacturer: Eagle Iron Works
II.A.46	**44" Sand Screw** Capacity: 175 tph Manufacture Date: 2005 Serial Number: 17112	Manufacturer: Eagle Iron Works

II.A.47	**44" Twin Screw** Capacity: 350 tph Manufacture Date: 2007 Serial Number: 17291	 Manufacturer: Eagle Iron Works
II.A.48	**36" Coarse Washer** Capacity: 250 tph Manufacture Date: 2006 Model Number: 36TCW	 Manufacturer: Trio Serial Number: TCW3618-128
II.A.49	**36" Coarse Material Washer** Capacity: 250 tph Manufacture Date: 2007 Serial Number: 17114	 Manufacturer: Eagle Iron Works
II.A.50	**Feeder** Manufacture Date: ~Prior to 1983 Model Number: 16' x 42"	 Manufacturer: Pioneer
II.A.51	**Feeder - 600 tph** Capacity: 600 tph Manufacture Date: 1999 Serial Number: Shop Built	 Manufacturer: Goodfellow
II.A.52	**Hyd. Feeder** Capacity: 300 tph Manufacture Date: 1979 Serial Number: 85-1743	 Manufacturer: L-Russ
II.A.53	**Plate Type Feeder** Capacity: 500 tph Manufacture Date: 1997	 Manufacturer: Kolman
II.A.54	**Plate Type Feeder** Capacity: 400 tph Manufacture Date: Reman. 1995 Serial Number: 101XHD673435036	 Manufacturer: Kolman/HED
II.A.55	**36" Belt Feeder** Capacity: 600 tph Manufacture Date: 2005 Serial Number: Shop Built	 Manufacturer: Goodfellow
II.A.56	**Stacker, self-cont.** Capacity: 350 tph Manufacture Date: 2007 Model Number: F30x80PRSCS	 Manufacturer: Superior Serial Number: 73-23
II.A.57	**Concrete Batch Plant #1** Capacity: 150 yd3/hr Manufacture Date: ~1988 Model Number: Cemco	 Manufacturer: Construction Equipment MFG Co.
II.A.58	**Cement Silo (overhead batch plant) #1** Capacity: 400 barrel Manufacture Date: ~1988 Model Number: Cemco	 Manufacturer: Construction Equipment MFG Co.
II.A.59	**Flyash Silo #1** Capacity: 400 barrel Manufacture Date: 2007 Model Number: Cemco	 Manufacturer: Construction Equipment MFG Co. Serial Number: 1020607-102

II.A.60	**Boiler #1** Capacity: 1.5 MMBTU/hr Manufacture Date: 1985 Serial Number: 35308	 Manufacturer: Natco
II.A.61	**Baghouses (2 for silos) #1** Manufacture Date: 1988	 Manufacturer: Cemco
II.A.62	**Concrete Batch Plant #2** Capacity: 200 yd3/hr Manufacture Date: ~1989 Model Number: FW2E1185215	 Manufacturer: Ross Bandit Serial Number: SHH20175C
II.A.63	**Cement Silo #2** Capacity: 800 barrel Manufacture Date: ~1989 Model Number: 800MVR	 Manufacturer: Ross Bandit
II.A.64	**Flyash Silo #2** Capacity: 943 barrel Manufacture Date: ~1989	 Manufacturer: R&S Industries
II.A.65	**Natural Gas Water Heater #2** Capacity: 4.5 MMBTU/hr Manufacture Date: 2004	 Manufacturer: Kemco
II.A.66	**Baghouse #2** Capacity: 1360 CFM Manufacture Date: 1989 Model Number: 6C9500	 Manufacturer: Ross
II.A.67	**Concrete Batch Plant #3** Capacity: 100 yd3/hr Manufacture Date: ~1979 Model Number: Rossco 100	 Manufacturer: Ross Serial Number: 3863
II.A.68	**Cement Silo #3** Capacity: 224 barrel Manufacture Date: ~1979	 Manufacturer: Ross
II.A.69	**Flyash Silo #3**	
II.A.70	**Fuel Oil/Diesel Boiler #3** Capacity: 1.5 MMBTU/hr Manufacture Date: 1985 Model Number: 24342	 Manufacturer: Natco Serial Number: 20093269
II.A.71	**Baghouse #3** Manufacture Date: ~1979	 Manufacturer: Ross
II.A.72	**Concrete Batch Plant #4** Capacity: 100 yd3/hr Manufacture Date: ~1979 Model Number: Rossco 100	 Manufacturer: Ross
II.A.73	**Cement Silo #4** Capacity: 300 barrel Manufacture Date: ~1979 Model Number: Rossco 100	 Manufacturer: Ross
II.A.74	**Flyash Silo #4** Capacity: 350 barrel Manufacture Date: ~1979	 Manufacturer: Sunroc

II.A.75	**Baghouse #4**	
	Manufacture Date: ~1979	Manufacturer: Ross
II.A.76	**Concrete Batch Plant #5**	
	Capacity: 150 yd3/hr	
	Manufacture Date: 1987	Manufacturer: Con-E-Co
	Serial Number: C-3173	
II.A.77	**Cement Silo #5**	
	Capacity: 750 barrel	
	Manufacture Date: 1987	Manufacturer: Con-E-Co
	Serial Number: C-3173	
II.A.78	**Flyash Silo #5**	
	Capacity: 750 barrel	
	Manufacture Date: 1987	Manufacturer: Con-E-Co
	Serial Number: C-3173	
II.A.79	**Natural Gas Water Heater #5**	
	Capacity: 5.5 MMBTU/hr	
	Manufacture Date: 2004	Manufacturer: Kimco
	Model Number: L	Serial Number: 26333
II.A.80	**Dust Collectors #5**	
	Capacity: 6500 CFM	
	Manufacture Date: 2006	Manufacturer: R&S Industries
	Model Number: RAB-1400	Serial Number: 6075A
II.A.81	**Baghouse (2 for silos) #5**	
	Manufacture Date: 1987	Manufacturer: Con-E-Co
	Model Number: 30-250	
II.A.82	**Concrete Batch Plant #6**	
	Capacity: 200 yd3/hr	
	Manufacture Date: 2006	Manufacturer: R&S Industries
	Model Number: Apache	Serial Number: 7454
II.A.83	**Cement Silo #6**	
	Capacity: 340,000 lbs	
	Manufacture Date: 2006	Manufacturer: R&S Industries
	Model Number: 943 Arrowhead	Serial Number: 7454
II.A.84	**Flyash Silo #6**	
	Capacity: 118,000/236,000 lbs - Divided Silo	
	Manufacture Date: 2006	Manufacturer: R&S Industries
	Model Number: 943 Arrowhead	Serial Number: 7454
II.A.85	**Natural Gas Water Heater #6**	
	Capacity: 5.5 MMBTU/hr	
	Manufacture Date: 2006	Manufacturer: Kemco
	Model Number: L	Serial Number: Sunroc
II.A.86	**Dust Collectors #6**	
	Capacity: 5000 CFM	
	Manufacture Date: 2006	Manufacturer: R&S Industries
	Model Number: RAB-1000	
II.A.87	**Baghouse (3 for Silos) #6**	
	Capacity: 2500 CFM	
	Manufacture Date: 2006	Manufacturer: R&S Industries
	Model Number: PJC-450	Serial Number: 7454

II.A.88	**Diesel Generator** Capacity: 350 kva	
II.A.89	**Generator** Capacity: 310 kw/387 kva Manufacture Date: 1991 Model Number: Stanford Newage	 Manufacturer: Cummins Serial Number: 30316511
II.A.90	**Generator** Capacity: 144 kw/25 kva Manufacture Date: 1992 Model Number: DCA 25551	 Manufacturer: Multiquip Serial Number: 3636966
II.A.91	**Generator** Capacity: 750 kw/906 kva Manufacture Date: 1999 Model Number: 3412	 Manufacturer: CAT Serial Number: 2WJ02291
II.A.92	**Generator** Capacity: 545 kw/681 kva Manufacture Date: 2007 Model Number: LC7	 Manufacturer: CAT Serial Number: ECT00260 G7A00750
II.A.93	**Generator** Capacity: 545 kw/681 kva Manufacture Date: 2007 Model Number: LC7	 Manufacturer: CAT Serial Number: ECT00261 G7A00751
II.A.94	**Generator** Capacity: 400 kw/500 kva Manufacturer: CAT Model Number: HP 3406, 438-587	
II.A.95	**Generator** Capacity: 725 kw/906 kva Manufacture Date: 2005/2006 Model Number: 3412	 Manufacturer: CAT Serial Number: TFT00517
II.A.96	**Generator** Capacity: 310 kw/387 kva Manufacturer: CAT Model Number: 3408	 Serial Number: 67U1061
II.A.97	**Generator** Capacity: 144 kw/25kva Manufacturer: Whisperwalt Model Number: DAC-25551U	 Serial Number: 71011776
II.A.98	**Generator** Capacity: 60 kw/75 kva Manufacturer: Coleman Model Number: CJ4T	 Serial Number: 2931314
II.A.99	**Fuel Oil/Diesel Generator** Manufacture Date: 2007 Model Number: NATM # 974136	 Manufacturer: MQ Equipment - Whiteman Serial Number: 4GNFU12247B021943
II.A.100	**Back-up Diesel Generator** Capacity: 375 kva Manufacture Date: ~1980	 Manufacturer: CAT

II.A.101	**Portable Light Plant** Capacity: 11 cemr kw8 Manufacture Date: 1990 Manufacturer: Maxi Lite Serial Number: 900630
II.A.102	**Portable Light Plant** Capacity: 11 cemr kw8 Manufacture Date: 1990 Manufacturer: Maxi Lite Serial Number: 900644
II.A.103	**Portable Light Plant** Capacity: kw8 Manufacture Date: 2006 Manufacturer: Ingersoll Rand Serial Number: 368736UCQ789
II.A.104	**Mobile Lite** Capacity: Lt 0035 kw8 Manufacture Date: 1998 Manufacturer: Dura-Tuff Serial Number: 303
II.A.105	**Mobile Lite** Capacity: kw8 Manufacture Date: 2001 Manufacturer: Mobile Light Serial Number: 359
II.A.106	**Light Source Light Tower** Capacity: kw8 Manufacturer: Ingersoll
II.A.107	**Front End Loader** Manufacturer: CAT Model Number: 966
II.A.108	**Crawler Dozer** Manufacturer: CAT Model Number: D9H

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO. **(New or Modified conditions are indicated as "New" in the Outline Label):**

II.B REQUIREMENTS AND LIMITATIONS

II.B.1 NEW	**Notice of Temporary Relocation:**
II.B.1.a	The owner/operator shall operate and conduct its operations of the aggregate processing plants and concrete batch plants in accordance with the terms and conditions of this AO and the terms and conditions of the Temporary Relocation Approval Letter issued by the Executive Secretary for each relocation. This Approval Letter will be based on the DAQ analysis of the information submitted to the Executive Secretary in the Notice of Temporary Relocation Form. [R307-401]

II.B.1.b	Equipment listed in this AO can be replaced by other equipment of equal or lesser production capacity having the same function as the existing equipment with written notification to the Director, and adherence to the DAQ "Replacement in Kind" provision. [R307-401-11]
II.B.1.c	The owner/operator shall comply with all applicable provisions of 40 CFR 60, NSPS Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), 40 CFR 60.670 to 60.676 for all crushers, screens, and conveyor transfer points on site. [40 CFR 60 Subpart OOO]
II.B.2 NEW	**Temporary Relocation Approval Letter:**
II.B.2.a NEW	The owner/operator shall operate and conduct its operations of the aggregate processing plants, the concrete batch plants, the hot mix asphalt plants, and the diesel-fired engines in accordance with the terms and conditions of this AO and the terms and conditions of the Temporary Relocation Approval Letter issued by the Director for each relocation. In the case of any discrepancy between the conditions of this AO and the Temporary Relocation Approval Letter, the owner/operator shall comply with the site-specific requirements in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.2.a.1 NEW	Portable sources that plan to relocate to a stationary source listed in the Utah PM_{10} or $PM_{2.5}$ State Implementation Plan (SIP) shall comply with the standards and adopt the control strategies listed in the PM_{10} or $PM_{2.5}$ SIP for the stationary source in addition to the requirements of this AO and the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3 NEW	**Operations at Temporary Locations:**
II.B.3.a NEW	The owner/operator may temporarily relocate this portable source to any temporary location. The temporary relocation shall not exceed 180 working days and shall not exceed 365 consecutive days. If a temporary relocation is expected to exceed 180 working days, the owner/operator shall submit an NOI in accordance with R307-401 for a permanent source and obtain a valid AO prior to the end of the 180 working days. [R307-401-17]
II.B.3.a.1 NEW	The owner/operator shall keep and maintain the following records on site: A. The initial relocation date at each location B. Working days at each location C. Consecutive days at each location. [R307-401-17]
II.B.3.a.2 NEW	The owner/operator shall submit records of the working days at each site and the consecutive days at each site to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.b NEW	The owner/operator shall not exceed the daily production limit specified in the Temporary Relocation Approval Letter. [R307-401-8]
II.B.3.b.1 NEW	The daily production shall be determined by belt scale records, scale house records, vendor receipts or by any other method as acceptable to the Director or the Director's representative. [R307-401-8]

II.B.3.b.2 NEW	The owner/operator shall keep and maintain the following production records on site for all periods that the portable source is in operation at any location: A. The date production occurs at each location B. The production for that date at each location C. The total production at each location. [R307-401-8]
II.B.3.b.3 NEW	The owner/operator shall submit records of the actual production rate to the Director at the end of each 180 calendar days. [R307-401-17]
II.B.3.c NEW	The owner/operator shall only operate between 6:00 AM and 10:00 PM each day. The hours of operation may be altered upon approval of the Director; however, any request for a change in these hours shall include modeling showing that all NAAQS are met. [R307-401-8]
II.B.3.c.1 NEW	The owner/operator shall keep and maintain the following records of operation for all periods that the portable source is in operation at any location: A. The time operations began each day at each location B. The time operations ended each day at each location. [R307-401-8]
II.B.3.d NEW	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any installation of this AO to exceed 20 percent opacity. [R307-201-3, R307-305-3]
II.B.3.d.1 NEW	Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3, R307-305-3]
II.B.4 NEW	**Emission Estimates and Emissions Inventory:**
II.B.4.a NEW	The owner/operator shall estimate the actual emissions that resulted from operating at each location. These emissions shall be summarized for each piece of equipment, each source of fugitive dust, and each source of fugitive emissions at the completion of operation at each location. The Director may require a summary of emissions for each location at any time. [R307-150-1, R307-401-8]
II.B.4.a.1 NEW	Records of actual emissions shall be kept for each location. Records of actual emissions shall include the following: A. The emission factors used to estimate emissions for each location B. All variables (production, hours of operation, haul road lengths, etc.) used in the emission estimates for each location C. The actual emissions from each location, which includes emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions. [R307-150-1, R307-401-8]

II.B.5 NEW	**Haul Roads and Fugitive Dust Sources:**
II.B.5.a NEW	The owner/operator shall comply with a FDCP consistent with R307-309-6 for each location. The FDCP for a location shall address the control of all fugitive dust sources at that location. [R307-401-8]
II.B.5.b NEW	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary for each temporary location. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.b.1 NEW	Visible emission determinations for fugitive dust from haul roads and operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than one-half vehicle length behind the vehicle and not less than one-half the height of the vehicle. [R307-205-4, R307-309-5, R307-401-8]
II.B.5.c NEW	The owner/operator shall use water application or other control options contained in R307-309 to minimize emissions from fugitive dust and fugitive emissions sources, including haul roads, storage piles, and disturbed areas. Controls shall be applied to ensure the opacity limits in this AO are not exceeded. [R307-309, R307-401-8]
II.B.6 NEW	**Aggregate Processing Plants:**
II.B.6.a	The owner/operator shall not allow visible emissions from any crusher on site to exceed 15 percent opacity. [40 CFR 60 Subpart OOO]
II.B.6.b	The owner/operator shall install water sprays on all crushers on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. [R307-401]
II.B.7 NEW	**Crushers, Screens, and Conveyors subject to NSPS Subpart OOO:**
II.B.7.a	The owner/operator shall not allow visible emissions from any conveyor transfer point on site to exceed 10 percent opacity. [40 CFR 60 Subpart OOO]
II.B.7.b	The owner/operator shall not allow visible emissions from any conveyor drop point on site to exceed 20 percent opacity. [R307-205] &. [R307-309]
II.B.7.c	The owner/operator shall install water sprays on all unenclosed conveyor transfer points on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. [R307-401]
II.B.8 NEW	**Concrete Batch Plants:**
II.B.8.a NEW	The owner/operator shall not allow visible emissions from any concrete batch plant and the associated equipment subject to this AO to exceed 7 percent opacity. [R307-401-8]

II.B.8.b NEW	Each storage silo associated with a concrete batch plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9 NEW	**Hot Mix Asphalt Plants:**
II.B.9.a NEW	The owner/operator shall use natural gas, propane, fuel oil, on-specification used oil as defined in R315-15, or any combination thereof as fuel in the hot mix asphalt plants subject to this AO. [R307-401-8]
II.B.9.b NEW	The sulfur content of any fuel oil burned in the hot mix asphalt plants subject to this AO shall not exceed 15 ppm by weight. [R307-401-8]
II.B.9.b.1 NEW	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of fuel oil shall be either by the owner/operator's own testing or by test reports from the fuel oil marketer. [R307-401-8]
II.B.9.b.2 NEW	The owner/operator shall keep and maintain records of the test certification of sulfur content in fuel oil. Records of the test certifications shall be kept for all periods when the plant is in operation. [R307-203-1, R307-401-8]
II.B.9.c NEW	The owner/operator shall use a baghouse to control particulate emissions from each hot mix asphalt plant dryer subject to this AO. [R307-401-8]
II.B.9.c.1 NEW	The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. The pressure gauge shall be calibrated according to the manufacturer's instructions at least once every 12 months. [R307-401-8]
II.B.9.c.2 NEW	The owner/operator shall record the reading of the pressure gauge at least once per operating day. [R307-401-8]
II.B.9.d NEW	Each storage silo associated with a hot mix asphalt plant subject to this AO shall be equipped with a fabric filter, a baghouse, a bin vent, or a dust collector to control particulate emissions generated during filling of the silos. [R307-401-8]
II.B.9.e NEW	The owner/operator shall not allow visible emissions from any baghouse, bin vent, dust collector or fabric filter associated with a hot mix asphalt plant subject to this AO to exceed 10 percent opacity. [R307-401-8]
II.B.9.f NEW	Concentrations in the exhaust stream from each asphalt drum mixer subject to this AO shall not exceed 0.030 grains/dscf of TSP, 0.024 grains/dscf of PM_{10}, and 0.024 grains/dscf of $PM_{2.5}$. [R307-401-8]

II.B.9.f.1 NEW	Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below: Emission Point: Drum Mixer exhaust passing through the baghouse Pollutant — Testing Status — Test Frequency TSP — * — # PM_{10} — ** — @ $PM_{2.5}$ — ** — @ * Initial compliance testing is required for each plant. The initial test date shall be performed as soon as possible and in no case later than 180 days after the startup of a new or modified emission source. A compliance test is required on a modified emission point that has an emission rate limit. ** Initial test is not required unless specified by the Director. # Initial test is required. Subsequent tests shall only be performed for PM_{10}. @ Test every third calendar year, or sooner if required by the Director, not exceeding 42 months between tests. Tests may be required if the source is suspected to be in violation with other conditions of this AO. [R307-165, R307-401-8]

II.B.9.f.2 NEW	A. Notification: At least 30 days prior to conducting any emission testing required under any part of UAC, R307, the owner or operator shall notify the Director of the date, time and place of such testing and shall submit a source test protocol to the Director. The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. If directed by the Director, the owner/operator shall attend a pretest conference. The pretest conference shall include representation from the owner/operator, the tester, and the Director. B. Reporting: Upon completion of the DAQ accepted testing methods, the owner/operator shall submit a copy of the results from each performance test as conducted to the Director within 60 days after the test has been completed. C. Sample Location: The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Director. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. D. Volumetric Flow Rate: 40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Director. E. TSP 40 CFR 60, Appendix A, Method 5 or other EPA-approved testing method, as acceptable to the Director F. $PM_{10}/PM_{2.5}$ For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a, or other EPA-approved testing method, as acceptable by the Director. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. All particulate captured shall be considered PM_{10}. The portion of the filterable particulate emissions considered $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensable particulate emissions shall also be tested using 40 CFR 51, Appendix M Method 202, or other EPA-approved testing method, acceptable to the Director. The portion of the filterable particulate emissions considered PM_{10} and $PM_{2.5}$ shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Director. The filterable particulate emissions shall be used for compliance demonstration. The condensable particulate emissions shall not be used for compliance demonstration, but shall be used for inventory purposes. G. Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary

	conversion factors determined by the Director, to give the results in the specified units of the emission limitation. H. Test Conditions All tests shall be conducted in accordance with R307-165-4. [R307-165, R307-401-8]
II.B.10 NEW	**Stationary Diesel-Fired Engines:**
II.B.10.a	The owner/operator shall not allow visible emissions from any stationary diesel engine on site to exceed 20 percent opacity. [R307-201] &. [R307-305]
II.B.10.b	The owner/operator shall use #1, #2 or a combination of #1 and #2 diesel fuel in the diesel engines listed in this AO. [R307-401]
II.B.10.c	The sulfur content of any fuel oil or diesel burned in the generators listed in this AO shall not exceed 15 ppm. [R307-401]
II.B.10.c.1	The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of diesel fuel shall be either by the owner/operator's own testing or by test reports from the diesel fuel marketer. [R307-203]
II.B.11	**All Screens shall be subject to the following:**
II.B.11.a	The owner/operator shall not allow visible emissions from any screen on site to exceed 10 percent opacity. [40 CFR 60 Subpart OOO]
II.B.11.b	The owner/operator shall install water sprays on all screens on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. [R307-401]

PERMIT HISTORY

When issued, the approval order shall supersede (if a modification) or will be based on the following documents:

Supersedes	DAQE-AN12570005-09 dated August 12, 2009
Is Derived From	NOI dated June 30, 2020

REVIEWER COMMENTS

1. **Comment regarding NSPS, MACT, & Title V Applicability:**

NSPS

NSPS Subpart I applies to owners and operators of a hot mix asphalt facility that commenced construction after June 11, 1973. The hot mix asphalt plants at this portable source were manufactured after June 11, 1973; therefore, NSPS Subpart I applies to this AO for portable equipment.

NSPS Subpart OOO applies to each crusher, screening operation, and belt conveyor in fixed or portable nonmetallic mineral processing plants manufactured after August 31 1983. The portable equipment in this AO is used to process nonmetallic minerals according to 40 CFR 60.671; therefore, NSPS Subpart OOO applies to this AO for portable equipment.

NSPS Subpart IIII applies to owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006. The stationary engines at this portable source were manufactured after April 1, 2006; therefore, NSPS Subpart IIII applies to this AO for stationary diesel-fired engines.

MACT

40 CFR 63 MACT Subpart ZZZZ applies to owners and operators of stationary RICE at a major or area source of HAP emissions. This source will have stationary RICE at an area source of HAP emissions; therefore, MACT Subpart ZZZZ will apply to the stationary engines at this source.

Title V

Title V of the 1990 Clean Air Act (Title V) applies to the following:

1. Any major source
2. Any source subject to a standard, limitation, or other requirement under Section 111 of the Act, Standards of Performance for New Stationary Sources;
3. Any source subject to a standard or other requirement under Section 112 of the Act, Hazardous Air Pollutants.
4. Any Title IV affected source.

The portable equipment in this AO is not part of a major source or a Title IV source, and is not subject to 40 CFR 61 requirements, but the facility is subject to 40 CFR 60 NSPS Subpart I and OOO requirements. Therefore, Title V applies to the source where this portable equipment operates. [Last updated July 21, 2020]

2. **Comment regarding Recordkeeping:**
This AO contains numerous recordkeeping requirements to demonstrate compliance. To assist the owner/operator, this Review Comment lists all the records that are required by this AO.

1. The initial relocation date at each location
2. Working days at each location
3. Consecutive days at each location
4. The date production occurs at each location
5. The production for each date at each location
6. The total production at each location
7. The time operations began each day at each location
8. The time operations ended each day at each location
9. The emission factors used to estimate emissions for each location
10. All variables used in the emission estimates for each location
11. The emissions from each emission unit, each source of fugitive dust, and each source of fugitive emissions at each location
12. Date the water spray inspections were made
13. Any corrective actions taken for the water sprays
14. Control mechanism used if sprays are not operating.
15. The initial performance test for each affected facility as defined in NSPS Subpart OOO
16. The certification of sulfur content in fuel oil used in the asphalt plants
17. The pressure gauge reading for each day of operation
18. The applicable records contained in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ for each stationary engine subject to this AO.
19. The certification of sulfur content in diesel fuel used in the stationary engines

[Last updated July 21, 2020]

3. **Comment regarding Reporting:**
R307-401-17 requires that "records of the working days at each site, consecutive days at each site, and actual production rate shall be submitted to the director at the end of each 180 calendar days." The owner/operator must submit this information to be in compliance with R307-401-17. [Last updated July 21, 2020]

4. **Comment regarding Hot Mix Asphalt Plant Condensable PM Emissions:**
Condensable PM emissions shall not be used for compliance demonstration during stack testing; however, condensable PM emissions shall be used for inventory purposes. There are several reasons condensable PM emissions will not be used for compliance demonstration.

A. NSPS Subpart I does not limit condensable PM emissions. DAQ is unaware of any other regulation that limits PM emissions, including condensable PM emissions, from hot mix asphalt plants. Since federal regulations only limit filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

B. The control device used to control PM emissions from a hot mix asphalt plant is a baghouse. A baghouse is unable to control condensable PM emissions from a hot mix asphalt plant. One of the purposes of a stack test is to ensure the control device is operating correctly. Since the baghouse can only control filterable PM emissions, only filterable PM emissions will be used for compliance demonstration.

C. The majority of uncontrolled emissions from a hot mix asphalt plant is filterable emissions. Based on AP-42, an uncontrolled 400 tph hot mix asphalt plant will emit 11,200 pounds of filterable

PM per hour and 7.8 pounds of condensable PM per hour. The amount of uncontrolled filterable PM emissions is over 1,400 times higher than the condensable PM emissions. Since the uncontrolled filterable PM emissions are so high, only filterable PM emissions will be tested for compliance demonstration.

D. Condensable PM emissions can vary depending on the fuel being combusted, the burner, the material being fed into the hot mix asphalt plant, and other factors. It is inappropriate to put a single limit in a permit that could apply to different locations, different plants, different materials, and different fuels. Due to the high variability of these factors, condensable emissions will not be used for compliance demonstration for this portable source.

Due to the reasons above, condensable PM emissions will not be tested for compliance demonstration; however, condensable PM emissions will be used for inventory purposes. The Director may require an emissions inventory at any time according to R307-150-1(4). Because this source is a Title V area source, this source is required to pay Title V fees according to R307-415-9. Both filterable and condensable PM emissions are considered chargeable pollutants; therefore, the owner/operator must test for condensable PM emissions for inventory purposes.
[Last updated July 21, 2020]

5. **Comment regarding Definition of Stationary Engines:**
definition of stationary internal combustion engine in NSPS Subpart IIII (40 CFR 60.4219) is as follows:

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

The definition of nonroad engine in 40 CFR 1068.30 is as follows:

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.
[Last updated July 21, 2020]

6. **Comment regarding Definition of Stationary Engines part 2:**
40 CFR 1068.31 has the following requirements:

(b) A stationary engine becomes a new nonroad engine if-

(1) It is used in an application that meets the criteria specified in paragraphs (1)(i) or (ii) in the definition of "nonroad engine" in §1068.30.

(2) It meets the criteria specified in paragraph (1)(iii) of the definition of "nonroad engine" in §1068.30 and is moved so that it fails to meet (or no longer meets) the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30.

(c) A stationary engine does not become a new nonroad engine if it is moved but continues to meet the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30 in its new location. For example, a transportable engine that is used in a single specific location for 18 months and is later moved to a second specific location where it will remain for at least 12 months is considered to be a stationary engine in both locations. Note that for stationary engines that are neither portable nor transportable in actual use, the residence-time restrictions in the definition of "nonroad engine" generally do not apply.

(e) A nonroad engine ceases to be a nonroad engine and becomes a new stationary engine if-

(1) At any time, it meets the criteria specified in paragraph (2)(iii) in the definition of "nonroad engine" in §1068.30. For example, a portable generator engine ceases to be a nonroad engine if it is used or will be used in a single specific location for 12 months or longer. If we determine that an engine will be or has been used in a single specific location for 12 months or longer, it ceased to be a nonroad engine when it was placed in that location.

(2) It is otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411).
[Last updated July 21, 2020]

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds