



State of Utah

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Environmental Quality

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DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

DAQE-IN154630005-21

July 8, 2021

Sam Smith  
Utah Sand and Gravel LLC  
2596 Fairway Circle  
Bountiful, UT 84010  
Sam@utahsand.com

Dear Mr. Smith:

Re: Intent to Approve:  
Modification to DAQE-AN154630004-17 to Increase Blasting Operations  
Project Number: N154630005

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **Mr. Enqiang He**, as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Enqiang He, can be reached at (801) 556-1580 or ehe@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager  
New Source Review Section

ADH:EH:sb

cc: Salt Lake Valley Health Department

**STATE OF UTAH**  
**Department of Environmental Quality**  
**Division of Air Quality**

**INTENT TO APPROVE**  
**DAQE-IN154630005-21**  
**Modification to DAQE-AN154630004-17 to Increase Blasting**  
**Operations**

**Prepared By**  
**Mr. Enqiang He, Engineer**  
**(801) 556-1580**  
**ehe@utah.gov**

**Issued to**  
**Utah Sand and Gravel LLC - Beck Street Aggregate Pit**

**Issued On**  
**July 8, 2021**



**New Source Review Section Manager**  
**Alan D. Humpherys**

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## GENERAL INFORMATION

### CONTACT/LOCATION INFORMATION

**Owner Name**

Utah Sand and Gravel LLC

**Source Name**Utah Sand and Gravel LLC - Beck Street  
Aggregate Pit**Mailing Address**2596 Fairway Circle  
Bountiful, UT 84010**Physical Address**1264 North Beck Street  
Salt Lake City, UT 84116**Source Contact**Name Sam Smith  
Phone (801) 301-8699  
Email Sam@utahsand.com**UTM Coordinates**423,534 m Easting  
4,516,720 m Northing  
Datum NAD83  
UTM Zone 12**SIC code** 1442 (Construction Sand & Gravel)

### SOURCE INFORMATION

**General Description**

Utah Sand and Gravel LLC conducts concrete and asphalt recycling, as well as mining and processing of native materials into construction aggregates in Salt Lake City. Products primarily include topsoil, road base, gravel, and engineered fill material. Production requires drilling and blasting for feed materials. Once feed materials (either native or recycled) are appropriately sized, they are further reduced using mechanical crushing equipment. The crushed materials are then screened and sorted into the desired gradations for sale. The source produces up to 450,000 tons of aggregate material per year.

**NSR Classification**

Minor Modification at Minor Source

**Source Classification**

Located in Salt Lake City CO Maintenance Area, Northern Wasatch Front O3 NAA, Salt Lake City UT  
PM<sub>2.5</sub> NAA, Salt Lake County SO<sub>2</sub> NAA  
Salt Lake County  
Airs Source Size: B

**Applicable Federal Standards**

NSPS (Part 60), A: General Provisions

NSPS (Part 60), OOO: Standards of Performance for Nonmetallic Mineral Processing Plants

Project Description

The source has proposed to increase the number of blasting from 4 to 8 and the ANFO (ammonium nitrate and fuel oil) from 24 to 48 tons a year.

**SUMMARY OF EMISSIONS**

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

<b>Criteria Pollutant</b>	<b>Change (TPY)</b>	<b>Total (TPY)</b>
Carbon Monoxide	0.80	1.60
Nitrogen Oxides	0.20	0.40
Particulate Matter - PM <sub>10</sub>	0.13	21.91
Particulate Matter - PM <sub>2.5</sub>	0.07	3.74
Sulfur Oxides	0.02	0.04

**PUBLIC NOTICE STATEMENT**

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Salt Lake Tribune and Deseret News on July 11, 2021. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

**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.

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.

### **II.A      THE APPROVED EQUIPMENT**

II.A.1	<b>Utah Sand and Gravel LLC</b> Beck Street Aggregate Pit
II.A.2	<b>Jaw Crusher</b> Capacity: 400 TPH Manufacture Date: 1993 NSPS Applicable: Subpart OOO
II.A.3	<b>Cone Crusher</b> Capacity: 300 TPH Manufacture Date: 2006 NSPS Applicable: Subpart OOO
II.A.4	<b>6'x20' Triple-Deck Screen</b> Size: 6'x20' NSPS Applicable: Subpart OOO Manufacture Date: 1986
II.A.5	<b>6'x20' Triple-Deck Screen</b> Size: 6'x20' NSPS Applicable: Subpart OOO Manufacture Date: 1999

II.A.6	<b>42"x100' Stacker</b> Manufacture Date: 2009 NSPS Applicable: Subpart OOO
II.A.7	<b>Various Conveyors</b> NSPS Applicable: Subpart OOO
II.A.8	<b>Drilling and Blasting Operations</b>

## 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.

### II.B REQUIREMENTS AND LIMITATIONS

II.B.1	<b>Utah Sand and Gravel shall be subject to the following:</b>
II.B.1.a	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any source on site to exceed 20% opacity. [R307-305-3]
II.B.1.a.1	Unless otherwise specified in this AO, opacity observations of emission from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-305-3]
II.B.1.b	The owner/operator shall not produce more than 450,000 tons of processed aggregate material per rolling 12-month period. [R307-401-8]
II.B.1.b.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by scale house records or vendor records. The records of production shall be kept on a daily basis. [R307-401-8]
II.B.2	<b>Haul Roads and All Fugitive Dust Sources associated with the equipment listed in this AO shall be subject to the following:</b>
II.B.2.a	The owner/operator shall comply with the most recent fugitive dust control plan associated with the site and acceptable to the director for control of all dust sources associated with the aggregate processing plant. [R307-309-6]
II.B.2.b	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20% opacity onsite and 10% at the property boundary. [R307-309-5]
II.B.2.b.1	Visible emission determinations for fugitive dust emissions from haul-road traffic and mobile equipment in 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 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-309-5]
II.B.2.c	Road base shall be placed on all unpaved roads. Additionally, all unpaved roads and other operational areas that are used by mobile equipment shall be water sprayed to control fugitive dust. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition unless the temperature is below freezing. [R307-401-8]

<p>II.B.2.c.1</p>	<p>Records of water treatment shall be kept for all periods the plant is in operation. The records shall include the following items:</p> <ul style="list-style-type: none"> <li>A. Date Road base is placed on unpaved roads</li> <li>B. Date and time treatments were made</li> <li>C. Number of Treatments made and quantity of water applied</li> <li>D. Rainfall amount received, if any</li> <li>E. Records of temperature, if the temperature is below freezing.</li> </ul> <p>[R307-401-8]</p>
<p>II.B.2.d</p>	<p>The owner/operator shall apply water from conveyor sprays and water trucks to all storage piles on site to control fugitive emissions. Sprays shall operate as required to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop spraying the storage piles with water if the temperature is below freezing. [R307-401]</p>
<p>II.B.2.d.1</p>	<p>Records of water treatment shall be kept for all periods the plant is in operation. The records shall include the following items:</p> <ul style="list-style-type: none"> <li>A. Date and time treatments were made</li> <li>B. Number of Treatments made and quantity of water applied</li> <li>C. Rainfall amount received, if any</li> <li>D. Records of temperature, if the temperature is below freezing.</li> </ul> <p>[R307-401-8]</p>
<p>II.B.3</p>	<p><b>All Crushers, Screens, and Conveyor Transfer Points on Site Shall Be Subject to the Following:</b></p>
<p>II.B.3.a</p>	<p>Visible emissions from all crushers, screens, and conveyor transfer points shall be subject to the following opacity limits:</p> <ul style="list-style-type: none"> <li>A. 12% opacity for the crushers.</li> <li>B. 7% opacity for the screens.</li> <li>C. 7% opacity for the conveyor transfer points.</li> </ul> <p>[ 40 CFR 60 Subpart OOO, R307-312]</p>
<p>II.B.3.b</p>	<p>The owner/operator shall install water sprays on all crushers, screen, and conveyor transfer points on site to control fugitive emissions. Sprays shall operate as required to maintain the opacity limits listed in this AO when the temperature is above freezing. [R307-401-8]</p>
<p>II.B.4</p>	<p><b>All NSPS Subpart OOO Equipment on Site Shall be Subject to the Following:</b></p>
<p>II.B.4.a</p>	<p>The owner/operator shall conduct an initial performance test for all NSPS Subpart OOO crushers, screens, and conveyor transfer points. Performance tests shall meet the limitations specified in Table 3 to Subpart OOO. Records of initial performance tests shall be kept and maintained on site for the life of the equipment. [ 40 CFR 60 Subpart OOO]</p>

II.B.4.b	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.4.c	The owner/operator shall submit written reports to the Director of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672. [ 40 CFR 60 Subpart OOO]
II.B.5	<b>All Drilling and Blasting Operations on site shall be subject to the following:</b>
II.B.5.a	The owner/operator shall install and use a shroud on all aggregate drills when drilling to control fugitive emissions. [R307-401-8]
II.B.5.b	The owner/operator shall not conduct more than 8 blasts per rolling 12-month period. [R307-401-8]
II.B.5.b.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Number of blasts shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401-8]
II.B.5.c	The owner/operator shall not use more than 48 tons of ANFO explosives per rolling 12-month period. [R307-401-8]
II.B.5.c.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. The amount of explosives used shall be determined by purchasing records or maintaining an operations log. [R307-401-8]

## PERMIT HISTORY

This Approval Order shall supersede (if a modification) or will be based on the following documents:

Supersedes  
 Incorporates  
 Incorporates

AO DAQE-AN154630004-17 dated October 4, 2017  
 NOI dated March 22, 2021  
 Additional information dated May 13, 2021

## 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 Environmental Protection Agency 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 <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations 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 Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
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 <sub>x</sub>	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM <sub>10</sub>	Particulate matter less than 10 microns in size
PM <sub>2.5</sub>	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 <sub>2</sub>	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