



State of Utah

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Department of  
Environmental Quality

Tim Davis  
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DIVISION OF AIR QUALITY  
Bryce C. Bird  
*Director*

DAQE-AN129000009-25

July 16, 2025

Cash Christensen  
Bryce Christensen Excavating Inc.  
3270 South Quarry Ridge Drive  
St. George, UT 84790  
cash@brycechristensenexcavating.com

Dear Mr. Christensen:

Re: Approval Order: Minor Modification to Approval Order DAQE-AN129000008-25 to Change  
Paved and Unpaved Haul Road Lengths  
Project Number: N129000009

The attached Approval Order (AO) is issued pursuant to the Notice of Intent (NOI) received on February 5, 2025. Bryce Christensen Excavating Inc. must comply with the requirements of this AO, all applicable state requirements (R307), and Federal Standards.

The project engineer for this action is **Lucia Mason**, who can be contacted at (385) 707-7669 or lbmason@utah.gov. Future correspondence on this AO should include the engineer's name as well as the DAQE number shown on the upper right-hand corner of this letter. No public comments were received on this action.

Sincerely,

Bryce C. Bird  
Director

BCB:LM:jg

cc: Southwest Utah Public Health Department

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

**APPROVAL ORDER**  
**DAQE-AN129000009-25**  
**Minor Modification to Approval Order DAQE-AN129000008-25 to**  
**Change Paved and Unpaved Haul Road Lengths**

**Prepared By**  
**Lucia Mason, Engineer**  
**(385) 707-7669**  
**lbmason@utah.gov**

**Issued to**  
**Bryce Christensen Excavating Inc. - St. George Aggregate Production Plant**

**Issued On**  
**July 16, 2025**

**Issued By**

A handwritten signature in dark ink, appearing to read 'Bryce C. Bird', with a stylized flourish at the end.

**Bryce C. Bird**  
**Director**  
**Division of Air Quality**

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## **GENERAL INFORMATION**

### **CONTACT/LOCATION INFORMATION**

**Owner Name**

Bryce Christensen Excavating Inc.

**Source Name**

Bryce Christensen Excavating Inc. –  
St. George Aggregate Production Plant

**Mailing Address**

3270 South Quarry Ridge Drive  
St. George, UT 84790

**Physical Address**

3270 South Quarry Ridge Drive  
St. George, UT 84790

**Source Contact**

Name: Cash Christensen  
Phone: (435) 628-4198  
Email: cash@brycechristensenexcavating.com

**UTM Coordinates**

273,916 m Easting  
4,103,531 m Northing  
Datum NAD83  
UTM Zone 12

**SIC code**        3299 (Nonmetallic Mineral Products, NEC)

### **SOURCE INFORMATION**

**General Description**

Bryce Christensen Excavating, Inc. (BCE), produces construction aggregate in St. George, Washington County. Material is excavated using bulldozers and front-end loaders before being fed through a series of aggregate processing equipment, including three (3) crushers and one (1) screen. Front-end loaders transfer material from storage piles to trucks before the aggregate is delivered to customers. BCE produces up to 400,000 tons of processed aggregate material per year.

**NSR Classification**

Minor Modification at Minor Source

**Source Classification**

Located in Attainment Area  
Washington 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  
Title V (Part 70) Area Source

Project Description

BCE has requested a modification to AO DAQE-AN129000008-25, issued January 20, 2025, to update haul road lengths. Under Condition II.B.2.b of DAQE-AN129000008-25, BCE is permitted to have up to 2,550 feet of unpaved haul roads and is required to have no less than 1,300 feet of paved haul roads on-site. BCE has requested the following changes:

- Decrease the total paved haul road length by 300 ft (1,300 ft to 1,000 ft).
- Increase the total unpaved haul road length by 1,400 ft (2,550 ft to 3,950 ft).

The language of several conditions has been updated as well to add clarity and match current permit formatting.

**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>
CO <sub>2</sub> Equivalent	0	0.00
Carbon Monoxide	0	0.00
Nitrogen Oxides	0	0.00
Particulate Matter - PM <sub>10</sub>	1.36	15.73
Particulate Matter - PM <sub>2.5</sub>	0.14	6.07
Sulfur Dioxide	0	0.00
Volatile Organic Compounds	0	0.00

**SECTION I: GENERAL PROVISIONS**

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

### II.A THE APPROVED EQUIPMENT

II.A.1	<b>St. George Aggregate Production Plant</b>
II.A.2	<b>Impact Crusher</b> Capacity: 150 tons per hour (tph) NSPS Applicability: 40 CFR 60 Subpart OOO
II.A.3	<b>Jaw Crusher</b> Capacity: 250 tph NSPS Applicability: 40 CFR 60 Subpart OOO
II.A.4	<b>VSI Crusher</b> Capacity: 150 tph NSPS Applicability: 40 CFR 60 Subpart OOO
II.A.5	<b>Sizing Screen</b> NSPS Applicability: 40 CFR 60 Subpart OOO
II.A.6	<b>Various Conveyors, Stackers, and Feed Hoppers</b> NSPS Applicability: 40 CFR 60 Subpart OOO

## SECTION II: SPECIAL PROVISIONS

### II.B REQUIREMENTS AND LIMITATIONS

II.B.1	<b>Site-wide Requirements</b>
II.B.1.a	The owner/operator shall not produce more than 400,000 tons of aggregate per rolling 12-month period. [R307-401-8]

II.B.1.a.1	<p>The owner/operator shall:</p> <ul style="list-style-type: none"> <li>A. Determine aggregate production using customer billing records or weight recordings</li> <li>B. Calculate a new 12-month total by the 20th day of each month using data from the previous 12 months</li> <li>C. Keep records of production for all periods when the plant is in operation</li> <li>D. Keep records of aggregate production on a daily basis.</li> </ul> <p>[R307-401-8]</p>
II.B.1.b	<p>During the months of April through September, the owner/operator shall not operate before 4:00 AM or after 8:00 PM each day.</p> <p>During the months of October through March, the owner/operator shall not operate before 7:00 AM or after 4:00 PM each day.</p> <p>[R307-401-8, R307-410-4]</p>
II.B.1.b.1	<p>The owner/operator shall keep and maintain the following records of operation for all periods that the facility is in operation:</p> <ul style="list-style-type: none"> <li>A. The time operations began each day</li> <li>B. The time operations ended each day</li> </ul> <p>[R307-401-8, R307-410-5]</p>
II.B.1.c	<p>Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any stationary point or fugitive emissions source on site to exceed 20% opacity.</p> <p>[R307-201-3, R307-401-8]</p>
II.B.1.c.1	<p>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]</p>
II.B.2	<b>Aggregate Processing Equipment Requirements</b>
II.B.2.a	<p>The owner/operator shall not exceed the following opacity limits at the listed point sources:</p> <ul style="list-style-type: none"> <li>A. The impact crusher - 15%</li> <li>B. All other crushers - 12%</li> <li>C. Screens - 10%</li> <li>D. Conveyor transfer points - 10%</li> <li>E. Drop transfer points and stackers - 20%.</li> </ul> <p>[40 CFR 60 Subpart OOO, R307-201-3, R307-401-8]</p>
II.B.2.b	<p>The owner/operator shall install water sprays on all crushers, all screens, all conveyor transfer points, and all conveyor drop points on site to control emissions. The owner/operator shall operate sprays such that the opacity limits in this AO are not exceeded. [R307-401-8]</p>

II.B.2.c	The owner/operator shall conduct an initial performance test for all crushers, screens, and conveyor transfer points on site within 60 days after achieving maximum production rate but not later than 180 days after initial startup. Performance tests shall meet the limitations specified in Table 3 of Subpart OOO. [40 CFR 60 Subpart A, 40 CFR 60 Subpart OOO]
II.B.2.c.1	Initial performance tests for fugitive emission limits shall be conducted according to 40 CFR 60.675(c). The owner/operator may use methods and procedures specified in 40 CFR 60.675(e) as an alternative to the reference methods and procedures specified in 40 CFR 60.675(c). [40 CFR 60 Subpart OOO]
II.B.2.c.2	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. [40 CFR 60 Subpart A, 40 CFR 60 Subpart OOO]
II.B.2.c.3	The owner/operator shall submit results of the initial performance test for each crusher, screen, and conveyor according to 40 CFR 60.8(a). [40 CFR 60 Subpart A, 40 CFR 60 Subpart OOO]
II.B.3	<b>Fugitive Dust Requirements:</b>
II.B.3.a	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources on site to exceed 20% opacity. [R307-205-4]
II.B.3.a.1	Visible emission determinations for fugitive dust from haul roads and fugitive dust sources 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. [R307-401-8]
II.B.3.b	The owner/operator shall not exceed the following haul road length limits:  A. Total On-Site Paved and Unpaved Haul Roads Combined - 4,950 ft  B. Total On-Site Unpaved Haul Roads - 3,950 ft.  [R307-401-8]
II.B.3.b.1	To determine compliance with the above length limits, the owner/operator shall measure and record the paved and unpaved haul road lengths at least once every six (6) months. The owner/operator shall determine lengths using GPS measurements or aerial photographs. The owner/operator shall include the date each length measurement was taken in their records. [R307-401-8]
II.B.3.c	The owner/operator shall use the following control methods to maintain the opacity limits listed in this AO:  A. Paved Haul Roads: vacuum sweeping and water application  B. Unpaved Haul Roads and Unpaved Operation Areas: water application.  If the temperature is below freezing, the owner/operator may stop water applications until the temperature returns to above freezing. If paved haul roads are covered with snow or ice, the owner/operator may stop vacuum sweeping the paved haul roads until the paved roads are cleared of snow and ice.  [R307-401-8]



II.B.3.c.1	<p>The owner/operator shall keep records of sweeping and water application to paved haul roads for all periods the plant is in operation. Records shall include the following items regarding paved haul roads:</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. The temperature, if the temperature is below freezing</li> <li>E. Road conditions, if the paved haul roads are covered with snow or ice.</li> </ul> <p>[R307-401-8]</p>
II.B.3.d	<p>The owner/operator shall use water application or other control options contained in R307-205 on storage piles and disturbed area to maintain the opacity limits listed in this AO.</p> <p>[R307-205, R307-401-8]</p>
II.B.3.d.1	<p>The owner/operator shall keep and maintain records of water application or other control options to storage piles and disturbed area for all periods that the source is in operation. Records of water application shall include:</p> <ul style="list-style-type: none"> <li>A. Date of treatment</li> <li>B. Time of day that water was applied</li> <li>C. Quantity of water applied.</li> </ul> <p>[R307-401-8]</p>

## PERMIT HISTORY

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

Supersedes	AO DAQE-AN129000008-25 dated January 20, 2025
Is Derived From	NOI dated February 5, 2025
Incorporates	Additional Information dated February 11, 2025
Incorporates	Additional Information dated February 20, 2025
Incorporates	Additional Information dated March 6, 2025
Incorporates	Additional Information dated March 11, 2024

## 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>2</sub> e	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