



State of Utah

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Department of
Environmental Quality

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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN132830006-19

December 13, 2019

Brett Nielsen
Whitaker Construction Company
44 S. 1050 W.
Brigham City, UT 84302

Dear Mr. Nielsen:

Re: Intent to Approve:
Modification to Approval Order DAQE-AN132830005-17 to Add a Jaw Crusher and a Conveyor
Project Number: N132830006

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) 536-4010 or ehe@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

BCB:ADH:EH:sa

cc: Bear River Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN132830006-19
Modification to Approval Order DAQE-AN132830005-17
to Add a Jaw Crusher and a Conveyor

Prepared By
Mr. Enqiang He, Engineer
(801) 536-4010
ehe@utah.gov

Issued to
Whitaker Construction Company - Plymouth Aggregate Plant

New Source Review Section Manager
Alan D. Humpherys

Date: December 13, 2019

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name

Whitaker Construction Company

Source Name

Whitaker Construction Company - Plymouth
Aggregate Plant

Mailing Address

44 S. 1050 W.
Brigham City, UT 84302

Physical Address

20965 Old Hwy. 13
Plymouth, UT 84430

Source Contact

Name Brett Nielsen
Phone (435) 723-2921
Email brett@whitcon.com

UTM Coordinates

403,300 m Easting
4,639,000 m Northing
Datum NAD83
UTM Zone 12

SIC code 1442 (Construction Sand & Gravel)

SOURCE INFORMATION

General Description

Whitaker Construction Company operates an aggregate processing facility called the Plymouth Pit located at 20965 Old Hwy. 13 in Box Elder County. The equipment on site includes crushers, screens, conveyors, feeders, and mobile equipment such as loaders, haul trucks, and water trucks. Line power is used to operate the equipment on site. Whitaker Construction Company produces aggregate materials not to exceed 550,000 tons a year.

NSR Classification

Minor Modification at Minor Source

Source Classification

Located in Salt Lake City UT PM_{2.5} NAA
Box Elder 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

Whitaker Construction Company has requested a modification to its AO DAQE-AN132830005-17, dated September 26, 2017, to add a jaw crusher and a conveyor to the Plymouth Pit. The company has also proposed to remove the diesel-fired emergency generator engine from the Pit.

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)
CO ₂ Equivalent	-63	0.00
Carbon Monoxide	-0.30	0.00
Nitrogen Oxides	-1.51	0.00
Particulate Matter - PM ₁₀	+0.12	8.50
Particulate Matter - PM _{2.5}	-0.01	1.64
Sulfur Dioxide	0	0.00
Volatile Organic Compounds	-0.04	0.00

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 ITA will be published in the Box Elder News & Journal on December 18, 2019. 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]
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.

II.A THE APPROVED EQUIPMENT

II.A.1	Plymouth Pit
II.A.2	One (1) Jaw Crusher Capacity: 250 tons/hour (TPH) Applicable Federal Standard: NSPS Subpart OOO
II.A.3	One (1) Cone Crushing/Screening Plant Capacity: 250 TPH Manufacture Date: 1998 Applicable Federal Standard: NSPS Subpart OOO
II.A.4	One (1) Turbo Chieftain Power Screen Capacity: 441 TPH Manufacture Date: 2008 Applicable Federal Standard: NSPS Subpart OOO

II.A.5	Various Conveyors & Feeders - one (1) conveyor is new Applicable Federal Standard: NSPS Subpart OOO
II.A.6	Various Mobile Equipment (for information only) Includes: Various Loaders, Haul Trucks, & Water Trucks
II.A.7	One (1) Diesel Storage Tank Capacity: 4,000 gallons

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	The Plymouth Aggregate Plant shall be subject to the following:
II.B.1.a	The owner/operator shall not produce more than 550,000 tons of aggregate material per rolling 12-month period. [R307-401-8]
II.B.1.a.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 the owner/operator. The records of production shall be kept on a daily basis. [R307-401-8]
II.B.1.b	The owner/operator shall not conduct operations before 6:00 AM or after 6:00 PM each day from November 1 through March 31 each year. [R307-401-8]
II.B.1.b.1	Records of hours of operation shall be kept for all periods when the plant is in operation. Hours of operation shall be determined by the owner/operator. The records of hours of operation shall be kept on a daily basis. The records of hours of operation shall show the start and end times of the plant operation. [R307-401-8]. [R307-401-8]
II.B.1.c	Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any source on site to exceed 20% opacity. [R307-201-3]
II.B.1.c.1	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]
II.B.2	All Crushers, Screens, and Conveyors on site shall be subject to the following:
II.B.2.a	The owner/operator shall not allow visible emissions from any crusher on site to exceed 12% opacity. [R307-309-3, R307-312]
II.B.2.b	The owner/operator shall not allow visible emissions from any screen on site to exceed 7% opacity. [R307-312]
II.B.2.c	The owner/operator shall not allow visible emissions from any conveyor transfer point on site to exceed 7% opacity. [R307-312]
II.B.2.d	The owner/operator shall not allow visible emissions from any conveyor drop point on site to exceed 20% opacity. [R307-309-3]

II.B.2.e	The owner/operator shall install water sprays on all crushers, all screens, and all 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]
II.B.2.f	The owner/operator shall conduct an initial performance test for all crushers, screens, and conveyor transfer points on site within 60 days after achieving the maximum production rate but not later than 180 days after initial startup. 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]
II.B.2.f.1	Initial performance tests for fugitive emissions 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 alternatives to the reference methods and procedures specified in 40 CFR 60.675(c). [40 CFR 60 Subpart OOO]
II.B.2.f.2	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.3	All Haul Roads and Fugitive Dust Sources shall be subject to the following:
II.B.3.a	The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20% opacity on site and 10% opacity at the property boundary. [R307-309-3]
II.B.3.a.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.3.b	The unpaved haul road shall not exceed 0.25 miles in length. The loader operational areas shall not exceed 0.05 miles in length. The total haul road length, including paved and unpaved haul roads, shall not exceed 0.37 miles. [R307-401-8]
II.B.3.c	The owner/operator shall cover all unpaved haul roads and wheeled-vehicle operational areas with road base material. The owner/operator shall use water application and chemical suppressant to maintain opacity limits listed in this AO when the temperature is above freezing. [R307-401-8]
II.B.3.c.1	<p>Records of water application shall be kept for all periods when the plant is in operation. The records shall include the following items:</p> <ul style="list-style-type: none"> A. Date and time treatments were made B. Number of treatments made and quantity of water applied C. Rainfall amount received, if any D. Records of temperature, if the temperature is below freezing <p>[R307-401-8]</p>
II.B.3.d	An operational vacuum sweeper and water truck shall be made available during each operating day. The owner/operator shall vacuum sweep and flush with water all the paved haul roads on site to maintain opacity limit listed in this AO. The owner/operator may stop flushing the paved haul roads with water when the temperature is below freezing. The owner/operator may stop vacuum sweeping the paved haul roads when the haul roads are covered with snow or ice. [R307-401-8]

II.B.3.d.1	Records of vacuum sweeping and water application shall be kept for all periods when the plant is in operation. The records shall include the following items: A. Date and time vacuum sweeping and water application were made B. Number of vacuum sweeping and water application made and quantity of water applied C. Rainfall amount received, if any D. Records of temperature, if the temperature was below freezing [R307-401-8]
II.B.3.e	The total area of storage piles on site shall not exceed 3.0 acres. [R307-401-8]
II.B.3.f	The owner/operator shall apply water to all storage piles 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. Records of water treatment shall be kept for all periods when the plant is in operation. [R307-401-8]
II.B.3.g	The disturbed areas shall not exceed 100 acres without prior approval from the Director. [R307-401-8]
II.B.3.h	The owner/operator shall comply with all applicable requirements of R307-309 for fugitive emission and fugitive dust sources on site. [R307-309]
II.B.3.i	The owner/operator shall not exceed 500 disturbance-acres per rolling 12-month period. [R307-401-8]
II.B.3.i.1	Disturbance-acres shall be determined by multiplying the area that is disturbed each day by the number of disturbances of the area each day. [R307-401-8]
II.B.3.i.2	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 disturbance-acres shall be kept for all periods when the plant is in operation. The records of disturbance-acres shall be kept on a daily basis. [R307-401-8]

PERMIT HISTORY

This Approval Order shall supersede or will be based on the following documents:

Supersedes
Is Derived From
Incorporates

AO DAQE-AN132830005-17 dated September 26, 2017
NOI dated July 27, 2018
2nd NOI dated April 26, 2019

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 ₂	Carbon Dioxide
CO _{2e}	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 _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