



State of Utah

GARY R. HERBERT  
*Governor*

GREG BELL  
*Lieutenant Governor*

Department of  
Environmental Quality

Amanda Smith  
*Executive Director*

DIVISION OF AIR QUALITY  
Cheryl Heying  
*Director*

DAQE-AN0142360001-09

November 16, 2009

Junior Jessen  
Nile Chapman Construction, Inc.  
P.O. Box 98  
Roosevelt, UT 84066

Dear Mr. Jessen:

Re: Approval Order: New Aggregate Processing Plant; Uintah County; CDS B; Attainment Area,  
MACT (Part 63), NSPS (Part 60), Title V (Part 70)  
Project Number: N014236-0001

The attached document is the Approval Order for the above-referenced project. Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Mr. Alan Humpherys, who may be reached at (801) 536-4142.

Sincerely,

M. Cheryl Heying, Executive Secretary  
Utah Air Quality Board

MCH:AH:sa

cc: TriCounty Health Department

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER: New Aggregate Processing Plant**

**Prepared By: Mr. Alan Humpherys, Engineer**  
**Phone: (801) 536-4142**  
**Email: ahumpherys@utah.gov**

**APPROVAL ORDER NUMBER**

**DAQE-AN0142360001-09**

**Date: November 16, 2009**

**Nile Chapman Construction, Inc.**

**Pelican Pit**

**Source Contact:**

**Mr. Junior Jessen, President**

**Phone: (435) 722-3800**

**M. Cheryl Heying**  
**Executive Secretary**  
**Utah Air Quality Board**

## Abstract

Nile Chapman Construction, Inc. has requested to construct an aggregate processing plant near Leota, Uintah County, Utah. The facility will utilize various pieces of aggregate processing equipment to produce up to 250,000 tons of aggregate material per year. A diesel generator will supply power to the facility.

Uintah County is an attainment area of the NAAQS for all pollutants. 40 CFR 60 Subpart OOO and Subpart IIII, and 40 CFR 63 Subpart ZZZZ regulations apply to this source. 40 CFR 61 regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source, and this source is considered a Title V Area Source.

The emissions, in tons per year, will be as follows:  $PM_{10} = 5.88$ ,  $NO_x = 39.06$ ,  $SO_2 = 0.66$ ,  $CO = 8.95$ ,  $VOC = 1.15$ ,  $HAPs = 0.02$

This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order. This AO is issued to, and applies to the following:

**Name of Permittee:**

Nile Chapman Construction, Inc.  
P.O. Box 98  
Roosevelt, UT 84066

**Permitted Location:**

Pelican Pit  
14630 East 6850 South  
Leota  
Uintah County, UT

**UTM coordinates:** 608,403 m Easting, 4,449,676 m Northing  
**SIC code:** 1442 (Construction Sand & Gravel)

### **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 Executive Secretary or Executive Secretary'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]
- 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 Executive Secretary 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: Unavoidable Breakdowns. [R307-107]

## Section II: SPECIAL PROVISIONS

### **II.A The approved installations shall consist of the following equipment:**

- II.A.1 **Pelican Pit**
- II.A.2 **One (1) Jaw Crusher**  
Capacity: 400 tph  
Manufacture Date: 2007
- II.A.3 **One (1) Cone Crusher**  
Capacity: 250 tph  
Manufacture Date: 2006
- II.A.4 **One (1) 6' x 20' Screen**  
Capacity: 200 tph  
Manufacture Date: 1999
- II.A.5 **One (1) Screen**  
Capacity: 600 tph  
Manufacture Date: 2007
- II.A.6 **Various Conveyors and Feeders**  
Manufacture Date: Prior to 2008
- II.A.7 **One (1) 1,135 kW Generator**  
Rating: 1550 hp  
Fuel: Diesel
- II.A.8 **One (1) Diesel Fuel Storage Tank**  
Capacity: 12,000 gallons

**II.B Requirements and Limitations**

**II.B.1 The Pelican Pit shall be subject to the following**

II.B.1.a Nile Chapman Construction, Inc. shall notify the Executive Secretary in writing when the installation of the equipment listed in this AO has been completed and is operational. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the owner/operator has not notified the Executive Secretary in writing within 18 months from the date of this AO on the status of the construction and/or installation, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation. If a continuous program of construction and/or installation is not proceeding, the Executive Secretary may revoke the AO. [R307-401-18]

II.B.1.b The owner/operator shall not produce more than 250,000 tons of 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 twentieth 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 belt scale records and/or scale house records. All aggregate material shall be weighed and accounted for prior to leaving the site. The records of production shall be kept on a daily basis. [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 percent opacity. [R307-201]

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]

**II.B.2 All Haul Roads and Fugitive Dust Sources on site shall be subject to the following**

II.B.2.a The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources on site to exceed 20 percent opacity at all times. [R307-205]

II.B.2.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. [R307-205]

II.B.2.b The owner/operator shall cover all unpaved haul roads and wheeled-vehicle operational areas with road base material. [R307-401-8]

- II.B.2.c The owner/operator shall use water application on all haul roads, all wheeled-vehicle operational areas, and all exposed areas on site to maintain opacity limits listed in this AO. The owner/operator may stop applying water if the temperature is below freezing. The owner/operator shall resume applying water when the temperature is above freezing. [R307-401-8]
- II.B.2.c.1 Records of 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 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. [R307-401-8]
- II.B.2.d The owner/operator shall install water sprays on all conveyor drop points on site. 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. [R307-401-8]
- II.B.2.e The owner/operator shall comply with all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources on site. [R307-205]
- II.B.3 **All Crushers on site shall be subject to the following**
- II.B.3.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.3.b The owner/operator shall install water sprays on all crushers 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. The owner/operator may stop the water sprays when the temperature is below freezing. [R307-401-8]
- II.B.4 **All Screens on site shall be subject to the following**
- II.B.4.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.4.b The owner/operator shall install water sprays on all screens 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. The owner/operator may stop the water sprays when the temperature is below freezing. [R307-401-8]

II.B.5 **All Conveyors on site shall be subject to the following**

- II.B.5.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.5.b The owner/operator shall not allow visible emissions from any conveyor drop point on site to exceed 20 percent opacity. [R307-205]
- II.B.5.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 maintain the opacity limits listed in this AO when the temperature is above freezing. The owner/operator may stop the water sprays when the temperature is below freezing. [R307-401-8]

II.B.6 **All Crushers, Screens, and Conveyors on site shall be subject to the following**

- II.B.6.a 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 2 to Subpart OOO and 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.6.a.1 Initial performance tests for stack emissions limits shall be conducted according to 40 CFR 60.675(b), and 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(b) and 60.675(c). [40 CFR 60 Subpart OOO]
- II.B.6.a.2 The owner/operator shall submit written reports to the Executive Secretary 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.7 **The 1,135 kW Generator shall be subject to the following**

- II.B.7.a The 1,135 kW Generator shall not exceed 2,100 hours of operation per rolling 12-month period. [R307-401-8]
- II.B.7.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of operation shall be kept for all periods when the plant is in operation. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401-8]
- II.B.7.b The owner/operator shall not allow visible emissions from the 1,135 kW Generator to exceed 20 percent opacity. [R307-201]

- II.B.7.c The owner/operator shall use #1 diesel fuel in the 1,135 kW Generator. [R307-401-8]
- II.B.7.d The sulfur content of any diesel fuel burned in the 1,135 kW Generator shall not exceed 0.05 percent by weight. [R307-401-8]
- II.B.7.d.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]

**Section III: APPLICABLE FEDERAL REQUIREMENTS**

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

MACT (Part 63), ZZZZ: Recipro. Int. Comb Engine (RICE)  
NSPS (Part 60), OOO: Nonmetallic Mineral Processing Plants  
NSPS (Part 60), IIII: Stationary Comp/Ignit R.I.C.E.  
NSPS (Part 60), A: General Provisions  
MACT (Part 63), A: General Provisions

**PERMIT HISTORY**

This AO is based on the following documents:

Is Derived From	Additional Information dated August 10, 2009
Is Derived From	Additional Information dated July 13, 2009
Is Derived From	NOI dated July 6, 2009

**ACRONYMS**

The following lists commonly used acronyms and their 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
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
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
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
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds