

#### west virginia department of environmental protection

Division of Air Quality 601 57<sup>th</sup> Street SE Charleston, WV 25304 Phone (304) 926-0475 • FAX: (304) 926-0479 Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

#### **ENGINEERING EVALUATION / FACT SHEET**

## **BACKGROUND INFORMATION**

Application No.: R13-3379
Plant ID No.: 039-00676

Applicant: Watco Transloading, LLC

Facility Name: Nitro Facility

Location: Kanawha Counthy

NAICS Code: 488210

Application Type: Construction

Received Date: September 5, 2017 Engineer Assigned: Steven R. Pursley, PE

Fee Amount: \$1,000.00

Date Received: September 6, 2017
Complete Date: October 5, 2017
Due Date: January 3, 2018
Applicant Ad Date: September 13, 2017
Newspaper: Charleston Gazette

UTM's: Easting: 426.465 Northing: 4,253.157 Zone: 17

Description: Construction of a fly ash transloading operation at an existing

railroad terminal.

## **DESCRIPTION OF PROCESS**

Watco Transloading, LLC operates a rail terminal at 2208 1st Avenue Nitro, WV in Kanawha County. The facility proposes to begin loading and unloading of fly ash at this location.

The facility will receive fly ash by railcar. A transloading platform will be placed next to the rail car. Hosing from the platform will be connected via piping connections to the rail car and a truck trailer. Fly ash will be pneumatically conveyed from the rail car to the trailer. The transloading platform is equipped with a Donaldson Torit CPC-6 dust collector which will control particulate matter emissions from the transfer process. Although the applicant anticipates transloading 20,000 tons per year of fly ash per year at the facility, a throughput of 100,000 tons/year was used in emissions calculations to allow for operational flexibility.

# SITE INSPECTION

A site inspection of the location was performed by the writer on October 23, 2017. The site is located in Nitro in a mixed industrial, commercial, residential area with the nearest private residences being approximately 100 yards away. To get to the facility from Charleston take exit 45 of I-64 and turn left (east) on State Route 25. Proceed approximately 1.4 miles and the facility will be on the right across the train tracks. Below are pictures taken the day of the site inspection.





## ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Since no processing and no open storage of material occurs at the facility, the only emissions are Particulate Matter emissions resulting from the pneumatic transfer of the fly ash and haul road emissions. Emission factors for the transfer of the flyash were taken from AP-42 Table 11.12-2. Although these factors are for the controlled pneumatic unloading of cement an elevated silo, they seem to be a reasonable representation of flyash loading/unloading. Additionally, Watco appears to have doubled the emission factors, presumably to account for emissions from the unloading of the railcar AND emissions from the loading of the trucks. However, the AP-42 emission factor appears to already account for this. Therefore, the emissions were calculated in a very conservative manner.

Haulroad emissions were calculated using the procedures in AP-42 Chapter 13.2.2.

Fact Sheet R13-3379 Watco Transloading, LLC Nitro Facility

	PM		PM <sub>10</sub>		PM <sub>2.5</sub>	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Transfer (w/ BH)	0.45	1.95	0.25	1.07	0.25	1.07
Haul roads	2.32	2.32	0.54	0.54	0.05	0.05
Total	2.77	4.27	0.79	1.61	0.3	1.12

Note that haulroad hourly and annual emissions are numerically identical because the applicant assumes a maximum of 1 truck per hour and 2000 trucks per year.

#### REGULATORY APPLICABILITY

45CSR13

Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation).

The construction of the Nitro Facility has the potential to emit a regulated pollutant in excess of six (6) lbs/hour and ten (10) TPY and, therefore, pursuant to §45-13-2.24, the facility is defined as a "stationary source" under 45CSR13. Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction . . . and operation of any stationary source to be commenced without . . . obtaining a permit to construct." Therefore, Watco is required to obtain a permit under 45CSR13 for the modification and operation of the terminal.

As required under §45-13-8.3 ("Notice Level A"), Watco placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." The ad ran on September 13, 2017 in the *Charleston Gazette* and the affidavit of publication for this legal advertisement was received by DAQ on September 21, 2017.

45CSR17

To Prevent and Control Particulate Matter Air Pollution From Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.

The main requirement of 45CSR17 is the prohibition of fugitive particulate matter which causes or contributes to statutory air

Fact Sheet R13-3379 Watco Transloading, LLC Nitro Facility pollution. Watco Transloading will comply with this requirement with the use of pneumatic transfer systems controlled by a baghouse and dust collectors.

45CSR22 Air Quality Management Fee Program

The facility is not subject to any NSPS, MACT or NESHAP. Additionally, the facility is defined as a minor source under 45CSR30. Therefore the facility is not subject to 45CSR30 and will pay its annual fees through the Rule 22 program.

## **Nonapplicability Determinations**

To Prevent and Control Particulate Matter Air Pollution From

Manufacturing Processes and Associated Operations

Since this is not a manufacturing source (flyash is simply transferred directly from railcars to trucks) it is not subject to 45CSR7.

## TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

No non-criteria regulated pollutants are expected to be emitted from the facility.

# AIR QUALITY IMPACT ANALYSIS

Since the proposed facility will not be a major source as defined in 45CSR14, no modeling was performed.

#### MONITORING OF OPERATIONS

The following monitoring and recordkeeping shall be required by permit R13-3379:

- \* The amount of flyash transferred from railcar to truck on a monthly basis.
- Visible emission checks on the baghouse stack on a monthly basis.

# RECOMMENDATION TO DIRECTOR

Information supplied in the application indicate regulations will be achieved. Therefore it is the reco R13-3379 for the construction of a fly ash transloadi be granted to Watco Transloading, LLC.	mmendation of the writer that permit
	Steven R. Pursley, PE Engineer
	October 18, 2017