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west virginia department of environmental protection

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Earl Ray Tomblin, Governor  
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## ENGINEERING EVALUATION / FACT SHEET

### BACKGROUND INFORMATION

Application No.: R13-2962A  
Plant ID No.: 049-00149  
Applicant: TRANSFLO Terminal Services, Inc.  
Facility Name: Fairmont Facility  
Location: Marion County  
NAICS Code: 488210  
Application Type: Class II Administrative Update  
Received Date: August 23, 2016  
Engineer Assigned: Steven R. Pursley, PE  
Fee Amount: \$300.00  
Date Received: August 23, 2016  
Complete Date: August 23, 2016  
Due Date: October 21, 2016  
Applicant Ad Date: August 24, 2016  
Newspaper: *Times West Virginian*  
UTM's: Easting: 574.73 Northing: 4,371.05 Zone: 17  
Description: Application to consolidate company's Clarksburg and Fairmont operations.

### DESCRIPTION OF PROCESS

On August 23, 2016 Transflo Terminal Services, Inc submitted a request for a class II administrative update to permit R13-2962. The request was necessitated by Transflo consolidating its Clarksburg and Fairmont operations. The combined facility will operate at the current Fairmont facility. Currently, the Fairmont facility is permitted to transfer sand and cement. Moving the Clarksburg capacity to Fairmont will increase the actual amount of sand transferred at the Fairmont facility but not above its current permitted levels. The Clarksburg facility has never transferred cement, therefore that limit and associated emissions will also remain unchanged. However, the Clarksburg facility DID transfer ammonium nitrate, which is not currently permitted at the Fairmont facility. With this administrative update, Transflo will have the ability to handle ammonium nitrate at the Fairmont facility.

Ammonium nitrate transloading is a direct transfer process, meaning that no intermediate storage of the material occurs. The ammonium nitrate is transferred between railcars and trucks using a covered conveyor which includes an integral baghouse for particulate matter control. The baghouse has a filter bag assembly, not individual bags. The total filter cloth area is 100 square feet divided into 18 envelopes. Shake cleaning is used to periodically clean the bags.

**SITE INSPECTION**

Because the writer previously performed a site inspection of the facility none was deemed necessary for this permitting action. The following was taken directly from the engineering evaluation R13-2962:

*“A site inspection of the site was performed by the writer on September 19, 2012... The facility is located within Fairmont city limits but in a fairly isolated area. There are a few residences near the facility but none are within site of the facility. A photo of the site was taken and is included in the file.*

*To get to the facility take I79 north to exit 136. At the end of the off ramp turn left on Fairmont Gateway Connector / 273 North. Go 1.5 miles and turn right on Washington St. Go approximately 400 feet and turn right on Madison St. Go approximately 200 feet and the entrance to the facility is on the left.”*

**ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER**

In order to estimate emissions, the applicant used the batch drop equation from AP-42 Chapter 13.2.4 and assumed a conservative 90% control efficiency for the baghouse (applied only to transfer points actually controlled by the baghouse). Annual emissions were based on an anticipated maximum of 168 railcars being unloaded per year.

Additionally, the applicant used AP-42 Section 13.2.2 equation 1a to estimate haul road emissions for the increased traffic associated with the ammonium nitrate handling. A 50% control was then taken due to the existing permit requiring periodic watering of the roadways.

	PM		PM <sub>10</sub>		PM <sub>2.5</sub>	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Transfer Points	0.74	0.12	0.35	0.06	0.05	0.01
BH Exhaust	0.06	0.01	0.06	0.01	0.06	0.01
Haul Roads	1.88	0.81	0.52	0.22	0.05	0.02
<b>Total</b>	<b>2.68</b>	<b>0.94</b>	<b>0.93</b>	<b>0.29</b>	<b>0.16</b>	<b>0.04</b>

Total emissions from the existing facility (as taken from the engineering evaluation for R13-2962) are as follows:

	PM		PM <sub>10</sub>		PM <sub>2.5</sub>	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
<b>Total</b>	<b>81.16</b>	<b>56.69</b>	<b>23.41</b>	<b>16.44</b>	<b>3.46</b>	<b>3.84</b>

Therefore, total emissions from the new facility will be as follows:

	PM	PM <sub>10</sub>	PM <sub>2.5</sub>
	tpy	tpy	tpy
<b>Total</b>	<b>57.63</b>	<b>16.73</b>	<b>3.88</b>

## REGULATORY APPLICABILITY

The following state regulations apply to the ammonium nitrate operations at the facility (no federal rules i.e. NSPS, MACT/NESHAPs are applicable):

**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).

Because uncontrolled emissions from the changes exceed 6 pounds per hour and 10 tons per year of PM the facility is subject to 45CSR13. However, since controlled emissions from the changes are less than 6 pounds per hour and 10 tons per year of PM, they may be accommodated with a Class II Administrative Update. As required under §45-13-8.3 ("Notice Level A"), TRANSFLO placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." The ad ran on August 24, 2016 in the *Times West Virginian* and the affidavit of publication for this legal advertisement was submitted on September 1, 2016.

**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 pollution. TRANSFLO will comply with this requirement with the use of covered conveyors controlled by baghouses. Additionally, all haulroads will be watered as necessary.

**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**

**45CSR7** To Prevent and Control Particulate Matter Air Pollution From Manufacturing Processes and Associated Operations

Since this is not a manufacturing source (ammonium nitrate, cement and frac sand are simply unloaded, stored and shipped) 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**

Because this is a minor source as defined in 45CSR14, no modeling was performed.

## **MONITORING OF OPERATIONS**

In addition to the monitoring already required by R13-2962, TRANSFLO will be required to maintain the following records:

- \* Monthly throughput of ammonium nitrate.

## **CHANGES TO PERMIT R13-2962**

The following changes will be made to R13-2962:

- \* A new emission unit (EU4) was added to Table 1.
- \* New condition 4.1.4 was added (old condition 4.1.4 was renamed to 4.1.5).
- \* Old conditions 4.1.5-4.1.7 were renamed 4.1.6-4.1.8.
- \* New condition 4.1.9 was added (old conditions 4.1.9-4.1.11 were renamed 4.1.11-4.1.13)
- \* New condition 4.3.7 was added (old condition 4.3.7 was renamed 4.3.8).

RECOMMENDATION TO DIRECTOR

Information supplied in the application indicates that compliance with all applicable regulations will be achieved. Therefore it is the recommendation of the writer that permit R13-2962A for an administrative update to a bulk cement and frac sand facility in Fairmont, Marion County, be granted to TRANSFLO Terminal Services, Inc.



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Steven R. Pursley, PE  
Engineer

10-4-16

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October 4, 2016