



west virginia department of environmental protection

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**GENERAL PERMIT REGISTRATION APPLICATION
ENGINEERING EVALUATION / FACT SHEET**

BACKGROUND INFORMATION

Registration No.: G50-B105
Plant ID No.: 777-00135
Applicant: R.G. Johnson Company, Inc.
Facility Name: 5 North #4 Airshaft
Location: Cameron, Marshall County
SIC / NAICS Code: 3273 / 327320
Application Type: Construction
Received Date: May 12, 2015
Engineer Assigned: Thornton E. Martin Jr.
Fee Amount: \$500.00
Complete Date: July 07, 2015
Applicant Ad Date: May 26, 2015
Newspaper: *Intelligencer*
UTM's: Easting: 534.788 km Northing: 4412.948 km Zone: 17
Description: Applicant proposes the construction and operation of a concrete batch plant with a maximum production rate of 64 tons per hour and 40,000 tons per year.

TYPE OF PROCESS

Raw materials of gravel and sand are delivered via haul trucks and dumped into separate stockpiles. The front end loader transfers the sand and gravel to the belt hopper which feeds the raw materials into overhead storage bins via conveyor #1. The raw materials are batched into the weigh hopper at the appropriate mix proportion.

The cement and flyash are delivered via cement trucks and loaded into the cement and flyash bins via a 4" pneumatic line. The cement and flyash bins feed the weigh hopper (WH-2) to the proper mix proportion. The dust from the cement and flyash bins and the weigh hopper are fed into the baghouse for reuse.

The raw materials of gravel and sand are fed into truck chute via conveyor #2 where the cement and flyash are introduced. The truck chute feeds directly into the cement truck for delivery to the shaft for unload.

R.G. Johnson Company, Inc. proposes to utilize the following equipment at the Marshall County Mine, 5 North #4 Airshaft site near Cameron, Marshall County, WV:

Promoting a healthy environment.

Table 1: Equipment List

Equipment ID No.	Description	Maximum Production Rate		Control Equipment ¹
		Hourly	Annual*	
WH-1	Weigh Hopper – Erie Strayer – 2008 Sand and Gravel	64 tons	40,000 tons / yr	PE
WH-2	Weight Hopper – Erie Strayer – 2008 Cement and Flyash	10 tons	6,240 tons / yr	IC
IC	Baghouse – C&W RA-140, Reverse Air			NA
Storage		Storage Capacity	Maximum Yearly Throughput	
OS-1	Open Stockpile – Gravel	200 tons	4,250 tons / yr	N
OS-2	Open Stockpile – Sand	150 tons	3,500 tons / yr	N
BS-1	Storage Bin – Cement	90 tons	1,500 tons/yr	FE
BS-2	Storage Bin – Flyash	30 tons	750 tons / yr	FE

¹ FE - Full Enclosure; PE - Partial Enclosure; NA - Not Applicable; N - None
 * Based on 624 maximum operational hours annually

SITE INSPECTION

Al Carducci of the WVDAQ Northern Panhandle Regional Office performed a pre-construction site visit on July 07, 2015. The proposed site is owned by Marshall County Mine. The nearest residence is located to the right of the entrance road and it is over 300' from the middle of the plant. The plant is already constructed. The crew working at the site indicated that it would be ready to operate within 3 hours. The Marshall County site meets the siting requirement set forth in G50-B.

Directions: Travel I-79 North to Waynesburg, PA. Take Route 21 West, 30 miles to Route 250. Turn right on Rt. 250 North. Travel 2.1 miles and turn left onto Fork Ridge Road. Go 1 mile and job entrance will be on the left.

ESTIMATE OF EMISSIONS

Fugitive emissions from haulroads will be controlled by the utilization of a water tank truck as needed. A C&W RA-140 reverse air baghouse will control particulate matter from WH-2. R.G. Johnson Company, Inc. used the provided General Permit G50-B Emission Calculation Spreadsheet for concrete batch plants, G50BECALC, to calculate emissions for the portable concrete batch plant.

The maximum controlled emissions for R.G. Johnson Company, Inc.'s portable facility are summarized in the following table:

Table 2: G50-B105 Emissions Summary:

Emission Source	Controlled PM Emissions		Controlled PM ₁₀ Emissions	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Unpaved Haulroad Emissions	1.73	0.31	0.51	0.09
Stockpile Emissions	0.01	0.04	0.00	0.02
Fugitive Emissions Total	<i>1.74</i>	<i>0.35</i>	<i>0.51</i>	<i>0.11</i>
Point Source Emissions				
Transfer Point Emissions	7.62	1.77	4.22	1.00
Point Source Emissions Total (PTE)	<i>7.62</i>	<i>1.77</i>	<i>4.22</i>	<i>1.00</i>
FACILITY EMISSIONS TOTAL	9.36	2.12	4.73	1.11

GENERAL PERMIT ELIGIBILITY

R.G. Johnson Company, Inc.'s application for a concrete batch plant is eligible for a Class II General Permit registration G50-B because:

1. It has the SIC of 3273;
2. It is not a major source as defined in 45CSR14, 45CSR19 or 45CSR30;
3. It is not subject to 45CSR2, 45CSR3, 45CSR14, 45CSR16, 45CSR19, or 45CSR30;
4. It is not a cement manufacturing plant (NAICS 327310; SIC 3241), concrete pipe manufacturing plant (NAICS 327332; SIC 3272) or clay brick or structural clay tile manufacturing plant (NAICS 327121; SIC 3251);
5. It meets the definition of concrete batch plant set forth in DRAFT class II General Permit G50-B;
6. It does not incorporate:
 - a. A mine, quarry or crushing and screening operation;
 - b. A highwall truck dump;
 - c. A petroleum liquid storage vessel or tank greater than 39,889 gallons capacity; or
 - d. A petroleum liquid storage vessel or tank greater than or equal to 19,812 gallons capacity and a working true vapor pressure which exceeds 15.0 kPa (2.17 psia);
7. It will not require an individual air quality permit review process and/or individual permit provisions to address the emission of a regulated pollutant or to incorporate regulatory requirements other than those established by 45CSR7, 45CSR13, and 45CSR17;
8. It is not located in or does not significantly impact the area of Brooke County west of State Route 2, north of an extension of the southern boundary of Steubenville Township in Jefferson County, Ohio and south of the Market Street Bridge;
9. It is not located within the boundaries of or which may significantly impact the Weirton nonattainment area; or
10. It is not located in or which may significantly impact an area which has been determined to be a PM10 maintenance or nonattainment area.

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the proposed facility. The proposed construction of a ready mix concrete batch plant is subject to the following state and federal rules:

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

The facility is subject to the requirements of 45CSR7 because it meets the definition of "Manufacturing Process" found in subsection 45CSR7.2.20. The facility should be in compliance with Subsection 3.1 (no greater than 20% opacity), Subsection 3.7 (no visible emissions from any storage structure pursuant to subsection 5.1 which is required to have a full enclosure and be equipped with a control device), Subsection 4.1 (PM emissions shall not exceed those allowed under Table 45-7A), Subsection 5.1 (manufacturing process and storage structures must be equipped with a system to minimize emissions), Subsection 5.2 (minimize PM emissions from haulroads and plant premises) when the particulate matter control methods and devices proposed within application G50-B105 are in operation.

45CSR13 *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation*

The proposed construction is subject to the requirements of 45CSR13 because the potential to discharge is greater than six (6) pounds per hour and ten (10) tons per year, and 144 pounds per day of a regulated air pollutant (PM and PM10), the proposed construction requires an application to construct. The applicant submitted an application fee of \$500 and published a Class I legal advertisement in the *Intelligencer* on May 26, 2015.

45CSR22 *Air Quality Management Fee Program*

This rule establishes a program to collect fees for certificates to operate and for permits to construct, modify or relocate sources of air pollution. Funds collected from these fees will be used to supplement the Director's budget for the purpose of maintaining an effective air quality management program. An Application for a Certificate to Operate (CTO) will be enclosed with the permit at time of issuance as this will be a new construction.

The proposed construction of a ready mix concrete batch plant will not be subject to the following state and federal rules:

45CSR14 *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration*

In accordance with 45CSR14 Major Source Determination, the proposed ready mix concrete batch plant is not listed in Table 1. The facility will have a potential to emit 1.81 TPY of a regulated air pollutant (PM), not including fugitive emissions from haulroads, which is less than the 45CSR14 threshold of 250 TPY. This Folsom, Wetzel County facility is not listed in Table 2, and so fugitive emissions from haulroads are not included when determining source applicability. Therefore, the proposed construction is not subject to the requirements set forth within 45CSR14.

45CSR30 *Requirements for Operating Permits*

The facility's potential to emit will be 1.02 TPY of a regulated air pollutant (PM10), not including fugitive emissions from haulroads, which is less than the 45CSR30 threshold of 100 TPY for a major source.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

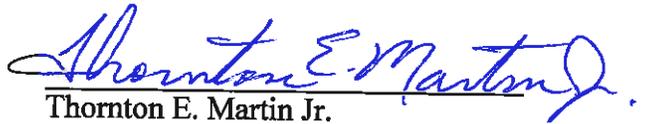
A toxicity analysis was not performed because the pollutants that will be emitted from this facility are PM (particulate matter) and PM10 (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and location of this facility and the limit of the proposed Construction. This facility will be located in Wetzel County, WV, which is currently designated as attainment for PM2.5 (particulate matter less than 2.5 microns in diameter).

RECOMMENDATION TO DIRECTOR

The information contained in this construction application indicates that compliance with all applicable regulations should be achieved when all proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. Therefore, the granting of a G50-B registration to R . G. Johnson Company, Inc. for the construction of a concrete batch plant to be located near Cameron, Marshall County, WV is hereby recommended.


Thornton E. Martin Jr.
Permit Engineer

July 07, 2015
Date