



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

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### NARRATIVE

TO: Hamid Yavari  
FROM: Brian Zhong  
DATE: 10/26/2018

Facility Name: **C&H Paving, Inc. - Statewide Portable Crushing Plant #1**  
AIRS No.: 777-00182  
Location: Statewide  
Application #: 26767  
Date of Application: October 11, 2018

### Background Information

C&H Paving, Inc. - Statewide Portable Crushing Plant #1 submitted Application No. 26767, dated October 11, 2018, requesting authorization to operate a mobile crushing plant. The owner has requested statewide operation of the plant. The initial plant location will be at the Corridor Materials Quarry in Sparta, Georgia (Hancock County). The quarry itself is inactive, and does not possess crushing ability or equipment. The plant consists of a 330 ton per hour (tph) jaw crusher and associated feeders, conveyors, other material handling equipment, and air pollution control systems.

### Purpose of Application

Application No. 26767 was received on October 11, 2018 for the operation of a 330 ton per hour mobile crushing plant. The mobile crushing plant is used to crush virgin rocks, concrete, asphalt, and other similar material generated in construction and demolition activities, which can then be sold and used as base material in various construction projects. The owner has requested statewide operation of the plant. Since this application is for a mobile crushing plant, a public advisory is not needed.

### Updated Equipment List

**Table 1 – Equipment List  
C&H Paving, Inc. - Statewide Portable Crushing Plant #1**

SOURCE	SOURCE CODE	Controls	NSPS APPLICABILITY
Portable Dump Hopper 1	PH1	None	YES
Portable Grizzly Feeder	PF1	Water Spray	YES
Portable Conveyor 1	PC1	None	YES
Portable Jaw Crusher	PJC1	Water Spray	YES
Portable Conveyor 2	PC2	Water Spray	YES
Portable Dump Hopper 2	PH2	Control Carry	YES
Portable Belt Feeder	PC3	Control Carry	YES
Portable Double Deck Screen	PS1	Control Carry	YES

Portable Conveyor 4	PC4	None	YES
Portable Conveyor 5	PC5	None	YES
Portable Conveyor 6	PC6	None	YES
Portable Conveyor 7	PC7	Water Spray	YES
Portable Dump Hopper 3	PH3	Control Carry	YES
Portable Belt Feeder	PC8	Control Carry	YES
Portable Cone Crusher 1	PCC1	Water Spray	YES
Portable Conveyor 9	PC9	Water Spray	YES
Portable Dump Hopper 4	PH4	Control Carry	YES
Portable Belt Feeder	PC10	Control Carry	YES
Portable Triple Deck Screen	PS2	Wet Process	YES
Portable Conveyor 11	PC11	Control Carry	YES
Portable Dump Hopper 5	PH5	Control Carry	YES
Portable Belt Feeder	PC12	Control Carry	YES
Portable Cone Crusher 2	PCC2	Water Spray	YES
Portable Conveyor 13	PC13	Water Spray	YES
Portable Conveyor 14	PC14	Wet Process	YES
Portable Sand Screw	PSS	Wet Process	YES
Portable Conveyor 15	PC15	Wet Process	YES
Portable Conveyor 16	PC16	Wet Process	YES
Portable Conveyor 17	PC17	Wet Process	YES

## **Emissions Summary**

### **Facility-Wide Emissions**

(in tons per year)

<b>Pollutant</b>	<b>Potential Emissions</b>	<b>Actual Emissions</b>
PM/PM <sub>10</sub> /PM <sub>2.5</sub>	94.44	5.32

The emissions of concern at this plant are PM/dusts generated by crushing, conveying/stacking, storage, loading and unloading operations, and criteria pollutants emitted from the fuel combustion in the diesel engine. PM emissions associated with the loading/unloading, crushing, and conveying/stacking operations were estimated using applicable emission factors in AP-42 Subchapter 11.19.2 - "Crushed Stone Processing & Pulverized Mineral Processing." Emissions of other air pollutants including HAP and EPA listed toxic compounds are expected to be negligible due to the nature of the sources/processes involved.

## **Regulatory Applicability**

The mobile crushing plant processes nonmetallic minerals as defined in 40 CFR 60 Subpart 000 - "Standards of Performance for Nonmetallic Processing Plants." Therefore, the plant's crushing operations (which have no capture systems), conveying transfer points and any other affected process units are subject to the applicable emission standards for fugitive emissions under NSPS Subpart 000. These limits are more stringent than that of Georgia Rule (n). The Permittee also shall comply with the applicable testing, monitoring, reporting and recordkeeping requirements under NSPS Subpart 000.

The PM emissions from each processing unit at this mobile crushing plant are subject to Georgia Rule 391-3-1-.02(2)(e) - "Particulate Emissions from Manufacturing Processes." Visible emissions from each processing unit at this plant are subject to the opacity limit of 40 percent in Georgia Rule 391-3-1-.02(2)(b) - "Visible Emissions." Georgia Rule 391-3-1-.02(2)(n) - "Fugitive Dust" limits the fugitive emissions from this facility to less than 20 percent opacity. The mobile crushing plant is expected to comply with the applicable emission limits in these rules by using wet suppression wherever feasible.

According to the definition in 40 CFR 89.2, a non-road engine is any internal combustion engine:

- (1) The engine is used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).
- (2) By itself or in or on a piece of equipment, the engine is portable or transportable, meaning the engine is designed to be and capable of being carried or moved from one location to another. Indications of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform, and
- (3) The engine remains at a location for no more than 12 consecutive months.

Nonroad engines do not meet the definition of a stationary engine under 40 CFR 60 Subpart IIII - "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" and 40 CFR 63 Subpart ZZZZ - "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." Therefore, non-road engines are not subject to any requirements under these rules. Since there are no federal requirements for non-road engines, and considering the temporary nature of non-road engines in location and operation, these non-road engines are specified as sources of minor significance and exempt from permitting in accordance with Georgia Rule 391-3-1-.03(6)(i)6.

### **Permit Conditions**

Conditions 1.1 through 1.5 are standard conditions containing general permitting requirements.

Condition 2.1 limits particulate matter emissions in accordance with Georgia Rule (e).

Condition 2.2 limits visible emissions in accordance with Georgia Rule (b).

Condition 2.3 establishes the applicability and emission limits of 40 CFR 60 Subpart OOO.

Conditions 3.1 through 3.4 contain the Georgia Rule (n) opacity requirements and common operating requirements to minimize fugitive dust.

Conditions 4.1 and 4.2 require routine maintenance and proper equipment for operation of control devices.

Condition 5.1 contains monitoring requirements including daily operations and maintenance checks on each water spray system.

Condition 6.1 is a standard condition with performance testing requirements. Conditions 6.2 and 6.3 include the testing requirements of 40 CFR 60 Subpart A and OOO.

Condition 7.1 is a standard condition for relocating mobile crushing facilities around the state.

Conditions 8.1 through 8.3 contain recordkeeping and reporting requirements regarding modifications at the facility.

Condition 9.1 is a standard condition allowing the Division to amend the permit. Condition 9.2 requires the payment of annual permit fees. Condition 9.3 prohibits the collocation of the mobile crushing plant at any quarry (initial quarry site is inactive, and does not possess crushing ability or equipment). Condition 9.4 requires the facility to keep a copy of the permit on site. Condition 9.5 prevents the facility from remaining in one location for more than 12-consecutive months.

### **Toxic Impact Assessment**

This crushing facility is a mobile source. No toxic impact assessment is required.

### **Summary & Recommendations**

I recommend that Permit No. 1423-777-0182-B-01-0 be issued to C&H Paving, Inc. - Statewide Portable Crushing Plant #1 for the operation of a mobile crushing facility. The owner has requested statewide operation of the plant. Since this application is for a mobile crushing plant, a public advisory is not needed. The plant is a true minor source with regard to Title V.