



#### AIR EMISSION TEST REPORT

Title

RESULTS OF VISIBLE EMISSION COMPLIANCE

TESTING FOR A NON-METALLIC MINERAL

PROCESSING FACILITY

Report

Date

September 24, 2019

Test Dates

September 19, 2019

Easil	ity In	form	ation
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Name

No.:

**AWH GRADING LLC** 

Location

3333 Muir Road

City, County

Milford, Livingston

#### **Facility Permit Information**

State Registration

P0734

PTI No.

54-16

#### **Testing Contractor**

Company

Impact Compliance & Testing, Inc.

Mailing Address 4180 Keller Road Holt, MI 48842

Phone

(517) 268-0043

Project No.

1900152

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# RESULTS OF VISIBLE EMISSION COMPLIANCE TESTING FOR NON-METALLIC MINERAL PROCESSING FACILITY

#### AWH GRADING, LLC MILFORD, MI

#### 1.0 INTRODUCTION

AWH Grading LLC (AWH Grading) operates a portable non-metallic mineral crushing operation located at 3333 Muir Road in Milford, Livingston County.

AWH Grading is in the process of modifying their General Permit to Install (PTI) No.54-16 which will have testing requirements for new equipment. AWH Grading contracted Impact Compliance & Testing, Inc. to perform the visible emission compliance testing specified in the permit for processing equipment and any associated transfer points. The modified processing equipment was placed into operation in summer 2019.

PTI No. 54-16 requires that visible emissions (VE) testing be performed in accordance with federal reference test methods as required by the New Source Performance Standards (NSPS) for nonmetallic mineral processing plants (40 CFR, Part 60, Subparts A and OOO).

Tom Andrews performed the VE testing for the processing equipment at AWH Grading on September 19, 2019. Mr. Adam Hayes, Owner for AWH Grading, coordinated the project.

A protocol for the VE testing was submitted to the EGLE-AQD on August 30, 2019 prior to the performance test.

Questions regarding this emission test report should be directed to:

Jory VanEss Environmental Consultant Impact Compliance & Testing, Inc. 4180 Keller Road Holt, MI 48842 Ph: (517) 268-0043

Em: jory.vaness@impactcandt.com

Mr. Adam Hayes Owner AWH Grading, LLC 3333 Muir Road Milford, MI 48380 Ph: (248) 388-4561

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#### **Report Certification**

This test report was prepared by Impact Compliance & Testing, Inc. based on field observations collected by Impact Compliance & Testing, Inc. This test report has been reviewed by AWH representatives and approved for submittal to the EGLE.

I certify that the testing was conducted in accordance with the specified test methods and submitted test plan unless otherwise specified in this report. I believe the information provided in this report and its attachments are true, accurate, and complete.

Report Prepared By:

Reviewed By:

Jory VanEss

**Environmental Consultant** 

Impact Compliance & Testing, Inc.

Robert L. Harvey, P.E.

General Manager

Impact Compliance & Testing, Inc.

I certify that the facility and emission units were operated at maximum routine operating conditions for the test event. Based on information and belief formed after reasonable inquiry, the statements and information in this report are true, accurate and complete.

Adam Hayes

Owner

AWH Grading, LLC

#### 2.0 SOURCE AND SAMPLING LOCATION DESCRIPTION

#### 2.1 General Process Description

AWH Grading operates non-metallic mineral processing equipment that is used to crush and process the concrete or natural stone retrieved from activities performed at the Ashley Land Development site. The AWH Grading processing plant uses crushers, screens, conveyors, and stackers to crush and segregate the material (emission group FGCRUSHING).

Appendix 1 presents a process flow diagram of the mineral crushing and processing equipment included in the visible emissions evaluation.

#### 2.2 Rated Capacities and Air Emission Controls

The AWH Grading facility specifies a maximum annual concrete or natural stone throughput rate of 2,000,000 tons.

The equipment is equipped with water sprays that are used to control potential fugitive dust (particulate matter) when needed. Residual moisture is adequate to control fugitive emissions on the conveyors and downstream transfer points.

#### 2.3 Sampling Locations

All VE observations were conducted at points in accordance with USEPA Method 9 requirements. These observation points were determined and confirmed by EGLE representative Dan McGeen.

Appendix 3 provides field data sheets with appropriate VE observation point diagrams.

#### 3.0 SUMMARY OF TEST RESULTS AND OPERATING CONDITIONS

#### 3.1 Purpose and Objective of the Tests

AWH grading is in the process of modifying its General Permit to install PTI No. 54-16 to include its new equipment and NSPS 40 CFR Part 60 Subpart OOO require AWH Grading to perform initial testing of new nonmetallic processing equipment.

#### 3.2 Operating Conditions During the Compliance Tests

The facility operated normally during the test event and a rate of approximately 200-250 tons per hour. Water suppression was applied to the material before the crusher.

#### 3.3 Summary of Air Pollutant Sampling Results

VE observations were performed on September 19, 2019. A total of ten (10) transfer points were observed for visible emissions by a certified observer of visible emissions. The visible emission observations were all zero percent opacity. The 15-second observation data were reduced to six-minute averages.

A summary of the maximum observed opacities is presented in Table 3.1. Visible emission data for each process are presented in Section 5.0 of this report.

Table 3.1 Average opacity conditions during the observation periods

Parameter	FGCRUSHING
Highest individual opacity reading (%)	0
Highest 6-minute average (%)	0

#### 4.0 SAMPLING AND ANALYTICAL PROCEDURES

This section provides a summary of the procedures that were used during the AWH Grading facility observation periods.

Opacity observations were conducted by a certified observer of visible emissions in accordance with USEPA Method 9 criteria.

40 CFR Part 60, Subpart OOO, Section 60.675(c)(3) specifies that Method 9 observations for fugitive emissions from affected sources under Section 60.672(b) must be 30 minutes (five 6-minute averages) and compliance with the applicable fugitive emission limits must be based on the average of the five 6-minute averages.

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40 CFR Part 60, Subpart OOO, Section 60.675(c)(3) specifies that three sources may be read concurrently if all three emission points are within a 70° viewing sector or angle in front of the observer, such that proper sun position can be maintained for all three points, and if an opacity reading for any one of the three emission points is within 5 percent opacity of the applicable standard, then the observer must stop taking readings for the other two points and continue reading just the single point. Three emission points were observed concurrently and, at no time, was the observed opacity within 5% of the applicable limit.

#### 5.0 RESULTS

#### 5.1 Test Results and Allowable Emission Limits

Fugitive visible emission data for each process are presented in Table 6.1 along with the applicable opacity limit. The average of the six-minute averages for each process is well below the applicable opacity standard. Therefore, the facility is operating in compliance with the PTI No. 54-16 and NSPS emission standards.

All observation periods were conducted at points which meet USEPA Method 9 and Subpart OOO criteria.

Appendix 2 provides the qualified observer certificate.

Appendix 3 provides field data sheets and individual observation point diagrams.

#### 5.2 Variations From Normal Sampling Procedures or Operating Conditions

The testing for all pollutants was performed in accordance with USEPA Method 9, Subpart OOO and the test protocol dated August 30, 2019.

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Table 5.1 Average opacity at each transfer point

Visible Emission Observation Point	Observed Opacity (%) (6 min. avg.)	Permit Limit (%) (6 min. avg.)
Chute to Crusher (CRUSHER002)	0	20
(CRUSHER002) to Surge Bin (SURGEBIN007)	0	20
(SURGEBIN007) to Stacker (02-STACKER)	0	20
(02-STACKER) to Stacker (SCREEN001)	0	20
(SCREEN001) to Stacker (01-STACKER)	0	20
(01-STACKER to Crusher (CRUSHER001)	0	20
(CRUSHER001) to Stacker (04-STACKER)	0	20
(04-STACKER) to Screen (SCREEN001)	0	20
(SCREEN001) to Conveyor (7413 shop-made)	0	20
(7413) to Stacker (03-STACKER)	0	20

## APPENDIX 1

• Process Flow Diagram

8:00-3:00pm with water sup 200-250 Ph Ш YIL 02 Stacker CRUSHER OI Ü Q · 04 (X) Screen OOI 4

103 STACKER

Stock