RECEIVED
AUG 12 2024
EGLE - Mailroom

AIR EMISSION TEST REPORT FOR THE VERIFICATION OF VISIBLE EMISSIONS

Prepared for:

Michigan ReAgg, Inc.
6600 Lansing Road Processing Location
Charlotte, MI
SRN P1312
PTI No. 56-24

ICT Project No.: 2400161
Test Date: July 23, 2024

IMPACT COMPLIANCE & TESTING

Report Certification

AIR EMISSION TEST REPORT FOR THE VERIFICATION OF VISIBLE EMISSIONS

Michigan ReAgg, Inc.
6600 Lansing Road Processing Location
Charlotte, MI

This test report was prepared by Impact Compliance & Testing, Inc. (ICT) based on field sampling data collected by ICT. Facility process data was verified and provided by Michigan ReAgg, Inc. (MI ReAgg) employees or representatives. This test report has been reviewed by MI ReAgg representatives and approved for submittal to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD).

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

The material and data in this document were prepared under the supervision and direction of the undersigned.

Impact Compliance & Testing, Inc.

Andrew Eisenberg
Project Manager

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.

Mike Busterna
Project Manager / Estimator
Asbestos Abatement, Inc.

Table of Contents

Page

1.0 INTRODUCTION 1

2.0 SOURCE AND SAMPLING LOCATION DESCRIPTION 2
2.1 General Process Description 2
2.2 Rated Capacities and Air Emission Controls 2
2.3 Sampling Locations 2

3.0 SUMMARY OF TEST RESULTS AND OPERATING CONDITIONS 3
3.1 Purpose and Objective of the Tests 3
3.2 Operating Conditions During the Compliance Tests 3
3.3 Summary of Air Pollutant Sampling Results 3

4.0 SAMPLING AND ANALYTICAL PROCEDURES 4

5.0 RESULTS 4
5.1 Test Results and Allowable Emission Limits 4
5.2 Variations from Normal Sampling Procedures or Operating Conditions 4

List of Tables

Table		Page
3.1	Process material throughput	3
3.2	Average opacity and operating conditions during the observation periods	3
5.1	Average opacity at each transfer point	5

List of Appendices

APPENDIX 1	PROCESS FLOW DIAGRAM
APPENDIX 2	QUALIFIED OBSERVER CERTIFICATES
APPENDIX 3	FIELD DATA SHEETS
	PROCESS MATERIAL SCALE READINGS

1.0 Introduction

MI ReAgg operates a portable nonmetallic mineral crushing operation permitted at 2420 North Grand River Avenue, Lansing, Michigan 48906. The portable plant was issued Permit to Install (PTI) No. 56-24 on May 16, 2024.

MI ReAgg contracted ICT to perform the Visible Emissions (VE) performance evaluation as specified in the NSPS for the new equipment and any associated transfer points. The VE testing was performed in accordance with federal reference test methods as required by 40 CFR, Part 60, Subparts A and OOO, and the previously submitted test plan dated June 24, 2024, and revised on July 18, 2024, to represent the new processing location.

Andrew Eisenberg performed the VE testing for the new processing equipment operated by MI ReAgg on July 23, 2024.

Questions regarding this emission test report should be directed to:

Mr. Andrew Eisenberg
Project Manager
Impact Compliance & Testing, Inc.
37660 Hills Tech Drive
Farmington Hills, MI 48331
Phone: (734) 464-3880

Mr. Mike Busterna
Project Manager / Estimator
Asbestos Abatement, Inc.
2420 N. Grand River Ave.
Lansing, MI 48906
Phone: (517) 323-0050 ext. 11

2.0 Source and Sampling Location Description

2.1 General Process Description

MI ReAgg operates a portable non-metallic mineral processing facility that is used to crush and process concrete and asphalt. The MI ReAgg portable facility uses crushers, screens, conveyors, and stackers to crush and segregate the material.

Appendix 1 presents a process diagram of equipment the was tested and the location of water sprays used to control emissions. Table 5.1 identifies the visible emissions observation points (equipment and associated transfer points) that were included in the compliance testing.

2.2 Rated Capacities and Air Emission Controls

The PTI issued to MI ReAgg for the portable non-metallic mineral processing facility specifies a maximum annual throughput rate for material of 60,000 tons of material annually.

The non-metallic mineral processing operation is designed to run as a continuous process and may operate for extended periods without interruption. However, the process may be interrupted during a production run for equipment adjustments or process upsets.

During the date of VE observations (July 23, 2024) the plant had a process throughput of 241 tons per hour.

The crushing plant is equipped with water sprays that are used to control potential fugitive dust (particulate matter) emissions when needed. Residual material moisture is adequate to control fugitive dust emissions from downstream material conveying and transfer points (i.e., these operations are not equipped with additional water sprays).

The control equipment is operated to maintain compliance with fugitive and visible emission limits specified by the NSPS and operational requirements of the Permit to install issued to MI ReAgg.

Process material throughput is presented in Table 3.1.

2.3 Sampling Locations

All VE observations were conducted at points in accordance with United States Environmental Protections Agency (USEPA) Method 9 requirements.

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

EGLE-AQD PTI No. 56-24 and NSPS 40CFR Part 60 Subpart OOO require MI ReAgg to perform initial testing of new nonmetallic processing equipment.

3.2 Operating Conditions During the Compliance Tests

The facility operated under routine maximum conditions during the test event resulting in 241 tons per hour. Water suppression was applied to the process material during the VE observations.

Images of scale readings with time stamps are presented in Appendix 3.

3.3 Summary of Air Pollutant Sampling Results

VE observations were performed on July 23, 2024. A total of 19 observation points were evaluated for visible emissions by a certified observer. The only observed VEs were from the Crusher. 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 6.0 of this report.

Table 3.2 Average opacity conditions during the observation periods

Parameter	EUPROCESS
Highest individual opacity reading (%)	5.0
Highest 6 minute average (%)	0.6

4.0 Sampling and Analytical Procedures

This section provides a summary of the procedures that were used during the MI ReAgg 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.

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 observation point are presented in Table 6.1 along with the applicable opacity limit. The average of the six-minute averages for each process is below the applicable opacity standard. Therefore, the facility is operating in compliance with the PTI 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's 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 June 24, 2024, and revised on July 18, 2024, to represent the new processing location. The facility was operated under normal process conditions.

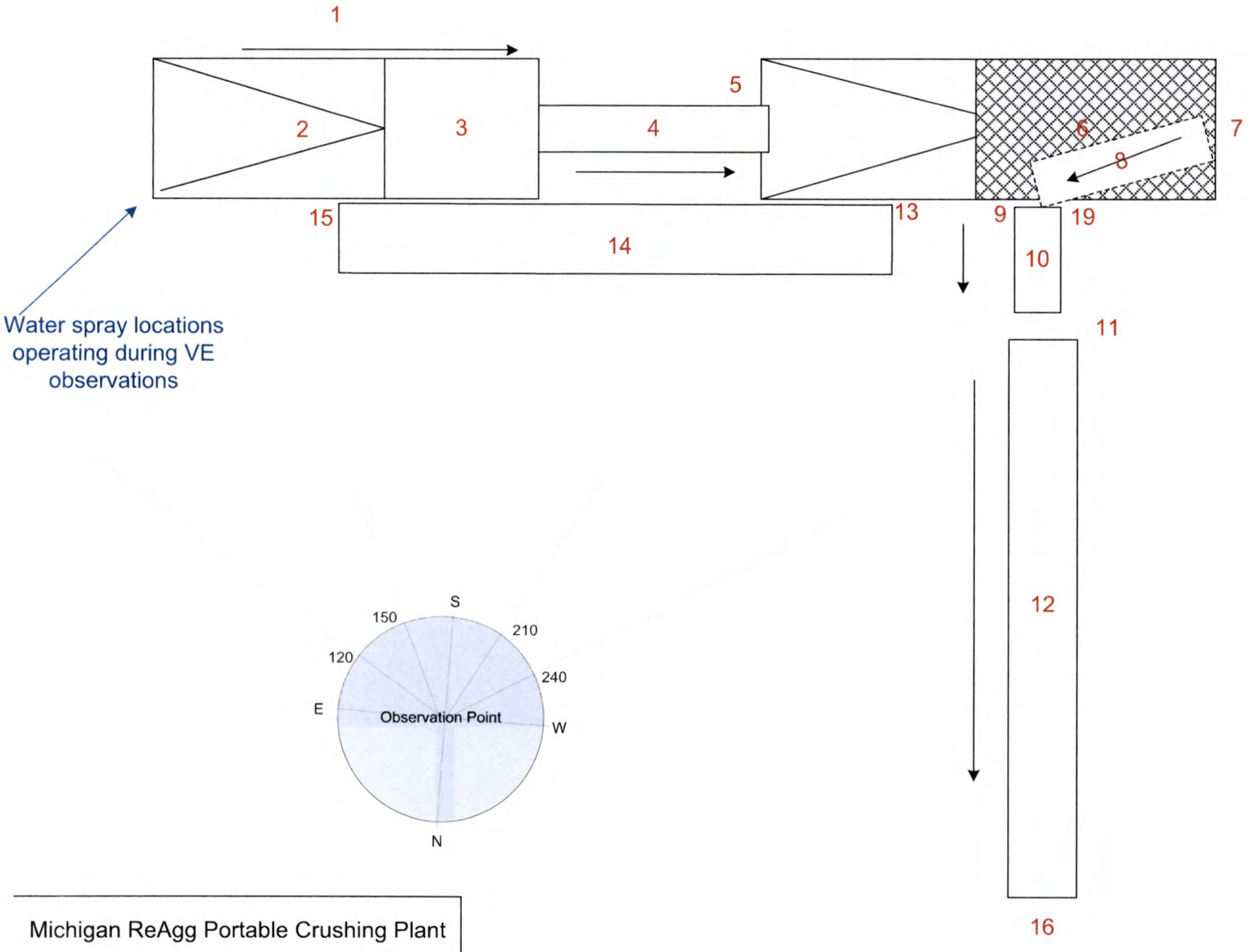
Table 5.1 Average opacity at each transfer point

Visible Emission Observation Point	Observed Opacity (%) (6 min. avg.)	Permit Limit (%) (6 min. avg.)
1. **TP** Loader to Crusher	0	7
2. Impact 01	0.6	12
3. **TP** Impact01 to Convey01	0	7
4. Convey01	0	7
5. **TP** Convey01 to Screen01	0	7
6. Screen01	0	7
7. **TP** Screen01 to Convey02	0	7
8. Convey02	0	7
9. **TP** Convey02 to Convey03	0	7
10. Convey03	0	7
11. **TP** Convey03 to Stack01	0	7
12. Stack01	0	7
13. **TP** Sceen01 to Convey04	0	7
14. Convey04	0	7
15. **TP** Convey04 to Impact01	0	7
16. Stockpile01	0	5
17. Front End Loader / Excavator Operations	0	5
18. Haul Roads	0	5
19. Stockpile02	0	5

TP – Denotes Transfer Point

APPENDIX 1

- Process Flow Diagram



Michigan ReAgg Portable Crushing Plant		
Scale None	Sheet 1 of 1	Impact Compliance & Testing