

3 Innwood Circle, Suite 220 • Little Rock, AR 72211 • (501) 225-7779 • Fax (501) 225-6738

March 2, 2023

Ms. Annette Cusher, PE
Arkansas Department of Energy & Environment
Division of Environmental Quality
Office of Land Resources
5301 Northshore Drive
North Little Rock, AR 72118-5317

RE: Mississippi County Class 1 Landfill Request for Continued Use of Steel Mill Drop Box Sludge as Alternative Daily Cover (AFIN 47-00124, Permit No. 0136-S1-R4) FTN No. R04355-2810-001

#### Dear Ms. Cusher:

On behalf of Mississippi County, Arkansas, FTN Associates, Ltd (FTN) would like to submit this request to continue the use of dried Drop Box sludge from the nearby Nucor – Yamato steel mill as an alternative daily cover (ADC) at the Mississippi County Class 1 Landfill (MCLF) in accordance with APC&EC Rule 22.413(b). Please find attached the 2022 ADC analytical results for your review.

The Drop Box sludge has been successfully used as an ADC for several years at the facility. In addition to functioning as daily cover, the use of the ADC provides several benefits to the operation of the landfill including:

- Decreased usage of onsite soils,
- Increased utilization of airspace,
- Increased flow-through of leachate to the collection system, and
- Reduction in side-slope seeps due to reduced usage of impermeable soil.

MCLF proposes to continue to use the ADC when sufficient quantities are available. However, the facility will use on-site soil when necessary to generate enough cover material.

Ms. Annette Cusher March 2, 2023 Page 2

Please contact me or Alex Kreps, PE, at (501) 225-7779 if you have any questions or require additional information.

Kindest regards,

FTN ASSOCIATES, LTD.

Jason J. Ghidotti, PE Project Manager

JJG/tas

Attachments

CC: J.T. Harris, Mississippi County

\\R\\\\P\_FILES\2023-03-02 FTN L DEQ MSCO SLUDGE ADC REQUEST\2023-03-02 FTN LTR DEQ MCLF SLUDGE ADC REQUEST DOCX



# **ATTACHMENT 1**

Analytical Data



12/30/2022

Nucor Yamato Mr. Tony Hodge 5929 East Hwy 18 Blytheville, AR, 72315

Ref:

Analytical Testing

Lab Report Number: 22-350-0217

Client Project Description: Analytical Testing

Dear Mr. Tony Hodge:

Waypoint Analytical, LLC. received sample(s) on 12/16/2022 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method. Where the laboratory was not responsible for the sampling stage (refer to the chain of custody) results apply to the sample as received.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2021) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an asreceived basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Randy Thomas Project Manager

Randell H. Thomas

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.





# **Certification Summary**

# Laboratory ID: WP MTN: Waypoint Analytical, LLC., Memphis, TN

| State          | Program               | Lab ID     | Expiration Date |
|----------------|-----------------------|------------|-----------------|
| Alabama        | State Program         | 40750      | 02/28/2023      |
| Arkansas       | State Program         | 88-0650    | 02/07/2023      |
| California     | State Program         | 2904       | 06/30/2023      |
| Florida        | State Program - NELAP | E871157    | 06/30/2023      |
| Georgia        | State Program         | C044       | 02/18/2023      |
| Georgia        | State Program         | 04015      | 06/30/2023      |
| Illinois       | State Program - NELAP | 200078     | 10/10/2023      |
| Kentucky       | State Program         | 80215      | 06/30/2023      |
| Kentucky       | State Program         | KY90047    | 12/31/2023      |
| Louisiana      | State Program - NELAP | LA037      | 12/31/2022      |
| Louisiana      | State Program - NELAP | 04015      | 06/30/2023      |
| Mississippi    | State Program         | MS         | 02/11/2023      |
| North Carolina | State Program         | 47701      | 07/31/2023      |
| North Carolina | State Program         | 415        | 12/31/2023      |
| Pennsylvania   | State Program - NELAP | 68-03195   | 05/31/2023      |
| South Carolina | State Program         | 84002      | 06/30/2023      |
| Tennessee      | State Program         | 02027      | 02/11/2023      |
| Texas          | State Program - NELAP | T104704180 | 09/30/2022      |
| Virginia       | State Program         | 00106      | 06/30/2023      |
| Virginia       | State Program - NELAP | 460181     | 09/14/2023      |
|                |                       |            |                 |

00001/22-350-0217



# **Sample Summary Table**

**Report Number:** 

22-350-0217

**Client Project Description:** 

**Analytical Testing** 

| Lab No | Client Sample ID   | Matrix | Date Collected   | Date Received |
|--------|--------------------|--------|------------------|---------------|
| 84073  | Dried Clarifier    | Solids | 12/16/2022 09:30 | 12/16/2022    |
| 84074  | Dried Clarifier    | Solid  | 12/16/2022 09:30 | 12/16/2022    |
| 84075  | Used Refractory    | Solids | 12/16/2022 09:30 | 12/16/2022    |
| 84076  | Used Refractory    | Solid  | 12/16/2022 09:30 | 12/16/2022    |
| 84077  | Wood Chips - Mulch | Solids | 12/16/2022 09:30 | 12/16/2022    |
| 84078  | Wood Chips - Mulch | Solid  | 12/16/2022 09:30 | 12/16/2022    |



Client: Nucor Yamato

CASE NARRATIVE

Project: Analytical Testing

Lab Report Number: 22-350-0217

Date: 12/30/2022

#### Flashpoint Method ASTM D93-80

QC Batch No: L655239

The sample analysis was performed using a modified version of the reference method. Due to the sample matrix, the continual stirring required by the method had to be omitted.

QC Batch No: L655994

The sample analysis was performed using a modified version of the reference method. Due to the sample matrix, the continual stirring required by the method had to be omitted.

#### **Metals Analysis Method 6010D**

Sample 84075 (Used Refractory)

Analyte: Silver

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Arsenic

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Arsenic

QC Batch No: L655366/L654764

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 84075 (Used Refractory)

Analyte: Barium

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Barium

QC Batch No: L655366/L654764

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A dilution test was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 84075 (Used Refractory)

Analyte: Cadmium

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.



Sample 84075 (Used Refractory)

Analyte: Cadmium

QC Batch No: L655366/L654764

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 84075 (Used Refractory)

Analyte: Chromium

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Chromium

QC Batch No: L655366/L654764

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A dilution test was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 84075 (Used Refractory)

Analyte: Lead

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Lead

QC Batch No: L655366/L654764

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A dilution test was performed and passed quality control acceptance ranges. No matrix interference is suspected.

Sample 84073 (Dried Clarifier)

Analyte: Selenium

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Selenium

QC Batch No: L655054/L654764

This analyte was analyzed at a dilution due to IEC interference/matrix interference.

Sample 84075 (Used Refractory)

Analyte: Selenium

QC Batch No: L655366/L654764

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.

#### Total Aqueous Mercury Analysis - CVAA (TCLP) Method 7470A

Analyte: Mercury

QC Batch No: L656146/L655975

The matrix spike and/or the matrix spike duplicate was outside quality control acceptance ranges. A post digestion spike was performed and passed quality control acceptance ranges. No matrix interference is suspected.





16756

Nucor Yamato Mr. Tony Hodge 5929 East Hwy 18 Blytheville , AR 72315 Project

**Analytical Testing** 

Information:

Report Date: 12/30/2022

Received: 12/16/2022

Report Number: 22-350-0217

REPORT OF ANALYSIS

Lab No:

84073

Sample ID : Dried Clarifier

Matrix: Solids

Sampled: 12/16/2022 9:30

| Test                 | Results | Units     | MQL   | DF | Date / Time<br>Analyzed | Ву  | Analytical<br>Method |
|----------------------|---------|-----------|-------|----|-------------------------|-----|----------------------|
|                      |         |           |       |    |                         |     |                      |
| Cyanide, Reactive    | <0.125  | mg/Kg     | 0.125 | 1  | 12/29/22 10:56          | FMM | SW-7.3.3             |
| Flash Point          | >96     | degrees C |       | 1  | 12/28/22 08:20          | CNB | ASTM D93-80          |
| pH                   | 10.3    | s.u.      |       | 1  | 12/29/22 16:12          | DRS | 9045D                |
| Sulfide (Reactivity) | <25.0   | mg/Kg     | 25.0  | 1  | 12/29/22 10:56          | FMM | SW-7.3.4             |
| Arsenic              | 33.1    | mg/Kg     | 0.500 | 1  | 12/21/22 06:41          | JTR | 6010D                |
| Barium               | 60.4    | mg/Kg     | 0.500 | 1  | 12/21/22 06:41          | JTR | 6010D                |
| Cadmium              | 19.8    | mg/Kg     | 0.100 | 1  | 12/21/22 06:41          | JTR | 6010D                |
| Chromium             | 675     | mg/Kg     | 0.250 | 1  | 12/21/22 06:41          | JTR | 6010D                |
| Lead                 | 65.2    | mg/Kg     | 0.300 | 1  | 12/21/22 06:41          | JTR | 6010D                |
| Mercury              | <0.158  | mg/Kg     | 0.158 | 1  | 12/20/22 11:37          | FDS | 7471A                |
| Selenium             | <5.00   | mg/Kg     | 5.00  | 10 | 12/22/22 00:06          | JTR | 6010D                |
| Silver               | 0.569   | mg/Kg     | 0.250 | 1  | 12/21/22 06:41          | JTR | 6010D                |



16756

Nucor Yamato Mr. Tony Hodge 5929 East Hwy 18 Blytheville, AR 72315

Project

**Analytical Testing** 

Information:

Report Date: 12/30/2022

Received: 12/16/2022

Report Number: 22-350-0217

**REPORT OF ANALYSIS** 

Lab No:

84074

Sample ID : Dried Clarifier

Matrix: Solid

Sampled: 12/16/2022 9:30

| oumpio 10 1 2 1 1 0 1 0 1 1        |                |          |                 |         |                |                         |     |                     |
|------------------------------------|----------------|----------|-----------------|---------|----------------|-------------------------|-----|---------------------|
| Analytical Method:                 | 1311           |          |                 |         |                |                         |     |                     |
| Test                               |                | Results  | Units           | MQL     | DF             | Date / Time<br>Analyzed | Ву  | Analytical<br>Batch |
| TCLP Metals Extraction             | I              | Leachate |                 |         | 1              | 12/19/22 14:00          | PHE | L654690             |
| Analytical Method:<br>Prep Method: | 6010D<br>3015A |          | Prep Batch(es): | L655396 | 12/22/22 11:38 | 3                       |     |                     |
| Test                               |                | Results  | Units           | MQL     | DF             | Date / Time<br>Analyzed | Ву  | Analytical<br>Batch |
| TCLP Arsenic                       |                | <0.250   | mg/L            | 0.250   | 1              | 12/22/22 18:33          | JTR | L655652             |
| TCLP Barium                        |                | 0.343    | mg/ <b>L</b>    | 0.250   | 1              | 12/22/22 18:33          | JTR | L655652             |
| TCLP Cadmium                       |                | <0.0500  | mg/L            | 0.0500  | 1              | 12/22/22 18:33          | JTR | L655652             |
| TCLP Chromium                      |                | <0.100   | mg/L            | 0.100   | 1              | 12/22/22 18:33          | JTR | L655652             |
| TCLP Lead                          |                | <0.100   | mg/L            | 0.100   | 1              | 12/22/22 18:33          | JTR | L655652             |
| TCLP Selenium                      |                | <0.500   | mg/L            | 0.500   | 1              | 12/22/22 18:33          | JTR | L655652             |
| TCLP Silver                        |                | <0.0500  | mg/L            | 0.0500  | 1              | 12/22/22 18:33          | JTR | L655652             |
| Analytical Method:<br>Prep Method: | 7470A<br>7470A |          | Prep Batch(es): | L655975 | 12/29/22 08:1  | 5                       |     |                     |
| Test                               |                | Results  | Units           | MQL     | DF             | Date / Time<br>Analyzed | Ву  | Analytical<br>Batch |

mg/L

**TCLP Mercury** 

<0.0200

0.0200

1 12/29/22 13:56 TJS

L656146



16756

**Nucor Yamato** Mr. Tony Hodge 5929 East Hwy 18

Blytheville , AR 72315

Project

Information:

**Analytical Testing** 

Report Date: 12/30/2022

Received: 12/16/2022

Report Number: 22-350-0217

**REPORT OF ANALYSIS** 

Lab No:

84075

Sample ID: Used Refractory

Matrix: Solids

Sampled: 12/16/2022 9:30

| Test                 | Results | Units     | MQL   | DF | Date / Time<br>Analyzed | Ву  | Analytical<br>Method |
|----------------------|---------|-----------|-------|----|-------------------------|-----|----------------------|
|                      |         |           |       |    |                         |     |                      |
| Chromium, Hexavalent | <0.505  | mg/Kg     | 0.505 | 1  | 12/29/22 09:30          | נננ | 3060A 7196A          |
| Cyanide, Reactive    | <0.125  | mg/Kg     | 0.125 | 1  | 12/29/22 10:56          | FMM | SW-7.3.3             |
| Flash Point          | >96     | degrees C |       | 1  | 12/23/22 08:10          | CNB | ASTM D93-80          |
| pH                   | 11.0    | s.u.      |       | 1  | 12/29/22 16:12          | DRS | 9045D                |
| Sulfide (Reactivity) | <25.0   | mg/Kg     | 25.0  | 1  | 12/29/22 10:56          | FMM | SW-7.3.4             |
| Arsenic              | 4.91    | mg/Kg     | 2.50  | 5  | 12/22/22 00:32          | JTR | 6010D                |
| Barium               | 445     | mg/Kg     | 2.50  | 5  | 12/22/22 00:32          | JTR | 6010D                |
| Cadmium              | 3.92    | mg/Kg     | 0.500 | 5  | 12/22/22 00:32          | JTR | 6010D                |
| Chromium             | 1800    | mg/Kg     | 1.25  | 5  | 12/22/22 00:32          | JTR | 6010D                |
| Lead                 | 35.7    | mg/Kg     | 1.50  | 5  | 12/22/22 00:32          | JTR | 6010D                |
| Mercury              | <0.147  | mg/Kg     | 0.147 | 1  | 12/20/22 11:41          | FDS | 7471A                |
| Selenium             | <5.00   | mg/Kg     | 5.00  | 10 | 12/22/22 01:07          | JTR | 6010D                |
| Silver               | <1.25   | mg/Kg     | 1.25  | 5  | 12/22/22 00:32          | JTR | 6010D                |



16756

**Nucor Yamato** 

Mr. Tony Hodge 5929 East Hwy 18 Blytheville , AR 72315 Project

**Analytical Testing** 

Information:

Report Date: 12/30/2022

Received: 12/16/2022

Report Number: 22-350-0217

**REPORT OF ANALYSIS** 

Lab No:

84076

07070

Sample ID : Used Refractory

Matrix: Solid

Sampled: 12/16/2022 9:30

Ву

Analytical Method: 1311

Test

Results

Units

MQL

DF

Date / Time Analyzed Analytical

Batch

TCLP Metals Extraction

Leachate

1 12/19/22 14:00 PHE

Analytical Method:

6010D

Prep Batch(es):

L655396

12/22/22 11:38

L654690

Analytical Method.

Prep Method:

3015A

| Test          | Results | Units | MQL    | DF | Date / Time<br>Analyzed | Ву  | Analytical<br>Batch |
|---------------|---------|-------|--------|----|-------------------------|-----|---------------------|
| TCLP Arsenic  | <0.250  | mg/L  | 0.250  | 1  | 12/22/22 18:38          | JTR | L655652             |
| TCLP Barium   | 0.401   | mg/L  | 0.250  | 1  | 12/22/22 18:38          | JTR | L655652             |
| TCLP Cadmium  | <0.0500 | mg/L  | 0.0500 | 1  | 12/22/22 18:38          | JTR | L655652             |
| TCLP Chromium | <0.100  | mg/L  | 0.100  | 1  | 12/22/22 18:38          | JTR | L655652             |
| TCLP Lead     | <0.100  | mg/L  | 0.100  | 1  | 12/22/22 18:38          | JTR | L655652             |
| TCLP Selenium | <0.500  | mg/L  | 0.500  | 1  | 12/22/22 18:38          | JTR | L655652             |
| TCLP Silver   | <0.0500 | mg/L  | 0.0500 | 1  | 12/22/22 18:38          | JTR | L655652             |

**Analytical Method:** 

**Prep Method:** 

7470A 7470A Prep Batch(es):

Results

L655975

12/29/22 08:15

DF

By Analytical

Batch

TCLP Mercury

Test

<0.0200 mg/L

Units

0.0200

MQL

1 12/29/22 13:58 TJS

Date / Time

Analyzed

IS L656146

Qualifiers/ Definitions

DF

**Dilution Factor** 

MQL

Method Quantitation Limit



16756

**Nucor Yamato** 

Mr. Tony Hodge 5929 East Hwy 18 Blytheville , AR 72315 Project

**Analytical Testing** 

Information:

Report Date: 12/30/2022

Received: 12/16/2022

Report Number: 22-350-0217

**REPORT OF ANALYSIS** 

Lab No:

84077

Sample ID: Wood Chips - Mulch

Matrix: Solids

Sampled: 12/16/2022 9:30

| Test                 | Results Units |           | MQL   | DF | Date / Time<br>Analyzed | Ву  | Analytical<br>Method |
|----------------------|---------------|-----------|-------|----|-------------------------|-----|----------------------|
|                      |               |           |       |    |                         |     |                      |
| Cyanide, Reactive    | <0.125        | mg/Kg     | 0.125 | 1  | 12/29/22 10:56          | FMM | SW-7.3.3             |
| Flash Point          | >96           | degrees C |       | 1  | 12/21/22 08:20          | CNB | ASTM D93-80          |
| рН                   | 7.0           | s.u.      |       | 1  | 12/29/22 16:12          | DRS | 9045D                |
| Sulfide (Reactivity) | <25.0         | mg/Kg     | 25.0  | 1  | 12/29/22 10:56          | FMM | SW-7.3.4             |
| Arsenic              | <0.500        | mg/Kg     | 0.500 | 1  | 12/22/22 02:55          | JTR | 6010D                |
| Barium               | 13.7          | mg/Kg     | 0.500 | 1  | 12/22/22 02:55          | JTR | 6010D                |
| Cadmium              | <0.100        | mg/Kg     | 0.100 | 1  | 12/22/22 02:55          | JTR | 6010D                |
| Chromium             | 10.4          | mg/Kg     | 0.250 | 1  | 12/22/22 02:55          | JTR | 6010D                |
| Lead                 | 1.20          | mg/Kg     | 0.300 | 1  | 12/22/22 02:55          | JTR | 6010D                |
| Mercury              | <0.151        | mg/Kg     | 0.151 | 1  | 12/20/22 11:42          | FDS | 7471A                |
| Selenium             | <0.500        | mg/Kg     | 0.500 | 1  | 12/22/22 02:55          | JTR | 6010D                |
| Silver               | <0.250        | mg/Kg     | 0.250 | 1  | 12/22/22 02:55          | JTR | 6010D                |



16756

**Nucor Yamato** 

Mr. Tony Hodge 5929 East Hwy 18 Blytheville, AR 72315 Project

**Analytical Testing** 

Information:

Report Date: 12/30/2022 Received: 12/16/2022

Report Number: 22-350-0217

**REPORT OF ANALYSIS** 

Lab No:

84078

Sample ID: Wood Chips - Mulch

Matrix: Solid

Sampled: 12/16/2022 9:30

Analytical Method: 1311

Test Results Units MQL DF Date / Time Ву Analytical **Analyzed** Batch

**TCLP Metals Extraction** 

Leachate

1 12/19/22 14:00 PHE

L654690

**Analytical Method:** 

6010D

Prep Batch(es):

L655634

12/23/22 11:53

| Prep Method:  | 3015A   |         |               |               |             |                         |     |                     |
|---------------|---------|---------|---------------|---------------|-------------|-------------------------|-----|---------------------|
| Test          |         | Results | Units         | MQL           | DF          | Date / Time<br>Analyzed | Ву  | Analytical<br>Batch |
| TCLP Arsenic  |         | <0.250  | mg/L          | 0.250         | 1           | 12/28/22 14:55          | TJS | L655987             |
| TCLP Barium   |         | 0.277   | mg/L          | 0.250         | 1           | 12/28/22 14:55          | TJS | L655987             |
| TCLP Cadmium  |         | <0.0500 | mg/L          | 0.0500        | 1           | 12/28/22 14:55          | TJS | L655987             |
| TCLP Chromium |         | <0.100  | mg/L          | 0.100         | 1           | 12/28/22 14:55          | TJS | L655987             |
| TCLP Lead     |         | <0.100  | mg/L          | 0.100         | 1           | 12/28/22 14:55          | TJS | L655987             |
| TCLP Selenium |         | <0.500  | mg/L          | 0.500         | 1           | 12/28/22 14:55          | TJS | L655987             |
| TCLP Silver   |         | <0.0500 | mg/L          | 0.0500        | 1           | 12/28/22 14:55          | TJS | L655987             |
|               | - 7470A | n.      | an Batab(aa). | 1.655075 12/2 | 0.722.00.11 | F                       |     |                     |

**Analytical Method:** 

**Prep Method:** 

7470A

Prep Batch(es):

Units

mg/L

L655975

12/29/22 08:15

DF

Test

7470A

Date / Time Analyzed

Batch

Analytical

**TCLP Mercury** 

< 0.0200

Results

0.0200

MQL

1 12/29/22 13:59 TJS

L656146

Ву

Qualifiers/ **Definitions** 

DF

**Dilution Factor** 

MQL

Method Quantitation Limit



# **Shipment Receipt Form**

Customer Number: 16756

Customer Name: Nucor Yamato Report Number: 22-350-0217

# **Shipping Method**

| ◯ Fed Ex            | US Postal  | <ul><li>Lab</li></ul> |       | Other:              |                       |
|---------------------|--|-----------------------|-------|---------------------|-----------------------|
| UPS                 | Client   | O Courie              | r     | Thermometer ID:     | T102                  |
| Shipping container  | /cooler uncomprom                                | ised?                 | Yes   | ○ No                |                       |
| Number of coolers   | /boxes received                                  |                       | 1     |                     |                       |
| Custody seals intac | ct on shipping conta                             | ainer/cooler?         | ◯ Yes | ○ No                | Not Present           |
| Custody seals intac | ct on sample bottle                              | s?                    | ◯ Yes | ○ No                | Not Present           |
| Chain of Custody (  | COC) present?                                    |                       | Yes   | ○ No                |                       |
| COC agrees with s   | sample label(s)?                                 |                       | Yes   | ○ No                |                       |
| COC properly com    | pleted   |                       | Yes   | ○ No                |                       |
| Samples in proper   | containers?                                      |                       | Yes   | ○ No                |                       |
| Sample containers   | intact?  |                       | Yes   | ○ No                |                       |
| Sufficient sample v | olume for indicated                              | test(s)?              | Yes   | ○ No                |                       |
| All samples receive | ed within holding tin                            | ne?                   | Yes   | ○ No                |                       |
| Cooler temperature  | e in compliance?                                 |                       | Yes   | ○ No                |                       |
|                     | rived at the laborat<br>sidered acceptable<br>n. |                       | Yes   | ○ No                |                       |
| Water - Sample co   | ntainers properly p                              | reserved              | O Yes | ○ No                | ● N/A                 |
| Water - VOA vials   | free of headspace                                |                       | Yes   | ○ No                | ● N/A                 |
| Trip Blanks receive | ed with VOAs                                     |                       | O Yes | ○ No                | ● N/A                 |
| Soil VOA method 5   | 5035 – compliance                                | criteria met          | O Yes | ○ No                | N/A                   |
| High concentra      | tion container (48 h                             | ır)                   | Lov   | v concentration EnC | Core samplers (48 hr) |
| High concentrate    | tion pre-weighed (n                              | nethanol -14 d)       | Lov   | v conc pre-weighed  | vials (Sod Bis -14 d) |
| Special precaution  | s or instructions inc                            | luded?                | ○ Yes | No                  |                       |
| Comments:           |  |                       |       |                     |                       |

Signature: Emily M. Peterson Date & Time: 12/16/2022 15:24:35

| For Laboratory Use Only  | Matrix Key<br>WW – Wastewater GW – Groundwater<br>DW – Drinking Water 5 – Soil /Solid O – Oil<br>P - Product M - Misc | Site/Facility ID#                                | Cool < 10C Na25203 (Micro Only) Cool ← 6C H2504 pH<2 None Required NaOH pH>10 HNO3 pH>2 HC1 pH<2 H3P04 pH<2 Cool ← 6C Na25203 | Comments/Notes                   | None Presentarius      | 1               |                    |                   |    |   | 22-350-0217                           | 15.24.16     |                               |                           |                  | ) Date, Time             | Date Time                | जिंदि गानि                   |
|--|---|--|---|----------------------------------|------------------------|-----------------|--------------------|-------------------|----|---|---------------------------------------|--------------|-------------------------------|---------------------------|------------------|--------------------------|--------------------------|------------------------------|
| For Laborat  | JPS USPS<br>Client Drop Off   |  | <b>&lt; &amp; ∪ ∆ w w ∪ x </b>  |                                  |                        |                 |                    |                   |    |   |                                       | Nucor Yamato |                               | nments                    |                  | Received by: (SIGNATURE) | Received by: (SIGNATURE) | Received by: (SIGNATURE)     |
|  | Method of Shipment Fed Ex Courier Other   | Purchase Order Number                            | Hex Chrome  | Required Analysis / Preservative |                        |                 | >                  |                   |    |   |                                       | Neson V      |                               | Client Remarks/Comments   |                  | Date Time                | Date Time                | 學是200                        |
|  |   | <del>                                     </del> | Reactivity  | ed Analysi                       |                        |                 |                    |                   |    |   |                                       |              | January<br>January<br>January | 5                         |                  | 8                        | å                        | SN.                          |
|  | yldge sagaly  | nato.c   | Ignitability —  | Require                          | É                      |                 |                    |                   | ηι |   |                                       |              |                               |                           |                  |                          |                          | Police<br>Police             |
| Billing Information<br>Customer #16756   | RUSH — Additional charges apply<br>Special Detection Limit(s)<br>Date Results Needed                                  | Project Manager Email<br>tonyh@nucor-yamato.com  | Hd  |                                  | \ <u></u>              | >               | <b>\</b>           |                   |    | · |                                       |              |                               |                           |                  |                          |                          |                              |
| Billing Information<br>Customer #  | RUSH – Additional ch<br>Special Detection Lin<br>Date Results Needed  | Project Manager Email<br>tonyh@nucor-J           | RCRA Total & TCLP Metals  |                                  | >                      | >               | >                  |                   |    |   |                                       |              |                               |                           |                  | by:(SIGNATURE)           | by. (SIGNATURE)          | Relinquished by: (SIGNATURE) |
| Sus Cus  | <b>3</b> 3 3  | Projec<br>tony                                   | estend(C) omposite  | 9)                               | ဗ                      | ဗ               | ဖ                  |                   |    |   |                                       |              |                               | Sampled by (Name – Print) | <u> </u>         | (S) (A)                  |                          | S Sign                       |
| A CALCALLAN E  |   |  | atrix (Refer to Key)  | M                                | S                      | S               | S                  |                   |    |   |                                       |              |                               | )ed by                    | Tony Hodge       | Relinguished             | Relinquished             | quishe                       |
| e de la companya de l | 2   | ၂ ဋ  | er of Containers  | ıN.                              | -                      | -               | -                  |                   |    |   |                                       |              |                               | Sam                       | <u>و</u>         | 圖)/                      | 2                        | Refin                        |
| Client Project Manager/Contact<br>Mr. Tony Hodge   | Project/Site Location (City/State)<br>Blytheville, AR   | Project Manager Phone # 870-762-5500             | Unless noted, all containers<br>per Table II of 40 CFR Part<br>136.   | Sample Identification            | Dried Clarifier Sludge | Used Refractory | Wood Chips - Mulch |                   |    |   |                                       |              |                               | /Juo:                     | Lab Comments     |                          |                          |                              |
|  | Project Description<br>Various SolidsSamples  |  | <b>3</b>  | Sample                           | Dried C                | Used            | ) booW             |                   |    |   |                                       |              | - 00sy 00                     | For Laboratory Use Only   |                  |                          |                          | ·.                           |
| ddress   | tion  | Waypoint Project Name                            | Waypoint ANALYTICAL 2790 Whitten Road Memphis, TN 38133 (901) 213-2400  | نة                               | Q                      | ဂ္က             | e                  |                   |    |   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |              |                               |                           | Custody<br>Seals | <b>Ģ</b> )               | Blank/Cooler Temp        |                              |
| Client Name/Address Nucor Yamato   | Project Description<br>Various Soli   | int Proje  | Maypoil<br>ANALYI<br>2790 Whitten Road<br>Memphis, TN 38138<br>(901) 213-2400   | Time                             | <u> </u>               | 08-30           | 06:30              |                   |    |   |                                       |              |                               |                           |                  | 2                        | 00 F                     | T V                          |
| Zu Cr  | Project   | Mayre  | 2790<br>Mem (991)   | Date                             | 12/16/22               | 12/16/22        | 12/18/22           | ta Salan<br>Salan |    |   |                                       | 11.5         |                               |                           | 발 (              | جُ                       |                          | C                            |