



December 16, 2019

Via Certified Mail and Electronic Mail

State of Michigan
Department of Environment, Great Lakes, and Energy
Mr. Jeremiah Brown, Environmental Quality Analyst
PO Box 30260
Lansing, MI 48909-7760

**RE: SRN / ID: U821810662, Wayne County
1491 W. Jefferson, Trenton MI 48183 (the "Site")**

Mr. Brown:

This letter is a response to the November 25, 2019 Notice of Violation (NOV) and is intended as the written response of Next Generation Environmental, Inc. (NextGen) and MSC Land Company, LLC (MSC).

Background

MSC, the owner of the Site, NextGen and the other contractors working at the Site have throughout the course of this project maintained an unprecedented level of openness and cooperation with respect to the work being conducted at the Site. EPA, EGLE or their subcontractors have been on Site no less than 35 different times. In addition, MSC has invited (through invitations given by the EPA and other means) interested stakeholders to tour the Site and view the work. These stakeholders have included local, state and federal governmental representatives, individual citizens and citizens representing larger constituents, like the Friends of the Detroit River.

MSC, NextGen and the other contractors working on the Site have attempted to maintain this level of cooperation with EGLE, LARA and the EPA through these actions:

- On June 17, 2019 the project team provided a draft of the stove removal "work plan" to EGLE, LARA and the EPA and requested comments (comments were only received from the EPA).
- On June 24, 2019, the project team invited the EPA, LARA and EGLE representatives to attend a site meeting on June 26, 2019 to discuss the stoves and the means and methods associated with the removal process. Tammy Bell, Jeremiah Brown, Jacob Runge and Rich Conforti for EGLE and Fred Kirkland from LARA attended the meeting. Brian Kelly from the EPA was unable to attend. The meeting was structured to highlight the challenges associated with the removal of the stoves and to solicit input from EGLE, LARA and the EPA with respect to our proposed plan. Our position was that the safest way to proceed with the abatement of the stoves was to lay them down. At this meeting we solicited the agencies' help to identify any potential regulatory concerns for the work plan.
- On June 24, 2019 the project team received comments from EPA's Technical Review Workgroup



- (TRW) for Metals and Asbestos. The project team incorporated the changes recommended by the TRW into the work plan.
- On August 1, 2019 a revised work plan was emailed to Tammy Bell of EGLE and Fred Kirkland of LARA. The work plan (enclosed as a part of the modified work plan provided with this letter as **Exhibit A**) was a step-by-step process of how the team would prepare the Site, take down the stoves and mitigate any potential dust. This email requested feedback and/or comments from EGLE, but no comments were received.

Response to NOV – Cited Violation: 61.150(a)(1)(ii)

MSC and NextGen would first like to address the questions posed in the NOV. Our responses are as follows (we note that we contest the allegation made by EGLE that a violation has occurred):

| | |
|--|--|
| Date the [alleged] violation occurred | 11/6/19 |
| Cause of the [alleged] violation | if a violation occurred, the only probable cause would have been Regulated Asbestos-Containing Material (RACM) contained in the stove making contact with the ground and then sending dust in the air on impact |
| Duration of the [alleged] violation | if a violation occurred it was acute and of a short duration |
| Is the [alleged] violation ongoing | the incident was acute |
| Summary of actions to be taken to correct the [alleged] violation (and date such actions shall be completed) | a revised work plan has been provided with this letter (attached as Exhibit A) and such plan will be implemented <u>if MSC tips another stove</u> |
| What steps are being taken to prevent a recurrence | with each tipping of a stove the work plan is analyzed for improvements and for each improvement identified the work plan has been modified and the action item has been implemented; this would occur even if a NOV was not issued for the third stove tipping; this process will continue if another stove is tipped by the MSC team |

MSC contends that notwithstanding that visible emissions may have been seen by EGLE as a result of the tipping of a stove: (i) such emissions did not contain any asbestos and (ii) there is no evidence that the emissions came from Regulated Asbestos-Containing Material (RACM).

As EGLE is aware, MSC and NexGen believed (and still believe) that the removal of RACM from the stoves prior to demolition would cause the project to put the health and safety of those people working on the project in jeopardy. Therefore, the project team reached out to EGLE and LARA to seek concurrence that we faced a worker-safety issue and that tipping in accordance with those provisions of NESHAP that allow RACM to remain in place during a demolition activity was the most appropriate way to mitigate the safety issue. The NESHAP provides:



“Each owner or operator of a demolition ... activity to whom this paragraph applies, ... shall comply with the following procedures:

(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

...
(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition....” (Emphasis added.) 40 CFR 61.145(c)

Based on 40 CFR 61.145(c) the tipping of the stove while containing RACM is not a violation provided that the RACM is adequately wet. Thus, the violation must have been issued, because in EGLE’s determination the RACM was not “adequately wet.”

Adequately wet is defined as, “sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted....” (Emphasis added.) 40 CFR 61.141

Based on this definition of “adequately wet,” EGLE appears to have concluded¹ that since it saw “visible emissions” on November 6th the RACM was not adequately wet and thus, a notice of violation was issued.

However, the NESHAP also contains a definition of “visible emissions.” “Visible emissions means any emissions, which are visually detectable without the aid of instruments, coming from RACM² or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.” (Emphasis added.) 40 CFR 61.141.

The primary cause of the visible emissions was (i) a breach to the stove’s steel encasement and the underlying bricks and (ii) the stove impacting the ground. The centrifugal force created as the stove falls results in pressure on the dome upon impact which resulted in the breach of the stove lining. Further when 4,987,500 pounds of brick and metal hit the ground dust can be created, notwithstanding that an asphalt pad had been placed on the ground to soften the impact, prevent the impact from generating dust from the Site soils and isolate Site soils from abatement activities.

Per scale tickets the stove (for the stove that has been abated), inclusive of the RACM in the stove, weighs 5,000,000 pounds. The RACM, assuming a conservative weight of 1.25 pounds per square foot, weighs 12,500 pounds. The RACM is one-quarter of one percent (0.25%) of the “stove.” Per the definitions of (i) adequately wet, (ii) visible emissions, and (iii) RACM, in order for there to be a violation, EGLE should be able to demonstrate that the visible emissions witnessed on November 6th came from the RACM. The

¹ EGLE in the NOV indicated that: (i) “Visible Emissions were observed during the demolition of stove which was demolished as asbestos containing,” (ii) “visible emissions from handling operation,” and (iii) “Per the NESHAP, there can be no visible emissions if the structure is being demolished as asbestos containing”.

² Regulated asbestos-containing material (RACM) means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart. (Emphasis added.) 40 CFR 61.141.



RACM is 0.25% of the material that was tipped. The visible emissions were caused by the (i) breach in the stove's steel encasement and the underlying bricks and (ii) 4,987,500 pounds of brick and metal hitting the ground not the 0.25% of RACM. In order for there to be a violation we, and EGLE, would have to ignore the 99.75% of the stove material being the direct and proximate cause of the visible emissions. We contend and have proof that the visible emissions did not come from the RACM.

If the visible emissions witnessed on November 6th were caused by the RACM hitting the ground, certainly, the monitoring data would reflect this. However, the data proves otherwise. Attached hereto as **Exhibit B** is a summary letter from Environmental Testing & Consulting that concludes that for all three stoves that have been tipped none of the asbestos samples taken exceeded the applicable regulatory standard.

Further, with respect to the stove tipped on November 6th, because of the concerns raised by EGLE four of the samples taken that day were reanalyzed with a more robust test – a transmission electron microscopy (TEM) test. This test, unlike the tests described above (which were phase contrast microscopy or PCM test), is able to delineate between the different types of fiber. The PCM tests only confirm that total fibers (asbestos and non-asbestos both) did not exceed the regulatory standard. None of the samples analyzed using the TEM test "were found to have any asbestos fibers present." (Exhibit C contains all data for both the PCM and TEM testing.) Thus, all of the fibers found in the PCM, which were still below the applicable regulatory standard, were non-asbestos fibers.

MSC and NextGen, for these reasons, strongly disagree with the issuance of the NOV. There is no evidence that the visible emissions were "coming from RACM." The fact is that the visible emissions were generated by the 4,987,500 pounds of non-ACM refractory brick hitting the ground and a breach in the stove's steel encasement. The data from the TEM supports this fact as no asbestos fibers were present in any emissions, per our testing.

Moving Forward

In an effort to prevent a recurrence of visible emissions from non-ACM refractory brick, the MSC team has revised the work plan to include improvements, as has been done after each tipping process. The proposed revisions are contained within that work plan (**Exhibit A**) and are provided along with this letter. The MSC team believes that tipping 4,987,500 pounds of non-ACM refractory brick will result in some dust.

If EGLE, notwithstanding the data presented in this letter, maintains its current position that the visible emissions seen when a stove is taken down is coming from one-quarter of one percent (0.25%) of the material of the stoves and not the other 99.75% of the stove's non-ACM refractory brick, then MSC will likely need to leave the remaining two stoves in place. A result that will be disappointing for MSC and the downriver community and will be an impediment to the development of the Site. We all want these stoves to be removed.

The MSC team strongly contends that it has made every effort to be transparent with this process and the potential issues. That is why we invited LARA, EGLE and the EPA to the Site to discuss the work plan, it is



why we invited them to watch the tipping of the stoves, it is why we had asked for comments on the work plan, and it is why when comments were received, from the EPA, they were implemented.

The MSC team is committed to working within the confines of the regulations; this has been the case from the onset of the project and will remain so until it is completed. We believe a critical component of our attempts to execute this scope safely and within the confines of the regulations would require EGLE representatives to meet with the project team after reviewing the revised work plan to ensure we can tip the remaining stoves to the satisfaction of EGLE.

Sincerely,

Next Generation Services Group, Inc.

MSC Land Company, LLC

A handwritten signature in blue ink, appearing to read "Charlie Martin", is written over a horizontal line.

Charlie Martin, President

A handwritten signature in blue ink, appearing to read "Michael A. Samhat", is written over a horizontal line.

Michael A. Samhat, President

Cc: Mr. Jason Wolf, EGLE

McLouth Stove Tipping Plan

Original Plan: August 1, 2019

Amendment 1: October 31, 2019

Amendment 2: November 15, 2019

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ENVIRONMENTAL TESTING
& CONSULTING

July 31, 2019

Ms. Tim Francis
ASTI Environmental
10448 Citation Dr.
Brighton, MI 48116
(810) 225-2800
tfrancis@asti-env.com

RE: Proposed Stove Removal Process

Dear Mr. Francis,

Per our recent site visit, Environmental Testing and Consulting (ETC) is writing this letter to review the issues associated with removing the five tall large stoves currently situated at the former McLouth Steel facility. These stoves are approximately 120' tall and the exterior is made up of 1" thick (up to 1 1/2 " thick in areas) plate steel in a series of rings placed on top of each other and then welded into place (see Appendix A).

In limited areas of the interior steel rings there is Suprex insulation (asbestos containing material with between 15-30%) and a series of dry stacked fire brick layers. The majority of the bricks have been found to be negative for asbestos (see Appendices B and D). There is a limited quantity of refractory brick in the upper level of the stove that could not be accessed for sampling. Based on age of construction, it is reasonable to assume that this upper refractory brick may contain asbestos. On the diagram in Appendix B, the Suprex asbestos insulation is highlighted in blue and the assumed positive refractory brick is highlighted in orange.

At the bottom of the stove there is a solid base plate supporting all the structure above (see Appendix C). This plate is welded to the support ring at the base where the bolts are secured to the concrete slab, and seals the entire structure of the stove above. The a wedge cut will be made on the stove will be cut at approximately 8 feet above this plate (see Appendix H).

Running from this plate upward there are twenty-two (22) pipes running approximately eight (8) feet up to another plate that supports the dry bricks stacked above. There is also an open space for gas return on the interior that is also surrounded by another layer of brick materials. Given this configuration ETC does not see any "safe" way to remove the materials from the interior while the stove is still standing. Given the clogged interior of the stove, the lack of access to all the areas with Suprex and dried stacked refractory brick, there is no way to remove all this material while the stove is vertical.

Safety concerns include:

- In order to remove the asbestos materials, the structural integrity of the dry stacked, layered brick will inherently have to be compromised. As soon as the bricks start to be removed from the upper levels, it is likely that much of the brick material will become unstable and could collapse internally on the workers on the inside.
- Further, the interior of the stove is a confined space with a variety of potential hazards where not all hazards can be properly abated for internal removal.
- No scaffolding can be built on the inside of the stoves due to their configuration. The only reasonable method to access the area would be through a Bosons chair or similar, however, the stove configuration does not lend itself to use of this method, and hazards listed above still exist.

Given all these concerns, ETC does not see any other way to remove the asbestos containing materials while the stoves are vertical. Therefore, all of these stoves will need to be brought down into a horizontal position prior to accessing and removing the asbestos. While there is a possibility of airborne release during the tipping of the stoves, ETC believes that controls can be put in place to minimize any fiber release during this process. As this work will not be in compliance with MCL Part 602, 1926.1101 (g) (5) "*Specific Control Methods for Class 1 Work*", please allow this letter to serve as a formal request under MCL Part 602, 1926.1101 (g) (6) "*Alternative Control Methods for Class 1 Work*" during the process of tipping the stoves **ONLY**.

ETC is recommending the following steps:

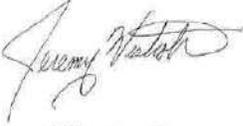
1. Prior to beginning any work on the stoves, the land surface where they will fall needs to be prepared. ETC has conducted soil sampling of the existing earthen surface (scattered with debris, bricks from previous stoves removals and other miscellaneous materials) to determine whether the surface is contaminated with asbestos prior to this proposed stove removal process.
2. To this end, ETC plotted a random soil sampling scheme and acquired soil samples from throughout the subject stove removal area (see Appendix E). Of the 45 samples taken, 20 of these samples were found to have asbestos contamination (trace quantity or higher). While the majority of these samples were in the area of the previous demolitions, the random sampling scheme and large percentage of positive samples would require that all of the existing surface area be considered previously contaminated.
3. The existing surface materials should be covered with millings from the site that can be verified (sampled) not to have existing asbestos contamination. This initial layer of millings will level the surface and provide some cushioning for the stoves to fall on. These millings and the ground below will be considered to be previous contaminated surfaces.

4. The layer of initial millings should be at least 6 inches thick and lightly compacted (see Appendix F).
5. After the initial leveling millings are in place and have been reviewed and documented with photos, two layers of 6 mill poly will be placed over the millings in the areas where the stoves will fall. Then for each stove landing area a "pad" will be constructed by first installing another layer of millings at least 12" thick. (see Appendix F).
6. Upon review and approval of the millings landing pad(s), a berm and water retention system will be constructed (see Appendix F) and then work on the actual stoves will commence.
7. Initially, a large ring or U bolt shall be welded toward the top of the stove on the side where the stove is to be tipped (see Appendix H). A heavy-duty cable shall be attached to the ring and to an excavator placed out of range of the tipping stove once horizontal. When ready to tip, the excavator shall place tension on the cable to ensure the stove falls only in the intended direction.
8. To the extent feasible, the interior of the stove shall be thoroughly wetted prior to tipping utilizing the top and side openings.
9. After wetting and prior to cutting the shell of a stove or removing any structural support, all accessible openings will be sealed shut. One opening will have a manifold attached to facilitate connection of air filtration devices (AFDs) to negatively pressurize the stove during the process of tipping it over.
10. The stoves will have to be tipped toward the side with the return brick chase (see Appendix I). Four of the stoves will need to be tipped to the west (Jefferson Ave.) while the remaining stove will need to be tipped toward the east (river side).
11. From this point forward, all workers in the demarcated tipping area shall be fully protected with personal protective equipment (PPE) including Tyvek suits and half face negative pressure respirators. This includes the heavy equipment operators and any other staff working within 150 feet of the stoves. Additionally, all these personnel shall have the OSHA asbestos, silica and lead awareness classes at a minimum.
12. AFDs will be hooked to the manifold with flexible tubing that can move with the stove as it tips over. These AFDs will provide a negative pressure within the enclosed stove and will significantly reduce any air that could escape the stove as it tips to the ground.
13. Two (2) water cannons and two (2) dust boss units shall be used at the site of each stove tipping (see Appendix F), and shall be in operation during the tipping process to address any errant dust emissions that might occur. Further, in accordance with **MCL Part 602, 1926.1101 (f) "Exposure Assessments and Monitoring"** continuous monitoring for particulates, silica and asbestos shall be run during all tipping operations. Refer to the last page of this document for locations of sampling to be performed during tipping operations (see Appendix J).

14. At this point, the AFDs shall be started to negatively pressurize the stove to the greatest extent possible.
15. Initially, a half circle cut shall be made remotely using a water cutting system on a track and be above the support legs of the unit. Then a wedge will be developed using a series of cuts expanding out as diagramed in Appendix H (Sections 1 through 7). This will avoid having any personnel in the area during cutting in case of unexpected tipping. Any debris and potential fibers will be pushed into the stove by the cutting action of the pressure cutter.
16. Once each section of the wedge has been cut, it shall be removed by pulling remotely with an excavator. This will provide direct access to the bricks immediately behind that section of the wedge. The bricks and supporting materials shall be removed (by pushing them into the stove with an excavator) in the order of one through seven as indicated on the diagram in Appendix H. By using the excavator to push in the bricks, all personnel will be able to stand back a safe distance in case of unexpected tipping.
17. Finally, the other half of the base circle shall be cut using the water system. This process shall remove enough support to allow the stove to be tipped and separated from the base upon which it sits.
18. Upon tipping, the exposed openings into the stove and remaining base shall be tented with 6 mil reinforced poly and placed under negative pressure on the same day upon which it is tipped. The remains of the stove shall function as an enclosure for the rest of the asbestos materials. Should a rupture occur during the tipping process, all misting watering operations will continue until the stove can be placed within a negative pressure containment. Then the requirements of **MCL Part 602, 1926.1101 (g) (5)** will again control the asbestos removal process.
19. All water generated on the site shall be contained and captured through the Water Management Process as described in Appendix F. Stove "pads" will act as a filter and capture any potential contaminated water.
20. Upon completion of the removal of the asbestos materials within a stove and the removal and recycling of the steel exterior sheath, the millings of the landing pad shall be retested for asbestos content. In any area found to have asbestos content the millings down to the poly barrier creating a barrier between new and previous surfaces and in a circle with a twenty-five foot radius shall be removed and disposed of as asbestos contaminated.
21. Adjustments to the means & methods of the stove tipping process will be made to subsequent stove tipping operations as necessary. Based upon these revised methods, the process shall be repeated until all the stoves are horizontal and sealed from any air leakage.

Sincerely,

Environmental Testing and Consulting



Jeremy Westcott
Managing Director
jeremy.westcott@2etc.com
JFW / taw

Please see page following

Cynthia Ostrowski
Certified Industrial Hygienist (ABIH)
cao.ostrowski@gmail.com

Cc: Richard Enright (Next Generation)
Charlie Martin (D21 / 21st Century)
MSC Land Company, LLC.



CAO Consulting, LLC

Specializing in occupational health and safety
including industrial hygiene and ergonomics

July 29, 2019

Mr. Jeremy Westcott, Managing Director
Environmental Testing & Consulting (ETC)
38900 West Huron River Drive
Romulus, Michigan 48174

Dear Mr. Westcott:

Per your request, I met with Mr. Charlie Martin (President 21st Century Salvage, Inc.); Mr. Richard Enright (Next Generation Services Group); and you on July 24, 2019 at the McLouth Steel facility in Trenton, Michigan. The purpose of this meeting was to review the work plan to remove the five ovens on the east side of the property. Based on observations and information obtained during this site visit, the work plan for the oven removal process follows standard best practice to minimize the release of airborne contaminants during the removal process. The sampling plan to evaluate airborne concentrations of asbestos, crystalline silica (cristobalite, quartz, tridymite), lead and respirable particulates should be conducted as follows:

Day One: Preparation of one oven for removal

1. Personal sample(s):
 - a. Asbestos
One (1) 8-hour time-weighted average (TWA)
 - b. Crystalline silica (cristobalite, quartz, tridymite) and respirable particulates
One (1) 8-hour time-weighted average (TWA)
 - c. Lead
One (1) 8-hour time-weighted average (TWA)

Day Two: Take down one oven

1. Personal sample(s):
 - a. Asbestos
 - i. Two (2) length of task (cover and secure containment over downed oven)
 - ii. Two (2) 8-hour TWA (cover and secure containment over downed oven)
 - iii. Two (2) length of task (excavator operators during downing of oven)

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Day Two: Take down one oven (continued)

- b. Crystalline silica (cristobalite, quartz, tridymite) and respirable particulates
 - i. One (1) 8-hour TWA (cover and secure containment over downed oven)
 - ii. Two (2) length of task (excavator operators during downing of oven)
 - iii. Two (2) 8-hour TWA (excavator operators)

- c. Lead
 - i. One (1) 8-hour TWA (cover and secure containment over downed oven)
 - ii. One (1) length of task (excavator operators during downing of oven)

- 2. Area sample(s):
 - a. Asbestos
 - i. Two (2) 8-hour TWA; one on each side of location where oven will be brought down

Air monitoring tests will be adjusted as needed if there are any changes in job tasks or assignments on the survey dates. Additional air monitoring tests will be conducted during the removal of second oven to verify the initial air monitoring results. Depending on the initial air monitoring results, the work plan and/or sampling plan will be adjusted as needed for future oven removals.

If you have any questions, or if I can be of any further assistance to you, please feel free to contact me.

Sincerely,



Cynthia A. Ostrowski, MS, CIH (#5800)
Certified Industrial Hygienist

Appendix A
Pictures of Stoves



McLouth Stoves



Stoves Interior Piping



Sampling and showing weld joints

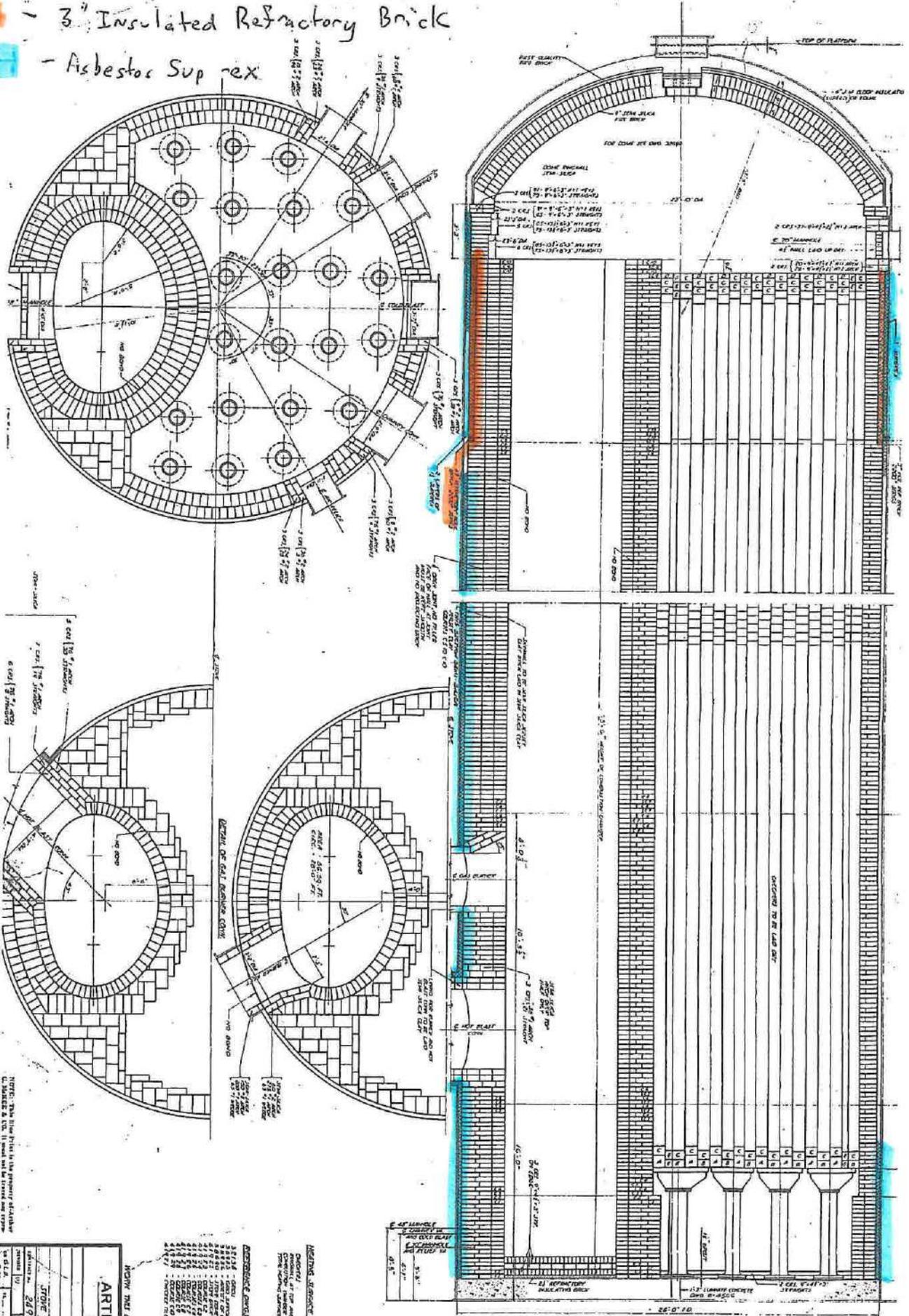


Stoves
(Plant in the Background)

Appendix B

Complete Stove Schematic

3" Insulated Refractory Brick
 - Asbestos Sup rex



NOTE: This blue print is the property of Arthur G. I. Moore & Co., Inc. It shall not be printed nor reproduced without the written consent of Arthur G. I. Moore & Co., Inc.

ARTHUR G. I. MOORE & CO., INC.
 CLEVELAND, OHIO

BLAIR BLDG.
 2890

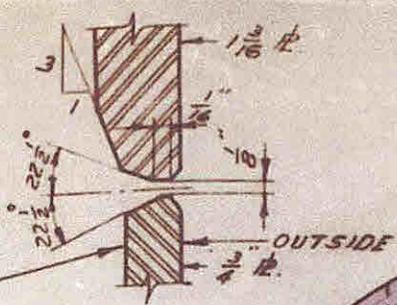
DATE: 10/10/19

BY: [Signature]

- LEGEND:**
- 3" INSULATED REFRACTORY BRICK
 - ASBESTOS SUP REX
 - ...

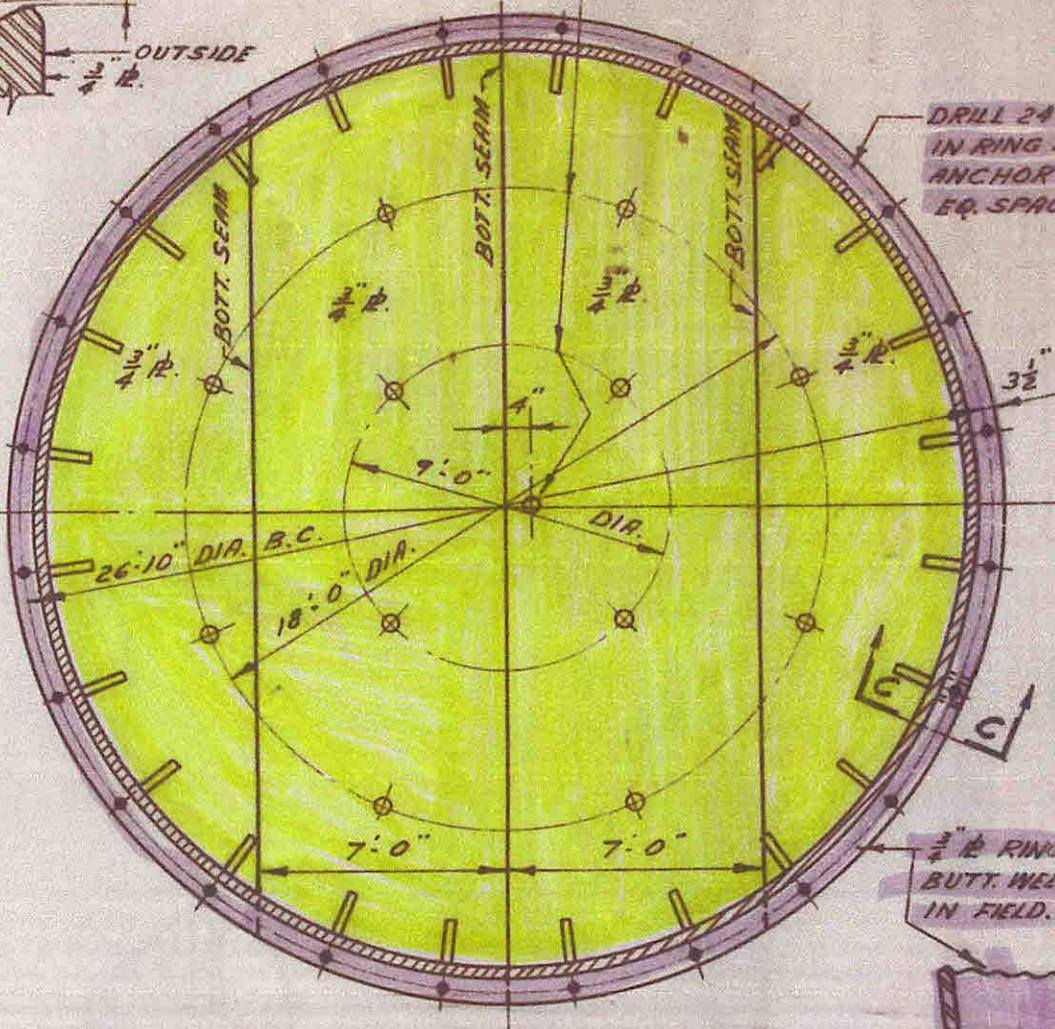
Appendix C

Stove Schematic Showing Base Plate Configuration



NOTE ADDED

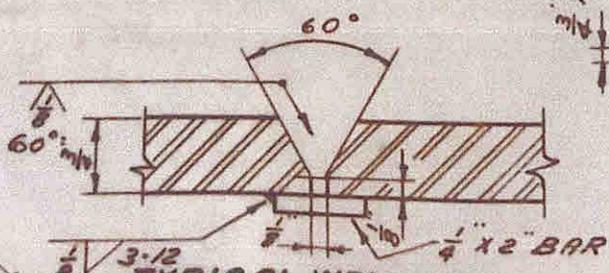
WELD IN 13-2" HALF COUPLINGS IN BOTTOM { FOR CONT. 2719 ONLY }
 TAP 13 HOLES FOR 2" STD. PIPE PLUGS { FOR CONT. 2490 ONLY }



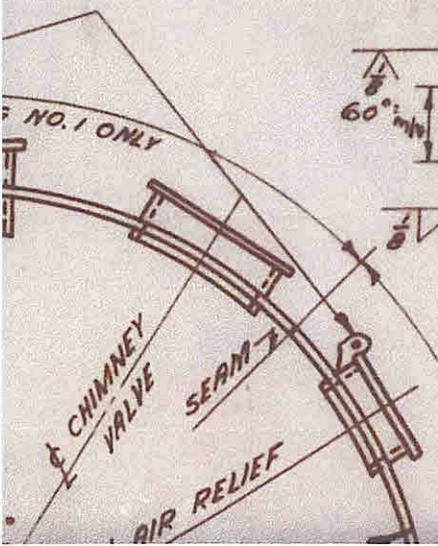
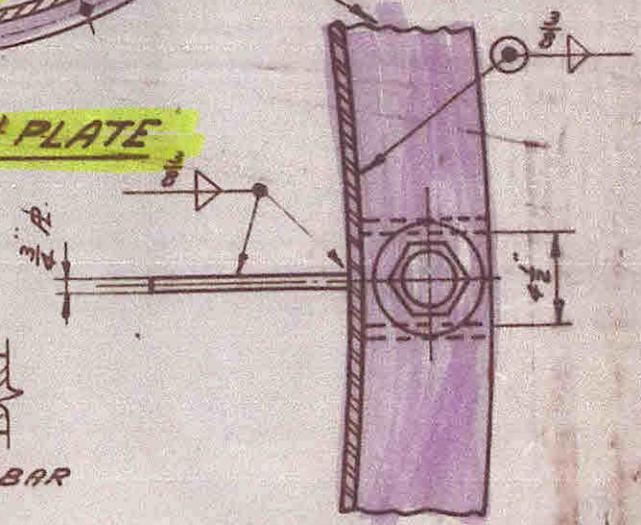
DRILL 24-3/4" Ø HOLES IN RING FOR 3" ANCHOR BOLTS EQ. SPACED.

3/4" RING BUTT WELD IN FIELD.

STOVE BOTTOM PLATE

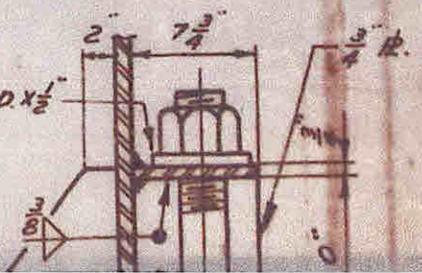


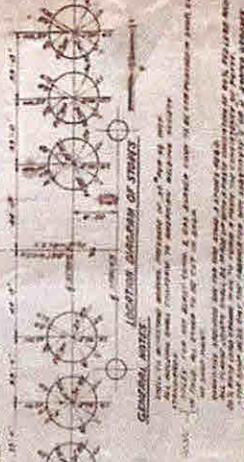
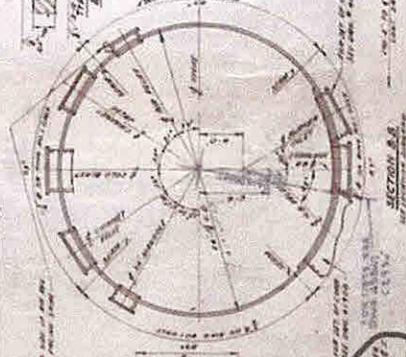
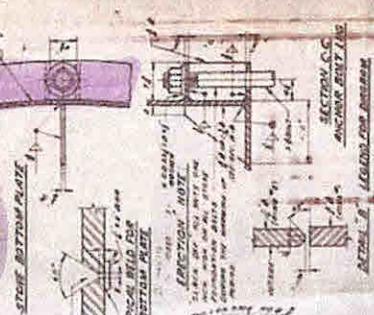
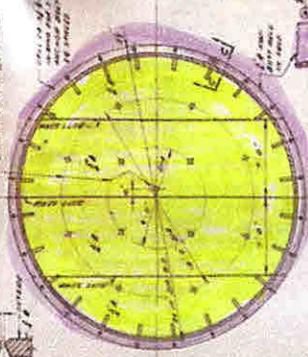
TYPICAL WELD FOR BOTTOM PLATE



ERECTION NOTE:

"SLACK OFF" ALL NUTS ONE INCH. HIGH ON ALL STOVE FOUNDATION

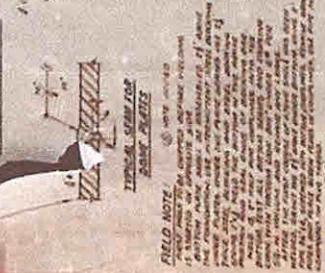
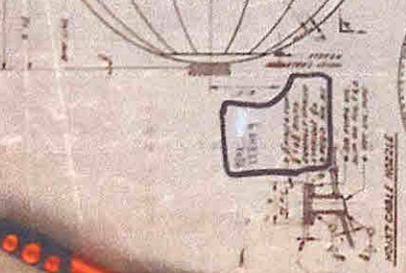
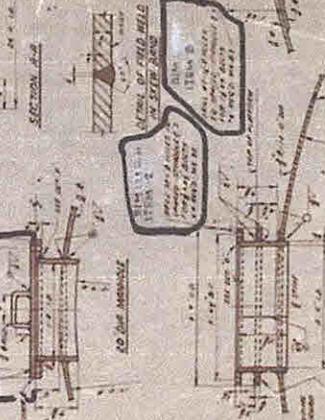
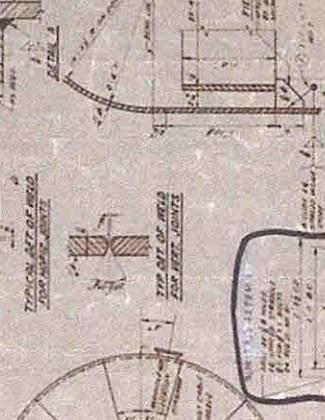
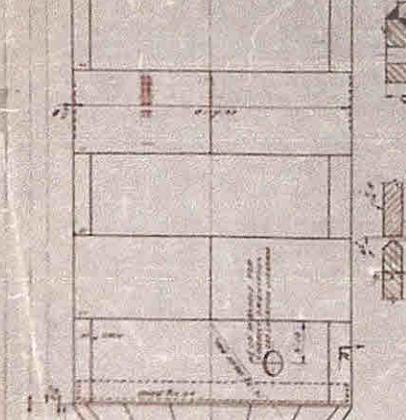
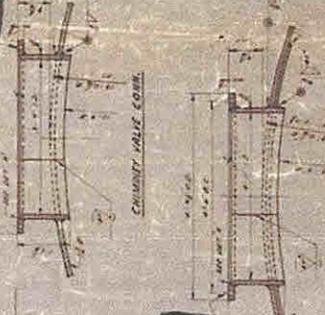
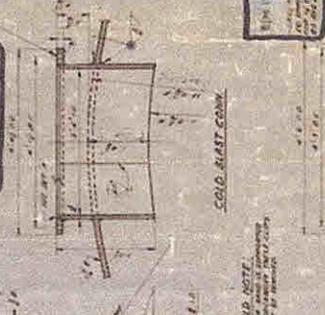
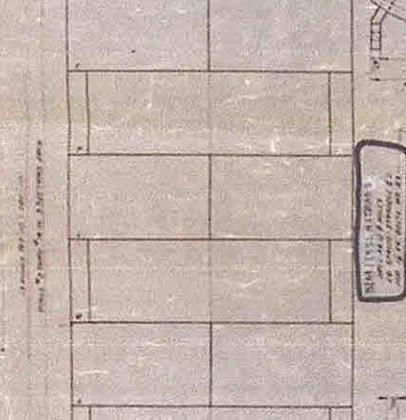
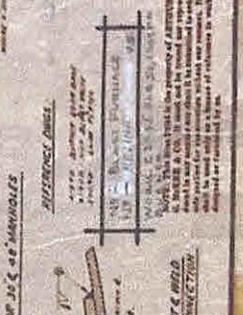
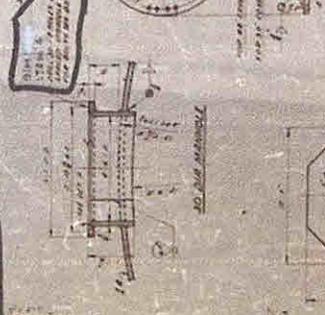
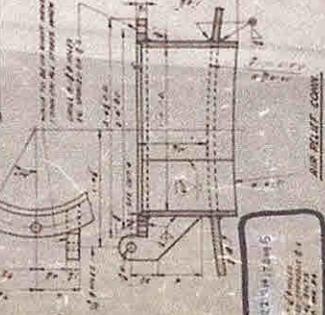
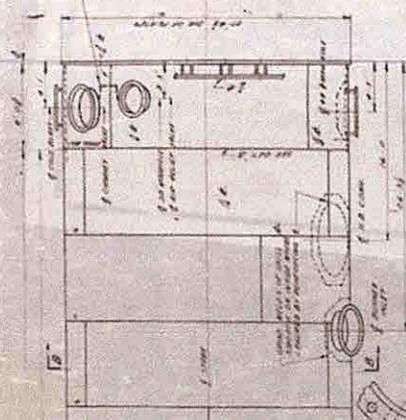




ARTHUR G. MCKEE & CO.
CLEVELAND, OHIO

BLAST FURNACE NO. 1002
BLAST STOVE STRUCK
STOVE STRUTS & BOLT HEADS

41895



FIELD NOTE: ...

TYPICAL SIZE FOR ...

GENERAL NOTE: ...

DIFFERENCE AMONG ...

DETAILS OF FIELD CUTS & WELDS ...

REINFORCING & FAB ...

CONCRETE ...

STEEL ...

WOOD ...

BRICK ...

STONE ...

IRON ...

COPPER ...

ZINC ...

LEAD ...

GLASS ...

PAPER ...

TEXTILES ...

OTHER ...

Appendix D

Asbestos Sampling Results For Stove Contents



To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 222462
Client Project: 222462
Report Date: 6/10/2019

Attention: Richard Enright

Project Location: 1491 W. Jefferson, Detroit, MI 48183
McLouth Steel

| Lab Sample Number | Client Sample Number | Sample Type | Completed |
|-------------------|----------------------|--------------|------------|
| 1041138 | 01a | Asbestos PLM | 06/10/2019 |
| 1041139 | 01b | Asbestos PLM | 06/10/2019 |
| 1041140 | 01c | Asbestos PLM | 06/10/2019 |
| 1041141 | 02a | Asbestos PLM | 06/10/2019 |
| 1041142 | 02b | Asbestos PLM | 06/10/2019 |
| 1041143 | 02c | Asbestos PLM | 06/10/2019 |
| 1041144 | 03a | Asbestos PLM | 06/10/2019 |
| 1041145 | 03b | Asbestos PLM | 06/10/2019 |
| 1041146 | 03c | Asbestos PLM | 06/10/2019 |

Reviewed by: 
Quality Assurance Coordinator

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 06/06/2019
Date Received : 06/10/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|--------------------------------------|---|--|---------------|-------------------|
| 1041138 01a Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Debris Pile in Center of Silo | Orange Fibrous Homogenous | PLM 2% Cellulose PLM 97% Fiberglass | PLM 1% Other | PLM None Detected |
| 1041139 01b Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Debris Pile in West Part of Silo | Tan Non-Fibrous Homogenous | PLM 2% Cellulose PLM 2% Fiberglass | PLM 96% Other | PLM None Detected |
| 1041140 01c Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Debris Pile in NE Exhaust Opening | Tan Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041141 02a Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Pipe Mortar on East Opening | Black/Grey Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041142 02b Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Pipe Mortar on East Opening | Black/Grey Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041143 02c Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Pipe Mortar on NE Opening | Black/Grey Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-triable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested.

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

ETC Job : 222462
Client Project : 222462
Date Collected : 06/06/2019
Date Received : 06/10/2019

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|---------------------------|----------------------------------|---------------------------------------|---------------|-------------------|
| 1041144 03a Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Insulation Along Pipe Leg | Red Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041145 03b Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Insulation Along Pipe Leg | Red Non-Fibrous Homogenous | PLM 2% Cellulose PLM 4% Fiberglass | PLM 94% Other | PLM None Detected |
| 1041146 03c Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Insulation Along Pipe Leg | Red Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |

Jan MacCabe

Lab Supervisor/Other Signatory

Analyst:

Dawson Bradley

Dawson Bradley

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples

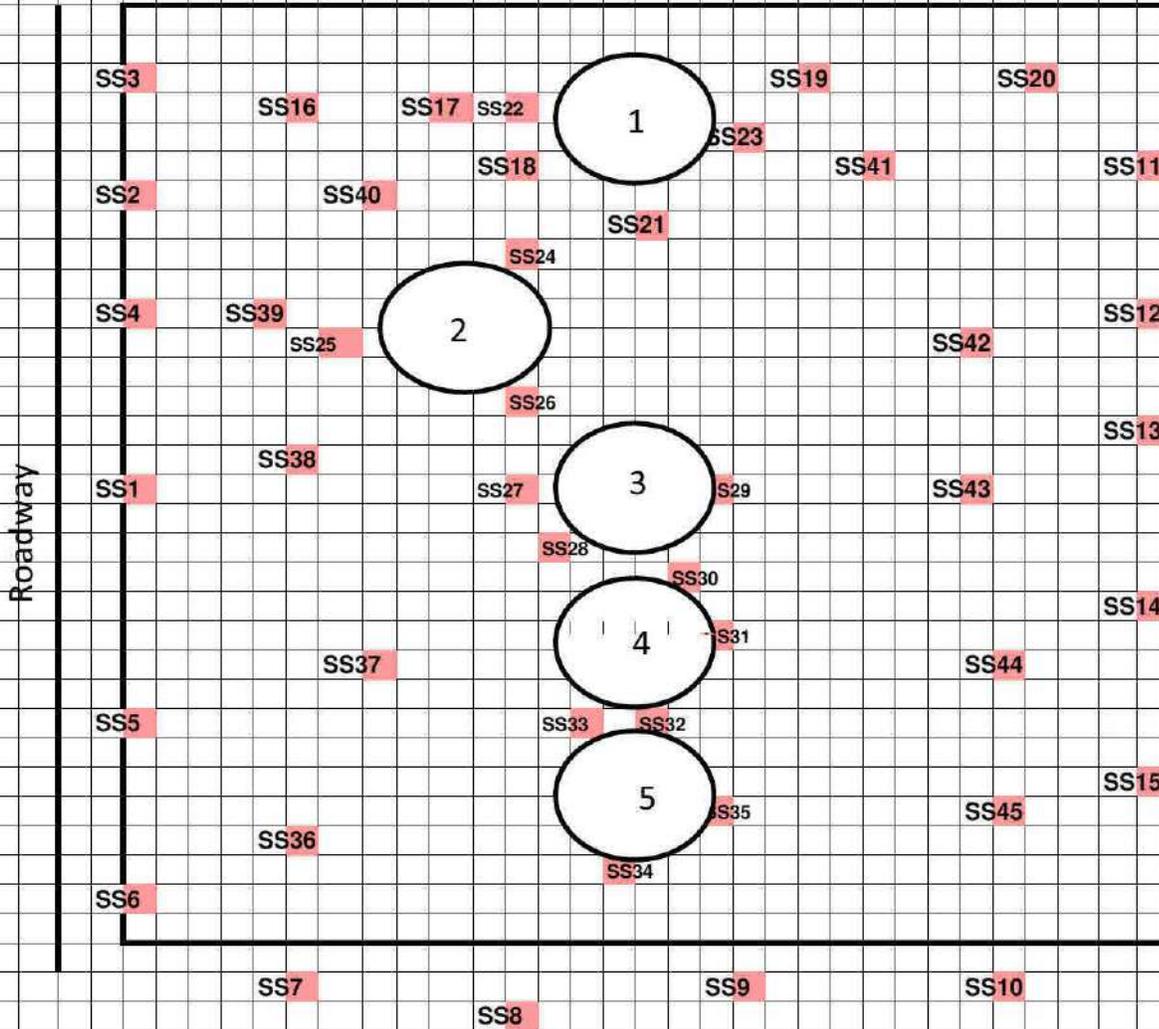
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Appendix E

Asbestos Sampling Results and Maps for Soils in Stove Area

General Diagram of Work Areas

| |
|-------|
| N |
| W + E |
| S |



Each square on grid represents roughly an 8' by 7' area.

"SS#" represents the soil sample taken from that location.

represents the grid square the sample was taken from

Samples 21-35 were taken within 5 feet of each Stove they represent



To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 222462
Client Project: 222462
Report Date: 7/10/2019

Attention: Richard Enright

Project Location: 1491 W. Jefferson, Detroit, MI 48183
McLouth Steel

| Lab Sample Number | Client Sample Number | Sample Type | Completed |
|-------------------|----------------------|--------------|------------|
| 1041138 | 01a | Asbestos PLM | 06/10/2019 |
| 1041139 | 01b | Asbestos PLM | 06/10/2019 |
| 1041140 | 01c | Asbestos PLM | 06/10/2019 |
| 1041141 | 02a | Asbestos PLM | 06/10/2019 |
| 1041142 | 02b | Asbestos PLM | 06/10/2019 |
| 1041143 | 02c | Asbestos PLM | 06/10/2019 |
| 1041144 | 03a | Asbestos PLM | 06/10/2019 |
| 1041145 | 03b | Asbestos PLM | 06/10/2019 |
| 1041146 | 03c | Asbestos PLM | 06/10/2019 |
| 1054200 | 04A | Asbestos PLM | 07/03/2019 |
| 1055560 | SS1 | Asbestos PLM | 07/09/2019 |
| 1055561 | SS2 | Asbestos PLM | 07/09/2019 |
| 1055562 | SS3 | Asbestos PLM | 07/09/2019 |
| 1055563 | SS4 | Asbestos PLM | 07/09/2019 |
| 1055564 | SS5 | Asbestos PLM | 07/09/2019 |
| 1055565 | SS6 | Asbestos PLM | 07/09/2019 |
| 1055566 | SS7 | Asbestos PLM | 07/09/2019 |

| Lab Sample Number | Client Sample Number | Sample Type | Completed |
|-------------------|----------------------|--------------|------------|
| 1055567 | SS8 | Asbestos PLM | 07/09/2019 |
| 1055568 | SS9 | Asbestos PLM | 07/09/2019 |
| 1055569 | SS10 | Asbestos PLM | 07/09/2019 |
| 1055570 | SS11 | Asbestos PLM | 07/09/2019 |
| 1055571 | SS12 | Asbestos PLM | 07/09/2019 |
| 1055572 | SS13 | Asbestos PLM | 07/09/2019 |
| 1055573 | SS14 | Asbestos PLM | 07/09/2019 |
| 1055574 | SS15 | Asbestos PLM | 07/09/2019 |
| 1055575 | SS16 | Asbestos PLM | 07/09/2019 |
| 1055576 | SS17 | Asbestos PLM | 07/09/2019 |
| 1055577 | SS18 | Asbestos PLM | 07/09/2019 |
| 1055578 | SS19 | Asbestos PLM | 07/09/2019 |
| 1055579 | SS20 | Asbestos PLM | 07/09/2019 |
| 1055580 | SS21 | Asbestos PLM | 07/09/2019 |
| 1055581 | SS22 | Asbestos PLM | 07/09/2019 |
| 1055582 | SS23 | Asbestos PLM | 07/09/2019 |
| 1055583 | SS24 | Asbestos PLM | 07/09/2019 |
| 1055584 | SS25 | Asbestos PLM | 07/09/2019 |
| 1055585 | SS26 | Asbestos PLM | 07/09/2019 |
| 1055586 | SS27 | Asbestos PLM | 07/09/2019 |
| 1055587 | SS28 | Asbestos PLM | 07/09/2019 |
| 1055588 | SS29 | Asbestos PLM | 07/09/2019 |
| 1055589 | SS30 | Asbestos PLM | 07/09/2019 |
| 1055590 | SS31 | Asbestos PLM | 07/09/2019 |
| 1055591 | SS32 | Asbestos PLM | 07/09/2019 |
| 1055592 | SS33 | Asbestos PLM | 07/09/2019 |

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| Lab Sample Number | Client Sample Number | Sample Type | Completed |
|-------------------|----------------------|--------------|------------|
| 1055593 | SS34 | Asbestos PLM | 07/09/2019 |
| 1055594 | SS35 | Asbestos PLM | 07/09/2019 |
| 1055595 | SS36 | Asbestos PLM | 07/09/2019 |
| 1055596 | SS37 | Asbestos PLM | 07/09/2019 |
| 1055597 | SS38 | Asbestos PLM | 07/09/2019 |
| 1055598 | SS39 | Asbestos PLM | 07/09/2019 |
| 1055599 | SS40 | Asbestos PLM | 07/09/2019 |
| 1055600 | SS41 | Asbestos PLM | 07/09/2019 |
| 1055601 | SS42 | Asbestos PLM | 07/09/2019 |
| 1055602 | SS43 | Asbestos PLM | 07/09/2019 |
| 1055603 | SS44 | Asbestos PLM | 07/09/2019 |
| 1055604 | SS45 | Asbestos PLM | 07/09/2019 |

Reviewed by:



Quality Assurance Coordinator

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 06/06/2019
Date Received : 06/10/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|--------------------------------------|---|--|---------------|-------------------|
| 1041138 01a Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Debris Pile in Center of Silo | Orange Fibrous Homogenous | PLM 2% Cellulose PLM 97% Fiberglass | PLM 1% Other | PLM None Detected |
| 1041139 01b Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Debris Pile in West Part of Silo | Tan Non-Fibrous Homogenous | PLM 2% Cellulose PLM 2% Fiberglass | PLM 96% Other | PLM None Detected |
| 1041140 01c Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Debris Pile in NE Exhaust Opening | Tan Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041141 02a Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Pipe Mortar on East Opening | Black/Grey Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041142 02b Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Pipe Mortar on East Opening | Black/Grey Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041143 02c Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Pipe Mortar on NE Opening | Black/Grey Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 06/06/2019
Date Received : 06/10/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|--|---------------------------|------------------------------------|---------------------------------------|---------------|----------------------|
| 1041144 03a Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Insulation Along Pipe Leg | Red Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1041145 03b Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Insulation Along Pipe Leg | Red Non-Fibrous Homogenous | PLM 2% Cellulose PLM 4% Fiberglass | PLM 94% Other | PLM None Detected |
| 1041146 03c Area 13, E Silo #2 Analyst: Dawson Bradley Date Analyzed : 06/10/2019 | Insulation Along Pipe Leg | Red Non-Fibrous Homogenous | PLM 1% Cellulose | PLM 99% Other | PLM None Detected |
| 1054200 04A S Motor Room in Area Analyst: Daniel Agnew Date Analyzed : 07/03/2019 | Mortar | Gray Non-Fibrous Homogenous | PLM 2% Cellulose | PLM 98% Other | PLM None Detected |
| 1055560 SS1 96 Ft W of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 3% Cellulose | PLM 97% Other | PLM None Detected |
| 1055561 SS2 64 ft NW of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 98% Other | PLM Trace Chrysotile |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|--|-------------|------------------------------------|---------------------|---------------|----------------------|
| 1055562 SS3 104 ft W of Stove #1 Layer-1 Analyst: Erin Danhausen Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 98% Other | PLM Trace Chrysotile |
| 1055563 SS4 68 ft W of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 96% Other | PLM 2% Amosite |
| 1055564 SS5 104 ft W of Stove #4 and #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 2% Cellulose | PLM 98% Other | PLM None Detected |
| 1055565 SS6 14 ft S of Stove #5 & 112 ft W of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 90% Other | PLM Trace Chrysotile |
| 1055566 SS7 71 ft SW of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 4% Cellulose | PLM 94% Other | PLM 2% Chrysotile |
| 1055567 SS8 16 ft W & 56 ft S of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 6% Cellulose | PLM 91% Other | PLM 3% Amosite |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|-------------|------------------------------------|---------------------|----------------|---|
| 1055568 SS9 8 ft E & 49 ft S of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 100% Other | PLM Trace Amosite PLM Trace Chrysotile |
| 1055569 SS10 80 ft E & 49 ft S of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 96% Other | PLM Trace Amosite |
| 1055570 SS11 112 ft E & 21 ft S of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM None Detected |
| 1055571 SS12 152 ft E of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 8% Cellulose | PLM 92% Other | PLM None Detected |
| 1055572 SS13 120 ft E & 7 ft N of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 7% Cellulose | PLM 93% Other | PLM None Detected |
| 1055573 SS14 120 ft E & 7 ft N of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM None Detected |

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Polarized Light Microscopy Asbestos Analysis Report

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 38900 Huron River Drive
 Romulus, MI 48174

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|--|-------------|------------------------------------|---------------------|---------------|--|
| 1055574 SS15 120 ft E Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 5% Cellulose | PLM 95% Other | PLM None Detected |
| 1055575 SS16 64 ft W of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 98% Other | PLM 2% Chrysotile |
| 1055576 SS17 32 ft W of Stove #1 Layer-1 Analyst: Erin Danhausen Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 2% Cellulose | PLM 96% Other | PLM Trace Amosite PLM 2% Chrysotile |
| 1055577 SS18 16 ft W & 14 ft S of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 97% Other | PLM Trace Chrysotile PLM 3% Amosite |
| 1055578 SS19 32 ft E of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 6% Cellulose | PLM 94% Other | PLM None Detected |
| 1055579 SS20 88 ft E of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM None Detected |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|-------------|------------------------------------|---------------------------------------|---------------|---------------------------------------|
| 1055580 SS21 3 ft S of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 8% Cellulose | PLM 92% Other | PLM None Detected |
| 1055581 SS22 1 ft W of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM <1% Amosite PLM <1% Chrysotile |
| 1055582 SS23 1 ft E of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 5% Cellulose | PLM 95% Other | PLM None Detected |
| 1055583 SS24 1 ft N of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 98% Other | PLM Trace Amosite |
| 1055584 SS25 5 ft E of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 3% Fiberglass PLM 2% Cellulose | PLM 93% Other | PLM 2% Amosite |
| 1055585 SS26 1 ft S of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 2% Cellulose PLM 7% Fiberglass | PLM 91% Other | PLM None Detected |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|--|-------------|------------------------------------|------------------|---------------|-------------------|
| 1055586 SS27 1 ft W of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 6% Cellulose | PLM 94% Other | PLM None Detected |
| 1055587 SS28 1 ft SW of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 4% Cellulose | PLM 96% Other | PLM None Detected |
| 1055588 SS29 1 ft E of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 2% Cellulose | PLM 98% Other | PLM None Detected |
| 1055589 SS30 1 ft NE of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 7% Cellulose | PLM 93% Other | PLM None Detected |
| 1055590 SS31 1 ft E of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 2% Cellulose | PLM 98% Other | PLM None Detected |
| 1055591 SS32 1 ft S of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 4% Cellulose | PLM 96% Other | PLM None Detected |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|-------------|------------------------------------|---------------------------------------|----------------|--|
| 1055592 SS33 2 ft SW of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM None Detected |
| 1055593 SS34 1 ft S of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 5% Fiberglass PLM 2% Cellulose | PLM 93% Other | PLM None Detected |
| 1055594 SS35 1 ft E of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Cellulose | PLM 98% Other | PLM Trace Chrysotile PLM 2% Amosite |
| 1055595 SS36 64 ft W of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM Trace Fiberglass | PLM 100% Other | PLM Trace Chrysotile |
| 1055596 SS37 48 ft W of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 4% Fiberglass | PLM 94% Other | PLM 2% Chrysotile |
| 1055597 SS38 60 ft W & 7 ft N of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 2% Fiberglass | PLM 96% Other | PLM 2% Chrysotile PLM Trace Amosite |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174

Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|--|-------------|------------------------------------|-------------------|---------------|--|
| 1055598 SS39 32 ft W & 7 ft N of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 7% Cellulose | PLM 91% Other | PLM 2% Chrysotile |
| 1055599 SS40 24 ft W & 21 ft N of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 6% Cellulose | PLM 92% Other | PLM Trace Amosite PLM 2% Chrysotile |
| 1055600 SS41 48 ft E & 21 ft S of Stove #1 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM None Detected |
| 1055601 SS42 112 ft E & 7 ft S of Stove #2 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 3% Cellulose | PLM 97% Other | PLM None Detected |
| 1055602 SS43 72 ft E of Stove #3 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 5% Cellulose | PLM 95% Other | PLM None Detected |
| 1055603 SS44 80 ft E & 7 ft S of Stove #4 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 10% Cellulose | PLM 90% Other | PLM None Detected |

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
 38900 Huron River Drive
 Romulus, MI 48174
Location : McLouth Steel
 1491 W. Jefferson, Detroit, MI 48183

ETC Job : 222462
Client Project : 222462
Date Collected : 07/08/2019
Date Received : 07/08/2019

| Sample | Description | Appearance | % Fibrous | % Non-Fibrous | % Asbestos |
|---|-------------|------------------------------------|------------------|---------------|-------------------|
| 1055604 SS45 80 ft E & 7 ft S of Stove #5 Layer-1 Analyst: OJ Ivey Date Analyzed : 07/09/2019 | Soil | Brown Non-Fibrous Homogenous | PLM 8% Cellulose | PLM 92% Other | PLM None Detected |



Lab Supervisor/Other Signatory

Analyst:



Daniel Agnew



Dawson Bradley



Erin Danhausen



OJ Ivey

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
 Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
 Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
 EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
 EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples

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ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos
Chain of Custody**

ETL Project #: 222462

| | | |
|--|--|--|
| Client: ETC | Contact: Leo Wall | Project Location/name: 1491 W. JEFFERSON, TROY, MI 48183 |
| Address: 38900 W Huron River Dr Romulus, Mi | Phone: | |
| Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other | E-mail: results@2etl.com randy.keathley@2etl.com | Client Project #: 222462 |
| | | Date Sampled: 7/8/2019 |

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other _____

PLM Instructions
(Check all that apply)

| | |
|--|--|
| <input type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method) | <input type="checkbox"/> Stop at 1st Positive - Clearly mark Homogenous Group |
| Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002* | |
| <input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010* | |
| <input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape) | <input checked="" type="checkbox"/> Soil or Vermiculite Analysis* |

10855

| Lab ID | Sample ID | Sample Location | Material Description |
|--------|-----------|---|----------------------|
| 560 | SS1 | 96 feet west of Stove #3 | soil |
| 561 | SS2 | 64 feet NW of Stove # 2 | soil |
| 562 | SS3 | 104 feet west of Stove #1 | soil |
| 563 | SS4 | 68 feet west of Stove #2 | soil |
| 564 | SS5 | 104 feet west of Stove #4 and #5 | soil |
| 565 | SS6 | 14 feet south of Stove #5 and 112 feet west of Stove #5 | soil |
| 566 | SS7 | 71 feet SW of Stove #5 | soil |
| 567 | SS8 | 16 feet west and 56 feet south of Stove #5 | soil |
| 568 | SS9 | 8 feet east and 49 feet south of Stove #5 | soil |
| 569 | SS10 | 80 feet east and 49 feet south of Stove #5 | soil |
| 570 | SS11 | 112 feet east and 21 feet south of Stove #1 | soil |
| 571 | SS12 | 152 feet east of stove #2 | soil |
| 572 | SS13 | 120 feet east and 7 feet north of Stove #3 | soil |
| 573 | SS14 | 120 feet east and 7 feet north of Stove #4 | soil |
| 574 | SS15 | 120 feet east of Stove #5 | soil |

John Decker
2019-07-08-1255

| | Date | Time |
|-------------------------------------|--------|-------------|
| Relinquished (Name/Organization): | | |
| Received (Name/ETL): | 7.8.19 | 3:16 am/pm |
| Stereoscopical Analysis (Name/ETL): | 7/9/19 | 10:25 am/pm |
| Sample Login (Name/ETL): | 7.8.19 | 3:43 am/pm |
| Analysis (Name/ETL): | 7/9/19 | 10:25 am/pm |
| QA/QC Review (Name/ETL): | 7/9/19 | 3:00 am/pm |

Special Instructions: _____ **Remarks:** _____

ENVIRONMENTAL TESTING LABORATORIES, INC



38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 992-2261
www.2etl.com

**Bulk Asbestos
Chain of Custody**

ETL Project #: 222462

| | | |
|--|--------------------------|---|
| Client: ETC | Contact: Leo Wall | Project Location/name: 1491 W. JEFFERSON, TRENTON, MI 48183 |
| Address: 38900 W Huron River Dr Romulus, Mi | Phone: | |
| | Fax: | |
| E-mail: results@2etl.com randy.keathley@2etl.com | | Client Project #: 222462 |
| Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other | | Date Sampled: 7/8/2019 |

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other

PLM Instructions
(Check all that apply)

| | |
|--|---|
| <input type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method) | <input type="checkbox"/> Stop at 1st Positive - <i>Clearly mark Homogenous Group</i> |
| Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002* | |
| <input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010* | |
| <input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape) | <input checked="" type="checkbox"/> Soil or Vermiculite Analysis* |

| Lab ID | Sample ID | Sample Location | Material Description |
|-----------|-----------|--|----------------------|
| 575 | SS16 | 64 feet west of Slove #1 | soil |
| 10455 576 | SS17 | 32 feet west of Slove #1 | soil |
| 577 | SS18 | 16 feet west and 14 feet south of Slove #1 | soil |
| 578 | SS19 | 32 feet east of Slove #1 | soil |
| 579 | SS20 | 88 feet east of Slove #1 | soil |
| 580 | SS21 | 3 foot south of Slove #1 | soil |
| 581 | SS22 | 1 foot west of Slove #1 | soil |
| 582 | SS23 | 1 foot east of Slove #1 | soil |
| 583 | SS24 | 1 foot north of Slove #2 | soil |
| 584 | SS25 | 5 feet east of Slove #2 | soil |
| 585 | SS26 | 1 foot south of Slove #2 | soil |
| 586 | SS27 | 1 foot west of Slove #3 | soil |
| 587 | SS28 | 1 foot SW of Slove #3 | soil |
| 588 | SS29 | 1 foot east of Slove #3 | soil |
| 589 | SS30 | 1 foot NE of Slove #4 | soil |

| | Date | Time |
|-------------------------------------|------------------------------|--------------------|
| Relinquished (Name/Organization): | | |
| Received (Name/ETL): | Buanna On Brianne Owens | 7.8.19 3:16 am/pm |
| Stereoscopical Analysis (Name/ETL): | E-D | 7/9/19 10:25 am/pm |
| Sample Login (Name/ETL): | Buanna On | 7.8.19 3:45 am/pm |
| Analysis (Name/ETL): | E-D | 7/9/19 10:25 am/pm |
| QA/QC Review (Name/ETL): | Angelia Banks Angelica Banks | 7/9/19 3:08 am/pm |
| Special Instructions: | Remarks | |

ENVIRONMENTAL TESTING LABORATORIES, INC

38900 HURON RIVER DRIVE
ROMULUS, MICHIGAN 48174
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FAX: (734) 992-2261
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**Bulk Asbestos
Chain of Custody**

ETL Project #: 222462

| | | |
|--|--|---|
| Client: ETC | Contact: Leo Wall | Project Location/name: 1491 W. JEFFERSON, TRENTON, MI 48183 |
| Address: 38900 W Huron River Dr Romulus, Mi | Phone: | |
| | Fax: | Client Project #: 222462 |
| | E-mail: results@2etl.com randy.keathley@2etl.com | Date Sampled: 7/8/2019 |
| Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other | | |

Turnaround Time (TAT): RUSH Same Day 24 hr 48 hr Standard (3-5 days) Other _____

PLM Instructions
(Check all that apply)

| | |
|--|---|
| <input type="checkbox"/> PLM EPA600/R-93/116, 1993 (Standard method) | <input type="checkbox"/> Stop at 1st Positive - <i>Clearly mark Homogenous Group</i> |
| Point Counting: <input type="checkbox"/> 400 Points* <input type="checkbox"/> NYSDOH ELAP 198.1, 2002* | |
| <input type="checkbox"/> Gravimetric Reduction* <input type="checkbox"/> NYSDOH ELAP 198.6, 2010* | |
| <input type="checkbox"/> PLM Non-Building Material (Dust, Wipe, Tape) | <input checked="" type="checkbox"/> Soil or Vermiculite Analysis* |

| Lab ID | Sample ID | Sample Location | Material Description |
|-------------|-----------|--|----------------------|
| 1055 590 | SS31 | 1 foot east of Stove #4 | soil |
| 591 | SS32 | 1 foot south of Stove #4 | soil |
| 592 | SS33 | 2 feet SW of Stove #4 | soil |
| 593 | SS34 | 1 foot south of Stove #5 | soil |
| 594 | SS35 | 1 foot east of Stove #5 | soil |
| 595 | SS36 | 64 feet west of Stove #5 | soil |
| 596 | SS37 | 48 feet west of Stove #4 | soil |
| 597 | SS38 | 60 feet west and 7 feet north of Stove #3 | soil |
| 598 | SS39 | 32 feet west and 7 feet north of Stove #3 | soil |
| 599 | SS40 | 24 feet west and 21 feet north of Stove #2 | soil |
| 600 | SS41 | 48 feet east and 21 feet south of Stove #1 | soil |
| 601 | SS42 | 112 feet east and 7 feet south of Stove #2 | soil |
| 602 | SS43 | 72 feet east of Stove #3 | soil |
| 603 | SS44 | 80 feet east and 7 feet south of Stove #4 | soil |
| 604 | SS45 | 80 feet east and 7 feet south of Stove #5 | soil |

| | Date | Time |
|-------------------------------------|--------------------------------|-------------------------------------|
| Relinquished (Name/Organization): | | |
| Received (Name/ETL): | Brianna Owens, Brianna Owens | 7.8.19 3:16 am/pm |
| Stereoscopical Analysis (Name/ETL): | <i>[Signature]</i> | 10:25 7/9/19 10:25 am/pm |
| Sample Login (Name/ETL): | Brianna Owens | 7.8.19 3:45 am/pm |
| Analysis (Name/ETL): | <i>[Signature]</i> | 10:25 7/9/19 10:25 am/pm |
| QA/QC Review (Name/ETL): | Angelica Banks, Angelica Banks | 7/9/19 3:09 am/pm |
| Special Instructions: | Remarks | |

Appendix F

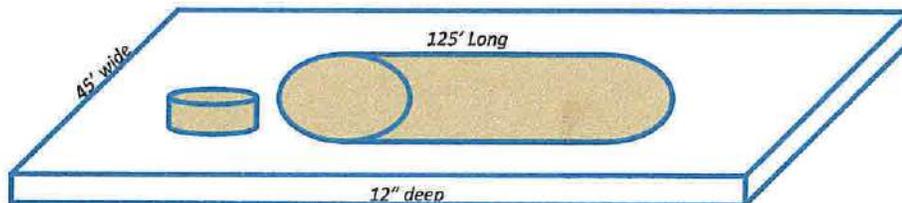
Diagrams for Water Collection and Treatment

Management of Demolition Water

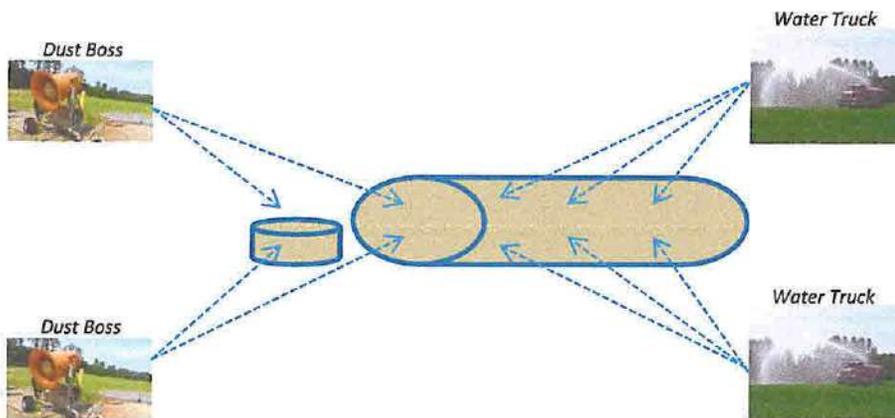
1. Management of demolition water during lay down of stoves
 - a. Primary water management controls: Lay down area
 - i. Area immediately around the stoves will be cleared of debris.
 1. Lay down area will be approximately 250' x 235'
 - ii. Millings will be laid and compacted
 - iii. Lay down area schematic



- iv. Lay down pad schematic
- b. Secondary water management controls: Stove lay down pads
 - i. Berms will installed around the perimeter of the stove lay down pad
 - ii. Poly will line the interior of the lay down area
 - iii. 12" of millings or other material will be placed in the stove lay down pad over the poly
 - iv. Lay down pad schematic

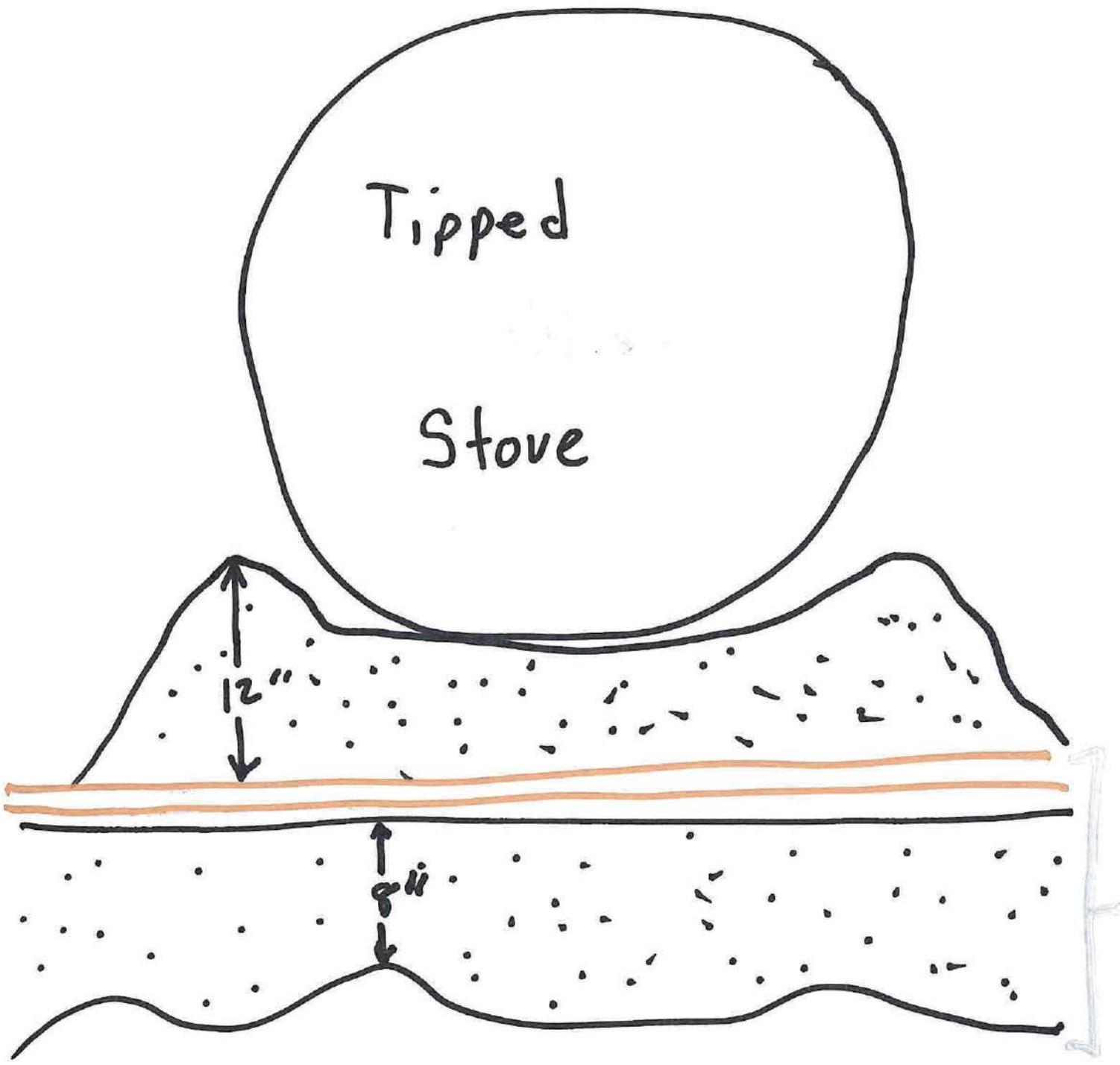


- c. Standard operating procedure during stove lay down process
- i. Only authorized personnel will be permitted on site during lay down operations.
 - ii. Work area will be demarcated with asbestos ribbon and signs
 - iii. Lay down pad will be pre-wetted but not over saturated
 - iv. Two Dust Bosses will be positioned opposite the direction the stoves will be laid down.
 - v. Dust Bosses will have a consistent spray of water into the “mouth” of the stoves during the lay down process.
 - vi. Water trucks will be positioned laterally, on either side of the stoves in the event of a breach of the stove
 - vii. A competent person will make the call when watering shall cease.
 - viii. Mouth of stove will be sealed with 6 mil plastic.
 - ix. Watering Schematic



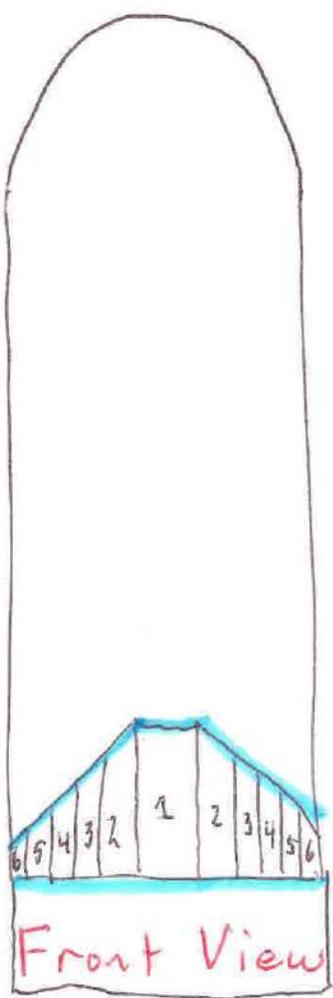
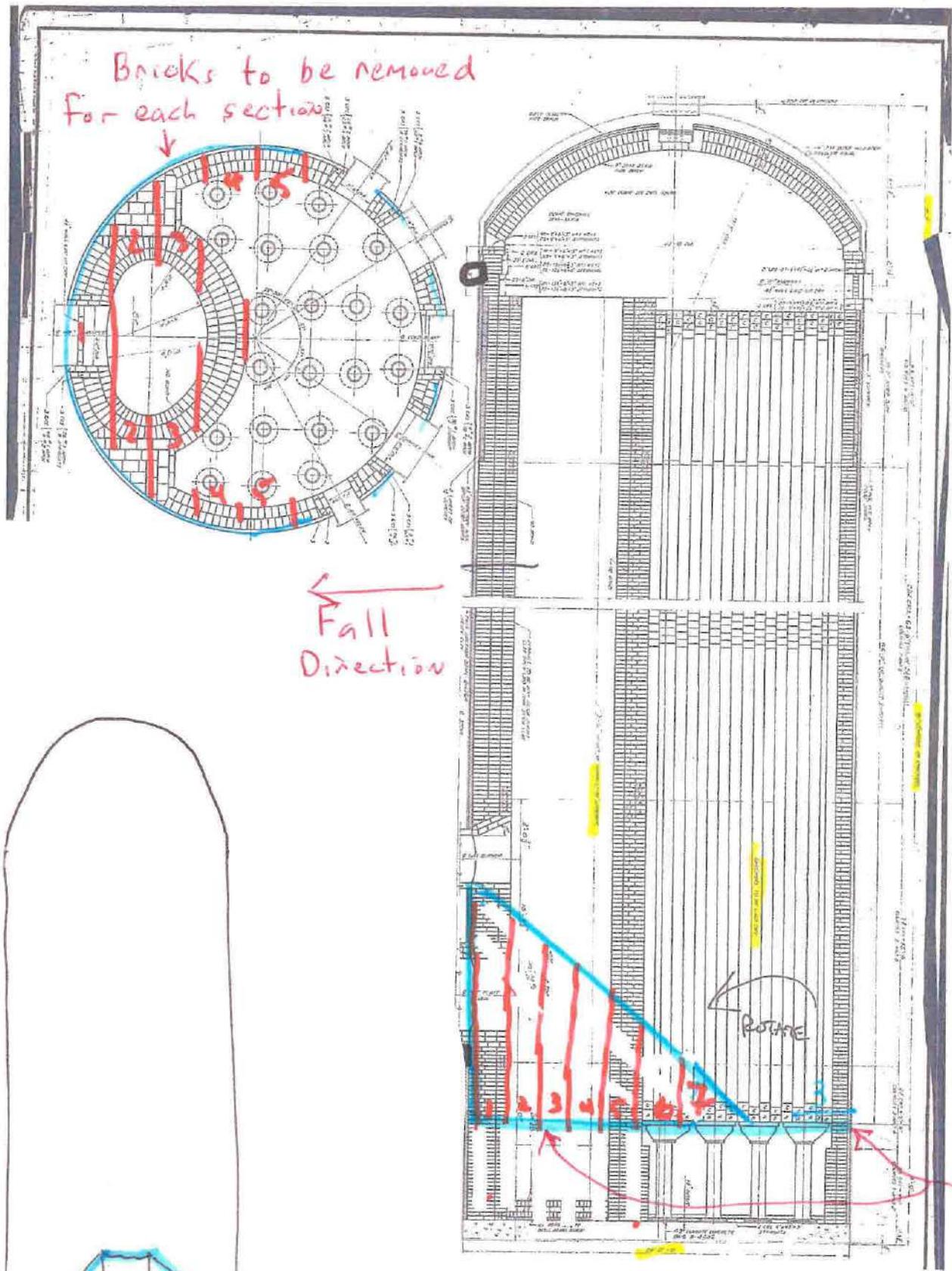
Appendix G

Cross section of Existing Surface,
New Millings layer
and Millings Berm



-  Asphalt Millings
-  6 mil poly layer
-  previously contaminated layers

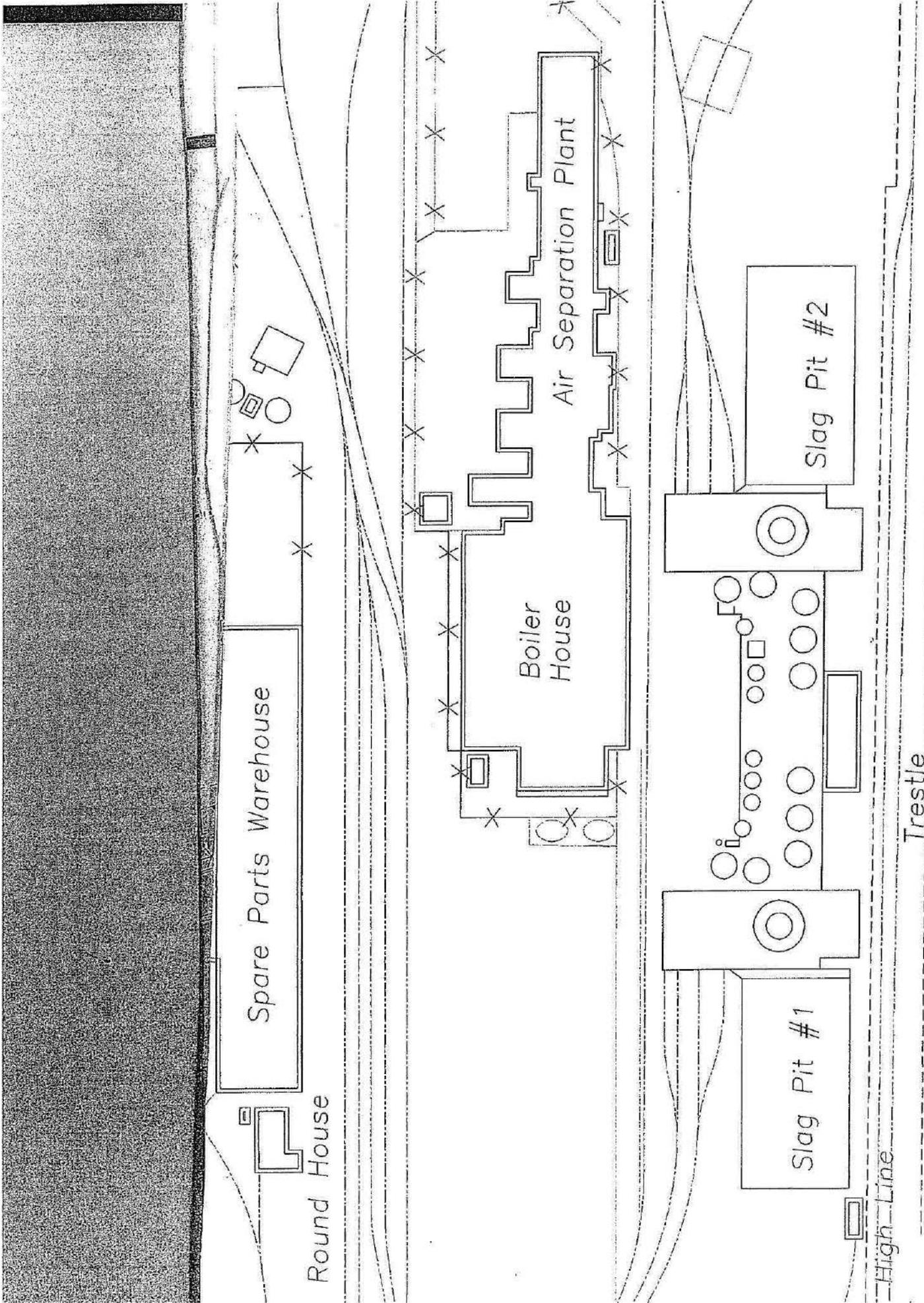
Appendix H
Wedge Cut Diagram



Side View

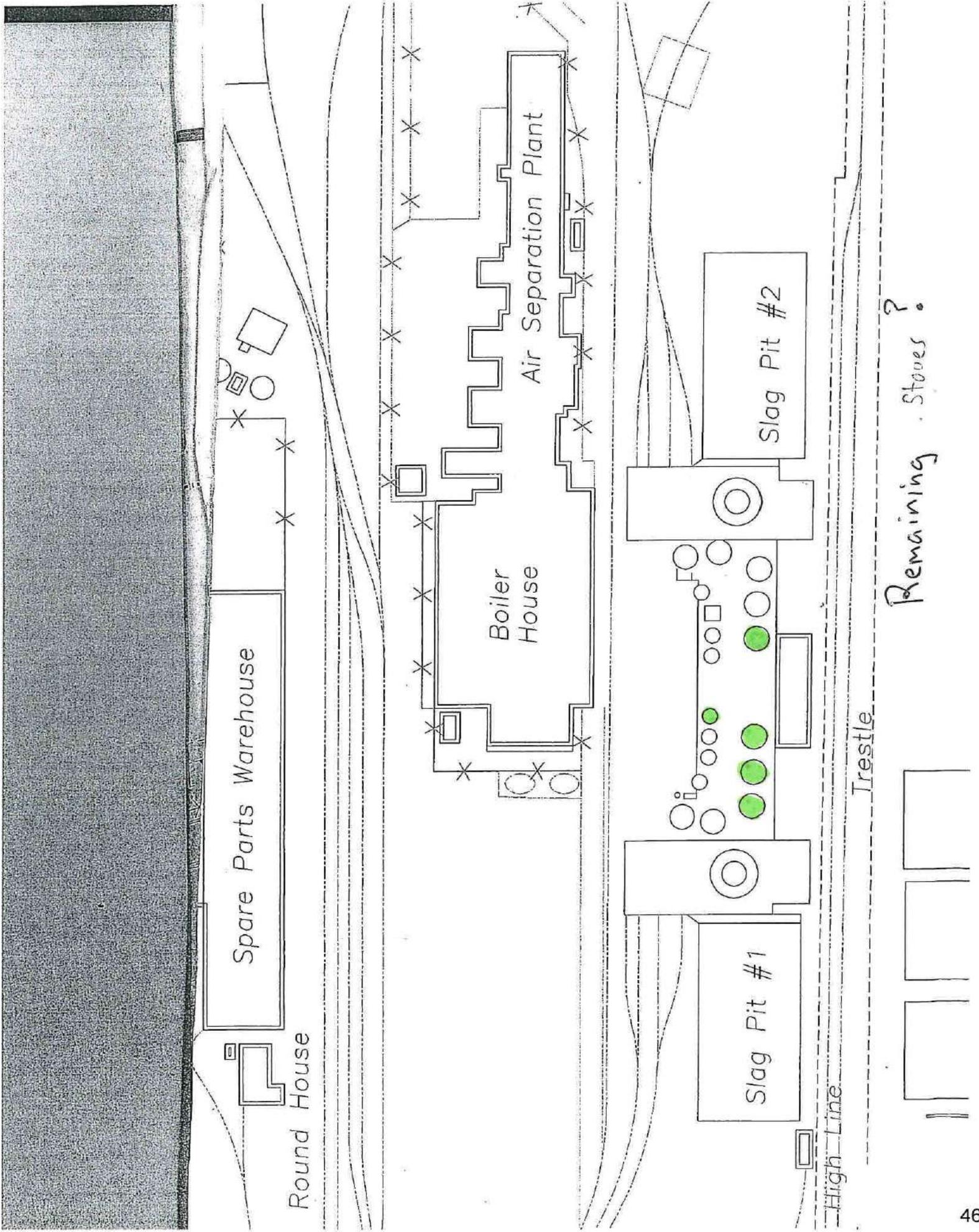
Water Jet Cuts

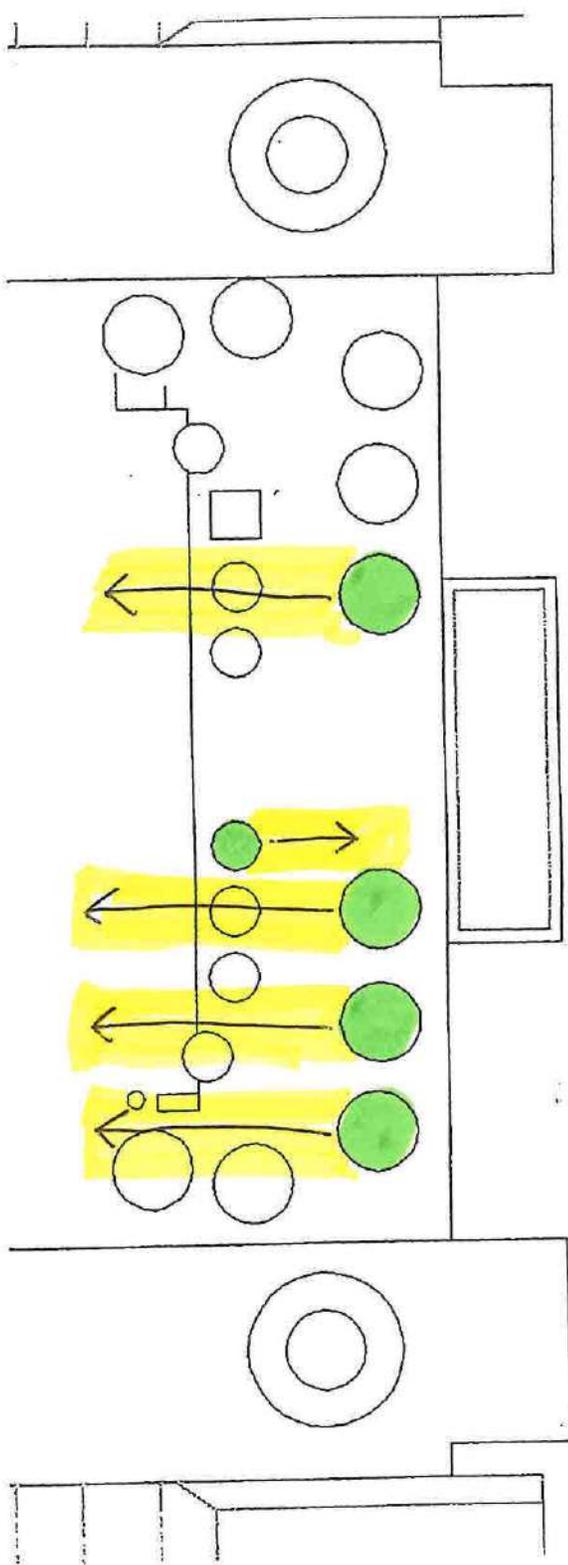
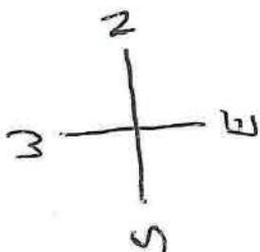
Appendix I
Stove Placement and Tipping Direction



Original Lay Out of
Stoves & Boiler House





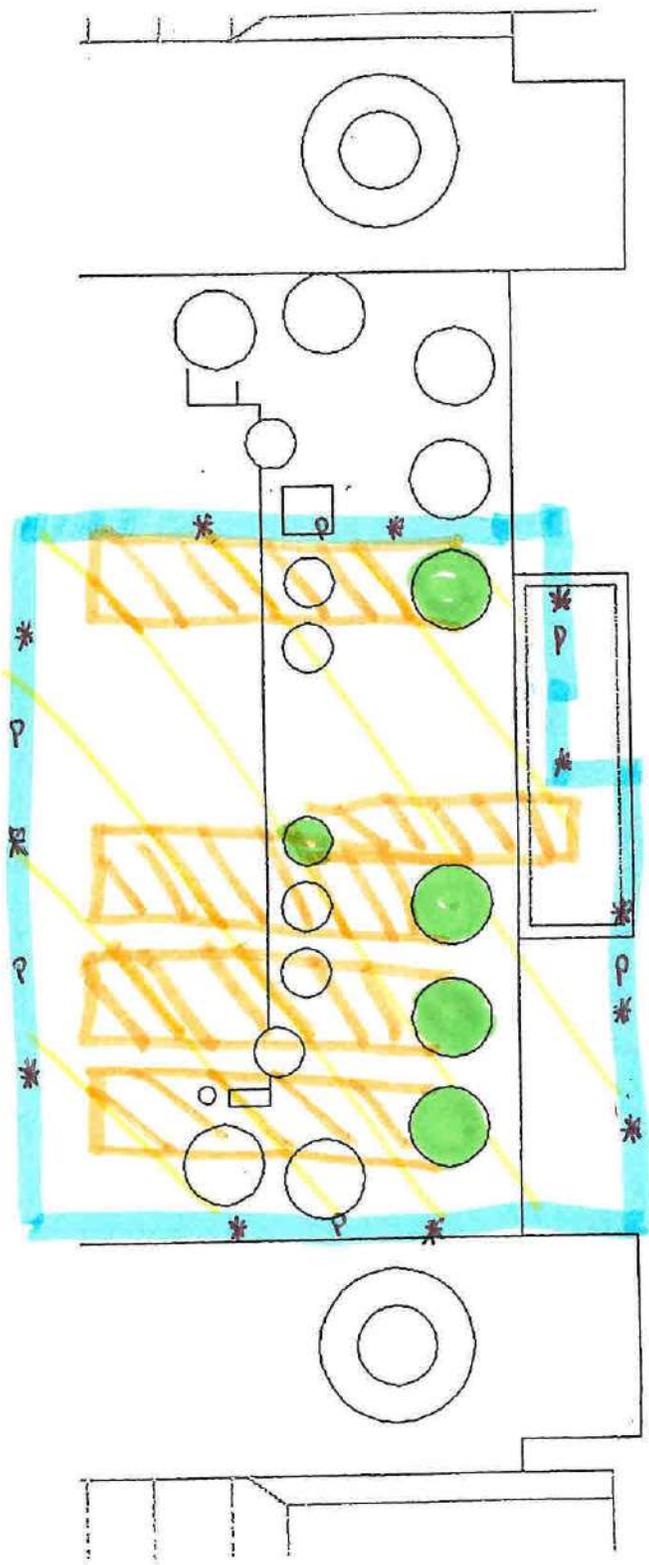


Trestle



● - Stoves

■ - Tipping Direction



P = Particulate Monitoring
 * = Asbestos Monitoring

Trestle



- Millings, Landin
 Zon
 - Berm or Dyke

Appendix J
CIH Sampling Plan



CAO Consulting, LLC

Specializing in occupational health and safety
including industrial hygiene and ergonomics

July 29, 2019

Mr. Jeremy Westcott, Managing Director
Environmental Testing & Consulting (ETC)
38900 West Huron River Drive
Romulus, Michigan 48174

Dear Mr. Westcott:

Per your request, I met with Mr. Charlie Martin (President 21st Century Salvage, Inc.); Mr. Richard Enright (Next Generation Services Group); and you on July 24, 2019 at the McLouth Steel facility in Trenton, Michigan. The purpose of this meeting was to review the work plan to remove the five ovens on the east side of the property. Based on observations and information obtained during this site visit, the work plan for the oven removal process follows standard best practice to minimize the release of airborne contaminants during the removal process. The sampling plan to evaluate airborne concentrations of asbestos, crystalline silica (cristobalite, quartz, tridymite), lead and respirable particulates should be conducted as follows:

Day One: Preparation of one oven for removal

1. Personal sample(s):
 - a. Asbestos
One (1) 8-hour time-weighted average (TWA)
 - b. Crystalline silica (cristobalite, quartz, tridymite) and respirable particulates
One (1) 8-hour time-weighted average (TWA)
 - c. Lead
One (1) 8-hour time-weighted average (TWA)

Day Two: Take down one oven

1. Personal sample(s):
 - a. Asbestos
 - i. Two (2) length of task (cover and secure containment over downed oven)
 - ii. Two (2) 8-hour TWA (cover and secure containment over downed oven)
 - iii. Two (2) length of task (excavator operators during downing of oven)

P.O. Box 81134
Rochester Hills, MI 48308-1134
248-421-4024
cao.ostrowski@gmail.com

Day Two: Take down one oven (continued)

- b. Crystalline silica (cristobalite, quartz, tridymite) and respirable particulates
 - i. One (1) 8-hour TWA (cover and secure containment over downed oven)
 - ii. Two (2) length of task (excavator operators during downing of oven)
 - iii. Two (2) 8-hour TWA (excavator operators)

- c. Lead
 - i. One (1) 8-hour TWA (cover and secure containment over downed oven)
 - ii. One (1) length of task (excavator operators during downing of oven)

- 2. Area sample(s):
 - a. Asbestos
 - i. Two (2) 8-hour TWA; one on each side of location where oven will be brought down

Air monitoring tests will be adjusted as needed if there are any changes in job tasks or assignments on the survey dates. Additional air monitoring tests will be conducted during the removal of second oven to verify the initial air monitoring results. Depending on the initial air monitoring results, the work plan and/or sampling plan will be adjusted as needed for future oven removals.

If you have any questions, or if I can be of any further assistance to you, please feel free to contact me.

Sincerely,



Cynthia A. Ostrowski, MS, CIH (#5800)
Certified Industrial Hygienist

Appendix K
Stove Lead and cadmium Paint Samples Results

Certificate of Analysis: Lead In Paint by EPA SW-846 7420 and 3050B*

Client : Environmental Testing and Consulting R
38900 Huron River Drive
Romulus, MI 48174

Attn : Peggy Genson Email : labresults@2etc.com
Phone : 734-955-6600 Fax : 734-955-6604

AAT Project : 504191
Sampling Date : 07/29/2019
Date Received : 07/30/2019
Date Analyzed : 07/30/2019
Date Reported : 7/30/2019 3:00:39PM

Client Project : 224224

Project Location : 1491 W. JEFFERSON TRENTON MI 48183

| Lab Sample ID | Client Code | Sample Description | PPM | Result Lead (% by weight) | Calculated R L (% by weight) |
|---------------|-------------|--------------------|-------|---------------------------|------------------------------|
| 4844412 | PC1 | STOVE 1 IN AREA 13 | 1059 | 0.1059 | 0.0010 |
| 4844413 | PC 2 | STOVE 1 IN AREA 13 | 1217 | 0.1217 | 0.0014 |
| 4844414 | PC 3 | STOVE 2 IN AREA 13 | 18489 | 1.8489 | 0.0014 |
| 4844415 | PC 4 | STOVE 2 IN AREA 13 | 23329 | 2.3329 | 0.0015 |
| 4844416 | PC 5 | STOVE 3 IN AREA 13 | 5383 | 0.5383 | 0.0089 |
| 4844417 | PC 6 | STOVE 3 IN AREA 13 | 5400 | 0.5400 | 0.0086 |
| 4844418 | PC 7 | STOVE 4 IN AREA 13 | 7835 | 0.7835 | 0.0032 |
| 4844419 | PC 8 | STOVE 4 IN AREA 13 | 4984 | 0.4984 | 0.0013 |
| 4844420 | PC 9 | STOVE 5 IN AREA 13 | 3025 | 0.3025 | 0.0009 |
| 4844421 | PC 10 | STOVE 5 IN AREA 13 | 4685 | 0.4685 | 0.0039 |

Analyst Signature



Norman Cyr



Tom Hamlin

RL= Reporting Limit * For true values assume (2) significant figures. The method and batch QC is acceptable unless otherwise stated. Current EPA/HUD Interim Standard for lead in paint samples is: 5000 PPM (parts per million) or ug/g which is equivalent to 0.5% by weight. AAT internal sop S203. The laboratory operates in accord with ISO 17025 guidelines and holds limited scopes of accreditation under AIHA-LAP and NY State DOH ELAP programs. These results are submitted pursuant to AAT LLC current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. Analytical results relate to the samples as received by the lab. AAT will not assume any liability or responsibility for the manner in which the results are used or interpreted. Reproduction of this document other than in its entirety is not permitted. All Quality control requirements for the samples this report contains have been met. AAT does not blank correct reported values. Sample data apply only to items analyzed. Samples are stored for 15 days following report date. * = Validated modified method
AIHA LAP- Lab ID #100986, NY State DOH ELAP -Lab ID #11864, State of Ohio- Lab ID # 10042



Certificate of Analysis: Cadmium In Paint by EPA SW-846 7420 and 3050B*

| | |
|--|--|
| Client : Environmental Testing and Consulting R 38900 Huron River Drive Romulus, MI 48174 | AAT Project : 504191 |
| Attn : Peggy Genson Email : labresults@2etc.com | Sampling Date : 07/29/2019 |
| Phone : 734-955-6600 Fax : 734-955-6604 | Date Received : 07/30/2019 |
| | Date Analyzed : 07/30/2019 |
| | Date Reported : 7/30/2019 3:00:39PM |

Client Project : 224224
Project Location : 1491 W. JEFFERSON TRENTON MI 48183

| Lab Sample ID | Client Code | Sample Description | PPM | Result Cadmium (% by weight) | Calculated R L (% by weight) |
|---------------|-------------|--------------------|------|---------------------------------|---------------------------------|
| 4844412 | PC1 | STOVE 1 IN AREA 13 | <21 | <0.0021 | 0.0021 |
| 4844413 | PC 2 | STOVE 1 IN AREA 13 | <28 | <0.0028 | 0.0028 |
| 4844414 | PC 3 | STOVE 2 IN AREA 13 | <28 | <0.0028 | 0.0028 |
| 4844415 | PC 4 | STOVE 2 IN AREA 13 | <30 | <0.0030 | 0.0030 |
| 4844416 | PC 5 | STOVE 3 IN AREA 13 | <179 | <0.0179 | 0.0179 |
| 4844417 | PC 6 | STOVE 3 IN AREA 13 | <172 | <0.0172 | 0.0172 |
| 4844418 | PC 7 | STOVE 4 IN AREA 13 | <65 | <0.0065 | 0.0065 |
| 4844419 | PC 8 | STOVE 4 IN AREA 13 | <26 | <0.0026 | 0.0026 |
| 4844420 | PC 9 | STOVE 5 IN AREA 13 | <19 | <0.0019 | 0.0019 |
| 4844421 | PC 10 | STOVE 5 IN AREA 13 | <78 | <0.0078 | 0.0078 |

Analyst Signature



Norman Cyr



Tom Hamlin

RL= Reporting Limit * For true values assume (2) significant figures. The method and batch QC is acceptable unless otherwise stated. Accurate is not accredited by any accrediting body for Cadmium analysis. AAT internal sop S310. The laboratory operates in accord with ISO 17025 guidelines and holds limited scopes of accreditation under AIHA-LAP and NY State DOH ELAP programs. These results are submitted pursuant to AAT LLC current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. Analytical results relate to the samples as received by the lab. AAT will not assume any liability or responsibility for the manner in which the results are used or interpreted. Reproduction of this document other than in its entirety is not permitted. AAT does not blank correct reported values. Sample data apply only to items analyzed. Samples are stored for 15 days following report date. * = Validated modified method



30105 Beverly Road
 Romulus, MI 48174
 Ph: 734-629-8161; Fax: 734-629-8431

To : Environmental Testing and Consulting R
 38900 Huron River Drive
 Romulus, MI 48174

AAT Project : 504191
 Client Project : 224224
 Date Reported : 7/30/2019 3:00:39PM

Attn : Peggy Genson Email : labresults@2etc.com
 Phone : 734-955-6600

Project Location : 1491 W. JEFFERSON TRENTON MI 48183

| Sample | Client Code | Analysis Requested | Completed | Analyst |
|---------|-------------|--------------------|------------|------------|
| 4844412 | PC1 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844413 | PC 2 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844414 | PC 3 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844415 | PC 4 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844416 | PC 5 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844417 | PC 6 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844418 | PC 7 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844419 | PC 8 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844420 | PC 9 | Lead Paint | 07/30/2019 | Norman Cyr |
| 4844421 | PC 10 | Lead Paint | 07/30/2019 | Norman Cyr |

Reviewed By

Quality Assurance Coordinator - Stephen Northcott

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AIHA LAP- Lab ID #100986, NY State DOH ELAP -Lab ID #11884, State of Ohio- Lab ID # 10042

Date Printed: 07/30/2019 3:00PM

AAT Project: 504191

12950 HAGGERTY ROAD
 BELLEVILLE, MICHIGAN 48111
 PHONE: (734) 699-5227
 FAX: (734) 699-8407



RETURN SAMPLES: Y OR N

www.accurate-test.biz

CHAIN-OF-CUSTODY FORM

CLIENT: **ETC** CONTACT: **RANDY KEATHLEY** PROJECT NAME: **1491 W. Jefferson, Trenton, MI 48183**

PHONE: **734-955-6600** PROJECT SUPERVISOR: **Leo Wall (734) 649-9682**

FAX: **734-955-6604** PROJECT NUMBER: **224224**

E-MAIL: results@2etc.com

ADDRESS: **38900 HURON RIVER DR, ROMULUS, MI 48174**

| LAB ID # | SAMPLE # | DATE COLLECTED | SAMPLE DESCRIPTION LOCATION / AREA | GRAB | COMPOSITE | NO. OF CONTAINERS | MATRIX (D=DUST, W=WATER, A=AIR, S=SOIL, SL=SLUDGE, P=PAINT, B=BULK) | AREA SAMPLED (INCHES BY INCHES) | WIPE AREA FL=FLOOR, WS=SILL, WW=WELL (SQUARE FEET) | REQUESTED ANALYSIS- PLEASE CHECK | | | | | |
|----------|----------|----------------|------------------------------------|------|-----------|-------------------|--|------------------------------------|--|----------------------------------|--------------|---------------|----------------|---------|--|
| | | | | | | | | | | Lead Dust Wipe | Lead in soil | Lead in paint | Pb & Cu in H2O | Cadmium | |
| | PC 1 | 7/29/2019 | Stove #1 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 2 | 7/29/2019 | Stove #1 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 3 | 7/29/2019 | Stove #2 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 4 | 7/29/2019 | Stove #2 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 5 | 7/29/2019 | Stove #3 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 6 | 7/29/2019 | Stove #3 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 7 | 7/29/2019 | Stove #4 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 8 | 7/29/2019 | Stove #4 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 9 | 7/29/2019 | Stove #5 in Area 13 | X | | | P | | N/A | | X | | | | |
| | PC 10 | 7/29/2019 | Stove #5 in Area 13 | X | | | P | | N/A | | X | | | | |

COMMENTS:

SAMPLES SUBMITTED BY: *[Signature]* DATE: **7-30-19**

SAMPLES RECEIVED BY: **DLG @ 11:50am 7-30-19** DATE: **7-30-19**

LAB USE ONLY:

AM/PM: **AM/PM**

AM/PM: **AM/PM**

AM/PM: **AM/PM**

LABORATORY USE ONLY:

SEALS INTACT UPON RECEIPT

SAMPLES PRESERVED

CONTAINERS LABELLED

TURNAROUND (PLEASE CIRCLE): ROUTINE 5 DAYS, 3 DAYS, 2 DAYS, 24 HOURS OR SAME DAY RUSH

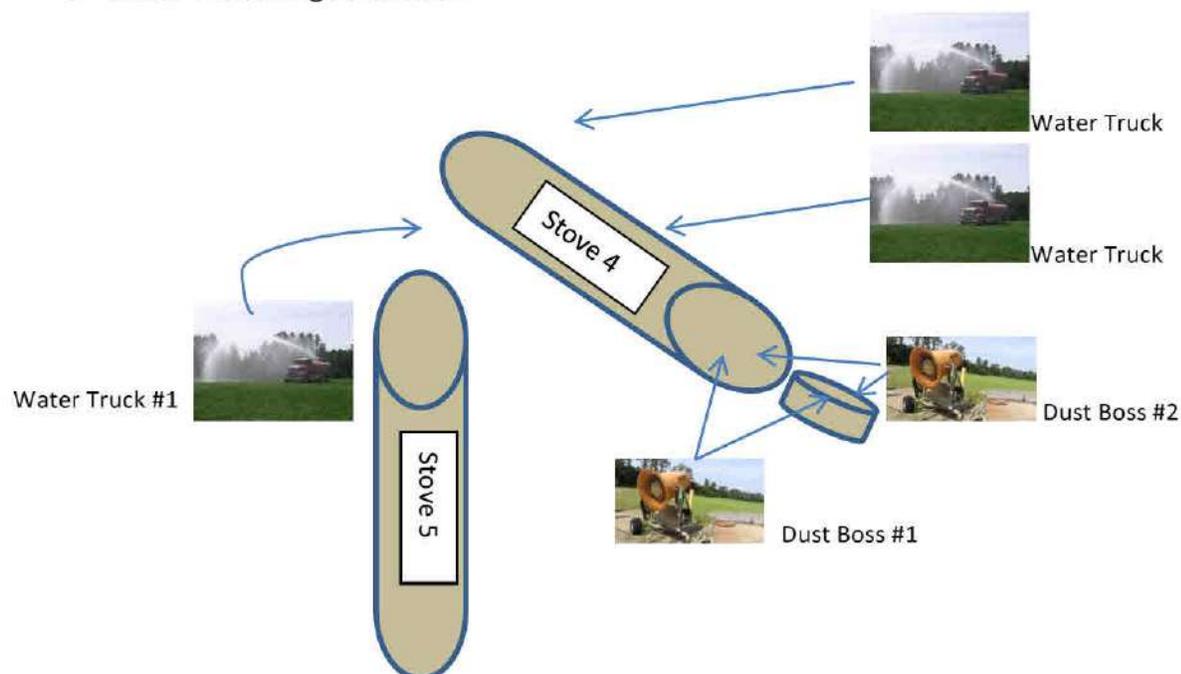
AAT LAB PROJECT #:
(LAB USE ONLY)

Appendix L
Stove Tipping Plan Amendment 1
10.31.2019

STOVE TIPPING PLAN AMENDMENT 1 - ADDITIONAL MEASURES FOR STOVES 2, 3 and 4

The following changes have been made prior to tipping stove 4, based upon a critical review of the stove tipping process observed during stoves 1 and 5. All changes made are in an effort to further mitigate dust during the process.

1. Increase interior wetting of stoves by adding fittings to both sides of the dome of each stove. Double water injection from 4,000 to 8,000 gallons of water pumped into the dome prior to commencement of the stove tipping process (amendment to item 9 of ETC recommendations).
2. Two (2) Dust boss will be placed closer to the base, approximately 10' from base.
3. Add additional watering units to the following (item C of SOP):
 - a. Add an additional water truck bringing total to three (3), two (2) which will be positioned downwind from the stove.
 - b. Additional water by manual watering using a fire hose hooked to 2" pump connected to frak tank
 - c. Dust bosses will remain at two (2) but repositioned
4. Exclusion zone will be extended from 150' to 200' (amendment to item 11 of ETC recommendations).
5. Position water trucks and dust bosses based on wind direction (amendment to item 13 of ETC recommendations).
6. Decrease opening to 50%, from 60%. Increase rear sticker size to 24" from 12".
7. Once opening is complete and prior to final torch cutting, conduct a coordination meeting with all stove tipping operation parties. Make final adjustments based on wind direction and speed.
8. Water trucks will begin spraying when excavator operator takes slack out of cable and begins pulling stove.
9. Stove 4 watering schematic:

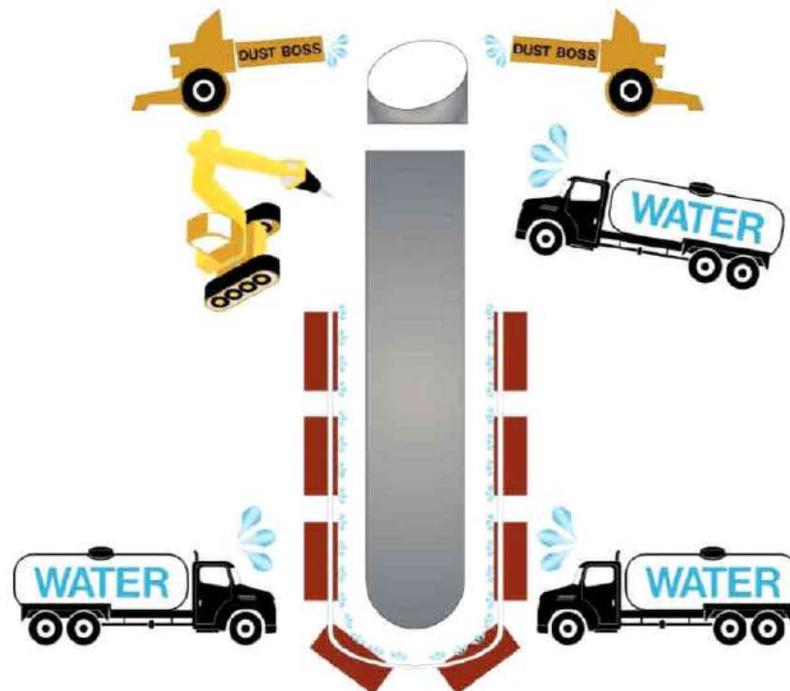


Appendix M
Stove Tipping Plan Amendment 2
11.15.2019

STOVE TIPPING PLAN AMENDMENT 2 – ADDITIONAL MEASURES FOR STOVES 2 & 3

The following changes have been made prior to tipping stoves 2 and 3 based on a critical review of the stove tipping process observed during stove 4. All changes made are in an effort to further mitigate dust during the process.

1. In addition to previous amendments, additional wetting of the exterior will be accomplished by the creation of watering system that will generate a fine water mist to encapsulate the dust emitting from the stove
 - a. The system will consist of piping, water jets, and a pump to pressurize the water to generate the mist
 - b. The mist will be designed to spray amended water in three directions, approximately 30 degrees downward, at 90 degrees, and approximately 30 degrees upward
 - c. The mist system will be fitting nozzles on spray trucks that can be adjusted to spray a fan pattern of water over the mist 'blanket' created by the system
2. Additionally, sea containers will be placed on the exterior of the drop zone to support the misting system and to create a barrier to limit the extent of any potential emissions
 - a. The sea containers (8) will be placed in a horseshoe arrangement from the midpoint up and over the dome and back to the midpoint
 - b. Plywood, or similar material, will be used to close gap between sea containers
3. Water will be charged during final cutting and remain running until stove is down and dust has been completely suppressed.
4. Schematic:





December 9, 2019

Mr. Richard Enright
Next Generation Services / 21st Century Salvage
10750 Martz Road
Ypsilanti, MI 48197
(734) 485-4855

RE: McLouth Steel - Stove Tipping Operations for Stoves 1, 5 and 4

Dear Mr. Enright,

Per our recent conversation, please allow this letter to serve as a summary of asbestos monitoring conducted during Stove Tipping Operations. The actual order of work was Stove 1 (Oct 3), Stove 5 (Oct 24) and Stove 4 (Nov 6). There are three main types of samples run during the tipping operations. These include:

- Excursion sample(s) which are short duration (about 30 minutes) taken on the actual workers for MIOSHA / OSHA compliance. *The MIOSHA / OSHA limit for these samples is 1.0 f/cc.*
- Personal sample(s) which are conducted for a regular 8-hour work shift each day again taken on the actual workers for MIOSHA / OSHA compliance. *The MIOSHA / OSHA limit for these samples is 0.1 f/cc.*
- Area sample(s) which are in various locations around the general work area / vicinity. These samples are not specifically required by MIOSHA or OSHA but are mentioned as a method of best practice to ensure that no asbestos abatement personnel are being exposed to unacceptable levels.

For this project, Next Generation has been using a voluntary action level of 0.05 f/cc (which is half the regulatory level) in order to be more protective. If the level should exceed 0.05 f/cc then they can respond before it approaches the actual regulatory level of OSHA of 0.1 f/cc.

- Michigan post abatement sample(s) which are taken after asbestos has been removed from a negative pressure enclosure are to ensure the enclosed space is safe for re-occupancy prior to release. *The Michigan Clearance limit is 0.05 f/cc.*

Below please find a basic summary of the highest monitoring results for each of these tipping events.

October 3, 2019 (Stove 1)

For the first stove tipping, both ETC and CAO were present and working together to conduct monitoring. The highest results found during this monitoring were:

- The highest noted result an excursion sample was 0.82 f/cc (or 82% of the regulatory limit).
- The highest noted result for a personal sample was 0.042 f/cc (or 42% of the regulatory limit).
- The highest noted results for an area sample was 0.067 f/cc (or 67% of the regulatory limit). Further, the reported level for this sample exceeded the voluntary action limit of 0.50 f/cc but was well below the regulatory limit of 0.10 f/cc. Also please note: in a previous letter dated October 15, 2019 the highest level was reported as 0.033 f/cc in error by ETC. The 0.033 level was a Time Weighted Average (TWA) result for an area sample which is not appropriate. The 0.067 f/cc result is the actual reading taken on Oct 3, 2019. Please refer to the page from the CIH report attached at the end of this letter.
- No post abatement samples were taken on this day.

October 24, 2019 (Stove 5)

For the second stove tipping, ETC conducted air monitoring before and during the event. The highest results found during this monitoring were:

- The highest noted result an excursion sample was 0.247 f/cc (or 24.7% of the regulatory limit).
- The highest noted result for a personal sample was 0.015 f/cc (or 15% of the regulatory limit).
- The highest noted results for an area sample was 0.052 f/cc (or 52 % of the regulatory limit). Please note this sample exceeded the voluntary action limit of 0.50 f/cc but was well below the regulatory limit of 0.10 f/cc.
- No post abatement samples were taken on this day.

Nov 4, 2019 (Stove 4)

For the third stove tipping, ETC conducted air monitoring before and during the event. The highest results found during this monitoring were:

- The highest noted result an excursion sample was 0.509 f/cc (or 50.9% of the regulatory limit).
- The highest noted result for a personal sample was 0.032 f/cc (or 32% of the regulatory limit).
- The highest noted results for an area sample was 0.022 f/cc (or 22% of the regulatory limit).
- No post abatement samples were taken on this day.
- ***Additionally, due to concerns raised regarding dust at the third stove tipping, the Phase Contrast Microscopy (PCM) samples were rerun using the more accurate and formal Transmission Electron Microscopy (TEM) method (NIOSH 7402). This analysis did not detect any asbestos fibers in the area samples that were run during the third stove tipping activity.***

In summary, no samples taken during the tipping of Stoves 1, 5 or 4 exceeded any applicable regulatory standard.

Thank you for choosing ETC. If you have any questions or concerns, please contact me at (734) 649-9680.

Environmental Testing & Consulting, Inc.



Jeremy Westcott
Managing Director

JFW / pg



TABLE NUMBER TWO
AIR MONITORING DATA

| ACCOUNT | LOCATION | SURVEY DATE |
|----------------------------|-------------------|-----------------|
| McLouth Steel Work Area 13 | Trenton, Michigan | October 3, 2019 |

PROJECT DESCRIPTION: Stove #1 is 210 feet high with 78 foot circumference; constructed 1 inch thick steel in series of rings welded together; interior has single layer Suprex insulation then layer of fire brick; bulk samples identified asbestos in insulation 15-30% but not in fire bricks; lead (<1%) present; cadmium not present; stove located 500 feet from Detroit River; heavy rains the previous three days; weather overcast on the survey date.

| SAMPLE DESCRIPTION | | SAMPLE RESULTS | | | STANDARDS | | |
|---|-------------------|----------------|----------------------|----------------------------|------------|-----------|--|
| EMPLOYEE/OPERATION | SAMPLE NUMBER | TIME MIN. | CONTAMINANT | CONCENTRATION | ACGIH TWA | TLVs STEL | CONSTRUCTION MIOSHA PEL STEL ³⁰ |
| PERSONAL SAMPLES | | | | | | | |
| Jeff Cheeks / Excavator Operator Sitting in excavator on north side by stove #3 during torching cutting on stove #1; cab door open | C007126976 | 224 | Asbestos | f/cc <0.0043 | 0.1 | ---- | f/cc 0.1 |
| Use excavator to pull steel panel, insulation & fire bricks from stove #1; took 85 minutes; cab door open; excavator parked 75 feet from stove #1 on south side when stove dropped; cab door closed | C007186390 TWA | 207 431 | Asbestos Asbestos | f/cc <0.0046 <0.0044 | 0.1 0.1 | ---- | f/cc 0.1 0.1 |
| AREA SAMPLES | | | | | | | |
| Five feet above the ground 20 feet on south side stove #1 during torching cutting | C007126953 | 197 | Asbestos | 0.0064 | 0.1 | ---- | 0.1 |
| Five feet above the ground; moved to 75 feet from stove #1 when excavator was removing steel, insulation & fire bricks from stove #1; remained on this spot; fallen to ground when stove #1 dropped | C007186562 TWA | 277 474 | Asbestos Asbestos | 0.18 0.11 | 0.1 0.1 | ---- | 0.1 0.1 |
| Five feet above the ground; 90 feet on east side stove #1 during torch cutting | C007127011 | 254 | Asbestos | <0.0038 | 0.1 | ---- | 0.1 |
| Five feet above the ground; 90 feet on east side stove #1 during removal steel, insulation, fire bricks by excavator; drop stove #1 | C007186422 TWA | 263 517 | Asbestos Asbestos | 0.067 <0.033 | 0.1 0.1 | ---- | 0.1 0.1 |

< Less than: sample results were below the analytical limit of detection. Does not apply to TWA results, unless both sample results were below the analytical limit of detection; otherwise less than the reported numerical value.

TLVs – Threshold Limit Values TWA – Time-Weighted Average PEL – Permissible Exposure Limit STEL³⁰ – 30 minute excursion limit f/cc – fibers per cubic centimeter



November 27, 2019

Mr. Richard Enright
Next Generation Services / 21st Century Salvage
10750 Martz Road
Ypsilanti, MI 48197
(734) 485-4855

RE: McLouth Steel - Stove Tipping Operations to 11-27-19

Dear Mr. Enright,

Per our recent conversation, please allow this letter to serve as a summary of Stove Tipping Operations from March 3, 2019 through November 25, 2019. As you are aware, prior to beginning any stove tipping operation, ETC, Next Generation, ASTI, Crown, etc. spent months developing a stove tipping method (sent under separate cover) to ensure the health and safety of workers and the general public. Additionally, there was on-site meeting between these parties and representatives from MIOSHA (Fred Kirkland) and MDEGLE (Tammy Bell) where the plan was laid out and reviewed to get any available insight or suggestions from the regulatory bodies. Additionally, this plan was submitted to the EPA review team for review and comment. All this occurred prior to the first tipping operations that occurred on October 3, 2019.

Below I will briefly summarize each of the three tipping operations that have occurred to date. At this point, three stoves have been tipped. In order they were Stove 1 (Oct 3), Stove 5 (Oct 24) and Stove 4 (Nov 6). Following each of these events, there was a meeting on-site to determine how the process could be improved. Without describing each change in detail some of the changes implemented included:

- Relocation of watering / misting
- Inclusion of more dust bosses and water trucks
- Pumping large quantities of water into the Stove prior to tipping in an attempt to wet the internal materials

October 3, 2019 (Stove 1)

The first stove tipped was Stove # 1 on October 3, 2019. The following were present: Next Generation, ETC, Cindy Ostrowski (CIH from CAO), MDEGLE, Crown, and many others. The stove fell as anticipated but the top of the stove broke open upon landing.

ETC worked with Cindy Ostrowski a CIH from CAO consulting to monitor for a variety of different parameters (asbestos, lead, particulate matter and silica). For valid samples, all the parameters were below regulatory levels. By way of clarification, one sample exceeded the MIOSHA level, however, this sample fell to the ground when the stove fell and sucked up dirt onto the cassette invalidating this result. Please refer to the letter included in Appendix A for more details on this sampling.

Following this tipping activity, (in compliance with the initial tipping plan submitted) a meeting was held to determine what procedures could be changed to improve the process. Some of the changes discussed above were proposed and implemented for the next stove tipping.

October 24, 2019 (Stove 5)

Stove # 5 was tipped on October 24, 2019. During the tipping activity, ETC conducted asbestos monitoring similar to that conducted for the first stove. The other parameters (lead, particulate dust and silica) were not tested as the previous results had all been non-detect. Please refer to Appendix B for copies of the sampling conducted on that day and during the tipping. Changes that were implemented prior to this second tipping were:

- Relocate some of the equipment to better cover any potential brick dust
- Attach a fire hose to the side of Stove # 5 and pump in 4000 gallons of water

Again, following this tipping activity, a meeting was held to determine what procedures could be improved. Some other of the changes discussed above were proposed and implemented for the next stove tipping.

November 6, 2019 (Stove 4)

The last tipping activity occurred on November 6, 2019 when stove # 4 was tipped. For this tipping activity, large amounts of water had been sprayed into the interior of the stove prior to tipping. The hope was that by inserting water at the top, it would filter down through the internal materials wetting them thoroughly. Changes that were implemented prior to this second tipping were:

- Increase volume of water for Stove # 4 to 20,000 gallons

Unfortunately, it is impossible to see into the stove to determine how effective the watering had actually been. Further, when this stove was tipped the stove broke more severely. It is likely that the weight of the additional water added to the stove created more energy in the landing causing larger breeches than previously. Therefore, adding more water for wetting may have been offset by the added weight and larger breeches.

After this tipping event, Next generation was contacted by MDEGLE who had watched the tipping from across the river in Grosse Ile. Their observation was that there were visible emissions during the tipping. A request was put forth for Next Generation to provide an updated work plan that would ensure zero emissions during the tipping process.

Next Generation has been working on this revised tipping procedure method (to be provided separately).

As with previous tipping events, ETC conducted air monitoring during the event to determine possible exposure levels. All of these results came back lower than any federal or state regulatory levels. However, due to concerns raised by MDEGLE (see above) Next Generation opted to have these same samples reanalyzed by TEM for a more definitive determination of the amount of actual asbestos fibers present in the brick dust monitored. Of the four (4) samples reanalyzed by TEM, none of them were found to have any asbestos fibers present. Please refer to Appendix C for copies of a letter discussing the initial PCM monitoring results and the follow-up TEM reanalysis of the area samples.

I hope this provides the summary of monitoring conducted by ETC and the numerous adjustments and changes implemented to improve the tipping procedure along the way. Thank you for selecting ETC. It has been a pleasure working with you. Further environmental services are available upon request. If you have any questions regarding this report, please feel free to contact me at (734) 955-6600.

Sincerely,

Environmental Testing & Consulting, Inc.



Jeremy Westcott
Managing Director

JFW / pg

Appendix A

October 3 (Stove # 1)

Monitoring Letter



October 15, 2019

Mr. Richard Enright
Next Generation Services / 21st Century Salvage
10750 Martz Road
Ypsilanti, MI 48197
(734) 485-4855

RE: McLouth Steel Air Monitoring during 1st Stove Tipping Operation

Dear Mr. Enright,

Attached please find the report for the air monitoring that was conducted during the 1st stove tipping operation at the former McLouth Steel plant on October 3, 2019.

Through all the monitoring conducted during the tipping operations the highest recorded readings for asbestos were:

Asbestos

- Highest area TWA reading was 0.033 f/cc east side (Michigan Clearance criteria is 0.05 f/cc). Please note: the south side sample reading was 0.11 f/cc which would be above the limit. However, this is not listed as the highest reading as the sample fell to the ground when the stove tipped and sucked up significant contamination from the ground invalidating this sample.
- Highest excursion sample was 0.82 f/cc (MIOSHA Excursion Limit 1.0 f/cc). Please note: some samples showed higher readings but required dilution and were below the detection limit.
- Highest personal 8-hour TWA reading was 0.042 f/cc (MIOSHA 8 hour TWA level is 0.10 f/cc).

Lead, Silica and Particulate Sampling

- All of the lead, silica and particulate samples showed either no or very low readings during the tipping operations.

Therefore, these results would indicate that the removal operations are not causing elevated levels of asbestos fibers, lead, silica or particulate materials to be produced and put into the air above the MIOSHA levels for these parameters.

Thank you for selecting ETC. It has been a pleasure working with you. Further environmental services are available upon request. If you have any questions regarding this report, please feel free to contact me at (734) 955-6600.

Sincerely,

Environmental Testing & Consulting, Inc.

A handwritten signature in black ink, appearing to read "Jeremy Westcott". The signature is fluid and cursive, with a large initial "J" and "W".

Jeremy Westcott
Managing Director

JFW/pg



CAO Consulting, LLC

Specializing in occupational health and safety
including industrial hygiene and ergonomics

October 15, 2019

Mr. Jeremy Westcott, Managing Director
Environmental Testing & Consulting (ETC)
38900 West Huron River Drive
Romulus, Michigan 48174

Dear Mr. Westcott:

In accordance with the sampling plan proposed on July 29, 2019, I conducted an air monitoring survey at the former McLouth Steel property on October 3, 2019. The purpose of this air monitoring survey was to evaluate employee exposures to airborne concentrations of asbestos fibers, lead dusts, crystalline silica (cristobalite, quartz) dusts and respirable particulates while bringing down stove #1 in work area #13 at the former McLouth Steel property.

The survey results are presented and discussed in the “**Results and Discussion**” section of the attached report and summarized below:

ASBESTOS

Personal Air Monitoring Results

On the survey date, airborne concentrations of asbestos fibers were **not detected** during operation of the excavator to remove the steel panels, insulation and fire bricks from stove #1. Therefore, the excavator operator’s TWA exposure to airborne levels of asbestos fibers was **WELL BELOW** the TLV-TWA and MIOSHA PEL. The employee’s 30 minute excursion exposure to asbestos fibers while torch cutting three panels on the south side of stove #1 and covering the exposed insulation and fire bricks after dropping stove #1 was **below** the MIOSHA excursion limit. Additionally, employees’ TWA exposures to airborne concentrations of asbestos fibers were **below** the TLV-TWA and MIOSHA PEL during torch cutting operations.

P.O. Box 81134
Rochester Hills, MI 48308-1134
248-421-4024
cao.ostrowski@gmail.com

Provision of a healthy and safe work environment is the responsibility of your management. This report does not attempt to deal with every possible legal obligation, code violation, loss potential or exception to good practice. It is not intended to imply that all hazards and situations are resolved. CAO Consulting, LLC assumes no liability by reason of this report which is provided for informational purposes only.

The ground crew employee's TWA exposure to airborne levels of asbestos fibers was **well below** the TLV-TWA and MIOSHA PEL. The short term exposure sample indicated his highest exposure occurred when covering the dropped stove #1 with poly sheeting. Although his exposure during this task was **below** the MIOSHA 30-minute excursion limit, it was 82% of the MIOSHA 30-minute excursion. Hence, the potential exists for employee exposures to asbestos to exceed MIOSHA standards during the dropping and when covering the stove after the drop.

Area Air Monitoring Results

Airborne levels of asbestos fibers were **not detected** during the morning (first) sample collected on the east side of stove #1 on the day of the survey. Although the morning sample collected to the south of stove #1 was positive, the airborne levels of asbestos fibers were extremely low concentrations. Employees were only prepping the area and torch cutting during the morning samples. Elevated levels of asbestos fibers were detected in both areas during the second (afternoon) samples. Excavation of insulation and fire bricks, dropping stove #1 and covering the exposed insulation and fire bricks occurred during the afternoon samples. The TWA levels of asbestos fibers were below the TLV-TWA and MIOSHA PEL at the sample collected on the east side, but above at the sample collected on the south side. The asbestos fibers on the south side were most likely higher, since the large dust cloud released when stove #1 struck the ground was visible on the south side; plus the water misters were in use on the east side which reduced dust levels. The south side sample was also knocked to the ground when stove #1 hit the ground, so it may have also collected more fibers from the ground.

LEAD

Airborne levels of lead dusts were **not detected** during operation of the excavator to remove the steel panels, insulation and fire bricks from stove #1. Although a ground crew member was exposed to extremely low levels (just above the analytical limit of detection) of lead dusts during the second sample of the work shift, this ground crew member's as well as the excavator's operator's TWA exposures to lead dusts was **well below** the TLV-TWA and the MIOSHA PEL and Action Level (AL) during excavation and ground crew operations while stove #1 was prepped and dropped to the ground on the day of the survey.

SILICA

On the survey date, airborne concentrations of crystalline silica that includes cristobalite and quartz dusts were **not detected** during operation of the excavator to remove the steel panels, insulation and fire bricks as well as during ground crew operations that included working in the restricted area during torch cutting, excavating debris and covering exposed insulation and fire bricks after the stove was on the ground. Therefore, employees' TWA exposures to airborne concentrations of crystalline silica (cristobalite, quartz) dusts were **well below** the TLV-TWA and the MIOSHA PEL and AL during excavation and ground crew operations while stove #1 was prepped and dropped to the ground.

Mr. Westcott
Page Three

RESPIRABLE PARTICULATES

Employees' TWA exposures to airborne levels of respirable particulates were **well below** the TLV-TWA and the MIOSHA PEL during operation of the excavator to remove the steel panels, insulation and fire bricks as well as during ground crew operations that included working in the restricted area during torch cutting, excavating debris and covering exposed insulation and fire bricks after the stove was on the ground on the survey date.

The following recommendations are based on observations made and information obtained during this survey. Information to support these recommendations is presented in the "**Results and Discussion**" section of the attached report.

RECOMMENDATIONS

2019-10-01

Since the best practice is reduce employee exposures to the lowest levels practical, additional water should be applied more timely and in more strategic locations to reduce release of asbestos fibers and dusts when the stoves are dropped to the ground. Employees should continue to wear half mask respirators with high efficiency particulate aerosol (HEPA) filters during torch cutting and ground crew operations.

Thank you for the assistance of your staff during this survey. If you have any questions, or if I can be of any further assistance to you, please feel free to contact me.

Sincerely,



Cynthia A. Ostrowski, MS, CIH (#5800), FAIHA
Certified Industrial Hygienist



CAO Consulting, LLC
Specializing in occupational health and safety
including industrial hygiene and ergonomics

AIR MONITORING SURVEY REPORT

McLouth Steel
1491 W. Jefferson Avenue
Trenton, Michigan 48183

October 3, 2019

Survey conducted and report submitted by:
Cynthia A. Ostrowski, CIH

Provision of a healthy and safe work environment is the responsibility of your management. This report does not attempt to deal with every possible legal obligation, code violation, loss potential or exception to good practice. It is not intended to imply that all hazards and situations are resolved. CAO Consulting, LLC assumes no liability by reason of this report which is provided for informational purposes only.

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AIR MONITORING SURVEY REPORT

McLouth Steel
1491 W. Jefferson Avenue
Trenton, Michigan 48183

PURPOSE OF SURVEY

The purpose of this survey was to evaluate employee exposures to airborne concentrations of asbestos fibers, lead dusts, crystalline silica (cristobalite, quartz) dusts and respirable particulates while bringing down stove #1 in work area #13 at the former McLouth Steel property.

DEMOLITION DESCRIPTION

A demolition project is currently in progress at the McLouth Steel property. The demolition project includes the removal of five stoves on the east side of the property approximately 500 feet from the Detroit River. The stoves are approximately 120 feet tall with a 78 foot circumference. Their exterior is constructed of 1 inch thick plate steel in a series of rings welded together. The interior of each stove has a layer of Suprex insulation along the steel. A layer of fire bricks is present along the interior insulation. Bulk sampling indicated the Suprex insulation contains asbestos between 15-30%. Asbestos was not present in the fire bricks. Bulk sampling also identified the presence of lead (<1%), but did not identify any cadmium in each stove.

In order to remove the stoves from the property, the demolition, remediation and environmental testing contractors determined the best approach was to bring each stove down on its side. Details of the project are presented in the Appendix A. On the survey date, stove #1 was brought down. One employee used an acetylene torch to cut slits on an angle along both sides (north and south) on the west side of stove #1. A second employee applied water to the stove in the area of the torch cutting to limit the release of fibers and dusts. After removal of the steel and debris from the west side of the stove, both employees used acetylene torches to cut a seam on the stove's east side above its base. Each employee began cutting simultaneously on opposite ends. As the seam became larger in width, they left the area in their truck.

An excavator was used to pull the cut steel panels along with the insulation and fire bricks away from the stove #1's west side. One employee operated the excavator. The operator waited inside the excavator where it was parked on the north side next to stove #3 while torch cutting was in progress. The operator indicated the excavator cab door was open during the torch cutting and when removing the steel, insulation and fire bricks from the stove. The excavator was parked approximately 75 feet on the south side of the stove beyond the asbestos restricted area with the cab door closed when the stove was brought down to the ground.

A second excavator with an operator was located approximately 300 feet on the west side of the stove during the entire removal process. This excavator controlled a steel cable that was attached to the stove's west side one-third from the top. As the stove became unstable as the employees cut the seam on the stove's east side, this second excavator pulled the stove to the ground in a controlled manner.

Three employees acted as the ground crew during this process. Only one ground crew member worked in the asbestos restricted area during torch cutting and excavating operations. This employee applied water from a hose onto the stove while standing on the ground near the excavator as it removed debris from the stove. Water was also applied by a water truck on the opposite side of the stove where the excavator was removing debris. The initial ground crew member along with the other two ground crew members were stationed to the north of stove #1 near stove #3 when stove #1 was pulled down. Once the stove was on the ground, two ground crew members turned on two water misters located to the east of the stove. Water was also applied by two water trucks, one on each side of the fallen stove. The three ground crew members used poly sheeting to cover exposed insulation and fire bricks. There were two areas with exposed insulation and fire bricks: the stove bottom and a weld seam one third from the stove top that split when the stove hit the ground.

The area surrounding stove #1 was demarcated with warning tape to identify an asbestos restricted area. The three ground crew members wore Tyvek suits, gloves and half mask respirators with high efficiency particulate aerosol (HEPA) filters when working in the asbestos restricted area. A changing room with wash facilities was available in work area #13 for them to remove the Tyvek suits, gloves and respirators before leaving the work area. Two negative air machines were attached to two exterior valves on the stove's east side. These machines were operating during the entire process. Half mask respirators with HEPA filters were also worn by the two employees performing the torch cutting operation.

HEALTH HAZARD INFORMATION

OCCUPATIONAL HEALTH STANDARDS

Occupational exposures to chemical substances and physical agents are limited by occupational health guidelines and standards known as "Threshold Limit Values" and "Permissible Exposure Limits". Threshold limit values (TLVs) are either airborne concentrations of chemical substances or ambient levels of physical agents, to which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. These values are published annually by the American Conference of Governmental Industrial Hygienists (ACGIH) and are based upon the best available information from industrial experience and experimental human and animal studies. The TLV list is updated annually with additions and revisions and contains three categories of recommended limits:

1. TLV-TWA: The time-weighted average concentration for a normal 8-hour workday and 40-hour workweek to which nearly all workers may be repeatedly exposed without adverse effect.

2. TLV-Short Term Exposure Limit (STEL): The STEL is a 15-minute TWA exposure that should not be exceeded at any time during a workday, even if the eight-hour TWA is within the TLV-TWA. The TLV-STEL is the concentration to which it is believed that nearly all workers can be exposed continuously for a short period of time without suffering from irritation, chronic or irreversible tissue damage, dose-rate-dependent toxic effects, or narcosis of sufficient degree to increase the likelihood of accidental injury, impaired self-rescue or materially reduced work efficiency. Exposures above the TLV-TWA up to the STEL should be less than 15 minutes, should occur no more than four times a day, and there should be at least 60 minutes between successive exposures in this range.
3. TLV-Ceiling (C): The ceiling limit, or concentration, that should not be exceeded during any part of the working exposures.

TLVs are guidelines for control of health hazards and should not be used as fine lines between safe and dangerous conditions. The best practice is to maintain concentrations of all airborne contaminants to the lowest levels practical.

Permissible exposure limits (PELs) are issued by the Occupational Safety and Health Administration (OSHA) and are published in Subpart Z of the OSHA General Industry Standards (29 CFR Part 1910). These PELs are embodied in Federal and/or State statutes and have the force and effect of law. The majority of these standards are based upon the 1968 ACGIH TLVs, and not updated annually. Revisions are only made after a long and involved legal process. However, MIOSHA (Michigan OSHA) published new and revised PELs in 1989, which are based upon the 1989 TLVs. The MIOSHA standards supersede the OSHA standards, since they are more stringent. PELs are similar to TLVs in that they are time-weighted average concentrations for 8-hour workdays and also use the ceiling limit concept. In addition, some of the standards assign an "action level" (AL) which is below the PEL but requires certain administrative or monitoring actions on the part of the employer.

ASBESTOS

Asbestos is a generic term referring to various fibrous mineral silicates, including chrysotile (hydrated magnesium silicate), amosite (iron-magnesium silicate), crocidolite (sodium-iron silicate), tremolite (calcium-magnesium silicate), anthophyllite (another iron-magnesium silicate) and actinolite (calcium-magnesium-iron silicate). The potential health hazards associated with exposure to asbestos results from inhalation of airborne fibers. Small asbestos fibers pass readily through the upper respiratory tract and are deposited in the terminal bronchioles of the lung. The fibers produce a local irritation, which the body attempts to overcome by a tissue response. The tissue response encapsulates the fibers, which results in the development of asbestos bodies. Accumulation of these asbestos bodies can produce a form of pneumoconiosis, known as asbestosis. Asbestosis is a progressive disease characterized by diffuse interstitial fibrosis. It is often evident as rales and dyspnea. Exposure to airborne asbestos fibers has also been associated with bronchogenic carcinoma (a malignancy of the lung interior), mesothelioma (a diffuse malignancy of the chest or abdominal lining) and cancer of the stomach, colon and rectum. Cigarette smoking can increase the incidence of bronchogenic carcinoma. The MIOSHA

construction standard is a PEL of 0.1 f/cc. MIOSHA also has a 30-minute short term exposure limit of 0.3 f/cc. The ACGIH TLV-TWA for asbestos is 0.1 f/cc.

LEAD

Lead is a blue-grey metal which is very soft, but heavy. It may enter the body by inhalation or ingestion. In general, it is not absorbed through the skin. A significant portion of the lead that enters the body passes into the bloodstream. Some of the lead is quickly filtered and excreted from the body. Any remaining lead is carried by the bloodstream to other tissues and organs. If the exposure to lead continues, the amount of lead will increase in these tissues. The early effects of lead poisoning are not specific and are difficult to distinguish from symptoms of minor seasonal illnesses. Symptoms may include fatigue, headaches, digestive and sleep disturbances, and aching bones and muscles. However, if the exposure to the lead is reduced, the individuals will completely recover from these symptoms. The effects are much more severe for continued lead exposure. Chronic overexposure to lead may lead to kidney failure. Lead overexposure may damage the central and peripheral nervous systems. Damage to the peripheral system will cause a lead paralysis, which affects the hands. If the central nervous system is affected, the result could be brain dysfunction. The lead may also accumulate in the bone marrow and cause an anemia.

The MIOSHA construction PEL for lead is 0.05 mg/m^3 for an eight hour time-weighted average exposure with an AL of 0.03 mg/m^3 . If the AL is exceeded, the following actions must be taken: biannual exposure monitoring, medical surveillance and training. In addition, the following actions must be implemented if the PEL is exceeded: quarterly exposure monitoring, engineering/administrative controls, respirator protection, protective clothing, signs and hygiene facilities (change rooms, showers, lunchrooms). The TLV-TWA for lead is 0.05 mg/m^3 .

SILICA

Often referred to as quartz, crystalline silica is a colorless and odorless solid which may be a component of many mineral dusts. Crystalline silica can affect the body if it is inhaled. It may cause scarring of the lungs with coughing and shortness of breath. This is known as silicosis. Silicosis is a disabling, progressive, and sometimes fatal lung disease. Signs and symptoms tend to be progressive with continued exposure, advancing age and continued smoking habits. Symptoms include coughing, shortness of breath, wheezing and repeated nonspecific chest illnesses. Crystalline silica is also listed as a suspected human carcinogen. The TLV-TWA (respirable dust) is 0.025 mg/m^3 for the quartz and cristobalite forms of silica. The MIOSHA construction PEL is 0.05 mg/m^3 and the AL is 0.025 mg/m^3 (both as respirable dust) for quartz, cristobalite and tridymite. There is no TLV for tridymite.

SURVEY AND ANALYTICAL METHODS

Personal and area air monitoring samples were collected as follows:

| Contaminant | Sampling Media | Flow Rate Liters per minute (lpm) | Analytical Method |
|-------------------------------|--|--|------------------------------|
| Asbestos | 0.8 micron mixed cellulose ester filters with cowl | 1.99-2.08 | NIOSH 7400A |
| Lead | 5.0 micron polyvinyl chloride filter | 2.02-2.06 | NIOSH 7303 |
| Respirable particulates | Pre-weighed 5.0 micron polyvinyl chloride filter preceded by an aluminum cyclone | 2.51-2.53 | NIOSH 0600 |
| Silica (cristobalite, quartz) | Pre-weighed 5.0 micron polyvinyl chloride filter preceded by an aluminum cyclone | 2.51-2.53 | NIOSH 7500 |

The sampling media was connected by plastic tubing to SKC portable air sampling pumps. Personal "breathing zone" samples were collected by attaching the pumps to employees' belts and clipping the sampling media to their lapels. Prior to and after the survey, all pumps were calibrated according to National Institute for Occupational Safety and Health (NIOSH) methods using a Mini-Buck M5 calibrator (serial #A54176). Analysis for each contaminant was performed by NIOSH methods. Results are reported in milligrams of contaminant per cubic meter of air sampled (mg/m^3) with the exception of the results for asbestos. Results for asbestos are reported as fibers per cubic centimeter of air sampled (f/cc). Samples for lead, silica and respirable particulates were analyzed by Bureau Veritas in Novi, Michigan. Samples for asbestos were analyzed by Bureau Veritas in Kennesaw, Georgia. Both laboratories are accredited by the American Industrial Hygiene Association Laboratory Accreditation Program (AIHA-LAP).

RESULTS AND DISCUSSION

ASBESTOS

Results of the personal and area air monitoring tests to evaluate employee exposures to airborne concentrations of asbestos fibers during torch cutting, excavation and ground crew operations are presented in Tables #1 and #2.

Personal Air Monitoring Results

The personal air monitoring results indicated airborne concentrations of asbestos fibers were **NOT DETECTED** during operation of the excavator to remove the steel panels, insulation and fire bricks from stove #1. Therefore, the excavator operator's time-weighted average (TWA) exposure to airborne levels of asbestos fibers was **WELL BELOW** the Threshold Limit Value (TLV)-TWA and the Michigan Occupational Safety and Health Administration (MIOSHA) Permissible Exposure Limit (PEL).

The personal air monitoring samples for the employee torch cutting the steel were overloaded with debris, which required the laboratory to redeposit the samples. However, when redepositing samples, the numerical values are increased due to dilution factors. According to laboratory personnel, less than 5 fibers were observed in the samples which are below the limit of detection. This employee's short term exposure while actually torch cutting the steel was **WELL BELOW** the MIOSHA 30-minute excursion limit as well as the TLV-TWA and MIOSHA PEL. In addition, the second employee's TWA exposure to asbestos fibers while working next to the employee torch cutting to apply water was **WELL BELOW** the TLV-TWA and MIOSHA PEL.

The ground crew employee's TWA exposure to airborne levels of asbestos fibers was **WELL BELOW** the TLV-TWA and MIOSHA PEL. His first sample in the morning was much lower than his second sample in the afternoon. The difference in results is to be expected, since he spent the majority of the morning outside the asbestos restricted area. The second sample coincides when he was active inside the asbestos restricted area after dropping of the stove. The short term exposure sample indicated his highest exposure occurred when covering the dropped stove #1 with poly sheeting. Although his exposure during this task was **BELOW** the MIOSHA 30-minute excursion limit, it was 82% of the MIOSHA 30-minute excursion. Hence, the potential exists for employee exposures to asbestos to exceed MIOSHA standards during the dropping and when covering the stove after the drop.

Since the best practice is reduce employee exposures to the lowest levels practical, additional water should be applied more timely and in more strategic locations to reduce release of asbestos fibers when the stoves are dropped to the ground. Employees should continue to wear half mask respirators with high efficiency particulate aerosol (HEPA) filters during torch cutting and ground crew operations.

Area Air Monitoring Results

The area air monitoring results indicated airborne levels of asbestos fibers were **NOT DETECTED** during the morning (first) sample collected on the east side of stove #1. Although the morning sample collected to the south of stove #1 was positive, the airborne levels of asbestos fibers were extremely low concentrations. Employees were only prepping the area and torch cutting during the morning samples. Elevated levels of asbestos fibers were detected in both areas during the second (afternoon) samples. Excavation of insulation and fire bricks, dropping stove #1 and covering the exposed insulation and fire bricks occurred during the afternoon samples. The TWA levels of asbestos fibers were below the TLV-TWA and MIOSHA PEL at the sample collected on the east side, but above at the sample collected on the south side. The asbestos fibers on the south side were most likely higher, since the large dust cloud released when stove #1 struck the ground was visible on the south side; plus the water misters were in use on the east side which reduced dust levels. The south side sample was also knocked to the ground when stove #1 hit the ground, so it may have also collected more fibers from the ground.

LEAD

Results of the personal air monitoring tests to evaluate employee exposures to airborne levels of lead dusts during excavation and ground crew operations are presented in Table #3. The results indicate lead dusts were **NOT DETECTED** during operation of the excavator to remove the steel panels, insulation and fire bricks from stove #1. A ground crew member was exposed to extremely low levels (just above the analytical limit of detection) of lead dusts during the second sample of the work shift that included operating the water misters and covering the exposed insulation and fire bricks after the stove was on the ground. However, lead was **NOT DETECTED** while working in the restricted area to cover the exposed insulation and fire bricks that took 143 minutes to complete. Based on these survey results, employees' TWA exposures to airborne levels of lead dusts were **WELL BELOW** the TLV-TWA and the MIOSHA PEL and Action Level (AL) during excavation and ground crew operations while stove #1 was prepped and dropped to the ground.

SILICA

Results of the personal air monitoring tests to evaluate employee exposures to airborne concentrations of crystalline silica that includes cristobalite and quartz dusts during excavation and ground crew operations are presented in Table #4. The results indicate crystalline silica that includes cristobalite and quartz dusts were **NOT DETECTED** during operation of the excavator to remove the steel panels, insulation and fire bricks as well as during ground crew operations that included working in the restricted area during torch cutting, excavating debris and covering exposed insulation and fire bricks after the stove was on the ground.

The sample collected while the employee worked in the restricted area to cover the exposed insulation and fire bricks indicated silica dusts were not detected, but the numerical value for total crystalline silica was above the MIOSHA AL. It is the calculation of the small sample volume from the shorter sampling period that results in a numerical value above the AL. This shorter sample was collected at the same time as the full shift sample. Since the TWA results includes this shorter sample, crystalline silica dusts were well below the detection limits. Therefore, employees' TWA exposures to airborne concentrations of crystalline silica (cristobalite, quartz) dusts were **WELL BELOW** the TLV-TWA and the MIOSHA PEL and AL during excavation and ground crew operations while stove #1 was prepped and dropped to the ground.

RESPIRABLE PARTICULATES

Results of the personal air monitoring tests to evaluate employee exposures to airborne levels of respirable particulates during excavation and ground crew operations are presented in Table #4. The results indicate employees' TWA exposures to airborne levels of respirable particulates were **WELL BELOW** the TLV-TWA and the MIOSHA PEL during operation of the excavator to remove the steel panels, insulation and fire bricks as well as during ground crew operations that included working in the restricted area during torch cutting, excavating debris and covering exposed insulation and fire bricks after the stove was on the ground.



TABLE NUMBER ONE
AIR MONITORING DATA

| | | |
|--|-------------------------------|--------------------------------|
| ACCOUNT McLouth Steel Work Area 13 | LOCATION Trenton, Michigan | SURVEY DATE October 3, 2019 |
| PROJECT DESCRIPTION: Stove #1 is 210 feet high with 78 foot circumference; constructed 1 inch thick steel in series of rings welded together; interior has single layer Suprex insulation then layer of fire brick; bulk samples identified asbestos in insulation 15-30% but not in fire bricks; lead (<1%) present; cadmium not present; stove located 500 feet from Detroit River; heavy rains the previous three days; weather overcast on the survey date. | | |

| SAMPLE DESCRIPTION | | SAMPLE RESULTS | | | STANDARDS | | | |
|---|---------------|----------------|-------------|--------------------|--------------------|--------------------|-------------------------|--------------------|
| EMPLOYEE/OPERATION | SAMPLE NUMBER | TIME MIN. | CONTAMINANT | CONCENTRATION | ACGIH TWA | TLVs STEL | CONSTRUCTION MIOSHA PEL | STEL ³⁰ |
| <u>PERSONAL SAMPLES</u> | | | | <u>f/cc</u> | <u>f/cc</u> | <u>f/cc</u> | <u>f/cc</u> | <u>f/cc</u> |
| Kim Wheeler / Torch cutting steel on stove #1 Three cuts each on north and south sides Bottom cuts north and south sides; cut east side prior to stove drop | C007127154 | 215 | Asbestos | <0.24* | 0.1 | ---- | 0.1 | 1 |
| | C007186384 | 212 | Asbestos | <0.25* | 0.1 | ---- | 0.1 | 1 |
| | TWA | 427 | Asbestos | <0.25* | 0.1 | ---- | 0.1 | 1 |
| Kim Wheeler / Torch cutting steel on stove #1 Three cuts on south side during sample C007127154 | C007127028 | 26 | Asbestos | 0.045 | 0.1 | ---- | 0.1 | 1 |
| Jeebre Thomas / Torch cutting steel on stove #1 Applied water during torch cutting Torch cut east side of stove prior to stove drop | C007126949 | 202 | Asbestos | 0.016 | 0.1 | ---- | 0.1 | 1 |
| | C007127045 | 212 | Asbestos | 0.011 | 0.1 | ---- | 0.1 | 1 |
| | TWA | 414 | Asbestos | 0.013 | 0.1 | ---- | 0.1 | 1 |
| Erik Alaniz / Ground Crew Worked outside restricted area while torch cutting in progress Cover exposed insulation, fire bricks after dropped stove #1 | C007186703 | 203 | Asbestos | 0.0059 | 0.1 | ---- | 0.1 | 1 |
| | C007186182 | 310 | Asbestos | 0.065 | 0.1 | ---- | 0.1 | 1 |
| | TWA | 513 | Asbestos | 0.042 | 0.1 | ---- | 0.1 | 1 |
| Eric Aliniz /Ground Crew Place poly sheeting over dropped stove #1 to contain exposed insulation and fire bricks during sample C007186182 | C007126983 | 43 | Asbestos | 0.82 | 0.1 | ---- | 0.1 | 1 |

< Less than: sample results were below the analytical limit of detection. Does not apply to TWA results, unless both sample results were below the analytical limit of detection; otherwise less than the reported numerical value.

*Samples overloaded with debris; so laboratory redeposited samples which raises numerical value. Less than 5 fibers were seen in these samples, which is below limit of detection.
TLVs – Threshold Limit Values TWA – Time-Weighted Average PEL – Permissible Exposure Limit STEL³⁰ – 30 minute excursion limit f/cc – fibers per cubic centimeter



TABLE NUMBER TWO
AIR MONITORING DATA

| | | |
|--|--------------------------------------|---------------------------------------|
| ACCOUNT McLouth Steel Work Area 13 | LOCATION Trenton, Michigan | SURVEY DATE October 3, 2019 |
| PROJECT DESCRIPTION: Stove #1 is 210 feet high with 78 foot circumference; constructed 1 inch thick steel in series of rings welded together; interior has single layer Suprex insulation then layer of fire brick; bulk samples identified asbestos in insulation 15-30% but not in fire bricks; lead (<1%) present; cadmium not present; stove located 500 feet from Detroit River; heavy rains the previous three days; weather overcast on the survey date. | | |

| SAMPLE DESCRIPTION | | | SAMPLE RESULTS | | STANDARDS | | | |
|---|---------------|-----------|----------------|---------------|-------------|-------------|--|-------------|
| EMPLOYEE/OPERATION | SAMPLE NUMBER | TIME MIN. | CONTAMINANT | CONCENTRATION | ACGIH TWA | TLVs STEL | CONSTRUCTION MIOSHA PEL STEL ³⁰ | |
| <u>PERSONAL SAMPLES</u> | | | | <u>f/cc</u> | <u>f/cc</u> | <u>f/cc</u> | <u>f/cc</u> | <u>f/cc</u> |
| Jeff Cheeks / Excavator Operator Sitting in excavator on north side by stove #3 during torching cutting on stove #1; cab door open | C007126976 | 224 | Asbestos | <0.0043 | 0.1 | ---- | 0.1 | 1 |
| Use excavator to pull steel panel, insulation & fire bricks from stove #1; took 85 minutes; cab door open; excavator parked 75 feet from stove #1 on south side when stove dropped; cab door closed | C007186390 | 207 | Asbestos | <0.0046 | 0.1 | ---- | 0.1 | 1 |
| | TWA | 431 | Asbestos | <0.0044 | 0.1 | ---- | 0.1 | 1 |
| <u>AREA SAMPLES</u> | | | | | | | | |
| Five feet above the ground 20 feet on south side stove #1 during torching cutting | C007126953 | 197 | Asbestos | 0.0064 | 0.1 | ---- | 0.1 | 1 |
| Five feet above the ground; moved to 75 feet from stove #1 when excavator was removing steel, insulation & fire bricks from stove #1; remained on this spot; fallen to ground when stove #1 dropped | C007186562 | 277 | Asbestos | 0.18 | 0.1 | ---- | 0.1 | 1 |
| | TWA | 474 | Asbestos | 0.11 | 0.1 | ---- | 0.1 | 1 |
| Five feet above the ground; 90 feet on east side stove #1 during torch cutting | C007127011 | 254 | Asbestos | <0.0038 | 0.1 | ---- | 0.1 | 1 |
| Five feet above the ground; 90 feet on east side stove #1 during removal steel, insulation, fire bricks by excavator; drop stove #1 | C007186422 | 263 | Asbestos | 0.067 | 0.1 | ---- | 0.1 | 1 |
| | TWA | 517 | Asbestos | <0.033 | 0.1 | ---- | 0.1 | 1 |

< Less than: sample results were below the analytical limit of detection. Does not apply to TWA results, unless both sample results were below the analytical limit of detection; otherwise less than the reported numerical value.

TABLE NUMBER THREE
AIR MONITORING DATA

| | | |
|--|--------------------------------------|---------------------------------------|
| ACCOUNT McLouth Steel Work Area 13 | LOCATION Trenton, Michigan | SURVEY DATE October 3, 2019 |
| PROJECT DESCRIPTION: Stove #1 is 210 feet high with 78 foot circumference; constructed 1 inch thick steel in series of rings welded together; interior has single layer Suprex insulation then layer of fire brick; bulk samples identified asbestos in insulation 15-30% but not in fire bricks; lead (<1%) present; cadmium not present; stove located 500 feet from Detroit River; heavy rains the previous three days; weather overcast on the survey date. | | |

| SAMPLE DESCRIPTION | | | SAMPLE RESULTS | | STANDARDS | | | |
|---|---------------|-----------|----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| EMPLOYEE/OPERATION | SAMPLE NUMBER | TIME MIN. | CONTAMINANT | CONCENTRATION | ACGIH TWA | TLVs STEL | CONSTRUCTION MIOSHA PEL | AL |
| PERSONAL SAMPLES | | | | <u>mg/m³</u> | <u>mg/m³</u> | <u>mg/m³</u> | <u>mg/m³</u> | <u>mg/m³</u> |
| Jeff Cheeks / Excavator Operator Sitting in excavator on north side by stove #3 during torching cutting on stove #1 | PY143680-450 | 227 | Lead | <0.0021 | 0.05 | ---- | 0.05 | 0.03 |
| use excavator to pull steel panel, insulation & fire bricks from stove #1; took 85 minutes; cab door open; excavator parked 75 feet from stove #1 on south side when stove dropped; cab door closed | PY108845-686 | 204 | Lead | <0.0024 | 0.05 | ---- | 0.05 | 0.03 |
| | TWA | 431 | Lead | <0.0022 | 0.05 | ---- | 0.05 | 0.03 |
| John Price / Ground Crew Worked outside restricted area; operated water boss as needed while excavator removed steel, insulation, fire bricks | PY143680-451 | 241 | Lead | <0.0020 | 0.05 | ---- | 0.05 | 0.03 |
| | PY108846-051 | 219 | Lead | 0.0025 | 0.05 | ---- | 0.05 | 0.03 |
| assisted with covering the dropped stove #1 with poly sheeting inside restricted area | TWA | 460 | Lead | <0.0022 | 0.05 | ---- | 0.05 | 0.03 |
| | PY120390-646 | 143 | Lead | <0.0035 | 0.05 | ---- | 0.05 | 0.03 |
| John Price / Ground Crew Worked inside restricted area to cover dropped stove #1; sampled during sample PY108846-051 | | | | | | | | |

< Less than: sample results were below the analytical limit of detection. Does not apply to TWA results, unless both sample results were below the analytical limit of detection; otherwise less than the reported numerical value.

TLVs – Threshold Limit Values TWA – Time-Weighted Average PEL – Permissible Exposure Limit AL – Action Level STEL – short term exposure limit
 mg/m³ – milligrams per cubic meter

TABLE NUMBER FOUR
AIR MONITORING DATA

| | | |
|--|--------------------------------------|---------------------------------------|
| ACCOUNT McLouth Steel Work Area 13 | LOCATION Trenton, Michigan | SURVEY DATE October 3, 2019 |
| PROJECT DESCRIPTION: Stove #1 is 210 feet high with 78 foot circumference; constructed 1 inch thick steel in series of rings welded together; interior has single layer Suprex insulation then layer of fire brick; bulk samples identified asbestos in insulation 15-30% but not in fire bricks; lead (<1%) present; cadmium not present; stove located 500 feet from Detroit River; heavy rains the previous three days; weather overcast on the survey date. | | |

| SAMPLE DESCRIPTION | | | SAMPLE RESULTS | | STANDARDS | | | |
|---|---------------|-----------|---|--|---------------------------|------------------------------|---------------------------|---------------------------------|
| EMPLOYEE/OPERATION | SAMPLE NUMBER | TIME MIN. | CONTAMINANT | CONCENTRATION | ACGIH TWA | TLVs STEL | CONSTRUCTOIN MIOSHA PEL | AL |
| <u>PERSONAL SAMPLES</u> | | | | <u>mg/m³</u> | <u>mg/m³</u> | <u>mg/m³</u> | <u>mg/m³</u> | <u>mg/m³</u> |
| Jeff Cheeks / Excavator Operator Sitting in excavator on north side by stove #3 during torching cutting on stove #1; use excavator to pull steel panel, insulation & fire bricks from stove #1; took 85 minutes; cab door open; excavator parked 75 feet from stove #1 on south side when stove dropped; cab door closed | PZ132940-158 | 432 | Respirable particulates Cristobalite Quartz Total crystalline silica | 0.10 <0.0046 <0.0046 <0.0092 | 3 0.05 0.05 0.05 | ---- ---- ---- ---- | 5 0.05 0.05 0.05 | ---- 0.025 0.025 0.025 |
| Dave Chandler / Ground Crew Supervisor Worked within restricted area; added water while excavator removed steel, insulation, fire bricks; turned on water boss behind stove #1 after stove #1 dropped; assisted with covering the dropped stove #1 with poly sheeting | PZ132940-148 | 445 | Respirable particulates Cristobalite Quartz Total crystalline silica | 0.087 <0.0045 <0.0045 <0.0090 | 3 0.05 0.05 0.05 | ---- ---- ---- ---- | 5 0.05 0.05 0.05 | ---- 0.025 0.025 0.025 |
| Dave Chandler / Ground Crew Supervisor Worked within restricted area; turned on water boss behind stove #1 after stove #1 dropped; assisted with covering the dropped stove #1 with poly sheeting; sampled during sample PZ132940-148 | PZ132940-386 | 143 | Respirable particulates Cristobalite Quartz Total crystalline silica | <0.14 <0.014 <0.014 <0.028 | 3 0.05 0.05 0.05 | ---- ---- ---- ---- | 5 0.05 0.05 0.05 | ---- 0.025 0.025 0.025 |

< Less than: sample results were below the analytical limit of detection.

mg/m³ – milligrams per cubic meter

TLVs – Threshold Limit Values TWA – Time-Weighted Average PEL – Permissible Exposure Limit AL – Action Level STEL – short term exposure limit

Appendix B

October 24 (Stove #5)

Monitoring Data

Asbestos Abatement Air Monitoring Project



the ETC group
 environmental testing
 project management
 laboratory analysis
 professional training

Client: Next Generation Environmental, Inc
 Contractor: Next Generation Environmental, Inc
 Facility: 1491 West Jefferson, Trenton, MI 48183
 ETC Project #: 225924
 Date: 10/24/2019
 Hygienist: Randy Keathley
 Areas of Work: Area 4, Area 13, Area 14

FIELD DATA SHEET

| Sample ID (below) | Sampling Time | | Elapsed Time (min) | Sampling Data | | Flow Rate (lpm) | Volume (L) | Actual Results (f/cc) | 8 Hour TWA (f/cc) | Description and Location |
|----------------------|---------------|-------|-----------------------|---------------|--------|--------------------|---------------|--------------------------|----------------------|--|
| | Start | Stop | | Fibers | Fields | | | | | |
| FB1 | | | | 0.0 | 100 | | | | | FIELD BLANK |
| FB2 | | | | 0.0 | 100 | | | | | FIELD BLANK |
| EX1 | 7:32 | 8:05 | 33 | 12.0 | 100 | 2.3 | 74.25 | 0.079 | 0.013 | On George Cook - A27795 - loading brick in Area 13. |
| EX2 | 12:35 | 13:07 | 32 | 22.0 | 100 | 2.3 | 72.00 | 0.150 | 0.010 | On Jeff Cheeks - knocking out brick in the fish mouth of stove #5 in Area 13 |
| EX3 | 8:30 | 9:00 | 30 | 34.0 | 100 | 2.3 | 67.50 | 0.247 | 0.015 | On John Price - A46646 - prep work within the regulated area. |
| PS1 | 8:05 | 12:05 | 240 | 16.0 | 100 | 2.3 | 540.00 | 0.015 | | On George Cook - A27795 - loading brick in Area 13. |
| PS2 | 8:25 | 12:10 | 225 | 28.0 | 100 | 2.3 | 506.25 | 0.027 | | On Jeff Cheeks - knocking out brick in the fish mouth of stove #5 in Area 13 |
| PS3 | 9:00 | 12:00 | 180 | 20.0 | 100 | 2.3 | 405.00 | 0.024 | | On John Price - A46646 - prep work within the regulated area. |
| PS1R1 | 12:05 | 16:53 | 288 | 27.0 | 100 | 2.3 | 648.00 | 0.020 | | On George Cook - A27795 - loading brick in Area 13. |
| PS2R1 | 12:10 | 14:50 | 160 | 19.0 | 100 | 2.3 | 360.00 | 0.026 | | On Jeff Cheeks - knocking out brick in the fish mouth of stove #5 in Area 13 |

AA- Ambient Air
 BL- Baseline
 CS-Contiguous

EA- Exhaust Air, EX- Excursion
 PA- Post Abatement
 PP- Personal/Post Abatement

PS- Personal
 WA- Work Area
 WP- Work Area/Post Abatement

Asbestos Abatement Air Monitoring Project



the ETC group
 environmental testing
 project management
 laboratory analysis
 professional training

Client: Next Generation Environmental, Inc
 Contractor: Next Generation Environmental, Inc
 Facility: 1491 West Jefferson, Trenton, MI 48183
 ETC Project #: 225924
 Date: 10/24/2019
 Hygienist: Randy Keathley
 Areas of Work: Area 4, Area 13, Area 14

FIELD DATA SHEET

| Sample ID (below) | Sampling Time | | Elapsed Time (min) | Sampling Data | | Flow Rate (lpm) | Volume (L) | Actual Results (f/cc) | 8 Hour TWA (f/cc) | Description and Location |
|----------------------|---------------|-------|-----------------------|---------------|--------|--------------------|---------------|--------------------------|----------------------|---|
| | Start | Stop | | Fibers | Fields | | | | | |
| PS3R1 | 12:00 | 17:00 | 300 | 30.0 | 100 | 3.3 | 975.00 | 0.015 | | On John Price - A46646 - prep work within the regulated area. |
| CS1 | 7:39 | 11:38 | 239 | 22.0 | 100 | 6.3 | 1496.14 | 0.007 | | West of Stove #4 in Area 13 |
| CS2 | 8:13 | 12:12 | 239 | 14.0 | 100 | 6.3 | 1496.14 | 0.005 | | South of shower trailer in Area 13 |
| CS3 | 8:16 | 12:13 | 237 | 11.0 | 100 | 6.3 | 1483.62 | 0.004 | | SE of stove #5 in area 13 |
| CS1R1 | 11:38 | 15:30 | 232 | 41.0 | 100 | 6.3 | 1452.32 | 0.014 | | West of Stove #4 in Area 13 |
| CS2R1 | 12:12 | 15:35 | 203 | 74.0 | 100 | 6.3 | 1270.78 | 0.029 | | South of shower trailer in Area 13 |
| CS3R1 | 12:13 | 15:36 | 203 | 104.5 | 78 | 6.3 | 1270.78 | 0.052 | | SE of stove #5 in area 13 |

AA- Ambient Air
 BL- Baseline
 CS-Contiguous

EA- Exhaust Air, EX- Excursion
 PA- Post Abatement
 PP- Personal/Post Abatement

PS- Personal
 WA- Work Area
 WP- Work Area/Post Abatement

Asbestos Abatement Air Monitoring Project
Summary of Daily Activities



Client: Next Generation Environmental, Inc
 Contractor: Next Generation Environmental, Inc
 Facility: 1491 West Jefferson, Trenton, MI 48183
 Competent Person: Allen Offenbecker
 ETC Project #: 225924
 Date: 10/24/2019

Hygienist: Randy Keathley

Areas of Work: Area 4, Area 13, Area 14

| Work Area | Materials Removed | Approx. Total Amount | Friable/ Non-Friable | Removal Technique | % Done | Clearance Level | PCM/ TEM | Aggressive Clearance Required | Aggressive Clearance Performed | Pass/ Fail |
|-----------|-------------------|----------------------|----------------------|-------------------|--------|-----------------|----------|-------------------------------|--------------------------------|------------|
| Area 4 | Galbestos | 2,269,249 SF | F | CB | 34% | 0.050 | PCM | No | No | N/A |
| Area 13 | Brick Insulation | 50,000 SF | F | CB | 19% | 0.050 | PCM | No | No | N/A |
| Area 14 | Transite | 200 SF | NF | CB | 85% | 0.050 | PCM | No | No | N/A |

7:00 I, Randy Keathley, arrived at 1491 W. Jefferson in Trenton, MI, to perform ongoing asbestos air monitoring for client and contractor, Next Generation Environmental.

7:06 21st Century will be knocking down stove #5 today. Allen will be assisting anyway he can but he will also have guys lining and sealing dumpsters so George can loadout the rest of the brick he can access. I will be running a personal pump on one of 21st Century's guys who will be busting out the brick in the fish mouth of stove #5 but he will be outside of the regulated area.

7:32 When I got out to Area 13 there was a truck with two dumpsters already waiting to be lined. I gave George Cook a personal pump with sample EX1.

7:39 I started sample CS1 west of stove #4. (see map)

8:05 I swapped out EX1 for PS1 after the first set of dumpsters that were loaded.

8:13 I started sample CS2 south of the shower trailer. (see map)

8:16 I decided to run a third area pump, southeast of stove #5. This sample is CS3.

8:25 Jeff Cheeks arrived in Area 13 and he is on standby until they are ready for him to hammer out the brick in the fish mouth of stove #5. I gave him sample PS2 to run in the meantime.

NOTE: Jeff Cheeks is an operator for 21st Century Salvage. He will be sitting inside the cab of his machine, outside of the regulated area during his time breaking the brick. The hammer portion will be reaching over the banner tape to do said task and even though he is not an accredited abatement worker, I felt it was necessary to emulate the process that was performed by the certified industrial hygienist. She was hired by D21 to do all air monitoring for stove #1, and she too, ran a personal pump on Jeff Cheeks during her time here.

8:30 John Price is going to be setting up the dust bosses and assisting 21st Century by helping the welders get started and moving their tanks for them. I gave him a personal pump with sample EX3. He is in a suit respirator.

9:00 I swapped out sample EX3 for PS3. John resumed work area prep.

8:52 Two trucks carrying dumpsters have been loaded and sent off site. Shawn Canning is setting up the 2x4s in the fish mouth as a reference for when it starts to lean. John Price will be the ground guy for him.

9:16 Tim Francis is going over the water plan with Allen. He wants John to position of the dust bosses, northwest of stove #5 to catch any dust that comes from a break at the top of the stove. He also wants a road bulldozed along the north perimeter of area 13 so water trucks can get down the side of it after it falls.

10:11 Jeff Cheeks began busting up brick around the fish mouth.

11:43 21st Century and Next Generation are breaking for lunch. It will be 30 minutes.

12:05 While the crew was on lunch, I took this opportunity to swap out samples. First, I swapped out sample PS1 for PS1R1.

12:08 I swapped out sample CS1 for CS1R1 and checked the flow rate of my pump. No adjustments were necessary.

12:10 I swapped out sample PS2 for PS2R1.

12:13 I collected samples CS2 and CS3 and replaced them with CS2R1 and CS3R1. Also checked the flow rate of the pumps and no adjustments were necessary.

12:35 I started a second personal pump on Jeff Cheeks when he was ready to resume busting up brick. The sample is EX2 and will run for at least 30 minutes.

13:07 I collected sample EX2 from Jeff and the personal pump. He is finished busting out the brick but is staying in the area just in case he has to bust more out.

13:35 Stove #5 is now on the ground. 3 water trucks are moving in to mitigate dust. The dust boss on the east side of the stove is on but the one on the north side isn't working properly. Overall, the dust output is significantly better than the stove #1.

13:58 Pro-V truck arrived on site and is heading to Area 13 for brick loadout of stove #1. I am heading up front to my office to read samples.

14:09 Two more trucks hauling dumpsters have arrived on site and are heading back to Area 13.

14:30 Luke is sealing up the last two dumpsters of the day. After that, all Next Gen personnel will be sealing up all open points of stove #5.

NOTE: George is consolidating the last pile of brick and combining it with the brick in stove #5.

14:50 Jeff is done in this area so I collected his personal pump and sample PS2R1.

15:30 I collected sample CS1R1 from the west side of stove #4.

15:36 I collected samples CS2R1 and CS3R1 as well. I am heading back to my office to read these samples now.

16:00 I did end up having one high sample which was CS3R1. It was only slightly above the clearance level by .002 which is a dramatic improvement from the high sample of stove #1. I will let Allen know of my readings.

16:22 Charlie stopped up at the garage to ask about my readings. I told him about the slightly high sample and ways to fix it. There is a 9am "lessons learned" meeting tomorrow morning and he wants me to attend and go over this with the supervisors and Tim.

16:53 I drove back out to Area 13 to collect the personal samples that are still running since both 21st and Next Gen are wrapping up for the day. I collected sample PS1R1 from George's cab.

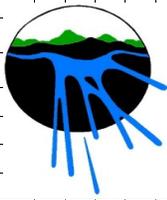
17:00 Back at the garage, I got the personal pump from John. I will read both of these samples tomorrow morning as everyone is about to leave.

17:20 I packed up and left for the day.

This job is ongoing

Documented By
 Randy Keathley

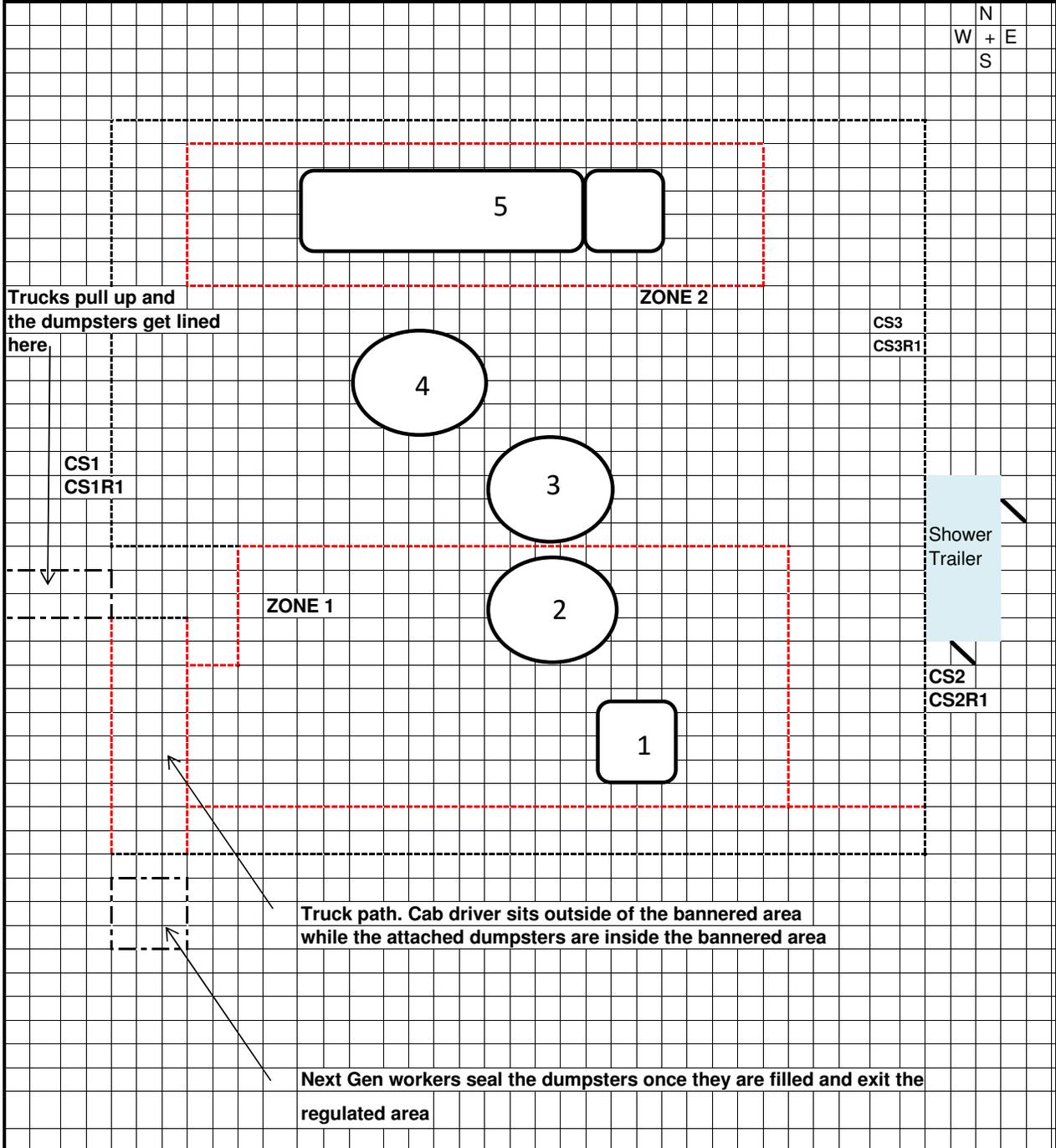
Asbestos Abatement Air Monitoring Project



the ETC group
 environmental testing
 project management
 laboratory analysis
 professional training

Client: Next Generation Environmental, Inc
 Contractor: Next Generation Environmental, Inc
 Facility: 1491 West Jefferson, Trenton, MI 48183
 Competent Person: Allen Offenbecker
 ETC Project #: 225924
 Date: 10/24/2019
 Hygienist: Randy Keathley
 Areas of Work: Area 4, Area 13, Area 14

General Diagram of Work Areas



Appendix C

November 6 (Stove # 4)

Monitoring Letter



November 25, 2019

Mr. Charlie Martin
Next Generation Services / 21st Century Salvage
10750 Martz Road
Ypsilanti, MI 48197
(734) 485-4855

RE: McLouth Steel - Stove 4 Tipping Monitoring Data to 11-6-19

Dear Mr. Enright,

Per your request, please find attached the data sheets for the asbestos monitoring (PCM) conducted on-site at the previous McLouth Steel plant during the tipping of Stove 4 on November 6, 2019. The on-site PCM results are included in Appendix A.

After there were issues raised about visible dust during the tipping operation, ETC opted to have the PCM cassettes rerun by TEM method (NIOSH 7402) to verify what percentage of fibers found on the cassettes were actually asbestos. This analysis was conducted by IATL in New Jersey. Suffice it to say, none of the fibrous materials found on the cassettes were found to be asbestos fibers. Therefore, all fibers counted on the PCM analysis (which was well below the MIOSHA PEL anyway) were non-asbestos. The TEM analysis results can be found in Appendix B.

Therefore, these results would indicate that the tipping of Stove 4 did not cause elevated levels of asbestos fibers to be produced.

Thank you for selecting ETC. It has been a pleasure working with you. Further environmental services are available upon request. If you have any questions regarding this report, please feel free to contact me at (734) 955-6600.

Sincerely,

Environmental Testing & Consulting, Inc.

A handwritten signature in black ink that reads "Jeremy Westcott".

Jeremy Westcott
Managing Director

Appendix A

On-site PCM Results for Stove 4 Tipping

Asbestos Abatement Air Monitoring Project



Client: Next Generation Environmental
 Contractor: Next Generation Environmental
 Facility: 1491 West Jefferson, Trenton, MI 48183
 ETC Project #: 226942
 Date: 11/6/2019
 Hygienist: Randy Keathley
 Areas of Work: Area 4, Area 13, Area 14

FIELD DATA SHEET

| Sample ID (below) | Sampling Time | | Elapsed Time (min) | Sampling Data | | Flow Rate (lpm) | Volume (L) | Actual Results (f/cc) | 8 Hour TWA (f/cc) | Description and Location |
|----------------------|---------------|-------|-----------------------|---------------|--------|--------------------|---------------|--------------------------|----------------------|---|
| | Start | Stop | | Fibers | Fields | | | | | |
| FB1 | | | | 0.0 | 100 | | | | | FIELD BLANK |
| FB2 | | | | 0.0 | 100 | | | | | FIELD BLANK |
| EX1 | 9:40 | 10:15 | 35 | 47.0 | 100 | 2.3 | 78.75 | 0.293 | 0.021 | On Erik Alaniz - dust boss operator in Area 13 |
| EX2 | 9:44 | 10:16 | 32 | 35.0 | 100 | 2.3 | 72.00 | 0.238 | 0.016 | On Luke Harris - set up and water support for Jeff Cheeks |
| EX3 | 9:50 | 10:20 | 30 | 70.0 | 100 | 2.3 | 67.50 | 0.509 | 0.032 | On Willie Wright - support staff for torch cutters. |
| PS1 | 7:17 | 13:14 | 357 | 39.0 | 100 | 2.3 | 803.25 | 0.024 | 0.021 | On Erik Alaniz - dust boss operator in Area 13 |
| PS2 | 7:29 | 13:16 | 347 | 59.0 | 100 | 2.3 | 780.75 | 0.037 | 0.016 | On Luke Harris - set up and water support for Jeff Cheeks |
| PS3 | 7:36 | 11:49 | 253 | 53.0 | 100 | 2.3 | 569.25 | 0.046 | 0.032 | On Willie Wright - support staff for torch cutters. |
| PS1R1 | 13:14 | 14:58 | 104 | 13.0 | 100 | 2.3 | 234.00 | 0.027 | 0.021 | On Erik Alaniz - dust boss operator in Area 13 |
| PS2R1 | 13:16 | 14:58 | 102 | 18.0 | 100 | 2.3 | 229.50 | 0.038 | 0.016 | On Luke Harris - set up and water support for Jeff Cheeks |
| CS1 | 7:20 | 11:19 | 239 | 52.0 | 100 | 6.3 | 1496.14 | 0.017 | | West of Stove #4 in Area 13 |
| CS2 | 7:45 | 11:44 | 239 | 68.0 | 100 | 6.3 | 1496.14 | 0.022 | | South of shower trailer in Area 13 |
| CS1R1 | 11:19 | 15:18 | 239 | 14.0 | 100 | 6.3 | 1496.14 | 0.005 | | West of Stove #4 in Area 13 |
| CS2R1 | 11:44 | 15:20 | 216 | 22.0 | 100 | 6.3 | 1352.16 | 0.008 | | South of shower trailer in Area 13 |

AA- Ambient Air
 BL- Baseline
 CS-Contiguous

EA- Exhaust Air, EX- Excursion
 PA- Post Abatement
 PP- Personal/Post Abatement

PS- Personal
 WA- Work Area
 WP- Work Area/Post Abatement

Asbestos Abatement Air Monitoring Project
Summary of Daily Activities



Client: Next Generation Environmental, Inc
 Contractor: Next Generation Environmental, Inc
 Facility: 1491 West Jefferson, Trenton, MI 48183
 Competent Person: Allen Offenbecker
 ETC Project #: 226942
 Date: 11/6/2019
 Hygienist: Randy Keathley
 Areas of Work: Area 4, Area 13, Area 14

| Work Area | Materials Removed | Approx. Total Amount | Friable/ Non-Friable | Removal Technique | % Done | Clearance Level | PCM/ TEM | Aggressive Clearance Required | Aggressive Clearance Performed | Pass/ Fail |
|-----------|-------------------|----------------------|----------------------|-------------------|--------|-----------------|----------|-------------------------------|--------------------------------|------------|
| Area 4 | Galbestos | 2,269,249 SF | F | CB | 34% | 0.050 | PCM | No | No | N/A |
| Area 13 | Brick Insulation | 50,000 SF | F | CB | 25% | 0.050 | PCM | No | No | N/A |
| Area 14 | Transite | 200 SF | NF | CB | 85% | 0.050 | PCM | No | No | N/A |

7:00 I, Randy Keathley, arrived at 1491 W. Jefferson in Trenton, MI, to perform ongoing asbestos air monitoring for client and contractor, Next Generation Environmental.

7:06 Stove #4 will be tipped today in Area 13 and all workers for both Next Generation and 21st Century will be in Area 13 to prepare. I will be running 3 personal pumps on Allen's guys and will distribute based on what jobs everyone is doing as not all workers will be in the regulated area.

7:06 (cont) John Price and Erik Alaniz will be operating dust bosses in Area 13. Luke and Kenneth will be setting up AFD machines in Area 13 that will be hooked to the west pipe openings of the stove. They will also be doing prep inside the regulated area. Willie is going to be supporting the torch cutters that will be making cuts so Jeff Cheeks can hammer out the brick in the fish mouth. The torch cutters will also be making the final cut before the stove drop. Willie is in charge with water application during both processes. Sean Maley will be in a water truck and Shawn Canning will be an outside person with Dave and Allen.

7:17 I started sample PS1 on John Price while he gets the dust bosses into position with Erik.

7:20 There was a light plant located on the western perimeter of area 13 and I am using that to plug in my area pump to run sample CS1.

7:29 I started sample PS2 on Luke. Him and Austin are setting up AFD machines on stove #4.

7:36 Once the power washer was in position so Willie can start spraying the areas that will be torch cut and brick will be hammered out, I gave him a personal pump with sample PS3.

7:45 South of the shower trailer, I started a second area pump with sample CS2.

8:16 Torch Cutting is about to begin around the fish mouth of Stove #4. Willie is getting into position with the power washer.

8:49 Torch cutting has subsided for now. Jeff Cheeks is entering the area and beginning to bust out the brick. Luke Harris will be applying water during the process.

9:26 Jeff is finished busting out the brick. Everyone is exiting the area for the moment to prepare for the next step which is cutting the back. I will be starting separate personal pumps with excursion samples.

9:40 I gave Erik another personal pump with sample EX1 to run for at least 30 minutes. Him and John Price are position the dust bosses and checking to make sure they are operational.

9:44 I gave Luke a personal pump with sample EX2. He is removing the AFD machines from the pipe openings so that the torch cutters can get back access to the stove as they will be cutting from opposite ends and meeting in the middle, minus 2 feet.

9:50 I gave Willie a second personal pump with sample EX3. He will be on fire watch for the torch cutters and applying water once the stove starts to fall East. He will be west of the stove with ample time to get out of the way just in case the stove falls in another direction.

10:20 The stove is now on the ground. Dust emissions were significantly reduce thanks to the multiple water sources on each side of the stove. I collected the personal pumps with the excursion samples from Erik, Willie, and Luke.

10:37 The crew is going to begin covering the openings with poly here shortly. They are gathering their supplies as of right now.

11:19 I swapped out sample CS1 for CS1R1.

NOTE: Egle did not like the emissions that came out of the stove and are on site despite saying they couldn't make it. Richard and Allen are having their guys stand down as of right now.

11:44 I collected sample CS2 and started sample CS2R1. Allen is sending his guys on lunch since they are still waiting to go back to work. I collected Willie's personal pump with sample PS3 as he is no longer going to need his for the remainder of the day.

13:16 Allen is having his guys go back out to Area 13 and to cover stove #4. I collected samples PS1 and PS2 and started PS1R1 and PS2R1 on Erik and Luke to run for the rest of the day.

14:59 The crew finished covering the openings with poly on the stove. Allen is having his guys wrap up and head to the garage to go over a couple things from today. Erik and Luke both gave me their personal pumps and samples PS1R1 and PS2R1.

15:20 I collected samples CS1R1 and CS2R1 and headed back up to the garage.

NOTE: Tim Francis wants a copy of the data sheets from each stove dropping and the maps that have the locations of my area pumps. Allen said it was okay to give him this information.

15:50 I packed up and left for the day.

This job is ongoing

Documented By
 Randy Keathley

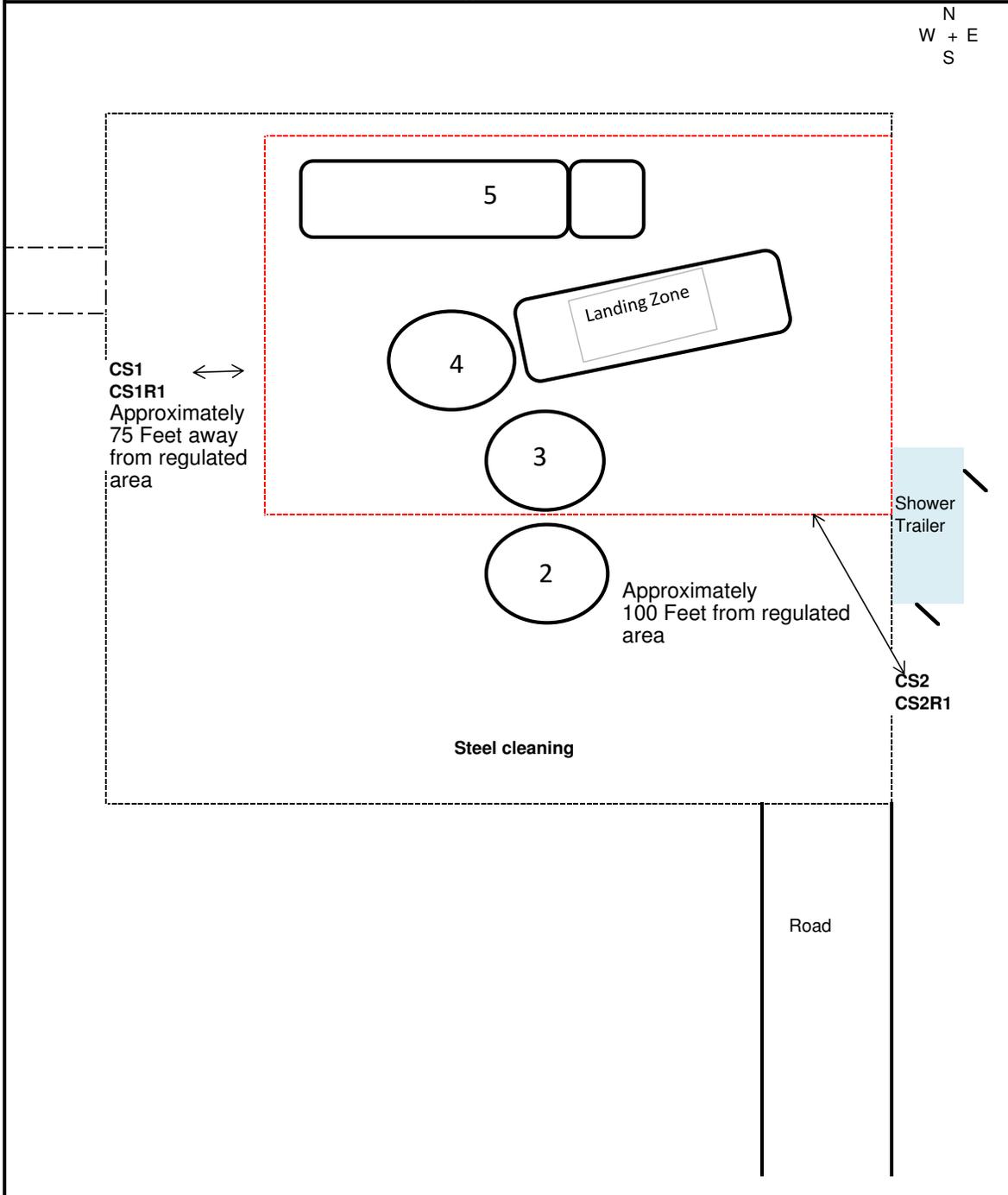
Asbestos Abatement Air Monitoring Project



the ETC group
environmental testing
project management
laboratory analysis
professional training

Client: Next Generation Environmental, Inc
Contractor: Next Generation Environmental, Inc
Facility: 1491 West Jefferson, Trenton, MI 48183
Competent Person: Allen Offenbecker
ETC Project #: 226942
Date: 11/6/2019
Hygienist: Randy Keathley
Areas of Work: Area 4, Area 13, Area 14

General Diagram of Work Areas



Appendix B

TEM Re-analysis of PCM Cassettes for Stove 4 Tipping

Asbestos Abatement Air Monitoring Project



the ETC group
 environmental testing
 project management
 laboratory analysis
 professional training

Client: Next Generation Environmental
 Contractor: Next Generation Environmental
 Facility: 1491 West Jefferson, Trenton, MI 48183
 ETC Project #: 226942
 Date: 11/6/2019
 Hygienist: Randy Keathley
 Areas of Work: Area 4, Area 13, Area 14

FIELD DATA SHEET

| Sample ID (below) | Sampling Time | | Elapsed Time (min) | Sampling Data | | Flow Rate (lpm) | Volume (L) | Actual Results (f/cc) | 8 Hour TWA (f/cc) | Description and Location |
|----------------------|---------------|-------|-----------------------|---------------|--------|--------------------|---------------|--------------------------|----------------------|---|
| | Start | Stop | | Fibers | Fields | | | | | |
| FB1 | | | | 0.0 | 100 | | | | | FIELD BLANK |
| FB2 | | | | 0.0 | 100 | | | | | FIELD BLANK |
| EX1 | 9:40 | 10:15 | 35 | 47.0 | 100 | 2.3 | 78.75 | 0.293 | 0.021 | On Erik Alaniz - dust boss operator in Area 13 |
| EX2 | 9:44 | 10:16 | 32 | 35.0 | 100 | 2.3 | 72.00 | 0.238 | 0.016 | On Luke Harris - set up and water support for Jeff Cheeks |
| EX3 | 9:50 | 10:20 | 30 | 70.0 | 100 | 2.3 | 67.50 | 0.509 | 0.032 | On Willie Wright - support staff for torch cutters. |
| PS1 | 7:17 | 13:14 | 357 | 39.0 | 100 | 2.3 | 803.25 | 0.024 | 0.021 | On Erik Alaniz - dust boss operator in Area 13 |
| PS2 | 7:29 | 13:16 | 347 | 59.0 | 100 | 2.3 | 780.75 | 0.037 | 0.016 | On Luke Harris - set up and water support for Jeff Cheeks |
| PS3 | 7:36 | 11:49 | 253 | 53.0 | 100 | 2.3 | 569.25 | 0.046 | 0.032 | On Willie Wright - support staff for torch cutters. |
| PS1R1 | 13:14 | 14:58 | 104 | 13.0 | 100 | 2.3 | 234.00 | 0.027 | 0.021 | On Erik Alaniz - dust boss operator in Area 13 |
| PS2R1 | 13:16 | 14:58 | 102 | 18.0 | 100 | 2.3 | 229.50 | 0.038 | 0.016 | On Luke Harris - set up and water support for Jeff Cheeks |
| CS1 | 7:20 | 11:19 | 239 | 52.0 | 100 | 6.3 | 1496.14 | 0.017 | | West of Stove #4 in Area 13 |
| CS2 | 7:45 | 11:44 | 239 | 68.0 | 100 | 6.3 | 1496.14 | 0.022 | | South of shower trailer in Area 13 |
| CS1R1 | 11:19 | 15:18 | 239 | 14.0 | 100 | 6.3 | 1496.14 | 0.005 | | West of Stove #4 in Area 13 |
| CS2R1 | 11:44 | 15:20 | 216 | 22.0 | 100 | 6.3 | 1352.16 | 0.008 | | South of shower trailer in Area 13 |

6916554

6916555

6916556

6916557

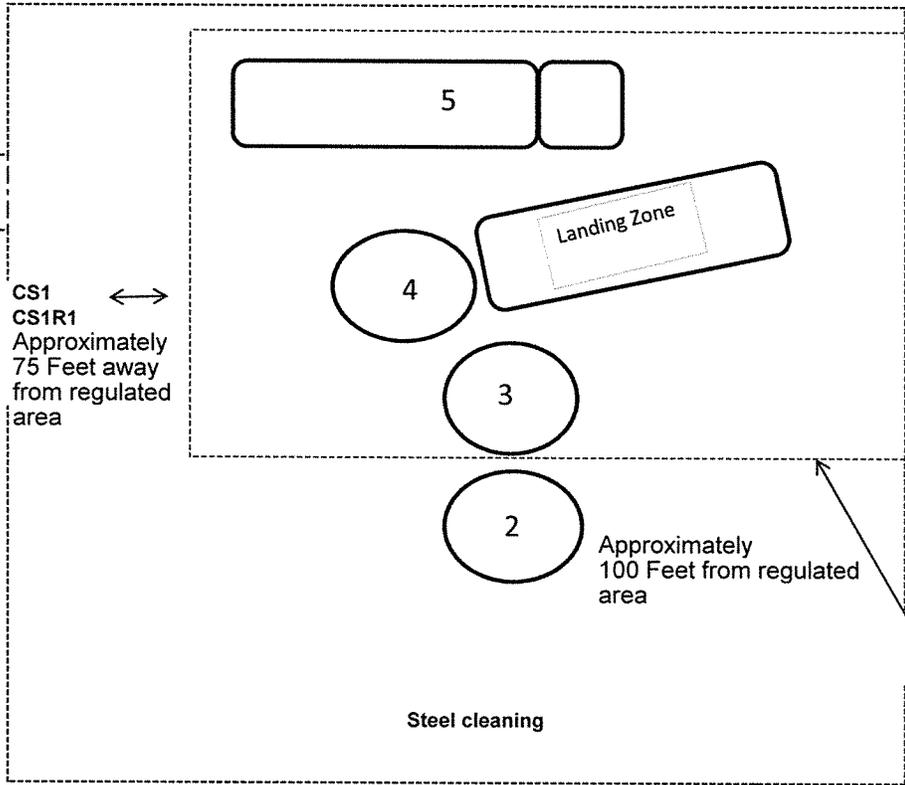
AA- Ambient Air
 BL- Baseline
 CS-Contiguous

EA- Exhaust Air, EX- Excursion
 PA- Post Abatement
 PP- Personal/Post Abatement

PS- Personal
 WA- Work Area
 WP- Work Area/Post Abatement

General Diagram of Work Areas

N
W + E
S



CS1
CS1R1
Approximately
75 Feet away
from regulated
area

Shower
Trailer

Approximately
100 Feet from regulated
area

CS2
CS2R1

Steel cleaning

Road

PRELIMINARY RESULTS
Airborne Asbestos Analysis
TEM NIOSH

Client: Environmental Testing & Consulting In
38900 Huron River Dr
Romulus, MI 48174

Client No.: ENV756

Batch No.: 604062
Project: McLouth Steel
Project No.: 226942
PCM Reprep(y/n) Y
Turn-Around Time: 6 Hour

| Client Contacts: | Laboratory Contacts: |
|-------------------|--|
| Contacts: _____ | Contacts: Frank E. Ehrenfeld III |
| Phone: _____ | Phone: (856) 231-9449 |
| Fax: _____ | Fax: (856) 231-9818 |
| Cell/Pager: _____ | Cell/Pager: (609) 929-4211 |
| E-Mail: _____ | E-Mail: frankehrenfeld@iatl.com |

| Chain of Custody: | | | |
|------------------------------|---------------|-----------------------|-------------|
| Samples Taken in Field: | Client | Date: | Time: _____ |
| Samples Rec'd at Laboratory: | L. D'Ornellas | Date: <u>11/12/19</u> | Time: _____ |
| Samples Analyzed: | J. Jeon | Date: <u>11/12/19</u> | Time: _____ |
| Preliminary Results Faxed: | _____ | Date: _____ | Time: _____ |
| Preliminary Results E-Mail: | _____ | Date: _____ | Time: _____ |

Summary Data
Transmission Electron Microscopy
NIOSH 7402

| Client Sample ID # | IATL Sample ID # | Volume (L) | Comments | ¹ Results f/mm ² | ² Results f/cc | ³ Results f/cc |
|--------------------|------------------|------------|---------------|--|---------------------------|---------------------------|
| CS1 | 6916554 | 1496.14 | None Detected | < 11 | < 0.0028 | < 0.0028 |
| CS2 | 6916555 | 1496.14 | None Detected | < 11 | < 0.0028 | < 0.0028 |
| CS1R1 | 6916556 | 1496.14 | None Detected | < 11 | < 0.0028 | < 0.0028 |
| CS2R1 | 6916557 | 1352.16 | None Detected | < 9.62 | < 0.0027 | < 0.0027 |
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1 - Total Asbestos Fibers in relation to area analyzed. 2 - Total Asbestos Fibers of all sizes as a function of the volume of air sampled. 3 - Same as for 2 for fibers > 5.0 µm in length.

Grid Box #: _____
Instrument (I,II, III): _____

These preliminary results are issued by IATL to expedite procedures by the clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificates of Analysis will follow these preliminary results. The signed COAs are to be considered the official results.

TEM.NIOSH Prelim.001 Revision Date: 06/22/18

