



REGION 5
CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Metalico Youngstown, Inc., Girard, Ohio

FROM: David Sutlin, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: Metalico Youngstown, Inc. Yard 6

Facility Location: 27 Furnace Lane, Girard, Ohio 44420

Date of Inspection: October 25, 2023

EPA Inspector(s):

1. David Sutlin, Environmental Engineer
2. Carlo Demma, Physical Scientist
3. Valeria Apolinario, Environmental Engineer

Other Attendees:

1. Glenda Wehrli, Director of Environmental Compliance and Employee Safety, Metalico
2. Don Fleming, General Manager, Metalico
3. Jim Smith, Metalico
4. Tom Grumley, Metalico

Contact Email Address: gwehrli@metalico.com

Purpose of Inspection: To investigate emissions of volatile organic compounds (VOC) and particulate matter (PM) from the facility's hammermill shredder, compliance with regulations of ozone depleting substances, and compliance with the facility's air permit

Facility Type: Scrap metal shredding and recycling

Regulations Central to Inspection: Permit-to-Install and Operate, No. P0126925, issued June 8, 2020

Arrival Time: 9:00 AM

Departure Time: 12:50 PM

Inspection Type:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet
- ☒ Provided CBI warning to facility

The following information was obtained verbally from facility and company personnel unless otherwise noted.

Company Ownership: Metalico purchased this facility from Liberty Iron & Metal Inc. in December 2020. Metalico shut down a second facility operating in Youngstown and consolidated the staff at the Girard facility.

Process Description:

Scrap is brought into the facility on trucks and is weighed at the scale house. Larger scrap metal pieces are broken up using shears or, if required, torch-cut at a single torch cutting station. Small appliances such as refrigerators that contain refrigerant are moved to a designated area to recover the refrigerant. The majority of other scrap is separated into two staging piles, one for auto bodies and one for light iron such as small appliances. The light iron scrap is inspected for non-conforming materials such as liquids and non-metal items. Rejected items are photographed and put back onto the trucks. Cars received off the street are de-polluted, including recovery of A/C refrigerant, and auto bodies from dealers are spot checked to ensure that they were properly de-polluted by the dealer. All ferrous scrap is then moved to a pile closer to the shredder. Cars and light iron are placed onto the infeed conveyor, which continuously loads scrap into a hammermill shredder. As the scrap is loaded, water is sprayed onto it, as-needed, to suppress dust. The majority of water spray occurs continuously and directly onto the hammermill in order to control for PM. After the shredder, materials are separated into ferrous, non-ferrous and waste materials. Waste materials are further processed in the automotive shredder residue plant to further extract non-ferrous metals.

Staff Interview:

- The shredder is approximately 20 years old.

- Auto bodies and light iron are continuously fed together into the shredder at a typical ratio of 30% autos to 70% sheet metal. This is done by loading two to three grapples of light iron followed by one auto body. Occasionally the shredder will process material at a rate as high as 50% autos.
- The maximum shredder infeed rate is approximately 108 gross tons/hr.
- The shredder runs 7-9 hrs/day, 5 days/week, occasional Saturdays, and typically operates from 7am to 3pm or 4pm. A second shift is reserved for most shredder maintenance. Prolonged maintenance occurs twice yearly for a total of approximately 17 days per year in addition to running minimally the last week of the year. An ampere reader on the shredder is used to track the total hours the shredder operated.
- Downtime is an ongoing challenge, but this particular shredder, which runs on two D/C motors, experiences less downtime as compared to shredders that run on A/C power.
- The shredder also processes approximately 200 tons/month of relatively clean mill scrap in batches and separate from the auto bodies/light iron mix.
- Visible emission (VE) readings are taken daily, as required by the permit. Readings are taken whenever readers are available rather than at a specific time.
- Scrap suppliers are required to sign waiver for small appliances and motor vehicle air conditioners where refrigerant was recovered or leaked out. Peddlers are put on notice if they have appliances with cut lines and are eventually turned away.
- The majority of cars received off the street are void of any refrigerant.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

- Observed several auto bodies being fed into the shredder while some VEs could be seen coming from the shredder.
- Several sections of covers over the conveyors downstream of the shredder were missing.
- A section of rubber flaps closing off the housing of the shredder's infeed roller was missing.
- EPA toured the designated refrigerant recovery areas and verified proper recovery equipment for both automobiles and small appliances.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were taken during this inspection.

According to the permit, fugitive emissions from the shredder shall not exceed 20% opacity as a 3-minute average. Carlo Demma took digital opacity photos of the shredder in accordance with EPA Alternative Method-082 while it was processing light iron and auto bodies. The opacity photos were analyzed post-inspection, and the results are included in the attached opacity report. The 3-minute average opacity, including an assumed 12th reading of 0% as noted in the comments of the opacity report, was 20%.

CLOSING CONFERENCE

- ☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Photos confirming repair of the flap over the infeed roller
- Calculation method for scrap infeed rate
- Daily scrap infeed rate records
- Shredder motor amperage readings
- Employee Method 9 certifications
- VE logs
- Confirmation if the facility is using refrigerant recovery verification contracts
- Information on local incentive program to promote proper refrigerant recovery
- Permit applications for permit #s P0126925 and 02-22999
- Daily records of water spray flow rate for past 3 months
- Past 3 months of records of any deviations including corrective actions when the shredder operated without water application

Compliance Assistance:

- EPA recommended taking readings according to when VEs are expected to occur or are actually observed rather than based on the availability of the reader. Metalico indicated they were open to revising the permit accordingly.
- EPA advised that appliances should not be accepted where it was obvious that the lines had been knowingly cut. Metalico stated that they reject appliances if they suspect the refrigerant was not properly recovered and that they tour auto body dealers and small appliance dealers to ensure proper draining of fluids and refrigerant.

Concerns:

- EPA voiced concern over the damaged/missing flaps above the infeed roller. Staff addressed this after the inspection and sent photos to EPA for confirmation.
- EPA voiced concern over the missing cover sections on various conveyors. The permit requires that all conveying operations be controlled by partial and/or total enclosures.

DIGITAL SIGNATURES

Report Author: **DAVID SUTLIN**  Digitally signed by DAVID SUTLIN
Date: 2023.12.21 14:25:37 -06'00'

Section Supervisor: **CHARLES HALL**  Digitally signed by CHARLES HALL
Date: 2023.12.22 07:19:45 -06'00' for Brian Dickens

Facility Name: Metalico Youngstown, Inc.
Facility Location: 27 Furnace Lane, Girard, Ohio 44420
Date of Inspection: October 25, 2023

APPENDICES AND ATTACHMENTS

- Appendix A: Digital Image and Video Log
- Attachment: Digital Opacity Report

Facility Name: Metalico Youngstown, Inc.
Facility Location: 27 Furnace Lane, Girard, Ohio 44420
Date of Inspection: October 25, 2023

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Valeria Apolinario	2. Archival Record Location: EPA Region 5 Electronic Records Center
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Image Number	File Name	Date and Time	Description of Image
1	IMG_0372.JPG	2023:10:25 11:12:59	Scrap conveyor - missing covers
2	IMG_0373.JPG	2023:10:25 11:13:17	Scrap conveyor - missing covers
3	IMG_0374.JPG	2023:10:25 11:14:37	Scrap conveyor - missing covers
4	IMG_0375.JPG	2023:10:25 11:15:32	Scrap conveyor
5	IMG_0376.JPG	2023:10:25 11:23:22	Missing flaps on back of infeed roller housing
6	MVI_0369.MP4	10/25/2023 10:56	Steam and emissions from shredder
7	MVI_0370.MP4	10/25/2023 10:58	Steam and emissions from shredder
8	MVI_0371.MP4	10/25/2023 11:02	Steam and emissions from shredder

VISIBLE EMISSION OBSERVATION FORM

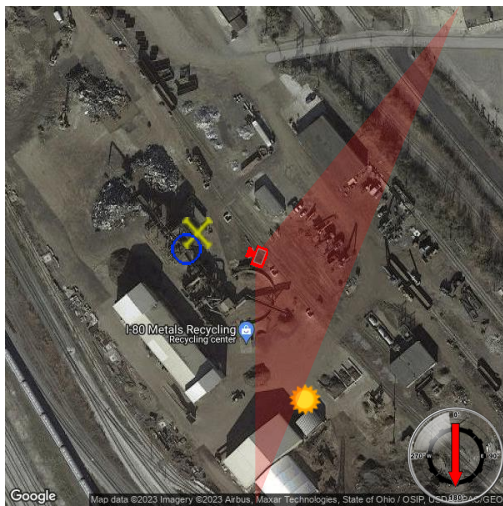
Method Used Total Average		
Equipment Owner Start Glenda Wehrli		
Facility Name Metalico Youngstown, Inc. Yard 6		
EO Street Address 27 Furnace Lane		
EO City Girard	EO Region US-OH	EO Zip 44420

Process Hammermill Shredder	Unit N/A	Operating Mode N/A
Control Equipment N/A	Operating Mode N/A	

Describe Emission Point Shredder fugitives			
Height of Emiss. Pt Start 30 End Same		Height of Emiss. Pt. Rel. to Observer Start 26 End Same	
Distance to Emiss. Pt Start 122.88 End Same		Direction to Emiss. Pt (Degrees) Start 275.51 End Same	

Vertical Angle to Obs. Pt. Start 0.83 End Same		Direction to Obs. Pt Start 291.09 End Same	
Distance and Direction to Observation Point from Emission Point Start 33.93 / 14.92 End Same			
Describe Emissions Start Fugitive End Same			
Emission Color Start White End Same		Water Droplet Plume Attached: () Detached: (X) N/A: ()	

Describe Plume Background Start Sky End Same			
Background Color Start Gray End Same		Sky Conditions Start Clear End Same	
Wind Speed Start 12 End Same		Wind Direction Start 225 End Same	
Ambient Temp. Start 69 End Same	Wet Bulb Temp. Start 54.72 End Same	RH Percent Start 39 End Same	



Longitude 080.42.06.695.W	Latitude 41.08.43.061.N	Declination
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Notes

Form Number						Page	of
Continued on VEO Form Number							

Observation Date 10/25/2023	Time Zone CST	Start Time 10:04:45	End Time 10:07:15
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	Opacity	Comments
1	45	
2	40	
3	45	Avg Opacity = 22.27
4	20	
5	20	
6	10	
7	10	
8	5	
9	0	
10	0	
11	50	
12		
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Observers Name (Print) David Sutlin	
Observers Signature <i>David Sutlin</i>	Date 10/25/2023
Organization USEPA Region 5	
Certified By David Sutlin	Date 12/21/2023

Source

Name:
Address:
City:
Region: -
Zip:
Phone:
Local ID:

Regulatory

Permit ID:
Condition:
Regulatory Reference:

Process

Process: Hammermill Shredder
Unit: N/A
Operating Mode: N/A

Complaint

Name: Metalico Youngstown, Inc. Yard 6
Address:
City:
Region: -
Zip:

Equipment

Name: N/A

Type of Inspection

Type of Inspection: Surveillance

Sun

Altitude: 35.1
Azimuth: 161
Data Source: Calculated

Map Information

Map Type: Google
Map Width: 502

Analysis

Averaging Type: Automatic
Method: Total Average
Number of Images: 1
Rolling High Count: All
Seconds Between Images: N/A
Who Created: DOCS II
Creation Date: 10/25/2023

Analysis Name: Shawn Dolan

Affiliation: Virtual Technology LLC 05

Comments: The actual camera operator for these readings was Carlo Demma, Physical Scientist, EPA. With an assumed 12th reading of 0%, the 3-minute average opacity is 20%.

Image	Opacity	Coordinates	Date Taken	Camera Information															
 IMG_6877.JPG	45	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>414</td><td>2212</td><td>465</td><td>2273</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>470</td><td>382</td><td>521</td><td>443</td></tr></table>	T	L	B	R	414	2212	465	2273	T	L	B	R	470	382	521	443	Date Taken: 2023-10-25 10:04:45.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
T	L	B	R																
414	2212	465	2273																
T	L	B	R																
470	382	521	443																
 IMG_6878.JPG	40	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>332</td><td>3288</td><td>383</td><td>3349</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>470</td><td>382</td><td>521</td><td>443</td></tr></table>	T	L	B	R	332	3288	383	3349	T	L	B	R	470	382	521	443	Date Taken: 2023-10-25 10:05:00.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
T	L	B	R																
332	3288	383	3349																
T	L	B	R																
470	382	521	443																
 IMG_6879.JPG	45	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>378</td><td>3105</td><td>429</td><td>3166</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>470</td><td>382</td><td>521</td><td>443</td></tr></table>	T	L	B	R	378	3105	429	3166	T	L	B	R	470	382	521	443	Date Taken: 2023-10-25 10:05:15.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
T	L	B	R																
378	3105	429	3166																
T	L	B	R																
470	382	521	443																
 IMG_6880.JPG	20	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>214</td><td>1944</td><td>265</td><td>2005</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>470</td><td>382</td><td>521</td><td>443</td></tr></table>	T	L	B	R	214	1944	265	2005	T	L	B	R	470	382	521	443	Date Taken: 2023-10-25 10:05:30.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
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214	1944	265	2005																
T	L	B	R																
470	382	521	443																
 IMG_6881.JPG	20	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>224</td><td>1154</td><td>280</td><td>1215</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>567</td><td>230</td><td>618</td><td>291</td></tr></table>	T	L	B	R	224	1154	280	1215	T	L	B	R	567	230	618	291	Date Taken: 2023-10-25 10:05:45.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
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224	1154	280	1215																
T	L	B	R																
567	230	618	291																
 IMG_6882.JPG	10	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>337</td><td>1664</td><td>388</td><td>1725</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>801</td><td>624</td><td>852</td><td>685</td></tr></table>	T	L	B	R	337	1664	388	1725	T	L	B	R	801	624	852	685	Date Taken: 2023-10-25 10:06:00.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
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337	1664	388	1725																
T	L	B	R																
801	624	852	685																
 IMG_6883.JPG	10	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>357</td><td>1555</td><td>408</td><td>1616</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>869</td><td>454</td><td>920</td><td>515</td></tr></table>	T	L	B	R	357	1555	408	1616	T	L	B	R	869	454	920	515	Date Taken: 2023-10-25 10:06:15.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
T	L	B	R																
357	1555	408	1616																
T	L	B	R																
869	454	920	515																
 IMG_6884.JPG	5	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>803</td><td>2157</td><td>854</td><td>2218</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>900</td><td>613</td><td>951</td><td>674</td></tr></table>	T	L	B	R	803	2157	854	2218	T	L	B	R	900	613	951	674	Date Taken: 2023-10-25 10:06:30.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72
T	L	B	R																
803	2157	854	2218																
T	L	B	R																
900	613	951	674																

Image	Opacity	Coordinates	Date Taken	Camera Information																
 IMG_6885.JPG	0	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>675</td><td>2169</td><td>726</td><td>2230</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>900</td><td>606</td><td>951</td><td>667</td></tr></table>	T	L	B	R	675	2169	726	2230	T	L	B	R	900	606	951	667	Date Taken: 2023-10-25 10:06:45.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72	
T	L	B	R																	
675	2169	726	2230																	
T	L	B	R																	
900	606	951	667																	
 IMG_6886.JPG	0	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>582</td><td>2163</td><td>633</td><td>2224</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>746</td><td>570</td><td>797</td><td>631</td></tr></table>	T	L	B	R	582	2163	633	2224	T	L	B	R	746	570	797	631	Date Taken: 2023-10-25 10:07:00.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72	
T	L	B	R																	
582	2163	633	2224																	
T	L	B	R																	
746	570	797	631																	
 IMG_6887.JPG	50	Foreground Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>296</td><td>1713</td><td>347</td><td>1774</td></tr></table> Background Coordinates <table><tr><td>T</td><td>L</td><td>B</td><td>R</td></tr><tr><td>214</td><td>844</td><td>265</td><td>905</td></tr></table>	T	L	B	R	296	1713	347	1774	T	L	B	R	214	844	265	905	Date Taken: 2023-10-25 10:07:15.000 Camera Mfg/Model: Canon/Canon PowerShot SX70 HS Temperature: 69Wind Speed/Dir: 12 SW Rel Humidity: 39Wet Bulb Temp: 54.72	
T	L	B	R																	
296	1713	347	1774																	
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