

MARYLAND DEPARTMENT OF THE ENVIRONMENT

**AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT**

DOCKET # 19-22

Applicant: Complete Recycling Group, LLC

Application: Installation of two (2) MAX4000SP secondary aluminum sweat furnaces, US Furnaces each rated at 5 MMBtu/hr and equipped with an afterburner.

Location: 1500 W. Pulaski Hwy Elkton MD 21921

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Notice of Application and Opportunity to Request an Informational Meeting
2	Environmental Justice (EJ) Information - EJ Fact Sheet and MDE Score and Screening Report
3	Permit to Construct Application Forms: 5, 5T, 5EP, and 6
4	Furnace Brochures

**DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**NOTICE OF APPLICATION AND
OPPORTUNITY TO REQUEST AN INFORMATIONAL MEETING**

The Maryland Department of the Environment, Air and Radiation Administration (ARA) received a permit-to-construct application from Complete Recycling Group, LLC on October 10, 2022, for Installation of two (2) MAX4000SP secondary aluminum sweat furnaces, US Furnaces each rated at 5 MMBtu/hr and equipped with an afterburner. The proposed installations will be located at 1500 W. Pulaski Hwy in Elkton, Cecil County MD 21921.

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 45.43 which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%.

Copies of the application, the EJ mapping tool screening report (which includes the score), and other supporting documents are available for public inspection on the Department's website at <https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx> (click on Docket Number 19-22). Any applicant-provided information regarding a description of the environmental and socioeconomic indicators contributing to that EJ score can also be found at the listed website. Such information has not yet been reviewed by the Department. A review of the submitted information will be conducted when the Department undertakes its technical review of all documents included in the application.

Pursuant to the Environment Article, Section 1-603, Annotated Code of Maryland, the Department will hold an informational meeting to discuss the application and the permit review process if the Department receives a written request for a meeting within 10 working days from the date of the second publication of this notice. A requested informational meeting will be held virtually using teleconference or internet-based conferencing technology unless a specific request for an in-person informational meeting is received. All requests for an informational meeting should be directed to the attention of Ms. Shannon Heafey, Air Quality Permits Program, Air and Radiation Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230.

Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director
Air and Radiation Administration



The Applicant's Guide to Environmental Justice and Permitting

What You Need to Know

This fact sheet is designed to provide guidance to applicants on incorporating environmental justice screening requirements pursuant to House Bill 1200, effective October 1, 2022.

What is Environmental Justice?

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment. House Bill 1200 adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues.

What is House Bill 1200 and what does it require?

Effective October 1, 2022, House Bill 1200 requires a person applying for a permit from the Department under §1-601 of the Environment Article of the Annotated Code of Maryland or any permit requiring public notice and participation to include in the application an EJ Score for the census tract where the applicant is seeking the permit; requiring the Department, on receiving a certain permit application to review the EJ Score; and requiring notices to include information related to EJ Scores and generally relating to environmental permits and environmental justice screenings.

What is a "Maryland EJ Tool"?

The term "Maryland EJ Tool" means a publicly available state mapping tool that allows users to: (1) explore layers of environmental justice concern; (2) determine an overall EJ score for census tracts in the state; and (3) view additional context layers relevant to an area.



The Applicant's Guide to Environmental Justice and Permitting

What You Need to Know

What is an "EJ Score"?

The term "EJ Score" means an overall evaluation of an area's environment and environmental justice indicators, as defined by MDE in regulation, including: (1) pollution burden exposure; (2) pollution burden environmental effects; (3) sensitive populations; and (4) socioeconomic factors.

The Maryland EJ Screening Tool uses three demographic indicators – minority population above 50%, poverty rate above 25% and percent of the population having limited English proficiency above 15% - to calculate a score that can be used as an indicator of susceptibility to environmental exposure. It is that score, linked to the census tract where the project is to be located, that needs to be reported to MDE as part of your permit application.

What does the application require?

The link for the Maryland EJ Tool is located on the Department's website, www.mde.maryland.gov, under Quick Links as EJ Screening Tool. At the top right, please click the first button for the MDE Screening Report. Input the address of the proposed installation in the address bar. Click on the Report button. Once the report has been generated select the print icon.

The applicant needs to include the MDE Screening Report with the EJ Score from the Maryland EJ Tool as part of the permit application upon submission. An application will not be considered complete without the report.

The applicant is encouraged to provide the Department with a discussion about the environmental exposures in the community. This will provide pertinent information about how the applicant should proceed with engaging with the community. Residents of a community with a high indicator score and a high degree of environmental exposure should be afforded broader opportunities to participate in the permit process and understand the impacts a project seeking permit approval may have on them.

Questions

For air quality permits, please call 410-537-3230.

For water permits, please call 410-537-4145.

For land permits pertaining to Solid Waste, please call 410-537-3098.

For land permits pertaining to Oil Control, please call 410-537-3483.

For land permits pertaining to Animal Feeding Operations, please call 410-537-4423.

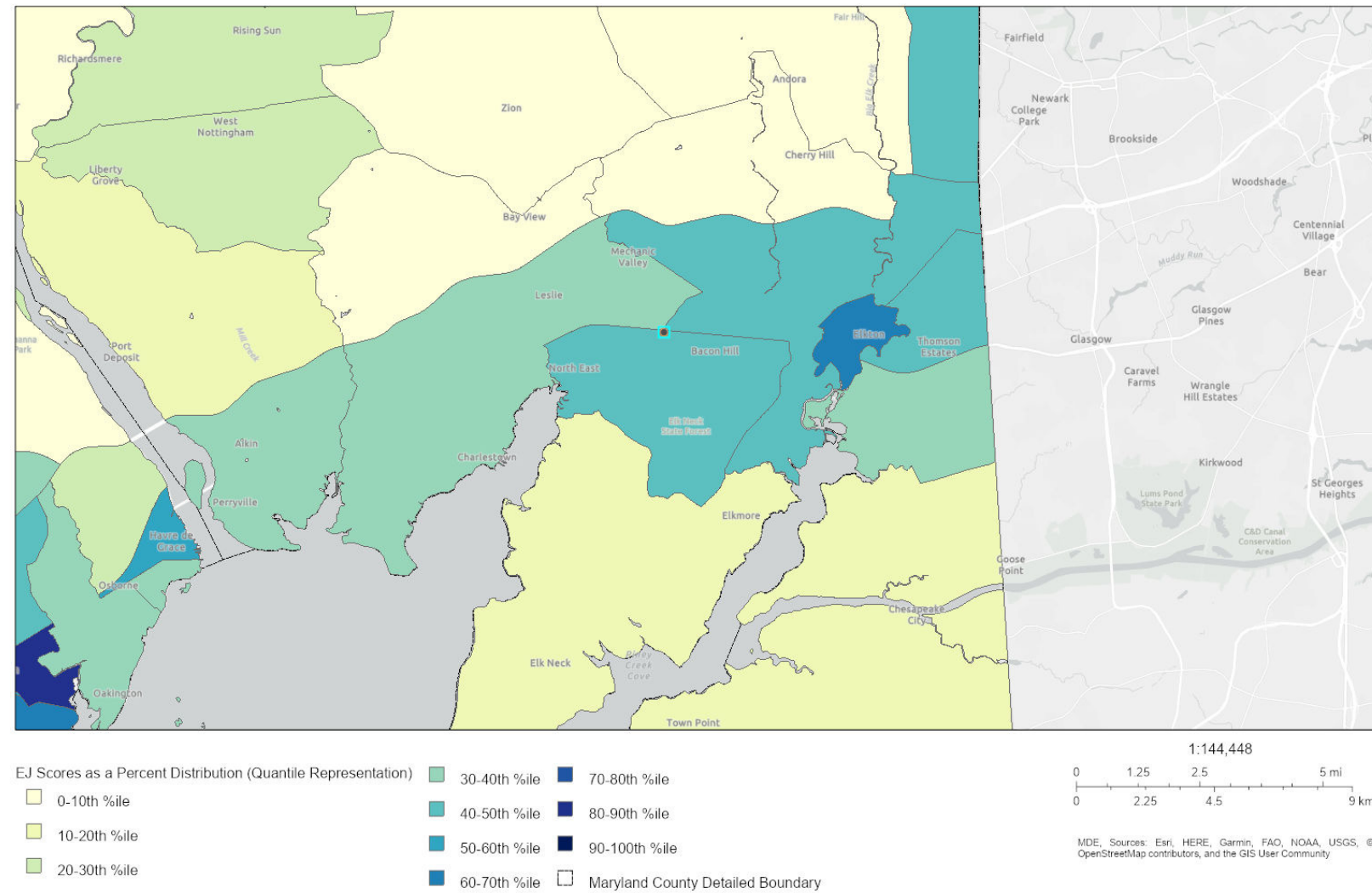
For land permits pertaining to Biosolids, please call 410-537-3403.



MDE EJ Screening Report - Complete Recycling Group - 1500 W Pulaski Hwy, Elkton, MD 21921

Area of Interest (AOI) Information

Nov 15 2022 6:00:44 Eastern Standard Time



Summary

Name	Count	Area(ft²)	Length(ft)
EJ Scores as a Percent Distribution (Quantile Representation)	1	N/A	N/A
Active High Air Emission Facilities	1	N/A	N/A
LRP Facilities	0	N/A	N/A
Maryland Dam Locations	0	N/A	N/A
Maryland Pond Locations	0	N/A	N/A
Wastewater Discharge Facilities	0	N/A	N/A
Historic Mine Locations	0	N/A	N/A
Significant Wastewater Treatment Plants	0	N/A	N/A
Point Source Discharges	0	N/A	N/A
All Permitted Solid Waste Acceptance Facilities	0	N/A	N/A
Municipal Solid Waste Acceptance Facilities	0	N/A	N/A
EJ Scores as a Percent Distribution (Quantile Representation)	1	N/A	N/A
Active High Air Emission Facilities	1	N/A	N/A
LRP Facilities	0	N/A	N/A
Maryland Dam Locations	0	N/A	N/A
Maryland Pond Locations	0	N/A	N/A
Wastewater Discharge Facilities	0	N/A	N/A
Historic Mine Locations	0	N/A	N/A
Significant Wastewater Treatment Plants	0	N/A	N/A
Point Source Discharges	0	N/A	N/A
All Permitted Solid Waste Acceptance Facilities	0	N/A	N/A
Municipal Solid Waste Acceptance Facilities	0	N/A	N/A

EJ Scores as a Percent Distribution (Quantile Representation)

#	Geographic Area Name	Percent Minority	Percent Poverty	Percent_Limited_English_Proficiency	SocioScore Percent Tract Only	Socio Percentile (All MD)	Socio Percentile (All MD) %	Area(ft²)
1	Census Tract 309.03, Cecil County, Maryland	21.50	35.79	0.00	19.10	45.43	45.428%	N/A

Active High Air Emission Facilities

#	master_ai_id	master_ai_name	air_code	naic	naic_description	emission_year	latitude	longitude
1	7253	Complete Recycling Group/B&H New & Used Tires	SOP	331,314	Secondary Smelting and Alloying of Aluminum	2020	39.610116	-75.908373

#	physical_address_line_1	physical_address_municipality	physical_address_state_code	physical_address_zip	county	co	nitrogen	pm10
1	1500 W Pulaski Hwy	Elkton	MD	21,921	Cecil	1.01	1.17	0.70
#	pt	voc	sox	pm25	pmcondense	carbon_dioxide	mercury	methane
1	0.00	0.06	0.16	0.00	0.25	1,437.91	0.00	0.03
#	BCRI		BHAP		HAPS		Count	
1	2.34		0.00		0.00		1	

EJ Scores as a Percent Distribution (Quantile Representation)

#	Geographic Area Name	Percent Minority	Percent Poverty	Percent_Limited_English_Proficiency	SocioScore Percent Tract Only	Socio Percentile (All MD)	Socio Percentile (All MD) %	Area(ft²)
1	Census Tract 309.03, Cecil County, Maryland	21.50	35.79	0.00	19.10	45.43	45.428%	N/A

Active High Air Emission Facilities

#	master_ai_id	master_ai_name	air_code	naic	naic_description	emission_year	latitude	longitude
1	7253	Complete Recycling Group/B&H New & Used Tires	SOP	331,314	Secondary Smelting and Alloying of Aluminum	2020	39.610116	-75.908373
#	physical_address_line_1	physical_address_municipality	physical_address_state_code	physical_address_zip	county	co	nitrogen	pm10
1	1500 W Pulaski Hwy	Elkton	MD	21,921	Cecil	1.01	1.17	0.70
#	pt	voc	sox	pm25	pmcondense	carbon_dioxide	mercury	methane
1	0.00	0.06	0.16	0.00	0.25	1,437.91	0.00	0.03
#	BCRI		BHAP		HAPS		Count	
1	2.34		0.00		0.00		1	



October 10, 2022

Maryland Department of the Environment
Air and Radiation Administration (ARA)
1800 Washington Blvd.
Baltimore, MD 21230

Re: Air Quality Permit Application for Two (2) Aluminum Sweat Furnaces
Complete Recycling Group LLC, Elkton, Cecil County
Permit No. 015-0275

Dear Sir/Madam:

Please accept the enclosed application for the proposed installation of a 3rd and 4th aluminum sweat furnace to be located at 1500 W. Pulaski Highway in Elkton, Maryland. The metals recycling facility is currently permitted to operate two (2) aluminum sweat furnaces (Secondary Aluminum Process, SIC 3341, NAICS 331314). The proposed sweat furnaces are the same make/model as the existing units.

A Permit to Construct (PTC) checklist is included along with the appropriate forms and supporting materials. In addition, an Initial Notification under 40 CFR Part 63 Subpart RRR is also included.

Thank you for your attention in this matter. If you have any questions or require further information, please contact me at 919-632-3258 or mark@eesolutions.net, or Richard Polansky of Complete Recycling Group at 443-309-4474 or rpolansky@complete-recycle.com.

Very truly yours,

Environmental and Engineering Solutions, Inc.

Mark D. Huncik
Air Quality Consultant

Enclosures (Air Permit Application for Aluminum Sweat Furnace)

cc: Richard J. Polansky, Complete Recycling Group

Initial Notification Report

Applicable Rule: 40 CFR Part 63 Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production. Initial notification is being made in accordance with §63.1515(a) [this serves as the identification of the relevant standard, as required by §63.9(b)(2)(iii)].

I. GENERAL INFORMATION

Print or type the following information for each plant that produces secondary aluminum (§63.9(b)(2)(i)-(ii)):

Owner/Operator Complete Recycling Group LLC
Street Address 1500 W. Pulaski Hwy, Elkton, MD 21921
Mailing Address same as above

Plant Name Complete Recycling Group LLC
Plant Contact/Title Richard J. Polansky, President
Plant Contact Phone Number 443-309-4774
Plant Street Address same as above
Plant Mailing Address same as above
Plant Email Address rpolansky@complete-recycle.com

Plant Permit Number 015-0275

II. CERTIFICATION *(Note: You may edit the text in this section as deemed appropriate)*

Based upon information and belief formed after a reasonable inquiry, I, as a responsible official of the above-mentioned facility, certify that the information contained in this notification is accurate and true to the best of my knowledge.

Name of Responsible Official: Richard J. Polansky
Title of Responsible Official: President

RICHARD J. POLANSKY 10.10.2022
Signature Date

III. SOURCE DESCRIPTION

1. **Check** your existing/new source status (optional):
Existing source [affected source(s) constructed on or before February 11, 1999; must comply with Secondary Aluminum NESHAP by March 24, 2003]

☒ New source [affected source(s) constructed or reconstructed after February 11, 1999; must comply with Secondary Aluminum NESHAP by March 23, 2000 or upon initial startup, whichever is later]

☐ New source at an aluminum die casting facility, aluminum foundry, or aluminum extrusion facility [must comply with Secondary Aluminum NESHAP by March 24, 2003 or upon initial startup, whichever is later]¹
2. **Indicate** your anticipated compliance date (§63.9(b)(2)(iii)): Upon Startup
3. **Briefly describe** the nature, size, design, and method of operation of your plant, including the operating design capacity
(§63.9(b)(2)(iv)): Secondary aluminum sweat furnace with afterburner integral to the furnace. Maximum of 1.5 tons/hr scrap charged to the furnace.

4. **Check** your major/area source status (§63.9(b)(2)(v)):
☐ Major Source [potential plant-wide hazardous air pollutant (HAP) emissions exceed 10 tons/year for a single HAP or 25 tons/year for a combination of HAP's]
☒ Area Source [potential plant-wide HAP emissions total less than 10 tons/year for a single HAP or 25 tons/year for all HAP's]

Check the emission estimation method used to determine major/area source status:
☐ Previous source test data
☒ Manufacturer's test data
☒ Industry emission factors
☐ Other method (specify) _____

¹ This requirement is based on direct final rule amendments published on June 14, 2002 (67 FR 41118)

5. **Indicate** the number of each type of affected source/emission unit that exists at your plant and the hazardous air pollutants (HAP) emitted² from each point (§63.9(b)(2)(iv); see definitions in §63.1503):³

Number	Affected Source	HAP Emitted					
2	Sweat furnace	D/F					
	Aluminum scrap shredder	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl
	Thermal chip dryer	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl
	Scrap dryer/delacquering kiln/decoating kiln	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl
	Dross-only furnace	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl
	Rotary dross cooler	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl
	Group 2 furnace (“clean furnace”)	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl
	Secondary Aluminum Processing Unit (consisting one or more group 1 furnaces and in-line fluxers)	Sb HF	As Pb	Cd Mn	Cr Hg	D/F Ni	HCl

2

Possible HAP emitted from Secondary Aluminum production facilities include: antimony (Sb) & compounds, arsenic (As) & compounds (inorganic), cadmium (Cd) & compounds, chromium (Cr) & compounds, dioxin/furans (D/F), hydrochloric acid (HCl), hydrogen fluoride (HF), lead (Pb) & compounds, manganese (Mn) & compounds, mercury (Hg) & compounds, and nickel (Ni) & compounds. Area sources are only subject to emission standards for D/F, not the other HAP.

3

See applicability flowcharts to determine whether or not your facility is subject to Subpart RRR.



AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

OWNER OF EQUIPMENT/PROCESS	
COMPANY NAME:	Complete Recycling Group
COMPANY ADDRESS:	1500 W. Pulaski Hwy, Elkton, MD 21921
LOCATION OF EQUIPMENT/PROCESS	
PREMISES NAME:	Complete Recycling Group
PREMISES ADDRESS:	same as above
CONTACT INFORMATION FOR THIS PERMIT APPLICATION	
CONTACT NAME:	Richard J. Polansky
JOB TITLE:	President
PHONE NUMBER:	(443) 309-4474
EMAIL ADDRESS:	rpolansky@complete-recycle.com
DESCRIPTION OF EQUIPMENT OR PROCESS	
Two (2) Aluminum Sweat Furnaces with Afterburners	

Application is hereby made to the Department of the Environment for a Permit to Construct for the following equipment or process as required by the State of Maryland Air Quality Regulation, COMAR 26.11.02.09.

Check each item that you have submitted as part of your application package.

- ☒ Application package cover letter describing the proposed project
- ☒ Complete application forms (Note the number of forms included or NA if not applicable.)

No. <u>1</u> Form 5	No. <u> </u> Form 11
No. <u>1</u> Form 5T	No. <u> </u> Form 41
No. <u>2</u> Form 5EP	No. <u> </u> Form 42
No. <u>2</u> Form 6	No. <u> </u> Form 44
No. <u> </u> Form 10	
- ☒ Vendor/manufacturer specifications/guarantees
- ☒ Evidence of Workman's Compensation Insurance
- ☒ Process flow diagrams with emission points
- ☒ Site plan including the location of the proposed source and property boundary
- ☒ Material balance data and all emissions calculations
- ☒ Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.
- ☐ Certificate of Public Convenience and Necessity (CPCN) waiver documentation from the Public Service Commission ⁽¹⁾
- ☐ Documentation that the proposed installation complies with local zoning and land use requirements ⁽²⁾

⁽¹⁾ Required for emergency and non-emergency generators installed on or after October 1, 2001 and rated at 2001 kW or more.

⁽²⁾ Required for applications subject to Expanded Public Participation Requirements.



Complete Recycling Group
1500 W Pulaski Hwy



Imagery ©2022 CNES / Airbus, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2022 100 ft

Sweat Furnaces (2)

Forms (5, 5T, 5EP, 6) and
Attachments

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Blvd ▪ Baltimore, Maryland 21230
(410) 537-3230 ▪ 1-800-633-6101 ▪ www.mde.state.md.us

Air and Radiation Management Administration ▪ Air Quality Permits Program

APPLICATION FOR PROCESSING/MANUFACTURING EQUIPMENT

Permit to Construct ☒

Registration Update ☐

Initial Registration ☐

1A. Owner of Equipment/Company Name

Complete Recycling Group LLC

Mailing Address

1500 W Pulaski Hwy

Street Address

Elkton

MD

21921

City

State

Zip

Telephone Number

(443) 309-4774

Signature

RICHARD J. POLANSKY 10.10.2022

Richard J. Polansky, President

Print Name and Title

10.10.2022

Date

1B. Equipment Location and Telephone Number (if different from above)

same as above

Street Number and Street Name

City/Town

State

Zip

()

Telephone Number

Premises Name (if different from above)

3. Status (A= New, B= Modification to Existing Equipment, C= Existing Equipment)

Status

A

15

New Construction
Begun (MM/YY)

1 2 2 2

16-19

New Construction
Completed (MM/YY)

0 1 2 3

20-23

Existing Initial
Operation (MM/YY)

20-23

4. Describe this Equipment: Make. Model. Features. Manufacturer (include Maximum Hourly Input Rate. etc.)

MAX4000SP secondary aluminum sweat furnace with afterburner, US Furnaces - 5 MMBtu/hr firing total firing rate

5. Workmen's Compensation Coverage

AF WCP 100049109-01

8/3/2023

Binder/Policy Number

Expiration Date

Company ACCIDENT FUND INSURANCE CO.

NOTE: Before a Permit to Construct may be issued by the Department, the applicant must provide the Department with proof of worker's compensation coverage as required under Section 1-202 of the Worker's Compensation Act.

6A. Number of Pieces of Identical Equipment Units to be Registered/Permitted at this Time 2

6B. Number of Stack/Emission Points Associated with this Equipment 2



7. Person Installing this Equipment (if different from Number 1 on Page 1)

Name _____ Title _____

Company _____

Mailing Address/Street _____

City/Town _____ State _____ Telephone (____) _____

8. Major Activity, Product or Service of Company at this Location

Complete Recycling Group (CRG) is a scrap and salvage yard.

9. Control Devices Associated with this Equipment

None

☐

24-0

Simple/Multiple
Cyclone☐

24-1

Spray/Adsorb
Tower☐

24-2

Venturi
Scrubber☐

24-3

Carbon
Adsorber☐

24-4

Electrostatic
Precipitator☐

24-5

Baghouse

☐

24-6

Thermal/Catalytic
Afterburner☒

24-7

Dry
Scrubber☐

24-8

Other

☐

Describe _____

24-9

10. Annual Fuel Consumption for this Equipment

OIL-1000 GALLONS

26-31

SULFUR %

32-33

GRADE

34

NATURAL GAS-1000 FT³

35-41

LP GAS-100 GALLONS

42-45

COAL- TONS

46-52

SULFUR %

53-55

ASH%

56-58

WOOD-TONS

59-63

MOISTURE %

64-65

OTHER FUELS

ANNUAL AMOUNT CONSUMED

1

OTHER FUEL

ANNUAL AMOUNT CONSUMED

(Specify Type)

66-1

(Specify Units of Measure)

(Specify Type)

66-2

(Specify Units of Measure)

1=Coke 2=COG 3=BFG 4=Other

11. Operating Schedule (for this Equipment)

Continuous Operation

67-1

Batch Process

67-2

Hours per Batch

68-69

Batch per Week

Hours per Day

70-71

Days Per Week

72

Days per Year

73-75

Seasonal Variation in Operation:

No Variation

☒

76

Winter Percent

77-78

Spring Percent

79-80

Summer Percent

81-82

Fall Percent

83-84

(Total Seasons= 100%)



12. Equivalent Stack Information- is Exhaust through Doors, Windows, etc. Only? (Y/N)
☐ N

85

If not, then

Height Above Ground (FT)

Inside Diameter at Top

Exit Temperature (°F)

Exit Velocity (FT/SEC)

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86-88

--	--	--

89-91

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92-95

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96-98

NOTE:

Attach a block diagram of process/process line, indicating new equipment as reported on this form and all existing equipment, including control devices and emission points.

13. Input Materials (for this equipment only)

Is any of this data to be considered confidential? ☐ N (Y or N)

INPUT RATE

NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS
1. Natural Gas (2 furnaces)		5,000 each	cf/hr	43,800 each	1000 cf
2. Aluminum Scrap (2 furnaces)		1.5 each	tons	13,140 each	tons
3.					
4.					
5.					
6.					
7.					
8.					
9.					

TOTAL
14. Output Materials (for this equipment)
Process/Product Stream
OUTPUT RATE

NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS
1. Aluminum Ingots (2 furnaces)		1,500 each	pounds	6,570 each	tons
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

TOTAL
15. Waste Streams- Solid and Liquid
OUTPUT RATE

NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

TOTAL


16. Total Stack Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter					
	1	1	.	4	7

99-104

Oxides of Sulfur					
		1	.	5	8

105-110

Oxides of Nitrogen					
	2	2	.	8	6

111-116

Carbon Monoxide					
	1	9	.	2	0

177-122

Volatile Organic Compounds					
		1	.	2	6

123-128

PM-10					
	1	1	.	4	7

129-134

17. Total Fugitive Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter					

135-139

Oxides of Sulfur					

140-144

Oxides of Nitrogen					

145-149

Carbon Monoxide					

150-154

Volatile Organic Compounds					

155-159

PM-10					

160-164

Method Used to Determine Emissions (1= Estimate 2= Emission Factor 3= Stack Test 4= Other)

TSP
2.3

165

SOX
2

166

NOX
2

167

CO
2

168

VOC
2

169

PM10
2,3

170

AIR AND RADIATION MANAGEMENT ADMINISTRATION USE ONLY**18. Date Rec'd. Local****Date Rec'd. State****Return to Local Jurisdiction**

Date _____ By _____

Reviewed by Local Jurisdiction

Date _____ By _____

Reviewed by State

Date _____ By _____

19. Inventory Date**Month/Year**

--	--	--	--

171-174

Equipment Code

--	--	--

175-177

SCC Code

--	--	--	--	--	--	--	--

178-185

20. Annual**Operating Rate**

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186-192

Maximum Design**Hourly Rate**

--	--	--	--	--	--

193-199

Permit to Operate**Month**

--	--

200-201

Transaction Date**(MM/DD/YR)**

--	--	--	--	--	--

202-207

Staff Code

--	--	--

208-210

VOC Code

--	--

211 212

SIP Code

--	--

213 214

Regulation Code

--	--	--	--

215-218

Confidentiality

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219

Point Description

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

220-238

Action

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239

A: Add
C: Change

FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Applicant Name: Complete Recycling Group

Step 1: Quantify premises-wide emissions of Toxic Air Pollutants (TAP) from new and existing installations in accordance with COMAR 26.11.15.04. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Class I or Class II?	Screening Levels (µg/m ³)			Estimated Premises Wide Emissions of TAP		
			1-hour	8-hour	Annual	Actual Total Existing TAP Emissions (lb/hr)	Projected TAP Emissions from Proposed Installation (lb/hr)	Premises Wide Total TAP Emissions (lb/yr)
ex. ethanol	64175	II	18843	3769	N/A	0.60	0.15	0.75
ex. benzene	71432	I	80	16	0.13	0.5	0.75	1.00
See attached table								400

(attach additional sheets as necessary.)

Note: Screening levels can be obtained from the Department's website (<http://www.mde.maryland.gov>) or by calling the Department.

Step 2: Determine which TAPs are exempt from further review. A TAP that meets either of the following Class I or Class II small quantity emitter exemptions is exempt from further TAP compliance demonstration requirements under Step 3 and Step 4.

Class II TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(a))

A Class II TAP is exempt from Step 3 and Step 4 if the Class II TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour, and any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m³.

Class I TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(b))

A Class I TAP is exempt from Step 3 and Step 4 if the Class I TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour and 350 pounds per year, any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m³, and any applicable annual screening level for the TAP must be greater than 1 µg/m³.

If a TAP meets either the Class I or Class II TAP Small Quantity Emitter Exemption Requirements, no further review under Step 3 and Step 4 are required for that specific TAP.

FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Step 3: Best Available Control Technology for Toxics Requirement (T-BACT, COMAR 26.11.15.05)

In the following table, list all TAP emission reduction options considered when determining T-BACT for the proposed installation. The options should be listed in order beginning with the most effective control strategy to the least effective strategy. Attach supporting documentation as necessary.

Target Pollutants	Emission Control Option	% Emission Reduction	Costs		T-BACT Option Selected? (yes/no)
			Capital	Annual Operating	
ex. ethanol and benzene	Thermal Oxidizer	99	\$50,000	\$100,000	no
ex. ethanol and benzene	Low VOC materials	80	0	\$100,000	yes
VOC, D/F, and PM	Afterburner	99+ %	To be determined	To be determined	Yes, MACT compliant

(attach additional sheets as necessary)

Step 4: Demonstrating Compliance with the Ambient Impact Requirement (COMAR 26.11.15.06)

Each TAP not exempt in Step 2 must be individually evaluated to determine that the emissions of the TAP will not adversely impact public health. The evaluation consists of a series of increasingly non-conservative (and increasingly rigorous) tests. Once a TAP passes a test in the evaluation, no further analysis is required for that TAP. "Demonstrating Compliance with the Ambient Impact Requirement under the Toxic Air Pollutant (TAP) Regulations (COMAR 26.11.15.06)" provides guidance on conducting the evaluation. Summarize your results in the following table. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Screening Levels (µg/m ³)			Premises Wide Total TAP Emissions		Allowable Emissions Rate (AER) per COMAR 26.11.16.02A		Off-site Concentrations per Screening Analysis (µg/m ³)			Compliance Method Used?
		1-hour	8-hour	Annual	(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	1-hour	8-hour	Annual	
ex. ethanol	64175	18843	3769	N/A	0.75	1500	0.89	N/A	N/A	N/A	N/A	AER
ex. benzene	71432	80	16	0.13	1.00	400	0.04	36.52	1.5	1.05	0.12	Screen
See attached table												

(attach additional sheets as necessary)

If compliance with the ambient impact requirement cannot be met using the allowable emissions rate method or the screening analysis method, refined dispersion modeling techniques may be required. Please consult with the Department's Air Quality Permit Program prior to conducting dispersion modeling methods to demonstrate compliance.

Toxic Air Pollutant (TAP) Screening Analysis for 4 Aluminum Sweat Furnaces at Complete Recycling Group, Elkton, MD

Toxic Air Pollutant (TAP) (Class I or II)	CAS No.	TAP Class I or II?	Screening Levels			Estimated Premises Wide Emissions of TAP			No Further Review as Small Quantity Emitter?	Allowable Emission Rate (AER) per 26.11.16.02			TAP less than AER?	AERMOD Model Result (µg/m3) - 8-hr average
			1-hour (µg/m3)	8-hour (µg/m3)	Annual (µg/m3)	TAP Emissions per Furnace (lbs/hr)	Total TAP Emissions for 4 furnaces (lb/hr)	Total TAP Emissions (lb/yr) - (see Note 3)		1-hour (lbs/hr)	8-hour (lbs/hr)	Annual (lbs/yr)		
Dioxin/Furans (see Note 1)	NA	I	NA	1.2E+01	3.0E-08	2.86E-09	1.14E-08	1.002E-04	NO	NA	NA	1.095E-05	YES (exempt under 26.11.15.02(B) - Control of NESHAP and MACT Sources)	
Aluminum (see Note 2)	1317255	II	NA	10	NA	0.05075	0.203	1778.28	NO	NA	0.0358	NA	NO	5.41
Arsenic (see Note 4)	7440382	I	NA	0.1	0.0002	9.80E-07	3.92E-06	0.034	NO	NA	0.000358	0.073	YES	
Barium	7440393	II	NA	5	NA	2.16E-05	8.64E-05	0.757	NO	NA	0.0179	NA	YES	
Beryllium	7440417	I	NA	0.0005	0.0004	5.88E-08	2.35E-07	0.002	NO	NA	0.00000179	0.146	YES	
Cadmium	7440439	I	NA	0.02	0.0006	5.39E-06	2.16E-05	0.189	NO	NA	0.0000716	0.219	YES	
Chromium	7440473	I	NA	5	NA	6.86E-06	2.74E-05	0.240	NO	NA	0.0179	NA	YES	
Cobalt	7440484	II	NA	0.2	NA	4.12E-07	1.65E-06	0.014	NO	NA	0.000716	NA	YES	
Copper	7440508	II	NA	2	NA	4.17E-06	1.67E-05	0.146	NO	NA	0.00716	NA	YES	
Manganese	7439965	II	NA	2	NA	1.86E-06	7.44E-06	0.065	NO	NA	0.00716	NA	YES	
Mercury	7439976	II	0.3	0.1	NA	1.27E-06	5.08E-06	0.045	NO	0.001074	0.000358	NA	YES	
Molybdenum	7439987	II	NA	5	NA	5.39E-06	2.16E-05	0.189	NO	NA	0.0179	NA	YES	
Nickel	7440020	I	NA	1	NA	1.03E-05	4.12E-05	0.361	NO	NA	0.00358	NA	YES	
Selenium	7782492	I	NA	2	NA	1.18E-07	4.72E-07	0.004	NO	NA	0.00716	NA	YES	
Vanadium	7440622	II	NA	0.5	NA	1.13E-05	4.52E-05	0.396	NO	NA	0.00179	NA	YES	
Zinc	7440666	II	1000	500	NA	1.42E-04	5.68E-04	4.976	YES	X	X	X	X	
2-methylnaphthalene	91576	II	NA	29.0798	NA	1.18E-07	4.72E-07	0.004	NO	NA	0.104105684	NA	YES	
3-methylchloranthrene	56495	II	NA	20	NA	8.82E-09	3.53E-08	0.000	NO	NA	0.0716	NA	YES	
Acenaphthene	83329	II	NA	20	NA	8.82E-09	3.53E-08	0.000	NO	NA	0.0716	NA	YES	
Acenaphthylene	203968	II	NA	24.6	NA	8.82E-09	3.53E-08	0.000	NO	NA	0.088068	NA	YES	
Anthracene	120127	II	NA	20	NA	1.18E-08	4.72E-08	0.000	NO	NA	0.0716	NA	YES	
Benzene	71432	I	79.8671	15.9734	0.13	1.03E-05	4.12E-05	0.361	NO	0.285924218	0.057184772	47.45	YES	
Benzo(g,h,i)perylene	191242	II	NA	20	NA	5.88E-09	2.35E-08	0.000	NO	NA	0.0716	NA	YES	
Butane	106978	II	NA	23771	NA	1.03E-02	4.12E-02	360.912	YES	X	X	X	X	
Ethane	74840	II	NA	12302	NA	1.52E-02	6.08E-02	532.608	YES	X	X	X	X	
Fluoranthene	206440	II	NA	82	NA	1.47E-08	5.88E-08	0.001	NO	NA	0.29356	NA	YES	
Fluorene	86737	II	NA	20	NA	1.37E-08	5.48E-08	0.000	NO	NA	0.0716	NA	YES	
Formaldehyde	50000	I	NA	20.3	0.08	3.68E-04	1.47E-03	12.895	NO	NA	0.072674	29.2	YES	
Hexane	110543	II	NA	1762.4	NA	8.82E-03	3.53E-02	309.053	YES	X	X	X	X	
Naphthalene	91203	II	786.4	524.3	NA	2.99E-06	1.20E-05	0.105	YES	X	X	X	X	
Pentane	109660	II	NA	17705.5	NA	1.27E-02	5.08E-02	445.008	YES	X	X	X	X	
Phenanthrene	85018	II	NA	9.8	NA	8.33E-08	3.33E-07	0.003	NO	NA	0.035084	NA	YES	
Propane	74986	II	NA	18032.7	NA	2.50E-08	1.00E-07	0.001	YES	X	X	X	X	
Pyrene	129000	II	NA	20	NA	2.45E-08	9.80E-08	0.001	NO	NA	0.0716	NA	YES	
Toluene	108883	II	NA	753.6	NA	1.67E-05	6.68E-05	0.585	YES	X	X	X	X	
						0.3935	1.724							

Metals

Speciated Organic Chemicals

Note 1: For the dioxin/furan emission estimate, the NESHAP regulatory limit of 3.5×10^{-10} grains of dioxins and furans per dry standard cubic foot at 11 percent oxygen was used and the flow rate of 954 dscfm was used for each furnace.

Note 2: For aluminum, we have assumed that 25% of the particulate is aluminum. Our original assumption of 90% of the particulate being aluminum was too conservative since most of the particulate will be products of incomplete combustion of the oils on the scrap materials.

Note 3: Total yearly emissions based on 24 hours a day, 7 days a week, and 52 weeks a year

Note 4: For arsenic and all pollutants below arsenic in the table, the hourly emissions for each furnace were calculated using the WebFIRE emission factors for burning natural gas and the assumption that the furnace would burn 0.005 million cubic feet of natural gas per hour (5 MMBtu/hr total burners for each furnace).

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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FORM 5EP: Emission Point Data

Complete one (1) Form 5EP for EACH emission point (stack or fugitive emissions) related to the proposed installation.

Applicant Name: Complete Recycling Group

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan:
AS3

2. Emission Point Description

Describe the emission point including all associated equipment and control devices:

Aluminum Sweat Furnace #3

3. Emissions Schedule for the Emission Point

Continuous or Intermittent (C/I)?	C	Seasonal Variation Check box if none: <input checked="" type="checkbox"/> Otherwise estimate seasonal variation:	
Minutes per hour:		Winter Percent	
Hours per day:		Spring Percent	
Days per week:		Summer Percent	
Weeks per year:		Fall Percent	

4. Emission Point Information

Height above ground (ft):	46	Length and width dimensions at top of rectangular stack (ft):	Length:		Width:	
Height above structures (ft):	8					
Exit temperature (°F):	680	Inside diameter at top of round stack (ft):			2	
Exit velocity (ft/min):	1,446	Distance from emission point to nearest property line (ft):			72	
Exhaust gas volumetric flow rate (acfm):	4,550	Building dimensions if emission point is located on building (ft)	Height 38	Length 150	Width 80	

5. Control Devices Associated with the Emission Point

Identify each control device associated with the emission point and indicate the number of devices. **A Form 6 is also required for each control device.** If none check none:

<input type="checkbox"/> None	<input checked="" type="checkbox"/> Thermal Oxidizer	No. <u>1</u>
<input type="checkbox"/> Baghouse	No. _____	<input type="checkbox"/> Regenerative
<input type="checkbox"/> Cyclone	No. _____	<input type="checkbox"/> Catalytic Oxidizer
<input type="checkbox"/> Elec. Precipitator (ESP)	No. _____	<input type="checkbox"/> Nitrogen Oxides Reduction
<input type="checkbox"/> Dust Suppression System	No. _____	<input type="checkbox"/> Selective
<input type="checkbox"/> Venturi Scrubber	No. _____	<input type="checkbox"/> Catalytic
<input type="checkbox"/> Spray Tower/Packed Bed	No. _____	<input type="checkbox"/> Non-Selective
<input type="checkbox"/> Carbon Adsorber	No. _____	<input type="checkbox"/> Non-Catalytic
<input type="checkbox"/> Cartridge/Canister		
<input type="checkbox"/> Regenerative		
	<input type="checkbox"/> Other	No. _____
	Specify:	

[illegible]

(Attach additional sheets as necessary.)

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FORM 5EP: Emission Point Data

Complete one (1) Form 5EP for EACH emission point (stack or fugitive emissions) related to the proposed installation.

Applicant Name: Complete Recycling Group

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan:
AS4

2. Emission Point Description

Describe the emission point including all associated equipment and control devices:

Aluminum Sweat Furnace #4

3. Emissions Schedule for the Emission Point

Continuous or Intermittent (C/I)?	C	Seasonal Variation Check box if none: <input checked="" type="checkbox"/> Otherwise estimate seasonal variation:	
Minutes per hour:		Winter Percent	
Hours per day:		Spring Percent	
Days per week:		Summer Percent	
Weeks per year:		Fall Percent	

4. Emission Point Information

Height above ground (ft):	46	Length and width dimensions at top of rectangular stack (ft):	Length:		Width:	
Height above structures (ft):	8					
Exit temperature (°F):	680	Inside diameter at top of round stack (ft):				2
Exit velocity (ft/min):	1,446	Distance from emission point to nearest property line (ft):				72
Exhaust gas volumetric flow rate (acfm):	4,550	Building dimensions if emission point is located on building (ft)	Height 38	Length 150	Width 80	

5. Control Devices Associated with the Emission Point

Identify each control device associated with the emission point and indicate the number of devices. **A Form 6 is also required for each control device.** If none check none:

<input type="checkbox"/> None	<input checked="" type="checkbox"/> Thermal Oxidizer	No. <u>1</u>
<input type="checkbox"/> Baghouse	No. _____	<input type="checkbox"/> Regenerative
<input type="checkbox"/> Cyclone	No. _____	<input type="checkbox"/> Catalytic Oxidizer
<input type="checkbox"/> Elec. Precipitator (ESP)	No. _____	<input type="checkbox"/> Nitrogen Oxides Reduction
<input type="checkbox"/> Dust Suppression System	No. _____	<input type="checkbox"/> Selective
<input type="checkbox"/> Venturi Scrubber	No. _____	<input type="checkbox"/> Catalytic
<input type="checkbox"/> Spray Tower/Packed Bed	No. _____	<input type="checkbox"/> Non-Selective
<input type="checkbox"/> Carbon Adsorber	No. _____	<input type="checkbox"/> Non-Catalytic
<input type="checkbox"/> Cartridge/Canister		
<input type="checkbox"/> Regenerative		
	<input type="checkbox"/> Other	No. _____
	Specify:	

[illegible]

(Attach additional sheets as necessary.)

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Air and Radiation Management Administration ▪ Air Quality Permits Program

APPLICATION FOR PERMIT TO CONSTRUCT GAS CLEANING OR EMISSION CONTROL EQUIPMENT

1. Owner of Installation Complete Recycling Group	Telephone No. (443) 309-4774	Date of Application 10/2022	
2. Mailing Address 1500 W. Pulaski Hwy	City Elkton	Zip Code 21921	County Cecil
3. Equipment Location 1500 W. Pulaski Hwy	City/Town or P.O. Elkton	County Cecil	
4. Signature of Owner or Operator <i>RICHARD J. POLANSKY</i> 10.10.2022	Title President	Print or Type Name Richard J. Polansky	
5. Application Type: Alteration <input type="checkbox"/>		New Construction <input checked="" type="checkbox"/>	
6. Date Construction is to Start: December 2022		Completion Date (Estimate): January 2023	
7. Type of Gas Cleaning or Emission Control Equipment: Simple Cyclone <input type="checkbox"/> Multiple Cyclone <input type="checkbox"/> Afterburner <input checked="" type="checkbox"/> Electrostatic Precipitator <input type="checkbox"/> Scrubber <input type="checkbox"/> _____ (type) Other <input type="checkbox"/> _____ (type)			
8. Gas Cleaning Equipment Manufacturer US Furnaces	Model No.	Collection Efficiency (Design Criteria) 100% (integral to furnace)	
9. Type of Equipment which Control Equipment is to Service: Seconday Aluminum Sweat Furnace #3			
10. Stack Test to be Conducted: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> _____ (Stack Test to be Conducted By) _____ (Date)			
11. Cost of Equipment <u>To be determined</u> Estimated Erection Cost _____			



12. The Following Shall Be Design Criteria:

	<u>INLET</u>	<u>OUTLET</u>
Gas Flow Rate	_____ ACFM*	_____ ACFM*
Gas Temperature	_____ °F	_____ °F
Gas Pressure	_____ INCHES W.G.	_____ INCHES W.G.
	PRESSURE DROP _____	
Dust Loading	_____ GRAINS/ACFD**	_____ GRAINS/ACFD**
Moisture Content	_____ %	_____ %
OR		
Wet Bulb Temperature	_____ °F	_____ °F
Liquid Flow Rate (Wet Scrubber)	_____ GALLONS/MINUTE	
(WHEN SCRUBBER LIQUID OTHER THAN WATER INDICATE COMPOSITION OF SCRUBBING MEDIUM IN WEIGHT %)		
	*= ACTUAL CUBIC FEET PER MINUTE	**= ACTUAL CUBIC FEET DRY

WHEN APPLICATION INVOLVES THE REDUCTION OF GASEOUS POLLUTANTS, PROVIDE THE CONCENTRATION OF EACH POLLUTANT IN THE GAS STREAM IN VOLUME PERCENT. INCLUDE THE COMPOSITION OF THE GASES ENTERING THE CLEANING DEVICE AND THE COMPOSITION OF EXHAUSTED GASES BEING DISCHARGED INTO THE ATMOSPHERE. USE AVAILABLE SPACE IN ITEM 15 ON PAGE 3.

13. Particle Size Analysis

<u>Size of Dust Particles Entering Cleaning Unit</u>	<u>% of Total Dust</u>	<u>% to be Collected</u>
0 to 10 Microns	_____	_____
10 to 44 Microns	_____	_____
Larger than 44 Microns	_____	_____

14. For Afterburner Construction Only: *See attached Residence Time Calculation

Volume of Contaminated Air _____ CFM (DO NOT INCLUDE COMBUSTION AIR)

Gas Inlet Temperature _____ °F

Capacity of Afterburner _____ BTU/HR

Diameter (or area) of Afterburner Throat _____

Combustion Chamber _____ (diameter) _____ (length) Operating Temperature at Afterburner 1600 °F

Retention Time of Gases _____ minimum of 0.8 seconds



15. Show Location of Dust Cleaning Equipment in the System. Draw or Sketch Flow Diagram Showing Emission Path from Source to Exhaust Point to Atmosphere.

See attached diagram



Date Received: Local _____ State _____

Acknowledgement Date: _____

By _____

Reviewed By:

Local _____

State _____

Returned to Local:

Date _____

By _____

Application Returned to Applicant:

Date _____

By _____

REGISTRATION NUMBER OF ASSOCIATED EQUIPMENT:

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PREMISES NUMBER:

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Emission Calculations Revised By _____ Date _____



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APPLICATION FOR PERMIT TO CONSTRUCT GAS CLEANING OR EMISSION CONTROL EQUIPMENT

1. Owner of Installation Complete Recycling Group	Telephone No. (443) 309-4774	Date of Application 10/2022
2. Mailing Address 1500 W. Pulaski Hwy	City Elkton	Zip Code 21921
3. Equipment Location 1500 W. Pulaski Hwy	City/Town or P.O. Elkton	County Cecil
4. Signature of Owner or Operator <i>RICHARD J. POLANSKY</i> 10.10.2022	Title President	Print or Type Name Richard J. Polansky
5. Application Type:	Alteration <input type="checkbox"/>	New Construction <input checked="" type="checkbox"/>
6. Date Construction is to Start: December 2022	Completion Date (Estimate): January 2023	
7. Type of Gas Cleaning or Emission Control Equipment:		
Simple Cyclone <input type="checkbox"/> Multiple Cyclone <input type="checkbox"/> Afterburner <input checked="" type="checkbox"/> Electrostatic Precipitator <input type="checkbox"/>		
Scrubber <input type="checkbox"/> _____ (type) Other <input type="checkbox"/> _____ (type)		
8. Gas Cleaning Equipment Manufacturer US Furnaces	Model No.	Collection Efficiency (Design Criteria) 100% (integral to furnace)
9. Type of Equipment which Control Equipment is to Service: Secondary Aluminum Sweat Furnace #4		
10. Stack Test to be Conducted:		
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> _____ (Stack Test to be Conducted By) _____ (Date)		
11. Cost of Equipment <u>To be determined</u>		
Estimated Erection Cost _____		



12. The Following Shall Be Design Criteria:

	<u>INLET</u>	<u>OUTLET</u>
Gas Flow Rate	_____ ACFM*	_____ ACFM*
Gas Temperature	_____ °F	_____ °F
Gas Pressure	_____ INCHES W.G.	_____ INCHES W.G.
	PRESSURE DROP _____	
Dust Loading	_____ GRAINS/ACFD**	_____ GRAINS/ACFD**
Moisture Content	_____ %	_____ %
OR		
Wet Bulb Temperature	_____ °F	_____ °F
Liquid Flow Rate (Wet Scrubber)	_____ GALLONS/MINUTE	
(WHEN SCRUBBER LIQUID OTHER THAN WATER INDICATE COMPOSITION OF SCRUBBING MEDIUM IN WEIGHT %)		
	*= ACTUAL CUBIC FEET PER MINUTE	**= ACTUAL CUBIC FEET DRY

WHEN APPLICATION INVOLVES THE REDUCTION OF GASEOUS POLLUTANTS, PROVIDE THE CONCENTRATION OF EACH POLLUTANT IN THE GAS STREAM IN VOLUME PERCENT. INCLUDE THE COMPOSITION OF THE GASES ENTERING THE CLEANING DEVICE AND THE COMPOSITION OF EXHAUSTED GASES BEING DISCHARGED INTO THE ATMOSPHERE. USE AVAILABLE SPACE IN ITEM 15 ON PAGE 3.

13. Particle Size Analysis

<u>Size of Dust Particles Entering Cleaning Unit</u>	<u>% of Total Dust</u>	<u>% to be Collected</u>
0 to 10 Microns	_____	_____
10 to 44 Microns	_____	_____
Larger than 44 Microns	_____	_____

14. For Afterburner Construction Only: *See attached Residence Time Calculation

Volume of Contaminated Air _____ CFM (DO NOT INCLUDE COMBUSTION AIR)

Gas Inlet Temperature _____ °F

Capacity of Afterburner _____ BTU/HR

Diameter (or area) of Afterburner Throat _____

Combustion Chamber _____ (diameter) _____ (length) Operating Temperature at Afterburner 1600 °F

Retention Time of Gases _____ minimum of 0.8 seconds



15. Show Location of Dust Cleaning Equipment in the System. Draw or Sketch Flow Diagram Showing Emission Path from Source to Exhaust Point to Atmosphere.

See attached diagram



Date Received: Local _____ State _____

Acknowledgement Date: _____

By _____

Reviewed By:

Local _____

State _____

Returned to Local:

Date _____

By _____

Application Returned to Applicant:

Date _____

By _____

REGISTRATION NUMBER OF ASSOCIATED EQUIPMENT:

--	--	--	--

PREMISES NUMBER:

--	--

--	--	--	--

Emission Calculations Revised By _____ Date _____



Complete Recycling Group LLC
Residence Time Calculation
US Furnaces MAX4000 Aluminum Sweat Furnace

Burner ID	Burner Rating MM BTU/hr	Fuel	F factor dscf/MM BTU	Oxygen %	Stoichiometric Flow, dscfm	Moisture at Afterburner %	Temperature deg. F	Pressure at Afterburner	Afterburner Flow acfm	Afterburner Volume, ft3	Afterburner Residence Time, sec
Primary	3	gas	8,710	10	835	6	1,250	-0.06	2867		
Holding	1	gas	8,710	6	204	5	1,200	-0.06	679		
Afterburner	1	gas	8,710	6	204	5	1,650	-0.1	901		
Total	5	gas			1242				4,446	122.7	1.66

Sample Calculation

$$\text{stoich, flow, dscfm} = \text{F factor dscf/million BTU} \times \text{burner rated heat input million BTU/hr} \times \text{flue gas oxygen correction (20.9/(20.9-oxygen\%))} / 60 \text{ min/hr}$$

Definitions

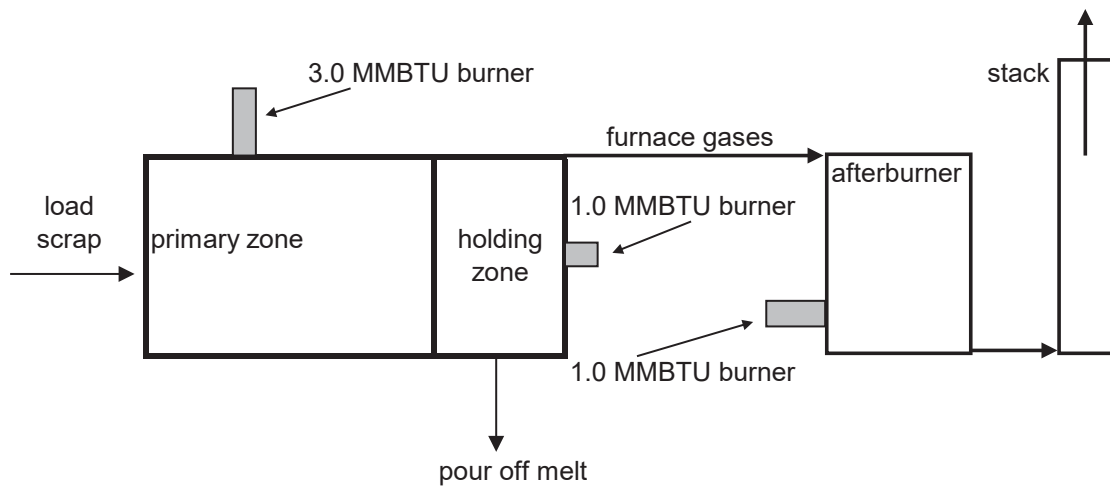
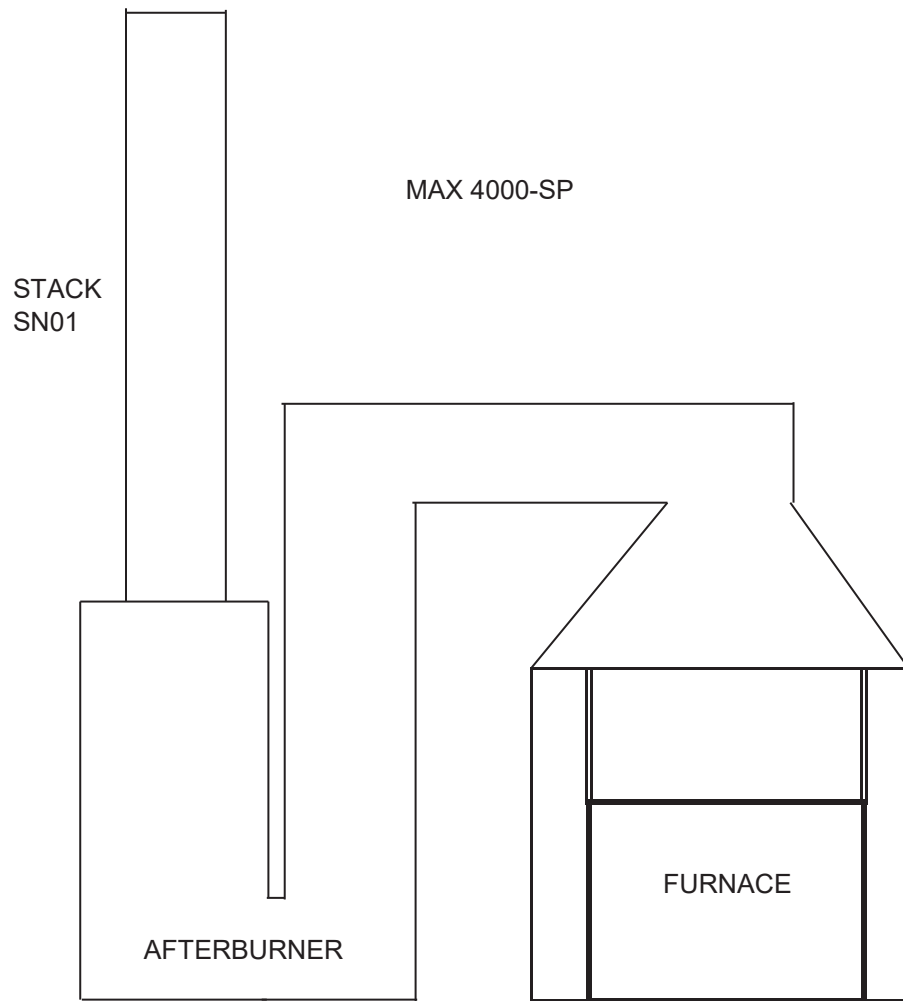
F-factor for natural gas is 8,710 dscf/million BTU fuel combusted, 40 CFR 75 Appendix F, Table 1.
 20.9/(20.9-oxygen%), correction factor for unconsumed oxygen in flue gas (excess air)
 % oxygen assumptions based upon typical burner set up and field conditions

Conversion to actual conditions

$$\text{dscfm} \times (1 + \text{moisture \%}) \times \text{stack temp R.} / \text{Temp std. R.} \times \text{stack pressure} / \text{std pressure} (-1.06)$$

Definitions

R = Rankine, or deg F + 460
 stack pressure = static pressure compared to atmospheric, in. mercury (for this demonstration, baro assumed to be 29.92)
 . = (-0.06/13.6) + 29.92
 std pressure, 29.92 in. mercury
 % moisture, water vapor volume in flue gases, assumption based upon gas combustion experienced at similar installations
 =0.06




Emission Calculations
and
Emission Factors
including stack test data for PM


After Control Criteria Pollutant Emissions per Furnace and Facility Total at Complete Recycling Group, Elkton, MD.

Pollutant	MAX-4000 Sweat Furnace Burner Rating (MMBTU/hr)	Emission Factor for Combustion of Natural Gas (lb/MMCF)	Heating Value of Natural Gas (BTU/CF)	Hourly natural gas combustion emission rate per MAX-4000 (lbs/hr)	Hourly emission rate per stack testing results for particulate and from WEBFIRE for SOx per MAX-4000 (lbs/hr)	Emission Rate per MAX-4000 furnace (lbs/hr)	Emission Rate per furnace (lb/day)	Emission Rate per furnace (TPY)	Total potential emissions for 4 sweat furnaces (TPY)	TPY Threshold for Major Source Permitting
NOx	5	100	1050	0.476		0.476	11.43	2.09	8.34	25
SOx	5	0.6	1050	0.003	0.03	0.033	0.79	0.14	0.58	100
CO	5	84	1050	0.400		0.400	9.60	1.75	7.01	100
VOC	5	5.5	1050	0.026		0.026	0.63	0.11	0.46	25
PM/PM10/PM2.5	5	7.6	1050	0.036	0.203	0.239	5.74	1.05	4.19	100
Condensable PM	5	5.7	1050	0.027	0.030	0.057	1.37	0.25		
CO2	5	120000	1050	571.43		571.43	13,714.29	2,502.86	10,011.43	NA
Methane	5	2.3	1050	0.011		0.01	0.26	0.05	0.19	NA
N2O	5	2.2	1050	0.010		0.01	0.25	0.05	0.18	NA
CO2e	5	---	---	574.51		574.51	13,788.27	2,516.36	10,065.44	NA
HAPs (Total)	5	1.89	1050	0.009		0.009	0.22	0.039	0.16	10

MEMORANDUM

To: **STACK TEST FILE – ALTECH RECOVERY, LLC**

Through: Rik Ombach, Minor Source Compliance Section Manager 

From: Chad Gilgen, Environmental Scientist 

Date: December 16, 2020

Source: Aluminum Sweat Furnace Exhaust (II.A.2)
Location: Magna, Salt Lake County, Utah
Contact: Steve Allen: 801-414-1737
Tester: TETCO
Permit #: DAQE-AN157400001-17, dated November 28, 2017
Action Code: Report Audit

The DAQ received a stack test report for the stack emissions testing of the above listed unit located at Altech Recovery, LLC in Salt Lake County, Utah on July 17, 2020. Testing was performed on May 27, 2020, to determine compliance with the PM₁₀ and PM_{2.5} emission limits found in condition II.B.2.a of DAQE-AN157400001-17

Source	Test Date	Pollutant	DAQ Results	Tester Results	Limits
Aluminum Sweat Furnace Exhaust	6-5-19	PM ₁₀ and PM _{2.5}	0.1354 lb/ton	0.135 lb/ton	4.40 lb/ton

DEVIATIONS: None.

CONCLUSION: The overall stack test report appears to be acceptable.

RECOMMENDATION: The emissions for the above listed units should be considered to have been in compliance with the PM₁₀ emission limit found in condition II.B.2.a of DAQE-AN0109190017-19.

ATTACHMENTS: TETCO's stack test report dated June 18, 2020, DAQ generated stack test review Excel spreadsheets.

Source Information



Division of Air Quality Compliance Demonstration

Source Information

Company Name: **Altech - Afterburner Stack**
 Company Contact: **Steve Allen**
 Contact Phone No.: **801-414-1737**
 Source Designation: **Afterburner Stack**

Test & Review Dates

Test Date: 5/27/2020
 Review Date: 12/16/2020 Tabs Are Shown
 Observer: **Unobserved**
 Reviewer: **Chad G.**

Particulate Emission Limits

lbs/MMBtu	lbs/ton	gr/dscf		
	4.400			

Emission Rates - "Front and Back Half"

lbs/MMBtu	lbs/ton	gr/dscf		
	0.1354	0.0092		

Test Information

Stack_I.D._inches	As ft^2	Y	DI H @	Cp	Pbar	Pq (static)	Dn
24.00	3.14	1.0000	1.503	0.84	25.8	-0.075	0.505

Circular

Contractor Information

Contracting Company: **TETCO**
 Contact: **Dean Kitchen**
 Phone No.: **801-792-9106**
 Project No.:

F factors for Coal, Oil, and Gas

	Fd scf/MMBtu	Fw scf/MMBtu	Fc scf/MMBtu
COAL			
Anthracite 2	<input type="radio"/> 10100	<input type="radio"/> 10540	<input type="radio"/> 1970
Bituminous 2	<input type="radio"/> 9780	<input type="radio"/> 10640	<input type="radio"/> 1800
Lignite	<input type="radio"/> 9860	<input type="radio"/> 11950	<input type="radio"/> 1910
OIL	<input type="radio"/> 9190	<input type="radio"/> 320	<input type="radio"/> 1420
GAS			
Natural	<input type="radio"/> 8710	<input type="radio"/> 10610	<input type="radio"/> 1040
Propane	<input type="radio"/> 8710	<input type="radio"/> 10200	<input type="radio"/> 1190
Butane	<input type="radio"/> 8710	<input type="radio"/> 10390	<input type="radio"/> 1250

☐ F factor used

lbs/MMBtu

☒ O2

☐ CO2



Summary
Division of Air Quality
Reference Methods 5 - TSP
Compliance Demonstration of

Altech - Afterburner Stack

Testing Results				
Test Date	5/27/2020	5/27/2020	5/27/2020	5/27/2020
Circular	Run 1	Run 2	Run 3	Run 4
As ft ²	3.14	3.14	3.14	
Pbar	25.80	25.80	25.80	
Pq (static)	-0.08	-0.08	-0.08	
Ps	25.79	25.79	25.79	
Avg. Ts F	885.10	854.15	847.80	
CO ₂ - F _{CO₂}	5.00	4.80	4.80	
O ₂	12.20	13.20	13.40	
N ₂ +C	82.80	82.00	81.80	
Md	29.29	29.30	29.30	
Ms	28.19	28.62	28.34	
Y	1.00	1.00	1.00	
Cp	0.84	0.84	0.84	
Vm cf	48.41	48.09	48.32	
Vlc	92.20	54.90	80.70	
Avg. Tm F	89.03	85.43	83.48	
Vm std	40.29	40.29	40.63	
Vw std	4.34	2.58	3.80	
Bws	0.10	0.06	0.09	
S Bws	1.00	1.00	1.00	
Avg. Sqrt Dlp	0.26	0.26	0.26	
Vs	25.26	24.84	24.97	
scfm wet	1611.23	1621.56	1638.10	
acfm	4761.15	4681.42	4706.31	
Qsd dscfh	87274.03	91429.75	89881.83	
# Sample Points	8.00	8.00	8.00	
Dn	0.505	0.505	0.505	
An	1.39E-03	1.39E-03	1.39E-03	
Start Time	9:41	11:39	13:29	
End Time	10:50	12:45	14:37	
Total Test time	60.00	60.00	60.00	
Time @ point	3.00	3.00	3.00	

Lab Data	Lab Data - grams collected		
	Probe	Filter	Back
Run 1	0.0048	0.0486	0.0034
Run 2	0.0086	-0.004	0.0046
Run 3	0.0031	0.0108	0.0043
Run 4			

Front Half Emissions Summary					
	Run 1	Run 2	Run 3	Run 4	Avg.
gr./dscf	0.0205	0.0018	0.0053		0.0092
lbs/hr	0.2550	0.0230	0.0678		0.1153
lbs/MMBtu	#VALUE!	#VALUE!	#VALUE!		

Total Emissions Summary w/back half condensable					
	Run 1	Run 2	Run 3	Run 4	Avg.
gr./dscf	0.0218	0.0035	0.0069		0.0107
lbs/hr	0.2713	0.0460	0.0888		0.1354
lbs/MMBtu	#VALUE!	#VALUE!	#VALUE!		

lbs/MMBtu

☒ O₂
☐ CO₂

F factor used

**PARTICULATE MATTER
COMPLIANCE TEST CONDUCTED AT
ALTECH RECOVERY, LLC
ALUMINUM SWEAT FURNACE EXHAUST**

MAY 27, 2020

by:

**TETCO
391 East 620 South
American Fork, Utah 84003
801-492-9106 (Phone) 801-4928-9107 (Fax)**

REVIEWED

Initials: CG Date: 12-16-20

Compliance Status: In compliance

File # 15740

Prepared for:

**AlTech Recovery
2050 South 7500 West
Magna, UT 84044**

Date of report:

June 18, 2020

SUMMARY OF RESULTS

Emission Results

Table I presents the test results. More detailed results are found in Table I, in Appendix A.

TABLE I. Measured Emissions and Limits

Source	Test Method ¹	Pollutant	Emission Rate (lb/hr)	Production (tph) ²	Emission Rate (lb/ton)	Emission Limit (lb/ton)
Aluminum	5	PM (filterable)	0.115	-	-	-
Sweat	202	PM (condensable)	0.020	-	-	-
Furnace	5 & 202	(PM ₁₀ and PM _{2.5})	0.135	1.375	0.098	4.40

1 Methods 5 and 202 were used instead of Method 201A.

2 Tons per hour of scrap aluminum processed

Process Data

A copy of the source “Melt Report” is found in Appendix D. Two “charge”s of scrap material were loaded during each test run: one charge was added at the beginning of the test run and a second charge was added during the second half of the test run after switching test ports.

Discussion of Errors or Irregularities

There were none.

Description of Collected Samples

The test filter for run 1 was lightly discolored with gray colored particulate. There was not any visible particulate on the test filters for runs 2 and 3. The front washes were clear in appearance.

Percent Isokinetic Sampling

Each of the tests were isokinetic within the $\pm 10\%$ criterion specified in the *Federal Register*. Isokinetic values for each test run are presented in Table II.

AERMOD Model Output Summary

8-hr average
($\mu\text{g}/\text{m}^3$ / g/s)

*** AERMOD - VERSION 21112 *** *** C:\Projects\EESolutions\Complete Recycling\Air Toxics\AERMOD\Furnace *** 10/07/22

*** AERMET - VERSION 21112 *** *** 14:21:24

PAGE 107

*** MODELOPTs: NonDEFAULT CONC FLAT and ELEV RURAL ADJ_U*

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF AL IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID

ALL	HIGH	1ST HIGH VALUE IS	845.30539	ON 19052016: AT (421939.94, 4384925.73, 43.50, 51.21, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

**AERMOD
Dispersion Modeling Analysis
For
Air Toxics**

**Four Aluminum Sweat Furnaces (4)
Complete Recycling Group, LLC
Elkton, Cecil County, Maryland**

October 2022

This summary report provides the results of the refined dispersion modeling analysis conducted in support of the new furnace installations at Complete Recycling Group LLC's Elkton, Maryland operations. The analyses were conducted to demonstrate compliance with the Maryland Department of Environment's (MDE's) air toxics Screening Level of 10 $\mu\text{g}/\text{m}^3$ for Aluminum. Only estimated Aluminum emissions are above the Allowable Emission Rate (AER) per COMAR Chapter 26.11.16.02.

This modeling is submitted as part of the air permit application for a permit-to-construct for installation and operation of two (2) new identical sweat furnaces.

Modeling Methodology

The methodologies used in the dispersion modeling analyses were based upon the guidance contained in the Guideline on Air Quality Models (Revised) (USEPA, 2017) and its prior supplements as well as User's Guide for the AMS/EPA Regulatory Model (AERMOD) (USEPA, 2022).

The most current version (Version No. 22112) of the USEPA-approved dispersion model AERMOD was used in the dispersion modeling analyses. . The model is capable of estimating ground-level concentrations from multiple sources and can incorporate the effects of building downwash on the predicted concentrations. The model also calculates concentrations expected in any cavity regions which include off-site receptors, thus eliminating the need to run a model for cavity concentrations.

In addition, the model includes complex terrain algorithms, thus allowing the model to select the appropriate algorithms for intermediate and complex terrain. The AERMOD model directly predicts applicable maximum short-term (i.e., 1-hour, 3-hour, 8-hour, 24-hour) and annual average concentrations.

The sweat furnace source parameters and emissions are based on site conditions and the hourly (lb/hr) rates contained in the air permit application (See Form 5EP).

A "Good Engineering Practice" (GEP) stack height analysis was performed to determine the wake effects and downwash conditions and account for them in the dispersion modeling.

Building wake effects generally cause higher predicted concentrations near a point source. A GEP/wake effect analysis was performed using the procedures outlined in the Guideline for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations) Revised (USEPA, 1985) as utilized in the Building Profile and Input Program with PRIME algorithm (BPIPPRM, Version 04274).

The refined dispersion modeling analyses with AERMOD utilized a dense cartesian receptor grid that extends out to 1 km from the site. Receptors were placed at 10-meter spacing along facility property boundaries and out to 20 meters downwind, 25-meter spacing to 250 meters downwind, 50-meter spacing to 500 meters downwind, and 100-meter spacing to 1000 meters downwind. Additional receptors surrounding the maximum impact locations were not deemed necessary as the receptor spacing was sufficient to bracket the maximum predicted concentrations.

Terrain elevations were developed using USGS NED 1/3 data (~10 meter resolution) and the AERMAP program. The higher resolution data was used to better resolve the terrain features in the near-field areas around the site.

The refined modeling was conducted with a recent five-year (2017-2021) meteorological data set as processed through AERMET by the MDE. The data set consisted of hourly surface meteorological data from the National Weather Service at the Bellanca Airfield (New Castle) Airport, Delaware (Station No. 13781), with coincident upper-air data from Sterling, VA (Station No. 93734). The data is considered appropriate to represent the dispersion conditions at the plant site. The AERSURFACE program was used to determine the surface characteristics for the airport site. The program provides sector-averaged surface characteristics by sector using a “geo.dat” file created by the CALMET geo preprocessors from land use/land cover data files.

Modeling Results

The results of the dispersion modeling are provided in the attached table and output summary. The maximum ambient concentrations occurred at or near the northern property fenceline/ boundary along West Pulaski Highway. The concentration is below the Aluminum Screening Level of $10 \mu\text{g}/\text{m}^3$ (54% of Screening Level).

MARYLAND DEPARTMENT OF THE ENVIRONMENT

**AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT**

**SUPPLEMENT TO
DOCKET #19-22**

Applicant: Complete Recycling Group, LLC

Proposal: Installation of two (2) MAX4000SP secondary aluminum sweat furnaces, US
Furnaces each rated at 5 MMBtu/hr and equipped with an after burner.

Location: 1500 W. Pulaski Hwy Elkton MD 21921

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Notice of Tentative Determination, Opportunity to Request a Public Hearing, and Opportunity to Submit Written Comments
2	Fact Sheet and Tentative Determination
3	Draft Permit to Construct and Conditions
4	Supplemental Information - Reference List
5	Privilege Log Not Applicable

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**NOTICE OF TENTATIVE DETERMINATION, OPPORTUNITY TO REQUEST
A PUBLIC HEARING, AND OPPORTUNITY TO SUBMIT WRITTEN COMMENTS**

FIRST NOTICE

The Department of the Environment, Air and Radiation Administration (ARA) has completed its review of an application for a Permit to Construct submitted by Complete Recycling Group, LLC (CRG) on October 10, 2022, for a Permit to Construct for the installation of two (2) MAX 4000SP secondary aluminum sweat furnaces, US furnaces each rated at 5 MMBtu/hr heat input and equipped with an afterburner. The proposed furnaces will be located at 1500 W. Pulaski Highway in Elkton, Cecil County, Maryland 21921.

Pursuant to Section 1-604, of the Environment Article, Annotated Code of Maryland, the Department has made a tentative determination that the Permit to Construct can be issued and is now ready to receive public comment on the application. Copies of the Department's tentative determination, the application, the draft permit to construct with conditions, and other supporting documents are available for public inspection on the Department's website. Look for Docket #19-22 at the following link:

<https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx>

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 45.43%, which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%. The Department's review of the environmental and socioeconomic indicators contributing to that EJ score is included in the tentative determination that is available for public inspection.

Interested persons may request a public hearing and/or submit written comments on the tentative determination. Requests for a public hearing must be submitted in writing and must be received by the Department no later than 20 days from the date of this notice. A requested public hearing will be held virtually using teleconference or internet-based conferencing technology unless a specific request for an in-person public hearing is received. Written comments must be received by the Department no later than 30 days from the date of this notice.

Interested persons may request an extension to the public comment period. The extension request must be submitted in writing and must be received by the Department no later than 30 days from the date of this notice or within 5 days after the hearing (if a hearing is requested), whichever is later. The public comment period may only be extended one time for a 60-day period.

All requests for a public hearing, requests for an extension to the public comment period, and all written comments should be directed to the attention of Ms. Shannon Heafey, Air Quality Permits Program, Air and Radiation Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230.

Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director
Air and Radiation Administration

**MARYLAND DEPARTMENT OF ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**FACT SHEET AND TENTATIVE DETERMINATION
COMPLETE RECYCLING GROUP, LLC**

**PROPOSED INSTALLATION OF TWO (2) METAL RECLAMATION FURNACE - A
MAX 4000SP SECONDARY ALUMINUM SWEAT FURNACE EACH RATED AT 5
MMBTU/HOUR HEAT INPUT**

I. INTRODUCTION

The Maryland Department of the Environment (the "Department") received an application from Complete Recycling Group, LLC (CRG) on October 10, 2022, for a Permit to Construct for the installation of two (2) metal reclamation furnaces - a MAX 4000SP secondary aluminum sweat furnaces (furnaces) each rated at 5 MMBtu/hr heat input to be located at 1500 W. Pulaski Highway in Elkton, Cecil County, Maryland.

A notice was placed in the Cecil Whig on March 3, 2023 and March 10, 2023 announcing an opportunity to request an informational meeting to discuss the application for a Permit to Construct. An informational meeting was not requested.

As required by law, all public notices were also provided to elected officials in all State, county, and municipality legislative districts located within a one-mile radius of the facility's property boundary.

The Department has reviewed the application and has made a tentative determination that the proposed installations are expected to comply with all applicable air quality regulations. A notice will be published to provide the public with opportunities to request a public hearing and to comment on the application, the Department's tentative determination, the draft permit conditions, and other supporting documents. The Department will not schedule a public hearing unless a legitimate request is received.

If the Department does not receive any comments that are adverse to the tentative determination, the tentative determination will automatically become a final determination. If adverse comments are received, the Department will review the comments, and will then make a final determination with regard to issuance or denial of the permit. A notice of final determination will be published in a newspaper of general circulation in the affected area. The final determination may be subject to judicial review pursuant to Section 1-601 of the Environment Article, Annotated Code of Maryland.

II. CURRENT STATUS AND PROPOSED INSTALLATION

A. Current Status

CRG is a scrap and salvage yard located in the town of Elkton in Cecil County, Maryland. The Company's business interest is in the Automotive Recycling Market. CRG buys automotive scrap metals, including scrap motors and transmissions units for repair and resale or recovery of valuable parts. CRG currently has two (2) MAX 4000SP secondary aluminum sweat furnaces each rated at 5 MMBtu/hr heat input. The company applied for and received a permit to construct the furnaces in 2016 and in 2019. The secondary aluminum sweat furnaces are located at its facility at 1500 W. Pulaski Highway in Elkton, Cecil County, Maryland.

The sweat furnace is designed exclusively for the reclamation of aluminum from metal scraps that contains large amounts of iron by using heat to separate the low melting point aluminum from the scraps, while the high melting point iron remains in the solid form. The liquid aluminum is poured into ingot molds and removed or sold for further use.

The furnace is composed of a primary chamber, a holding chamber and a secondary chamber or afterburner (which is integral to the furnace). The furnace is fired by natural gas. The afterburner has a minimum operating temperature of 1600 °F and a minimum design residence time of at least 0.8 seconds. The combination of the minimum operating temperature of 1600 °F and a residence time of at least 0.8 second, provides compliance with the stack testing requirement listed in 40 CFR Part 63, Subpart RRR. The furnace generates criteria pollutants from the combustion of natural gas. These pollutants are nitrogen oxide, sulfur oxide, carbon monoxide, volatile organic compound, and particulate matter. Toxic air pollutants are also generated from the operation of the furnace, including Dioxins/furans. Dioxins/furan are listed pollutants under 40 CFR Part 63, Subpart RRR. The limit for Dioxins/furans (D/F) under this Subpart, for secondary aluminum sweat furnace, is 0.8 nanogram (ng) of D/F TEQ per dscm, where TEQ stands for toxicity equivalent. Detailed emissions are presented in Tables 1, II, and III below.

B. Proposed Installation

CRG is proposing to install two (2) additional (identical) metal reclamation furnaces – each a MAX 4000SP secondary aluminum sweat furnace. The proposed sweat furnaces will also be located at 1500 W. Pulaski Highway in Elkton, Cecil County, Maryland. CRG is seeking to install the two additional aluminum sweat furnaces to give the Company added capacity to recover aluminum from the metallic scraps in response to the current favorable marketplace.

III. APPLICABLE REGULATIONS

The proposed installations, as with the previous two installations are subject to all applicable local, State, and federal air quality control regulations, including, but not limited to the following Federal National Emissions Standard for Hazardous Air Pollutant (NESHAP) for Secondary Aluminum Production, 40 CFR Part 63, Subpart RRR, which contains certain emissions standard, testing, monitoring, recordkeeping, and reporting requirements including, but not limited to the following:

- (1) **40 CFR Part 63 Subpart RRR, Section 63.1500(a)**, which requires the Permittee, owner, or operator of a secondary aluminum production facility to comply with the provisions of this subpart upon startup.

- (2) **40 CFR Part 63, Subpart RRR, Section 63.1505(f)(2)**, which prohibits the Permittee, owner, or operator of a sweat furnace at a secondary aluminum production facility that is a major or area source from discharging or causing to be discharged to the atmosphere emissions in excess of 0.80 nanogram (ng) of D/F TEQ per dscm (3.5×10^{-10} gr per dscf) at 11 percent oxygen (O₂)

Note: D/F TEQ = Dioxin and Furans expressed as toxicity equivalents.

Exception

40 CFR Part 63, Subpart RRR, Section 63.1505(f)(1) exempts the Permittee, owner, or operator from conducting a performance test to demonstrate compliance with the emission standard of paragraph (f)(2) of this section, provided that, on and after the compliance date of this rule, the owner or operator operates and maintains an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600 °F or greater.

- (3) **COMAR 26.11.02.19C & D**, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in the submittals.
- (4) **COMAR 26.11.06.02C(1)**, “In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.
- (5) **COMAR 26.11.06.03B (1)(a)**, “In Areas I, II, V, and VI a person may not cause or permit to be discharged into the outdoor atmosphere from any other installation, particulate matter in excess of 0.05 gr/SCFD (115 mg/dscm).”

- (6) **COMAR 26.11.06.08 and 26.11.06.09**, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (8) **COMAR 26.11.15.05**, which requires that the Permittee implement “Best Available Control Technology for Toxics” (T – BACT) to control emissions of toxic air pollutants.
- (9) **COMAR 26.11.15.06**, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.

IV. GENERAL AIR QUALITY

The U.S. Environmental Protection Agency (EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) for six (6) criteria pollutants, i.e., sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, ozone, and lead. The primary standards were established to protect public health, and the secondary standards were developed to protect against non-health effects such as damage to property and vegetation.

The Department utilizes a statewide air monitoring network, operated in accordance with EPA guidelines, to measure the concentrations of criteria pollutants in Maryland’s ambient air. The measurements are used to project statewide ambient air quality, and currently indicate that Cecil County complies with the NAAQS for sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, and lead.

Ground level ozone continues to present a problem for the Cecil County area, which is part of the Philadelphia metropolitan area, which is classified as moderate non-attainment area for ozone. The primary contributors to the formation of ozone are emissions of oxides of nitrogen, primarily from combustion equipment, and emissions of Volatile Organic Compounds (VOC) such as paint solvents and gasoline vapors. Cecil County is included in the non-attainment area for ozone.

With regard to toxic air pollutants (TAPs), screening levels (i.e., acceptable ambient concentrations for toxic air pollutants) are generally established at 1/100 of allowed worker exposure levels (TLVs)¹. The Department has also developed additional screening levels for carcinogenic compounds. The additional screening levels are established such that continuous exposure to the subject TAP at the screening level for a period of 70 years is expected to cause an increase in lifetime cancer risk of no more than 1 in 100,000.

¹ TLVs are threshold limit values (exposure limits) established for toxic materials by the American Conference of Governmental Industrial Hygienists (ACGIH). Some TLVs are established for short-term exposure (TLV – STEL), and some are established for longer-term exposure (TLV – TWA), where TWA is an acronym for time-weight average.

V. ENVIRONMENTAL JUSTICE ANALYSIS

The concept behind the term environmental justice (EJ) is that regardless of race, color, national origin, or income, all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

Extensive research has documented that health disparities exist between demographic groups in the United States, such as differences in mortality and morbidity associated with factors that include race/ethnicity, income, and educational attainment.

The Maryland General Assembly passed HB 1200, effective October 1, 2022, that adds to MDE's work incorporating diversity, equity and inclusion into our mission to help overburdened and underserved communities with environmental issues. In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the proposed source is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 45.43% which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%. To account for other sources of pollution surrounding the proposed source, the Department conducted an additional EJ Score analysis to evaluate the impact of other sources located within 1 mile of the proposed source. The highest EJ Score for census tracts located within 1 mile of the facility, expressed as a statewide percentile, was shown to be 46.72%.

An EJ Score of 46.72% indicates that the proposed installation is located in an area that is not disproportionately impacted by sources of pollution or at a higher risk of health problems from environmental exposures than other areas in Maryland. The Department has reviewed the air quality impacts from this proposed installation and has determined that the proposed installation will meet all applicable air quality standards.

VI. COMPLIANCE DEMONSTRATION AND ANALYSIS

The proposed installation must comply with all State imposed emissions limitations and

screening levels, as well as the NAAQS. The Department has conducted an engineering and air quality review of the application. The emissions were projected based on the material processed, the control efficiency of the furnace, performance test from similar equipment, and EPA emission factors. Based on the nature of the installation and process, the emissions expected from the operation are the products of combustion and air toxics.

The conservative U.S. EPA's SCREEN3 model and an equivalent model - the Lakes Environmental Screen model were used to project the maximum ground level concentrations from the proposed facility, which were then compared to the screening levels and the NAAQS.

- A. Estimated Emissions** – The maximum emissions of air pollutants of concern from the proposed furnaces are described in paragraph B and Table I, below. The emissions factors were obtained from the U.S. EPA AP 42 emissions factors.
- B. Compliance with National Ambient Air Quality Standards** – The maximum ground level concentrations for sulfur dioxide, particulate matter, carbon monoxide, volatile organic compound and nitrogen dioxide based on the emissions from the proposed furnaces are listed in column 2 of Table II. The combined impact of the projected contribution from the proposed furnace and the ambient background concentration for each pollutant shown in column 3 of Table II is less than the NAAQS for each pollutant shown in column 4.
- C. Compliance with Air Toxics Regulations** – The toxic air pollutants of concern that would be emitted from the installations are listed in Column 1 of Table III. The projected premises-wide emissions of the TAPs that will be emitted from the installations are also provided in the Column 3 and 4 and appropriately labeled.

In most of the cases, the emission of the TAP is less than the corresponding Allowable Emission Rate (AER) provided in Column 6. Others are in compliance based on comparison of the predicted impact in Column 7 with the correspond screening levels presented in Column 5.

VII. TENTATIVE DETERMINATION

Based on the above information, the Department has concluded that the proposed installations will comply with all applicable Federal and State air quality control requirements. In accordance with the Administrative Procedure Act, Department has made a tentative determination to issue the Permit to Construct.

Enclosed with the tentative determination is a copy of the draft Permit to Construct.

TABLE I
PROJECTED MAXIMUM EMISSIONS FROM THE PROPOSED INSTALLATIONS

POLLUTANT	Emissions Per Furnace		Emissions For Two Furnaces		PROJECTED MAXIMUM EMISSIONS FROM PROPOSED INSTALLATION
	(lbs/hr.)	(lbs/day)	(lbs/hr.)	Lbs/day	(tons/year)
Nitrogen Dioxide (NO ₂)	0.476	11.42	0.952	22.86	4.16
Sulfur Dioxide (SO ₂)	0.033	0.79	0.066	1.58	0.29
Carbon Monoxide (CO)	0.400	9.60	0.800	19.2	3.49
Volatile Organic Compounds (VOC)	0.026	0.624	0.052	1.248	0.227
Particulate Matter (PM ₁₀)	0.239	5.736	0.478	11.472	2.088

Emissions are based on 24 hours a day, 7 days per week and 52 weeks per year for a total of 364 days per year or 8736 hrs per year operation.

TABLE II
PROJECTED IMPACT OF EMISSIONS OF CRITERIA POLLUTANTS FROM THE PROPOSED
INSTALLATION ON AMBIENT AIR QUALITY

POLLUTANTS	MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS CAUSED BY EMISSIONS FROM PROPOSED PROCESS ($\mu\text{g}/\text{m}^3$)	BACKGROUND AMBIENT AIR CONCENTRATIONS ($\mu\text{g}/\text{m}^3$)*	NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) ($\mu\text{g}/\text{m}^3$)
Nitrogen Dioxide (NO_2)	annual avg. \rightarrow 4.82	annual avg. \rightarrow 21.4	annual avg. \rightarrow 100
Carbon Monoxide (CO)	8-hour max \rightarrow 35.4 1-hour max \rightarrow 50.6	8-hr max. \rightarrow 1833 1-hr max. \rightarrow 4286	8-hr max. \rightarrow 10,000 1-hr max. \rightarrow 40,000
Sulfur Dioxide (SO_2)	24-hour avg. \rightarrow 1.7 annual avg. \rightarrow 0.33	24-hour avg. \rightarrow 13.09 annual avg. \rightarrow 3.7	24-hour avg. \rightarrow 366 annual avg. \rightarrow 78.5
Particulate Matter (PM_{10})	24-hr max \rightarrow 12	24-hr max. \rightarrow 14	24-hr max. \rightarrow 150

*Background concentrations were obtained from Maryland air monitoring stations as follows:

NO_2 , CO and $\text{SO}_2 \rightarrow$ HU-Beltsville Monitoring Station in Prince George's County

$\text{PM}_{10} \rightarrow$ Glen Burnie Monitoring Station in Anne Arundel County

**COMPLETE RECYCLING GROUP
AMBIENT IMPACT AND SCREENING ANALYSIS
TABLE III**

Tap	Cas #	Emission Rate (lb/hr)	EMISSION RATE (Lb/yr)	MOST STRINGENT SCREENING LEVEL UG/M3)			Allowable LB/hr LB/yrBased on 1-hr/8-hr/Annual			PREDICTED IMPACT (UG/M3) 1-HR/ 8-HR /Annual		
				1-HR	8-HR	Annual						
Dioxin/furan	1746016	5.72E-09	5.00E-05	NA	12.1	3.0E-08	NA	4.35E-02	1.1E-05	NA	2.53E-07	2.89E-08
Aluminum	1317255	1.02E-01	8.87E+02	NA	10	NA	NA	3.58E-02	NA	NA	4.49E+00	NA
Arsenic	7440-38-2	1.96E-06	1.71E-02	NA	0.1	0.0002	NA	3.58E-04	7.30E-02	NA	8.68E-05	9.92E-06
Barium	7440-39-3	4.32E-05	3.77E-01	NA	5	NA	NA	1.79E-02	NA	NA	1.91E-03	NA
Beryllium	7440-41-7	1.18E-07	1.03E-03	NA	0.0005	0.0004	NA	1.79E-06	1.46E-01	NA	5.21E-06	5.95E-07
Cadmium	7440-43-9	1.08E-05	9.42E-02	NA	0.02	0.0006	NA	7.17E-05	2.19E-01	NA	4.77E-04	5.45E-05
Chromium	7440-47-3	1.37E-05	1.20E-01	NA	5	NA	NA	1.79E-02	NA	NA	6.07E-04	NA
Cobalt	7440-48-4	8.24E-07	7.20E-03	NA	0.2	NA	NA	7.17E-04	NA	NA	3.65E-05	NA
Copper	7440-50-8	8.34E-06	7.29E-02	NA	2	NA	NA	7.17E-03	NA	NA	3.69E-04	NA
Manganese	7439-96-5	3.72E-06	3.25E-02	NA	2	NA	NA	7.17E-03	NA	NA	1.65E-04	NA
Mercury	7439-97-6	2.54E-06	2.22E-02	0.30	0.1	NA	1.08E-03	3.58E-04	NA	1.61E-04	1.12E-04	NA
Molybdenum	7439-98-7	1.08E-05	9.42E-02	NA	5	NA	NA	1.79E-02	NA	NA	4.77E-04	NA
Nickel	7440-02-0	2.06E-05	1.80E-01	NA	1	NA	NA	3.58E-03	NA	NA	9.12E-04	NA
Selenium	7782-49-2	2.36E-07	2.06E-03	NA	2	NA	NA	7.17E-03	NA	NA	1.04E-05	NA
Vanadium	7440-62-2	2.26E-05	1.97E-01	NA	0.5	NA	NA	1.79E-03	NA	NA	1.00E-03	NA
Zinc	7440-66-6	2.84E-04	2.48E+00	1000	500	NA	3.58E+00	1.79E+00	NA	1.80E-02	1.26E-02	NA
2-methylnapthalene	91576	2.36E-07	2.06E-03	NA	29.0798	NA	NA	1.04E-01	NA	NA	1.04E-05	NA
3-methylchloranthrene	56495	1.76E-08	1.54E-04	NA	20	NA	NA	7.17E-02	NA	NA	7.81E-07	NA
Acenaphthene	83-32-9	1.76E-08	1.54E-04	NA	20	NA	NA	7.17E-02	NA	NA	7.81E-07	NA
Acenaphthylene	203-96-8	1.76E-08	1.54E-04	NA	24.6	NA	NA	8.82E-02	NA	NA	7.81E-07	NA
Anthracene	120-12-7	2.36E-08	2.06E-04	NA	20	NA	NA	7.17E-02	NA	NA	1.04E-06	NA
Benzene	71-43-2	2.06E-05	1.80E-01	79.8671	15.9734	0.13	2.86E-01	5.73E-02	4.75E+01	1.30E-03	9.12E-04	1.04E-04
Benzo(g,h,i) perylene	191-24-2	1.18E-08	1.03E-04	NA	20	NA	NA	7.17E-02	NA	NA	5.21E-07	NA

Butane	106-97-8	2.06E-02	1.80E+02	NA	23771	NA	NA	8.52E+01	NA	NA	9.12E-01	NA
Ethane	74840	3.04E-02	2.66E+02	NA	12302	NA	NA	4.41E+01	NA	NA	1.35E+00	NA
Fluoranthene	206-44-0	2.94E-08	2.57E-04	NA	82	NA	NA	2.94E-01	NA	NA	1.30E-06	NA
Fluorene	86-73-7	2.74E-08	2.39E-04	NA	20	NA	NA	7.17E-02	NA	NA	1.21E-06	NA
Formaldehyde	50-00-0	7.36E-04	6.43E+00	NA	20.3	0.08	NA	7.28E-02	2.92E+01	NA	3.26E-02	3.72E-03
Hexane	110-54-3	1.76E-02	1.54E+02	NA	1762.4	NA	NA	6.32E+00	NA	NA	7.81E-01	NA
Naphthalene	91203	5.98E-06	5.22E-02	786.4	524.3	NA	2.82E+00	1.88E+00	NA	3.78E-04	2.65E-04	NA
Pentane	109-66-0	2.54E-02	2.22E+02	NA	17705.5	NA	NA	6.35E+01	NA	NA	1.12E+00	NA
Phenanthrene	85-01-8	1.67E-07	1.46E-03	NA	9.8	NA	NA	3.51E-02	NA	NA	7.38E-06	NA
Propane	74-98-6	5.00E-08	4.37E-04	NA	18032.7	NA	NA	6.46E+01	NA	NA	2.21E-06	NA
Pyrene	129-00-0	4.90E-08	4.28E-04	NA	20	NA	NA	7.17E-02	NA	NA	2.17E-06	NA
Toluene	108-88-3	3.34E-05	2.92E-01	NA	753.6	NA	NA	2.70E+00	NA	NA	1.48E-03	NA
Total		1.97E-01	1.72E+03									

The listed Taps were reviewed for compliance with the air toxics regulations. The projected emissions are based on 8736 hours per year for all listed TAPS.

NA means not available.

DRAFT PERMIT

Wes Moore
Governor

Serena McIlwain
Secretary

Air and Radiation Administration

1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

☒ Construction Permit

☒ Temporary Operating Permit

PERMIT NO.:
015-0275-6-0413 & 0414

DATE ISSUED:
TBD

PERMIT FEE: \$5,500.00 (Paid)

EXPIRATION DATE:
In accordance with COMAR
26.11.02.04B

LEGAL OWNER & ADDRESS

Complete Recycling Group, LLC
1500 W Pulaski Hwy
Elkton, MD 21921

Attention: Richard Polanski,

SITE

Same
Cecil County
Premises # 0128
AI # 7253

SOURCE DESCRIPTION

Two (2) metal reclamation furnaces - a MAX 4000SP secondary aluminum sweat furnaces each rated at 5 MMBtu/hour heat input and equipped with an after burner.

This source is subject to the conditions described on the attached pages.

COMPLETE RECYCLING GROUP, LLC
PERMIT TO CONSTRUCT CONDITIONS
PERMIT Nos. 015-0275-6-0412 & 0413

INDEX

- Part A - General Provisions
 - Part B - Applicable Regulations
 - Part C - Construction Requirements
 - Part D - Operating Conditions
 - Part E - Monitoring and Testing Requirements
 - Part F - Notification, Record Keeping and Reporting Requirements
 - Part G - Temporary Permit-To-Operate Conditions
-

PART A - GENERAL PROVISIONS

- (1) The following applications and documents for Permit to Construct to install two (2) metal reclamation furnaces - a MAX 4000SP secondary aluminum sweat furnace (furnace) each rated at 5 MMBtu/hr heat input are incorporated by reference in this permit:
 - (a) Application for Processing or Manufacturing Equipment (AMA-5) received on October 10, 2022.
 - (b) Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration (Form 5T) received on October 10, 2022.
 - (c) Emissions Point Data (Form 5EP) received on October 10, 2022.
 - (d) Application for Permit to Construct Gas Cleaning or Emission Control Equipment (AMA-6) received on October 10, 2022.

If there are any discrepancies between the permit and the applications, the conditions on the permit will take precedence. In the applications, estimates of dimensions, volumes, emission rates, operating rates, feed rates and hours of operation are not deemed to constitute enforceable numeric limits except to the extent that they are necessary to make a determination of compliance with applicable regulations.

- (2) Upon presentation of credentials, representatives of the Maryland Department of the Environment ("MDE" or the "Department") and the Cecil County Health Department shall at any reasonable time be granted, without delay and without prior notification, access to the Permittee's property and permitted to:

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- (a) Inspect any construction authorized by this permit;
 - (b) Sample, as necessary to determine compliance with requirements of this permit, any materials stored or processed on-site, any waste materials, and any discharge into the environment;
 - (c) Inspect any monitoring equipment required by this permit;
 - (d) Review and copy any records, including all documents required to be maintained by this permit, relevant to a determination of compliance with requirements of this permit; and
 - (e) Obtain any photographic documentation or evidence necessary to determine compliance with the requirements of this permit.
- (3) Prior to any increase in the quantities and/or change in the types of materials stated in the application or limited by the permit, notification shall be provided to the Department. If the Department determines that the change constitutes a modification, the Permittee shall obtain a permit to construct prior to the modification.
- (4) If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect, and such invalid provisions shall be considered severed and deleted from this permit.
- (5) Nothing in this permit authorizes the violation of any rule or regulation or the creation of a nuisance or air pollution.

PART B - APPLICABLE REGULATIONS

- (1) The source is subject to all applicable local and federal air pollution control requirements including, the National Emissions Standard for Hazardous Air Pollutant (NESHAP) for Secondary Aluminum Production, 40 CFR Part 63, Subpart RRR, which contains certain emissions standard, testing, monitoring, record keeping and reporting requirements including, but not limited to the following:

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- (a) **40 CFR Part 63 Subpart RRR**, Section 63.1500(a), which requires the Permittee, owner or operator of a secondary aluminum production facility as defined in Section 63.1503 to comply with the requirements of this subpart upon startup.
- (b) **40 CFR Part 63, Subpart RRR**, Section 63.1505(f)(2), which prohibits the Permittee, owner, or operator of a sweat furnace at a secondary aluminum production facility that is a major or area source from discharging or causing to be discharged to the atmosphere emissions in excess of 0.80 nanogram (ng) of D/F TEQ per dscm (3.5×10^{-10} gr per dscf) at 11 percent oxygen (O₂).
Note: D/F TEQ = Dioxins and Furans expressed as toxicity equivalents.

Exception

40 CFR Part 63, Subpart RRR, Section 63.1505(f) (1) exempts the Permittee, owner or operator from conducting a performance test to demonstrate compliance with the emissions standard of paragraph (f) (2) of this section, provided that, on and after the compliance date of this rule, the Permittee, owner or operator operates and maintains an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600 °F or greater.

- (2) The source is subject to all applicable federally enforceable State air pollution control requirements including, but not limited to, the following:
 - (a) **COMAR 26.11.01.04A(1) - Requirements for Testing**
“The Department may require any person to conduct or have conducted testing to determine compliance with this subtitle. The Department, at its option, may witness or conduct these tests. This testing will be done at a reasonable time, and all information gathered during a testing operation will be provided to both parties.”
 - (b) **COMAR 26.11.01.07C - Report of Excess Emissions**
 - (i) “In the case of any occurrence of excess emissions, expected to last or actually lasting for 1 hour or more, from any installation required by COMAR 26.11.02.13 to obtain a State permit to operate, the owner or operator shall report the onset and shall report the termination of the occurrence to the Department by telephone.

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- (ii) Telephone reports of excess emissions shall include the following information:
 - (1) The identity of the installation and the person reporting;
 - (2) The nature or characteristics of the emissions (for example, hydrocarbons, fluorides);
 - (3) The time of occurrence of the onset of the excess emissions and the actual or expected duration of the occurrence; and
 - (4) The actual or probable cause of the excess emissions."
 - (c) **COMAR 26.11.02.09A - Sources Subject to Permits to Construct and Approvals** "A person may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits to construct and approvals: (6) All sources, including installations and air pollution control equipment, except as listed in Regulation .10 of this chapter-permit to construct required."
 - (d) **COMAR 26.11.06.02C (1) - Visible Emission Standard**
"In Areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."
Exceptions
COMAR 26.11.06.02A (2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
 - (i) The visible emissions are not greater than 40 percent opacity; and
 - (ii) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.
 - (e) **COMAR 26.11.06.03B(1)(a) - Particulate Matter from Confined Sources Areas I, II, V and VI**
"Installations Constructed On or After January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972, in excess of 0.05 gr/SCFD (115 mg/dscm)"
- (3) The source is subject to all applicable State-only enforceable air pollution control requirements including, but not limited to, the following regulations:

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- (a) **COMAR 26.11.02.13A** - Sources Subject to State Permits to Operate
“Except for a source that is covered by a Part 70 permit, a person may not operate or cause to be operated any of the following sources, without first obtaining, and having in current effect, a State permit to operate as required by this regulation:
(5) Metal reclamation furnace.”
- (b) **COMAR 26.11.02.14D** - Procedure for Obtaining State permits to Operate and Permits to Construct Certain Sources and Permits to Construct Control Equipment on Existing Sources
“A complete application for the renewal of a State Permit to Operate shall be submitted not later than 60 days before the expiration date of the permit. If a timely application for a renewal has been submitted, the current State Permit to Operate remains in effect until the Department makes a final decision to issue or deny the permit.”
- (c) **COMAR 26.11.02.19C** - Information required to be maintained by a Source
“Beginning January 1, 1994, the owner or operator of a source for which a permit to operate is required shall maintain records necessary to support the emissions certification including the following information:
- (i) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;
 - (ii) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;
 - (iii) Amounts, types, and analyses of all fuels used;
 - (iv) Emissions data from continuous emissions monitors that are required by this subtitle or U.S. EPA regulations, including monitor calibration and malfunction information;
 - (v) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:
 - (1) Significant maintenance performed;
 - (2) Malfunctions and downtime; and
 - (3) Episodes of reduced efficiency of all the equipment;

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- (vi) Limitations on source operation or any work practice standards that significantly affect emissions, and
- (vii) Other relevant information as required by the Department.”
- (d) **COMAR 26.11.02.19D - Emissions Certification**
 - (1) “Beginning January 1, 1994, the responsible official designated by the owner or operator of a source for which a permit to operate is required shall certify, as provided at Regulation .02F of this chapter, the actual emissions of regulated air pollutants from all installations at the plant or facility.
 - (2) Certification shall be on a form obtained from the Department and shall be submitted to the Department not later than April 1 of the year following the year for which certification is required.”
- (e) **COMAR 26.11.06.08 - Nuisance**

“An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution.”
- (f) **COMAR 26.11.06.09 - Odors**

“A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.”
- (g) **COMAR 26.11.15.05 - Control Technology Requirement**

“New or Reconstructed Installations. A person may not construct, reconstruct, operate, or cause to be constructed, reconstructed, or operated, any new installation or source that will discharge a toxic air pollutant to the atmosphere without installing and operating T-BACT.”
- (h) **COMAR 26.11.15.06 - Requirements for New Installations, Sources, or Premises**

“A (1) Except as provided in §A (2) of this regulation, a person may not construct, modify, or operate, or cause to be constructed, modified, or operated, any new installation or source without first demonstrating to the

**COMPLETE RECYCLING GROUP, LLC
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satisfaction of the Department using procedures established in this chapter that total allowable emissions from the premises of each toxic air pollutant discharged by the new installation or source will not unreasonably endanger human health.”

PART C - CONSTRUCTION REQUIREMENTS

- (1) Except as otherwise provided in this part, the furnaces shall be constructed in accordance with the application and specifications provided by the equipment manufacturer.
- (2) The integral afterburner associated with each furnace shall be designed to achieve a residence time of at least 0.8 seconds and a minimum operating temperature of 1600 °F.
- (3) The Permittee, owner or operator shall install temperature sensors and recorders to continuously monitor and record the flue gas temperature at the outlet of each afterburner.

PART D - OPERATING CONDITIONS FOR EACH FURNACE

- (1) Except as provided below, the Permittee, owner or operator shall operate and maintain the furnace in accordance with the information provided in the application and as recommended by the equipment manufacturer.
- (2) The Permittee, owner or operator shall, at all times, operate and maintain the furnace, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions so as to ensure full and continuous compliance with all applicable regulations.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[Reference: § 63.1506(a)(5)].**

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- (3) The Permittee, owner or operator shall operate the furnace in accordance with the Operation, Maintenance, and Monitoring (OM & M) plan developed and submitted to the Department for approval as detailed under monitoring section below.
- (4) The Permittee, owner or operator shall post and maintain easily visible labels, which identify the applicable emission limits and means of compliance, including:
 - (a) The type of affected source or emission unit (group 1 furnace);
 - (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and additional practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan. **[Reference: § 63.1506(b) (1)&(2)].**
- (5) The Permittee shall maintain a 3-hour block average operating temperature of the afterburner at or above the average temperature established during the performance test, or 1600 °F, if a performance test was not conducted and the afterburner meets the specifications of § 63.1505(f)(1). According to § 63.1505(f)(1), the owner or operator is not required to conduct a performance test to demonstrate compliance with the emissions standard of paragraph (f)(2) of this section, provided that, on and after the compliance date of this rule, the owner or operator operates and maintains an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600 °F or greater. **[Reference: § 63.1506(h)].**
- (6) The Permittee shall not charge the furnace with halogenated compounds (i.e., materials that contain chlorine, fluorine, & bromine), lead, asbestos, or radioactive materials.
- (7) The Permittee shall operate and maintain an afterburner with a design residence time of 0.8 seconds or greater and an operating temperature of 1600 °F or greater.
- (8) The Permittee shall limit fuel use in the furnace to natural gas only, unless the Permittee applies for and receives a prior approval from the Department.

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PERMIT TO CONSTRUCT CONDITIONS
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PART E - MONITORING AND TESTING REQUIREMENTS FOR EACH FURNACE

- (1) The Permittee, owner or operator must prepare and implement for the furnace a written OM&M plan submitted to the Department for approval, within 90 days after start-up. The plan must be accompanied by a written certification by the Permittee, owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The Permittee, owner or operator must comply with all of the provisions of the OM&M plan as submitted to the Department unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the Permittee, owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the Permittee, owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee, owner or operator submits a description of the changes and a revised plan incorporating them to the Department. Each plan must contain the following information: **[Reference: § 63.1510(b)]**.
- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device;
 - (b) A monitoring schedule for the affected source;
 - (c) Procedures for the proper operation and maintenance of each process unit and add-on control device, if any is used to meet the applicable emission limits or standards in § 63.1505(f)(2) – See PART B (1b) of this Permit.
 - (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance.
 - (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
 - (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range

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established in paragraph (b)(1) of § 63.1510, including:

- (i) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
 - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (h) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for the furnace not equipped with an add-on air pollution control device.
- (2) The Permittee, owner or operator shall inspect the labels for the furnace at least once per calendar month to confirm that posted labels as required by the operational standard in § 63.1506(b) are intact and legible. **[Reference: § 63.1510(c)].**
- (3) The Permittee, owner or operator shall calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the afterburner consistent with the requirements for continuous monitoring systems in subpart A of this part. **[Reference: § 63.1510(g)(1)].**
- (4) The temperature monitoring device must meet each of these performance and equipment specifications: **[Reference: § 63.1510 (g) (2)].**
 - (a) The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner and shall indicate the charging periods on the temperature monitoring charts.
 - (b) The monitoring system must record the temperature in 15-minute block averages and determine and record the average temperature for each 3-hour block period.

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- (c) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in § 63.1512(m).
 - (d) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Department.
- (5) The Permittee shall conduct an inspection of the afterburner at least once a year and record the results. At a minimum, an inspection must include:
- (a) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
 - (b) Inspection for proper adjustment of combustion air;
 - (c) Inspection of internal structures (e.g., baffles) to ensure structural integrity;
 - (d) Inspection of dampers, fans, and blowers for proper operation;
 - (e) Inspection for proper sealing;
 - (f) Inspection of motors for proper operation;
 - (g) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;
 - (h) Inspection of afterburner shell for corrosion and/or hot spots;
 - (i) Documentation, for the burn cycle that follows the inspection, that the afterburner is operating properly, and any necessary adjustments have been made; and
 - (j) Verification that the equipment is maintained in good operating condition.
 - (k) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.
[Reference: § 63.1510(g)(3)].
- (6) The Permittee, owners or operators of affected sources located at facilities which are area sources are subject only to those performance testing requirements pertaining to D/F. However, Permittee, owners or operators of furnaces meeting

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the specifications of §63.1505(f)(1) are not required to conduct a performance test.

PART F - NOTIFICATION, RECORDKEEPING AND REPORTING REQUIREMENTS

- (1) The Permittee, owner or operator must submit initial notifications to the Department and EPA as described in the applicable paragraphs of (a)(1) through (7) of section 63.1515. The applicable paragraphs are presented below:
 - (a) As required by §63.9(b)(3), the Permittee, owner, or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under §63.5(d), must provide notification that the source is subject to the standard. **[Reference: § 63.1515(a)(2)].**
 - (b) As required by §63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by §63.5(d). **[Reference: § 63.1515(a)(4)].**
 - (i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; **[Reference: § 63.1515(a)(4)(i)]** or
 - (ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date. **[Reference: § 63.1515(a)(4)(ii)].**
 - (c) As required by §63.9(d), the Permittee, owner or operator must provide notification of any special compliance obligations for a new source. **[Reference: § 63.1515(a)(5)].**

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- (2) The Permittee, owner or operator must submit semiannual reports according to the requirements in §63.10(e)(3), except that the Permittee, owner or operator must submit the semiannual reports within 60 days after the end of each 6-month period instead of within 30 days after the calendar half as specified in §63.10(e)(3)(v). When no deviations of parameters have occurred, the Permittee, owner or operator must submit a report stating that no excess emissions occurred during the reporting period. A report must be submitted if an excursion of a compliant process or operating parameter value or range, like afterburner operating temperature, occurs during a 6-month reporting period. **[Reference: § 63.1516(b)].**
- (3) The Permittee, owner or operator shall, as required by Section 63.10(b), maintain files of all information (including all reports and notifications) required by the general provisions and this subpart. **[Reference: § 63.1517(a)].**
- (4) The Permittee, owner or operator shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site. **[Reference: § 63.1517(a)(1)].**
- (5) The Permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche. **[Reference: § 63.1517(a)(2)].**
- (6) Permittee, owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA compatible computer software. **[Reference: § 63.1517(a)(3)].**
- (7) The Permittee shall maintain:
 - (a) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; **[Reference: § 63.1517(b)(2)(i)].**
 - (b) Records of annual afterburner inspections; **[Reference: § 63.1517(b)(2)(ii)].**
 - (c) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan; **[Reference: § 63.1517(b)(16)].** and

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- (d) OM&M plan. **[Reference: § 63.1517(b)(16)(ii)].**
- (8) For any failure to meet an applicable standard, the Permittee, owner or operator must maintain the following records:
- (i) Records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, end date and time of the event, cause of the deviation or exceedance and corrective action taken; and
 - (ii) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **[Reference: § 63.1517(b)(18)(i)&(ii)].**
- (9) For the Permittee, owner or operator that chooses to change furnace operating modes, the following records must be maintained:
- (i) The date and time of each change in furnace operating mode; and
 - (ii) The nature of the change in operating mode (for example, group 1 controlled furnace processing other than clean charge to group 2). **[Reference: § 63.1517(b)(20)(i)&(ii)].**
- (10) The Permittee shall maintain the following records necessary to support the emissions certification for at least five (5) years and make them available to the Department upon request:
- (a) An explanation of the methods used to quantify the emissions including the operating schedules and production data that were used to determine emissions;
 - (b) The readings of the continuous temperature monitors of the flue gases at the outlet of the afterburner as recorded on the temperature charts;
 - (c) Amounts, types, and analyses of all fuels used;

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- (d) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:
 - (i) Significant maintenance performed,
 - (ii) Malfunctions and downtime, and
 - (iii) Episodes of reduced efficiency of all the equipment;
 - (e) Emissions data, equipment calibration, and equipment malfunction information required by the permit for either emissions calculation or compliance determination;
 - (f) Limitations on source operation or any work practice standards that significantly affect emissions; and
 - (g) Other relevant information as required by the Department.
- (11) Records of material processed through the furnace shall be kept on site for at least five (5) years and made available to the Department upon request.
- (12) The Permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (13) The Permittee shall submit notifications of compliance status as required in paragraphs (b) of Section 63.1515.
- (14) The Permittee shall submit to the Department by April 1 of each year during the term of this permit a certification of emissions for the previous calendar year. The certifications shall be prepared in accordance with the applicable requirements adopted under COMAR 26.11.02.19D.
- (a) Certifications of emissions shall be submitted on forms obtained from the Department.
 - (b) A certification of emissions shall include mass emissions rates for each regulated pollutant and the total mass emissions rate for all regulated pollutants for each of the Permittee's registered sources of emissions.

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- (c) The person responsible for a certification of emissions shall certify the submittal to the Department in the following manner:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
- (15) By April 1 of each year during the term of this permit, the Permittee shall certify in writing to the Department the results of air toxics analysis for the previous calendar year. The air toxics analysis shall include either:
- (a) A statement that the previously submitted toxics compliance demonstrations remain valid; or
 - (b) A new toxics compliance demonstration developed in accordance with the requirements set forth under COMAR 26.11.15, if the Permittee has made changes to its operations that make the last submitted compliance demonstration invalid.
- (16) The Permittee shall report, in accordance with requirements under COMAR 26.11.01.07, occurrences of excess emissions to the Compliance Program of the Air and Radiation Administration.
- (17) All notifications and reports required by this permit shall be submitted to the Compliance Program via the link: mdeair.ECR@maryland.gov or to the:

Maryland Department of the Environment
Air and Radiation Administration
1800 Washington Blvd, Suite 715
Baltimore, MD 21230

and

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United States Environmental Protection Agency
Region III, Enforcement & Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

PART G – TEMPORARY PERMIT-TO-OPERATE CONDITIONS

- (1) This Permit-to-Construct shall also serve as a temporary Permit-to-Operate and confers upon the Permittee authorization to operate the furnaces for a start-up period of 180 days after the initial start-up. This period shall be used to demonstrate compliance with all applicable air quality regulation and permit to construct conditions. If the Permittee is unable to complete the compliance demonstration during this period, the Permittee shall submit to the Department a written request for an extension of the temporary permit to operate. The request shall include a completed permit to operate application.
- (2) The Permittee shall notify the Department in writing of the anticipated date of initial start-up of the facility not less than 30 days prior to such date.
- (3) The Permittee shall notify the Department in writing of the actual date of start-up of the facility no later than 15 days after the initial start-up date.
- (4) The Permittee shall submit to the Department, an application for a State permit to operate no later than 60 days prior to expiration of the effective period of the temporary permit-to-operate.
- (5) During the effective period of the temporary permit-to-operate the Permittee shall operate the furnaces and associated installations as required by the applicable terms and conditions of this Permit-to-Construct, and in accordance with operating procedures and recommendations provided by equipment vendor and the OM & M Plan.
- (6) Operating in accordance with the terms and conditions expressed in this permit neither authorizes the Permittee to violate any rules or regulations, nor create a nuisance or air pollution.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION

SUPPLEMENTAL INFORMATION REFERENCES

The Code of Maryland Regulations (COMAR) is searchable by COMAR citation at the following Division of State Documents website:

<http://www.dsd.state.md.us/COMAR/ComarHome.html>

The Code of Federal Regulations (CFR), including New Source Performance Standards (NSPS) at 40 CFR, Part 60 and National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR, Parts 61 and 63, is searchable by CFR citation at the following U.S. Government Publishing Office website:

<http://www.ecfr.gov>

Information on National Ambient Air Quality Standards (NAAQS) is located at the following U.S. Environmental Protection Agency (EPA) website:

<https://www.epa.gov/criteria-air-pollutants/naaqs-table>

Information on Maryland's Ambient Air Monitoring Program is located at the following Maryland Department of the Environment website:

<http://mde.maryland.gov/programs/Air/AirQualityMonitoring/Pages/index.aspx>

Information on the U.S. EPA's Screen3 computer model and other EPA-approved air dispersion models is located at the following U.S. EPA website:

http://www.epa.gov/scram001/dispersion_screening.htm

Information on the U.S. EPA TANKS Emission Estimation Software is located at the following U.S. EPA website:

<http://www.epa.gov/ttn/chief/software/tanks/index.html>

Information on the U.S. EPA Emission Factors and AP-42 is located at the following U.S. EPA website:

<https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors>

MARYLAND DEPARTMENT OF THE ENVIRONMENT

**AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT**

**SUPPLEMENT 2 TO
DOCKET #19-22**

Applicant: Complete Recycling Group, LLC

Proposal: Installation of two (2) MAX4000SP secondary aluminum sweat furnaces, US
Furnaces each rated at 5 MMBtu/hr and equipped with an afterburner

Location: 1500 W. Pulaski Hwy Elkton MD 21921

ITEM

DESCRIPTION

1

Notice of Tentative Determination, Public Hearing,
and Opportunity to Submit Written Comments

**DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**NOTICE OF TENTATIVE DETERMINATION, PUBLIC HEARING, AND
OPPORTUNITY TO SUBMIT WRITTEN COMMENTS**

FIRST NOTICE

The Department of the Environment, Air and Radiation Administration (ARA) has completed its review of an application for a Permit to Construct submitted by Complete Recycling Group, LLC on October 10, 2022 for the installation of two (2) MAX 4000SP secondary aluminum sweat furnaces, each rated at 5 MMBtu/hr heat input and equipped with an afterburner. The proposed furnaces will be located at 1500 W. Pulaski Highway in Elkton, Cecil County, Maryland 21921.

The issuance of the Permit-to-Construct for this facility will be the subject of a Virtual Public Hearing to be held on October 24, 2023 at 6:30 p.m.

To attend the hearing, please register using the following link no later than October 23, 2023:

<https://forms.gle/XqTGHY5X5U2wTm8B8>

Registered attendees will receive instructions on how to join the virtual meeting using a computer and internet connection or telephone on the day of the hearing.

Pursuant to Section 1-604, of the Environment Article, Annotated Code of Maryland, the Department has made a tentative determination that the Permit to Construct can be issued and is now ready to receive public comment on the application. Copies of the Department's tentative determination, the application, the draft permit to construct with conditions, and other supporting documents are available for public inspection on the Department's website. Look for Docket #19-22 at the following link:

<https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx>

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located using the Maryland EJ mapping tool. The EJ Score, expressed as a statewide percentile, was shown to be 45.43%, which the Department has verified. This score considers three demographic indicators – minority population above 50%, poverty rate above 25% and limited English proficiency above 15%. The Department's review of the environmental and socioeconomic indicators contributing to that EJ score is included in the tentative determination that is available for public inspection.

Persons who wish to make a statement concerning this application at the hearing are requested to provide the Department with a copy of their statement. In lieu of oral statements at the hearing, written comments may be submitted at the time of the hearing or to the Department no later than 30 days from the date of this notice or within 5 days after the hearing, whichever is later.

Interested persons may request an extension to the public comment period. The extension request must be submitted in writing and must be received by the Department no later than 30 days from the date of this notice or within 5 days after the hearing, whichever is later. The public comment period may only be extended one time for a 60-day period.

All requests for an extension to the public comment period and all written comments should be directed to the attention of Ms. Shannon Heafey by email to shannon.heafey@maryland.gov or by mail to the Air Quality Permits Program, Air and Radiation Administration, 1800 Washington Boulevard, Baltimore, Maryland 21230.

The Department will provide an interpreter for deaf and hearing-impaired persons provided that a request is made for such service at least ten (10) days prior to the hearing.

Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director
Air and Radiation Administration