

February 24, 2023

Mr. Benazir Khan
Division of Materials Management
NYS Department of Environmental Conservation
SUNY @ Stony Brook
50 Circle Road
Stony Brook, NY 11790

RE: Solid Waste Incinerator Annual Report for 2022
Hempstead Resource Recovery Facility

Dear Mr. Khan:

Enclosed please find the Solid Waste Incinerator Annual Report for the Hempstead Resource Recovery Facility for calendar year 2022. During 2022, we processed all acceptable waste delivered to the facility. Untreatable wastes, such as bulky items, were separated from the incoming waste stream, noted on the vehicle scale ticket (if possible), and delivered to the Town of Brookhaven's Municipal Landfill in Yaphank, New York for further separation and proper disposal. These items constitute the nonprocessable waste removed from the facility. The attached Truck Inspection Log (Attachment 1) details the nonprocessable waste delivered on a per truck basis for 2022. Note that there are additional bulky items that are pulled from the waste stream that are not accounted for in Attachment 1 because they are found during waste processing and cannot be associated with a specific delivery. Also note, due to safety measures in place to mitigate COVID-19 risk of infection currently scale tickets are not collected. Thus Attachment 1 does not list truck inspection details for the year 2022.

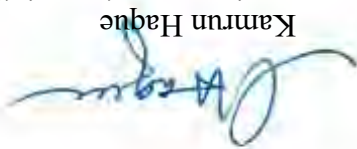
In addition, there were 16 incoming vehicles that set off the radiation detector at the scalehouse in 2022. On each occasion, the vehicle was either returned to the generator or hauler (residential waste), or was parked on site and allowed to naturally decay before being processed at the facility (commercial waste). Covanta personnel also notified the Department of each occurrence. A more detailed summary of the radioactive loads is provided as Attachment 2.

Also enclosed is a summary report of the annual facility inspection required by 6 NYCRR Part 360-3.3(h)(6) (Attachment 3) as well as updated financial assurance document as per section 12 of the report (Attachment 4).

Finally, turbine steam consumption in the enclosed report is a calculated figure since it is not recorded. It is assumed that all steam produced goes to the turbine unless the turbine is off-line for one hour or more. In 2022, the turbine was off-line for about 47.5 hours for maintenance and testing.

If you have any questions or require additional information, feel free to contact me at (516) 683-5438 or khaque@covanta.com.

Sincerely,



Kamrun Haque
Environmental Specialist

cc: NYSDEC Central Office (via e-mail)
F. Gay, NYSDEC – Region I (via e-mail)



COMBUSTION AND THERMAL TREATMENT FACILITY ANNUAL / QUARTERLY REPORT

Submit the Annual Report no later than March 1, 2023.

A. ___ This annual report is for the year of operation from January 01, 2022 to December 31, 2022

B. Quarterly Report for: ___ Quarter 1 ___ Quarter 2 ___ Quarter 3 ___ Quarter 4

SECTION 1 – FACILITY INFORMATION

FACILITY INFORMATION			
FACILITY NAME:			
FACILITY LOCATION ADDRESS:	FACILITY CITY:	STATE:	ZIP CODE:
FACILITY TOWN:	FACILITY COUNTY:	FACILITY PHONE NUMBER:	
FACILITY NYS PLANNING UNIT: <small>(A list of NYS Planning Units can be found at the end of this report).</small>			NYSDEC REGION #:
360 PERMIT #:	DATE ISSUED:	DATE EXPIRES:	NYS DEC ACTIVITY CODE:
FACILITY CONTACT:	<input type="checkbox"/> public <input type="checkbox"/> private	CONTACT PHONE NUMBER:	CONTACT FAX NUMBER:
CONTACT EMAIL ADDRESS:			
OWNER INFORMATION			
OWNER NAME:	OWNER PHONE NUMBER:	OWNER FAX NUMBER:	
OWNER ADDRESS:	OWNER CITY:	STATE:	ZIP CODE:
OWNER CONTACT:	OWNER CONTACT EMAIL ADDRESS:		
OPERATOR INFORMATION			
OPERATOR NAME:	<input type="checkbox"/> same as owner	<input type="checkbox"/> public <input type="checkbox"/> private	
PREFERENCES			
Preferred address to receive correspondence: <input type="checkbox"/> Facility location address <input type="checkbox"/> Owner address <input type="checkbox"/> Other (provide):			
Preferred email address: <input type="checkbox"/> Facility Contact <input type="checkbox"/> Owner Contact <input type="checkbox"/> Other (provide):			
Preferred individual to receive correspondence: <input type="checkbox"/> Facility Contact <input type="checkbox"/> Owner Contact <input type="checkbox"/> Other (provide):			

Did you operate in 2022? Yes; Complete this form.

No; Complete and submit Sections 1 and 16. If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, also complete the "Inactive Solid Waste Management Facility or Activity Notification Form" located at: <http://www.dec.ny.gov/chemical/52706.html> .

SECTION 2 - SOLID WASTE RECEIVED/PROCESSED

Provide the tonnages of solid waste received. DO NOT REPORT IN CUBIC YARDS!

Specify the methods used to measure the quantities received and the percentages measured by each method

_____% Scale Weight _____% Estimated
 _____% Truck Count _____% Other (Specify: _____)

Type of Solid Waste	January (tons)	February (tons)	March (tons)	April (tons)	May (tons)	June (tons)	July (tons)
Construction & Demolition Debris							
Industrial Waste (Including Industrial Process Sludges)							
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)							
Sewage Treatment Plant Sludge							
Treated Regulated Medical Waste							
Emergency Authorization Waste (Storm Debris)							
Other (specify)							
Total Tons Received							
Total Tons Processed							

SECTION 2 - SOLID WASTE RECEIVED/PROCESSED

(continued)

Type of Solid Waste	Tip Fee (\$/ton)	August (tons)	September (tons)	October (tons)	November (tons)	December (tons)	Total Year (tons)	Daily Avg. (tons)
Construction & Demolition Debris								
Industrial Waste (Including Industrial Process Sludges)								
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)								
Sewage Treatment Plant Sludge								
Treated Regulated Medical Waste								
Emergency Authorization Waste (Storm Debris)								
Other (specify)								
Total Tons Received								
Total Tons Processed								

SECTION 3 – SERVICE AREA OF SOLID WASTE RECEIVED

Please identify where the waste is coming from. The total tons received reported below should equal the total tons received in Section 2 (Solid Waste Received/Processed). **DO NOT REPORT IN CUBIC YARDS!**

- If the waste **WAS** received from another solid waste management facility, please write in the name *and address* of the facility along with the appropriate state, county and planning unit/municipality.
- If the waste **WAS NOT** received from another solid waste management facility, please write in “**Direct Haul**” along with the appropriate state, county and planning unit/municipality where the waste was generated.

Specify transport method and percentages of total waste transported by each:

_____ % Road _____ % Rail _____ % Water _____ % Other (specify: _____)

Explain which waste types and service areas below are included in these transport methods _____

SERVICE AREA OF SOLID WASTE RECEIVED					
TYPE OF SOLID WASTE	SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR “Direct Haul”	SERVICE AREA STATE OR COUNTRY	SERVICE AREA COUNTY OR PROVINCE	SERVICE AREA NYS PLANNING UNIT <small>(See Attached List of NYS Planning Units)</small>	TONS RECEIVED
Construction & Demolition Debris					
Industrial Waste (Including Industrial Process Sludges)					

SERVICE AREA OF SOLID WASTE RECEIVED					
TYPE OF SOLID WASTE	SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul"	SERVICE AREA STATE OR COUNTRY	SERVICE AREA COUNTY OR PROVINCE	SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECEIVED
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)	Town of Hempstead	NY	Nassau	Hempstead	427,029.09
	Village of Rockville Center	NY	Nassau	Hempstead	12,681.47
	Village of Garden City	NY	Nassau	Hempstead	13,645.28
	Village of Lynbrook Transfer Station	NY	Nassau	Hempstead	8,877.43
	Village of Freeport	NY	Suffolk	Freeport	17,693.27
	North Hempstead	NY	Nassau	Hempstead	112,372.07
	Brookhaven Transfer Station, Yaphank	NY	Suffolk	Brookhaven	228,024.94
	Direct Haul (Commercial)	NY	Nassau / NYC	Various	112,831.88
	Regal Transfer Station	NY	Bronx/Queens	NYC	8,705.00
	Winters Brothers Transfer Station	NY	Nassau/Suffolk	Nassau/Suffolk	15,805.53
	Jamaica Ash Transfer Station	NY	Nassau	Hempstead	8,039.21
	Omni	NY	NYC	NYC	3,689.68
	Metropolitan Paper	NY	Brooklyn	NYC	277.00
	National Waste	NY	NYC	NYC	7,723.42
	Covanta Fulton Street	NJ	Patterson	NA	205.99
	Covanta River Street	NJ	Totowa	NA	208.71
	Covanta MacArthur	NY	Suffolk	Suffolk	5,863.72

SERVICE AREA OF SOLID WASTE RECEIVED

TYPE OF SOLID WASTE	SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul"	SERVICE AREA STATE OR COUNTRY	SERVICE AREA COUNTY OR PROVINCE	SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECEIVED
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)					
Sewage Treatment Plant Sludge					
Treated Regulated Medical Waste (TRMW)*					
Emergency Authorization Waste (Storm Debris)					
Other (specify)					
TOTAL RECEIVED (tons): _____					

Part 360 Permit Limit (tpy) _____

Permit Limit based on Steaming rate (tpy) _____

* List generators that provide you Certificates of Treatment forms and quantities of TRMW from each _____

SECTION 4 – PLANT PERFORMANCE LOG

Complete the following Annual/Quarterly Plant Performance Log:

PLANT PERFORMANCE LOG ANNUAL/QUARTERLY SUMMARY

Processible Waste Bypassed (Tons): _____

Untreatable Waste Bypassed (Tons): _____

Incinerator #1 Operations (Hours): _____

Incinerator #2 Operations (Hours): _____

Incinerator #3 Operations (Hours): _____

Incinerator #4 Operations (Hours): _____

Steam Generated (Klbs): _____

Steam Sold (Klbs): _____

Turbine Operation (Hours): _____

Turbine Steam Consumption (Klbs): _____

Power Generation (MWH): _____

Purchased Power (MWH): _____

Annual Electricity Sold to User (MWH): _____

Ash Residue (Tons): _____

Volatile Matter in Ash (%): _____

Ferrous Metal Recovered (Tons): _____

Ferrous Metal Sold (Tons): _____

Non-ferrous Metal Recovered (Tons): _____

Non-ferrous Metal Sold (Tons) _____

Water Consumption (Kgal): _____

<u>Facility's Size</u>	<u>Operations</u>
Number of Units Installed: _____	Facility is in production: _____
Nominal rated capacity of each unit: _____	Hours per day: _____
	Days per week: _____
	Days per year: _____

Hours of Downtime	Unit #1	Unit #2	Unit #3	Unit #4	Total
Scheduled Maintenance	_____	_____	_____	_____	_____
Unscheduled Maintenance	_____	_____	_____	_____	_____
Total	_____	_____	_____	_____	_____
Availability (%) Reprinted	_____	_____	_____	_____	_____

SECTION 5 – TRANSFER OR DISPOSAL DESTINATION

Identify the transfer or disposal destination of waste removed by indicating the name of the transfer or disposal facility, the type of solid waste transferred, the corresponding State/Country, the County/Province, the NYS Planning Unit of the transfer or disposal destination facility, and the amount transferred or disposed or used as alternative operating cover (AOC) at each destination. This only includes waste sent off-site for disposal, not metal recovered reported in Section 6. **Refer to the list of NYS Planning Units that can be found at the end of this report. DO NOT REPORT IN CUBIC YARDS!**

Transport (specify percentages):

_____ % Road _____ % Rail
 _____ % Water _____ % Other (specify: _____)

Explain which waste types and service areas below are included in these transport methods _____

TRANSFER OR DISPOSAL DESTINATION								
TYPE OF SOLID WASTE	SOLID WASTE MANAGEMENT FACILITY TO WHICH IT WAS SENT <i>(Name & Address)</i>	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT <i>(See Attached List of NYS Planning Units)</i>	AMOUNT TO TRANSFER DESTINATION (TONS)	AMOUNT TO DISPOSAL DESTINATION (TONS)	AMOUNT USED AS AOC (TONS)	TOTAL YEAR (TONS)
Ash (MSW Energy Recovery)								
Bypass								
Emergency Authorization Waste (Storm Debris)								
Other (specify)								
TOTAL SENT (tons): _____								

SECTION 6 – METAL RECOVERED

Provide the tonnages of metal recovered from the mixed solid waste stream. Identify the location or solid waste management facility to which the recovered metal was sent from your facility, by indicating the name of the facility, the type of metal recovered, the corresponding State/Country, the County/Province, the NYS Planning Unit, and the amount recovered. **Refer to the list of NYS Planning Units that can be found at the end of this report.** DO NOT REPORT IN CUBIC YARDS!

Transport (specify percentages):

_____% Road _____% Rail
 _____% Water _____% Other (specify: _____)

Explain which waste types and service areas are in these transport methods _____

METAL RECOVERED FOR REUSE/RECYCLING					
METAL RECOVERED	DESTINATION <small>(Name & Address)</small>	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT <small>(See Attached List of NYS Planning Units)</small>	TONS RECOVERED <small>(out of facility)</small>
Ferrous Metal					
Non-ferrous Metal					
Other Metal <small>(specify)</small>					
TOTAL METAL RECOVERED (tons): _____					

SECTION 7 - FIRE AND SAFETY INCIDENTS

Provide a summary of the time, date, and details of any incidents which required the implementation of the contingency plan.

SECTION 8 - BUDGET

Provide an annual income and expense statement providing details on the major accounting items and operating and maintenance costs.

Covanta Hempstead Co. elects to not provide annual income, budgets, maintenance costs, tipping fees etc. since it is considered business confidential. Publication of this information could compromise Covanta Hempstead's competitiveness

SECTION 9 - INSPECTIONS

Provide a copy of the annual facility inspection report conducted and stamped by a professional engineer licensed to practice in New York State.

SECTION 10 - GOALS

Provide a narrative of the goals and objectives to be attained in the next future calendar year and any major repairs or renovations proposed.

Covanta Hempstead's goal is to continue to operate the facility in a safe, efficient, and environmentally sound manner- converting waste to non-hazardous ash residue and recyclable metal (both ferrous and non-ferrous) while generating electricity for use and sale. Through technology and research the facility continuously improving metals recovery operations, as well as determining how our ash residue can be recycled.

SECTION 11 – UNAUTHORIZED SOLID WASTE

Has unauthorized solid waste been received at the facility during the reporting period?

Yes No If yes, give information below for each incident (attach additional sheets if necessary):

Date Received	Type Received	Date Disposed	Disposal Method & Location

Radiation Monitoring

Does your facility use a fixed radiation monitor? ____ Yes ____ No

Identify Manufacturer _____ and Model _____ of fixed unit.

Does your facility use a portable radiation monitor? ____ Yes ____ No

Identify Manufacturer _____ and Model _____ of fixed unit.

If the radiation monitors been triggered give information below for each incident:

Incident Number	Received		Hauler	Origin	Truck Number	Reading	Disposal Status	Removed	
	Date	Time						Date	Time

SECTION 12 - COST ESTIMATES AND FINANCIAL ASSURANCE DOCUMENTS

Are there required cost estimates and financial assurance documents for closure?

Yes No If yes, attach additional sheets reflecting annual adjustments for inflation and any changes to the Closure Plan?

[SEE ATTACHMENT 4](#)

SECTION 13 – PROBLEMS

Were any problems encountered during the reporting period (e.g., specific occurrences which have led to changes in facility procedures)?

Yes No If yes, attach additional sheets identifying each problem and the methods for resolution of the problem.

SECTION 14 – CHANGES

Were there any changes from approved reports, plans, specifications, and permit conditions?

Yes No If yes, attach additional sheets identifying changes with a justification for each change.

SECTION 15 - PERMIT/CONSENT ORDER REPORTING REQUIREMENTS

Are there any additional permit/consent order reporting requirements not covered by the previous sections of this form?

Yes No If yes, attach additional sheets identifying the reporting requirements with their respective responses.

SECTION 16 - SIGNATURE AND DATE BY OWNER OR OPERATOR

Owner or Operator must sign, date and submit one completed form to the appropriate Regional Office (See attachment for Regional Office addresses, email addresses and Materials Management Contacts.)

The Owner or Operator must also submit one copy by email, fax or mail to:

**New York State Department of Environmental Conservation
Division of Materials Management
Bureau of Solid Waste Management
625 Broadway
Albany, New York 12233-7260
Fax 518-402-9041
Email address: SWMFannualreport@dec.ny.gov**

I certify, under penalty of law, that the data and other information identified in this report have been prepared under my direction and supervision in compliance with a system designed to ensure that qualified personnel properly and accurately gather and evaluate this information. I am aware that any false statement I make in such report is punishable pursuant to section 71-2703(2) of the Environmental Conservation Law and section 210.45 of the Penal Law.


Signature

2/23/23
Date

Edward Sandkuhl
Name (Print or Type)

Facility Manager
Title (Print or Type)

ESandkuhl@covanta.com
Email (Print or Type)

600 Merchants Concourse
Address

Westbury
City

NY 11590
State and Zip

(516) 683-5400
Phone Number

ATTACHMENTS: YES NO
(Please check appropriate line)

ATTACHEMENT 1

**HEMPSTEAD RESOURCE RECOVERY FACILITY
TRUCK INSPECTION LOG
2022**

DATE	COMPANY	VEHICLE	TICKET #	AP	MP	L	WG	MISC	T	CD	F	M/B
	<p>Due to COVID-19 and risk of infection the facility stopped collecting tickets however the program continues to run and our tipping floor staff are continuing to identify and remove these items deligently.</p>											

- AP Auto Products (including tires)
- MP Metal Products
- L Landscaping
- WG White Goods
- MISC Miscellaneous Non-Metal Bulky Items
- T Tanks
- CD Construction and Demolition Debris
- F Furniture
- M/B Mattress/Boxspring

Attachment 2

Hempstead Resource Recovery Facility - 2022 Radioactive Load Summary								
Number	Received		Hauler	Origin	Reading (kcps)	Disposal	Removal	
	Date	Time					Date	Time (est.)
1	1/27/2022	8:46	Town of Hempstead	TOH Merrick TS	23.4	Removed from site after driver refused to leave truck for decay, returned to original facility.	1/27/2022	8:56
2	2/7/2022	10:00	Town of Hempstead	TOH Merrick TS	24.4	Removed from site after driver refused to leave truck for decay, returned to original facility.	2/7/2022	10:10
3	3/4/2022	8:30	District 7	Oceanside	27.2	Removed from site after driver refused to leave truck for decay, returned to original facility.	3/4/2022	8:40
4	4/6/2022	3:50	Classic Coating	NYC	28.8	Removed from site after driver refused to leave truck for decay, returned to original facility.	4/6/2022	4:00
5	4/22/2022	2:16	Winter Brothers	Hempstead	10.1	Removed from site after driver refused to leave truck for decay, returned to original facility.	4/22/2022	2:26
6	5/3/2022	10:48	Village of Rockville Center	Rockville Center	15.2	Removed from site after driver refused to leave truck for decay, returned to original facility.	5/3/2022	10:58
7	5/6/2022	8:32	District 6	Hempstead	21.1	Removed from site after driver refused to leave truck for decay, returned to original facility.	5/6/2022	8:42
8	5/28/2022	3:21	Jamaica Ash	Oceanside	10.3	Removed from site after driver refused to leave truck for decay, returned to original facility.	5/28/2022	3:31
9	7/21/2022	12:25	Westbury Paper	TOH Merrick TS	12.4	Removed from site after driver refused to leave truck for decay, returned to original facility.	7/21/2022	12:35
10	7/21/2022	9:13	Town of Hempstead	TOH District 3	33.7	Removed from site after driver refused to leave truck for decay, returned to original facility.	7/21/2022	9:23
11	7/22/2022	10:59	Westbury Paper	TOH Merrick TS	11.0	Removed from site after driver refused to leave truck for decay, returned to original facility.	7/22/2022	11:10
12	8/9/2022	10:45	Town of Hempstead	TOH Sanitation District 2	15.8	Removed from site after driver refused to leave truck for decay, returned to original facility.	8/9/2022	10:55
13	8/10/2022	8:14	Town of Hempstead	TOH Sanitation District 2	12.4	Removed from site after driver refused to leave truck for decay, returned to original facility.	8/10/2022	8:24
14	10/5/2022	3:18	Jamaica Ash	Nassau Medical Center Hospital	10.2	Removed from site after driver refused to leave truck for decay, returned to original facility.	10/5/2022	3:25
15	10/29/2022	10:00	Winter Brothers	Residencial	13.3	Removed from site after driver refused to leave truck for decay, returned to original facility.	10/29/2022	10:05
16	11/29/2022	7:58	TOH	TOH District 3	13.7	Removed from site after driver refused to leave truck for decay, returned to original facility.	11/29/2022	8:05

ATTACHMENT 3

2022 ANNUAL SOLID WASTE REPORT
HEMPSTEAD RESOURCE RECOVERY FACILITY

2022 ANNUAL FACILITY INSPECTION REPORT

**HEMPSTEAD RESOURCE RECOVERY FACILITY
2022 ANNUAL FACILITY INSPECTION REPORT**

By Kenneth E. Armellino, P.E. - #075733

February 24, 2023

Signe *Kenneth E. Armellino* Date: 2/24/2023



2/24/23 Rev. 1

THIS PAGE LEFT BLANK

1 INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC), Division of Solid Waste, 6 NYCRR Part 360 Solid Waste Management Facilities, Subpart 360-3, SOLID WASTE INCINERATORS OR REFUSE-DERIVED FUEL PROCESSING FACILITIES OR SOLID WASTE PYROLYSIS UNITS, paragraph 360-3.3(h)(6) states:

(6) At least annually, a general facility inspection must be undertaken to determine the operating condition of the safety, emergency, security, process, and control equipment. This annual inspection must be performed under the direction of an individual licensed to practice engineering in the State of New York. This individual must prepare a summary report of the inspection which must be submitted to the department's central office and the office of the department administering the region within which the facility is located, as part of the annual facility report (see paragraph 360-3.4(f)(3) of this Part).

This requirement is part of the Solid Waste Permit to Operate #1-2820-01727/00031 (exp. 12/1/20) for the Hempstead Resource Recovery Facility, located at 600 Merchants Concourse, Westbury, NY 11590, owned and operated by Covanta Hempstead, Inc. As per the Administrative Procedures Act since a timely renewal application was submitted and deemed complete with comments received on 6/1/2020 the facility is allowed to continue operating. Permit status remains same as the previous year as no update has been received from the NYSDEC. This report covers the operation and inspection for the year 2021. The inspection and report were carried out by Kenneth E. Armellino, a licensed Professional Engineer in the State of New York (# 075733) and Director, Environmental Science and Community Affairs for Covanta, Inc. located at 445 South St., Morristown, NJ 07960. The site inspection and conclusions are based on a review of compliance with company technical standards, as well as a final inspection and document review on December 20, 2022. The site inspection included the assistance of Kamrun Haque, Environmental Specialist. Information was provided by various other employees as necessary.

2 OBJECTIVE

The objective of this summary report is to document the annual general inspection to determine the operating condition of the specified plant equipment. This summary report is grouped into the following four sections:

1. Safety and emergency equipment.
2. Security equipment.

3. Process & control equipment, i.e. refuse boilers/stokers, air pollution control equipment, turbine and residue and auxiliary systems.
4. Preventive maintenance management system.

3 FINDINGS

The operating condition of the safety, emergency, security, process and control equipment at the Covanta Hempstead facility, as summarized in the following paragraphs, was found to be acceptable.

3.1 Safety & Emergency Equipment

3.1.1 Fire Protection

All observed fire protection equipment (alarms, pumps, valves, extinguishers, etc.) was found to be in proper alignment, in acceptable condition and undergoing quarterly and annual inspections and tests by certified contractors and insurance inspectors, or site personnel, as required. Most fire extinguisher stations throughout the plant are protected by removable covers. The annual Fire Pump was tested by Simplex Grinnell in 2022. The refuse pit is already tied into the existing electric fire pump. Upgraded fire protection systems for the tipping floor and refuse pit have been installed. This includes new monitoring systems in the control room for the tipping floor, and remote water cannons for the east and west cranes. . Main fire alarm control panel was upgraded this year. Upgrades to the turbine generator sprinkler system were performed in 2019.

3.1.2 Safety Valves

The boiler steam safety valves observed were found to be in acceptable condition. Documentation indicating annual maintenance and in-situ testing by facility personnel and certified contractors is up to date. Balance of plant safety valves also appear to be properly maintained. Deaerator safety valves were tested in place by a contractor. All were found to be in compliance with company technical standards and generally accepted industry practices.

3.1.3 Self-Contained Breathing Apparatus

Ten minute escape hoods are stored in several areas throughout the plant site. Facility safety personnel inspect the devices on a regular basis as part of a PM work order.

3.1.4 Personal Protective Equipment

Employees and contractors use hard hats, steel toe boots, uniforms, and hearing and eye protection. Workers, as required, were observed to use appropriate breathing protection/respirators. Additional personal protective equipment, when required, is available for specific tasks. All areas inspected were neat and clean, i.e. free from tripping or slipping hazards. Overall housekeeping is above average.

3.1.5 Eyewash & Shower Stations

Emergency eyewash and shower stations, randomly inspected, were found to be in satisfactory condition. Facility personnel on a regular basis inspect emergency eyewash/shower station integrity. Portable eyewash stations have water changed/treated as required.

3.1.6 Lightning Protection

The lightning protection system appeared to be in fairly good condition with on-going maintenance in progress. The annual inspection was conducted in 2022 and routine repair activities are performed by in-house technician staff. The facility is continually assessing the adequacy of the lightning protection systems and making upgrades as determined necessary.

3.1.7 Radiation Detection

Radiation detection monitors are installed at the three inbound refuse scales are operational. The facility has three new monitors (Ludlum 375-P-100) installed in 2017 and have up to date calibrations. The facility also has two (2) handheld monitors which had a current calibration at the time of inspection. These devices are used to determine radioactivity levels and to monitor radioactive loads when parked on site for decay; the scale detectors are used to determine whether a load is acceptable for disposal. A fourth scale radiation detector is installed on outbound Scale 5 and is in operation and calibrated.

3.2 Security Equipment

3.2.1 Fencing

The facility perimeter fencing was observed to be free from breaks and in acceptable condition at all locations.

3.2.2 Entrance Gates

The main entrance and exit gates are operational. The truck/visitor gate is manned 24/7 from Sunday 10:00 a.m. to Saturday 6 p.m. by security personnel. The truck gate is manually closed and locked during non-waste delivery hours. The facility is equipped with a security system with a keycard system for access to the site as well as various areas within the facility. An Administration Building Security System is in place with door monitoring, buzzer entry and electronic lock systems. A sign with specified regulatory wording is installed at the Facility entrance.

3.2.3 Security Cameras

The facility perimeter as well as several exterior and interior areas is monitored 24 hours a day, 7 days a week by a digital camera system that is capable of recording more than a weeks worth of images. This system can be accessed by authorized facility personnel via the internet or the facility's internal network. Display monitors for the system are in the facility control room and are observed regularly by the control

room operator. A camera was added to the refuse pit location to observe pit management activities and waste feeding. Upgrades to the fire protection system in 2020 resulted in the addition of multiple security cameras as well.

3.3 Process & Control Equipment

3.3.1 Boiler/Stoker

During the inspection, all 3 boilers were in service. Comments on operating statistics are based on full year data through December 2022.

3.3.1.1 Boiler/Stoker Performance

3.3.1.1.1 Boiler Heat Output/Losses

Based upon annual operating data and current operating conditions, the three units continue to generate steam within permitted levels. The facility is operating at steam conditions which approximate design levels. Review of economizer exit flue gas temperatures and boiler draft losses indicate an efficient, acceptable boiler operating condition. Observed residue quality was good without excessive unburned material.

3.3.1.1.2 Availability

The annual boiler operating availability for 2022 was 95.5%. This availability level is indicative of the facility's excellent maintenance and operations practices.

3.3.1.1.3 Refuse Processing

Refuse processed for the entire year of 2022 was 995,324 tons. The plant processed all the acceptable waste that was delivered. Rejected waste consisted of 382 tons of bulkies.

3.3.1.1.4 Energy Recovery

The annual plant average gross energy recovery ratio in 2022 was 654.9 kWh/ton of refuse processed. In total the facility's gross generation was 651,845 megawatts in 2022.

3.3.1.2 Boiler/Stoker Critical Control Loops

Critical control functions of the boiler, furnace draft control and boiler drum level control, were reviewed. Both of these parameters were observed to be controlled automatically with stable results. All 3 boilers were observed to be operating in auto/cascade mode.

Note that instrument inputs associated with critical control loops and essential operating data are calibrated regularly. Informative, redundant and local instrumentation are calibrated only on an as-needed basis.

3.3.1.3 Boiler/Stoker Mechanical

3.3.1.3.1 Boiler Tube Failures

The plant is primarily managing tube corrosion by replacing pressure parts as dictated by tube wastage and UT surveys. Outage Condition Assessment Reports developed by the Facility and Regional Engineering staff are an excellent source for reviewing detailed boiler repair scopes and developing recommendations for repairs. Based on these reports, the preventative programs in place, and the facility's overall availability, boiler tube failures appear to satisfactorily managed and addressed.

3.3.1.3.2 Fans & Dampers

All ID, primary and secondary combustion air fans were operating normally with no obvious noise or excessive vibration alarms. Fan/motor vibration levels are monitored regularly by facility operators on rounds, and during preventive maintenance. Combustion air preheaters at the facility allow the facility to deal better with variable waste conditions, as well as reduce the need to use auxiliary fuel. All 3 fans are equipped with a variable frequency drive (VFD).

3.3.1.3.3 Boiler/Grates Miscellaneous

1. Feed rams and grate drives were observed to be operating properly.
2. Boiler areas were generally clean and free of debris.
3. Lighting and labels remain excellent throughout the boiler building. Lighting improvement efforts continued during 2022 to gradually change all lighting to 100% LED.
4. Soot blowers continue to operate normally and undergo routine maintenance.
5. Roller grate drives utilize variable frequency drives to allow for better bed control.
6. Currently all five new cells (Cells #0 to #4) are in service. The fourth cell from the previous set was demolished and reconstructed as cell 5, during the 1st quarter of 2022.
7. Refuse scales #1 and #2 were replaced in 2019 with upgrades to better withstand the conditions in which they operate.

3.3.2 Turbine

No oil leaks were observed and vibration indications were all normal. Turbine availability was 99.5% in 2022. During a cold water outage in 2022 the turbine rotor was scanned and found to be in good condition. In addition repairs were performed to the main steam stop valve and circwater piping. A major turbine overhaul was performed in 2019. The facility's reserve transformer upgrade begun in 2018 was completed in 2019. In 2021 a turbine lube oil vacuum dehydrator was installed. The facility now has 100% capacity redundancy up through the transformer, and is working with the utility to upgrade the feeder and their substation to utilize its full capacity. A major turbine outage is planned during the cold iron outage in 2023.

3.3.3 Air Pollution Control (APC) Equipment

3.3.3.1 APC Operating Data & Stack Emissions

A review of CEMS Exceedance data as well as the facility's CEMS compliance record for 2022 indicates the air pollution control system to be performing well. The Exceedance Summary sheet details environmental excursions, root cause for the excursions and targets areas for improvement in environmental performance.

Review of operating data showed that scrubber and baghouse draft losses for the three units are being maintained at acceptable levels implying that the flue gas paths are being maintained in an acceptably clean condition.

In addition, a new CEM system was installed, and was certified in July 2016 and approved by the Department in September 2016. The system, which utilizes an extraction sampling method, was officially placed into service for compliance purposes on October 1, 2016. In 2022 a new CEMS serve was installed, including upgrades from the obsolete CPP data processors to PLCs.

A renewed Title V operating permit for the facility was issued in July of 2016, and expires on July 12, 2021. The permit contained minor modifications to the facility's CEMS limits. Title V renewal application was submitted and received on December 28, 2020.

3.3.3.2 APC Critical Control Loops

Critical control functions of the air pollution control system were reviewed. Lime slurry delivery rate as a function of SO₂ removal efficiency, with a minimum flow are the critical control parameters. The lime slurry control loop is functional. SO₂ removal and scrubber outlet temperature control were observed to be functional and stable. The facility continues to review the minimum reagent levels during stack testing.

3.3.3.3 APC Miscellaneous

Air pollution control system observations are as follows:

1. All SDA and baghouse discharge valves & all screw conveyors were functioning.
2. Baghouse bag replacement continues as dictated by bag age and wear. Baghouse numbers 2 and 3 were re-bagged in 2020. Baghouse 1 was re-bagged in February 2022. All baghouse controls have been upgraded since 2021.
3. The facility has demonstrated good performance with all of the bags in the baghouse embedded with a PTFE membrane material.
4. Insulation appeared to be in sound condition, with ductwork expansion joints neatly insulated with insulation jackets.
5. The urea system appeared to be in acceptable condition, with no evidence of urea leakage detectable.
6. The scrubber deck area was completely refurbished in 2018, including the expansion of grate areas to allow for safer work and easier accessibility. Steel

flooring and other elements were replaced with corrosion resistant fiberglass. The solid flooring in this area also serves as containment for any spill that may occur in this area. Additionally in 2019 the scrubber roof was replaced.

7. In 2022 Low NOx (LN) system installation on Boiler 3 was installed. All 3 units now operate LN systems.

3.3.4 Residue & Fly-ash

1. In 2019 the air sorting separator that was installed on the non-ferrous metal system to separate stainless from other non-ferrous metals was replaced by a new eddy current magnet and modified head conveyor in an attempt to receive better performance. In 2020 a new sizer was added as well to metal recovery.
2. The residue load out area is in acceptable condition with no fugitive ash emissions witnessed during the inspection.
3. Operating procedures include operation of a street sweeper several times weekly except during inclement weather.
4. Residue and metal load out vehicles utilize a dedicated scale that was installed in 2014 so they do not need to loop the facility.
5. Installed new Ash Extractor cameras to help identify and prevent major jams in bottom ash in 2021.
6. Fully replaced the 200 Vibrating Screen Conveyor for better separation on the non-ferrous for better product yields.
7. In 2022 an additional eddy current magnet was installed to enable better capture of non-ferrous metals. This resulted in the rearrangement of various equipment in the metals building.

3.4 Preventive Maintenance

3.4.1 Preventive Maintenance System

The facility is using the Asset Life Management (ALM) maintenance program to generate and track corrective work orders, and for preventive maintenance work orders.

3.4.2 Outage Schedules

The facility completed Major Boiler Maintenance Outages on each of the operating units in 2021 sufficient to maintain the equipment in good working condition throughout 2022. In addition to the annual approximate 13-day scheduled boiler outages, on-line explosives and on-line water washing are used to clean boiler tube surfaces and maintain optimum operating conditions. During 2023 there will be a cold iron outage.

Outages provide the facility a chance to perform maintenance on critical equipment, perform equipment assessments, and gather data to develop future outage scopes so that the facility continues to run in an acceptable manner.

Outage worklists were reviewed and found to be thorough. Planned activities included standard boiler tube replacements, calibrations and reliability impact items. All units had economizer work performed.

3.4.3 Outage Tasks

Documentation of work performed during outages for all three units was reviewed and indicate that appropriate activities relative to boiler and air pollution control system maintenance are being performed.

3.4.4 Forced Outage Work List

The preventive maintenance/work order system contains a category for the type of outage required, i.e. boiler or full plant. A list of items can be queried and printed quickly should an unexpected forced outage occur.

3.4.5 Bulk Chemical Storage Tanks

At the time of the inspection, the following registered tanks, containments, and ancillary equipment were visually inspected and found to be in acceptable condition:

- Tank 06170 Potassium hydroxide (repaired and refurbished in 2013)
- Tank 06171 Sodium phosphate

The facility uses modular mixed beds for water treatment, eliminating the need to use or store large quantities of chemicals. The water treatment multimedia filters were replaced in 2021. The sodium hydroxide and potassium hydroxide tanks received the required 5-year inspections in 2020. Minor issues noted in the report were addressed. NYSDEC tank permits renewed in 2021 and expire in 4/19/2023.

The facility constructed a new bulk tank to store kerosene used to operate heaters that are strategically placed all throughout the facility to prevent freezing of critical plant equipment. The installation is complete but the tank is not yet operational as a final certified pressure test and County approvals are pending.

3.4.6 Balance of Plant

At the time of the inspection, the following items were also noted:

1. The Reserve Side Switchgear PT and CT were replaced with anti-flash coating
2. Tipping Floor Task Force Improvements including new fire monitors, IR and PTZ cameras, new elevated control booth/ truck dispatch system with lighting and mechanical arms at entrances went into service.
3. Replaced A-Side sifting Conveyors with new conveyors with new upgraded direct drive gearbox in 2021.
4. Upgraded evaporator tubes in soot blower lane to spiral wound inconel tubes on all boilers at the 192' elevation.
5. Minor tipping floor repairs were performed in 2022.

4 CONCLUSION

Based upon the above inspection, technical data review, personnel interviews and the general condition of the Facility it is my opinion that the safety, emergency, security, process and control equipment at the Hempstead Resource Recovery Facility, located at 600 Merchants Concourse, Westbury, NY 11590 and owned and operated by Covanta Hempstead, Inc. are in acceptable operating condition.

ATTACHMENT 4

**2022 ANNUAL SOLID WASTE REPORT
HEMPSTEAD RESOURCE RECOVERY FACILITY**

**FINANCIAL ASSURANCE DOCUMENT
(PER SECTION 12)**

INCREASE PENALTY RIDER

BOND NO. SUR0065118

To be attached and form a part of Bond No. SUR0065118 dated the 1st Day of November, 2020, executed by Argonaut Insurance Company as surety, on behalf of Covanta Hempstead Company as current principal of record, and in favor of New York State Department of Environmental Conservation, as Obligee for Closure Plan for Hempstead Plant, and in the amount of Two Million Four Hundred Eleven Thousand Six Hundred Seventy Three Dollars and 00/100 (\$2,411,673.00).

In consideration of the agreed premium charged for this bond, it is understood and agreed that Argonaut Insurance Company hereby consents that effective from the 1st Day of November, 2022, said bond shall be amended as follows:

THE BOND PENALTY SHALL BE INCREASED:

FROM: Two Million Four Hundred Eleven Thousand Six Hundred Seventy Three Dollars and 00/100 (\$2,411,673.00)

TO: Two Million Four Hundred Ninety Eight Thousand Seven Hundred Eighty Two Dollars and 00/100 (\$2,498,782.00)

The INCREASE of said bond penalty shall be effective as of the 1st Day of November, 2022, and does hereby agree that the continuity of protection under said bond subject to changes in penalty shall not be impaired hereby, provided that the aggregate liability of the above mentioned bond shall not exceed the amount of liability assumed by it at the time the act and/or acts of default were committed and in no event shall such liability be cumulative.

Signed, sealed and dated this 24th Day of January, 2023



Covanta Hempstead Company
PRINCIPAL
BY

James R. [Signature]

Argonaut Insurance Company
SURETY
BY

[Signature]

William T. Krumm, ATTORNEY-IN-FACT

(SURETY ACKNOWLEDGMENT (ATTY-IN-FACT))

State of Illinois } ss:
County of Cook

On this 24th day of January in the year two thousand twenty three, before me, Christina Laurendi, a Notary Public in and for said County and State, residing therein, duly commissioned and sworn, personally William T. Krumm, known to me to be the duly authorized Attorney-in-fact of Argonaut Insurance Company and the same person whose name is subscribed to the within instrument as the Attorney-in-fact of said Company, and the said William T. Krumm duly acknowledged to me that he subscribed the name of Argonaut Insurance Company and thereto as Surety and his own name as Attorney-in-fact. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this Certificate first above written.

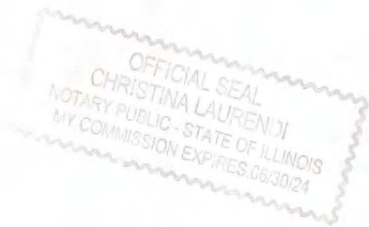
My Commission Expires

6/30/2024

Notary Public in and for
County, State of

Christina Laurendi

Dupage, Illinois



Argonaut Insurance Company
Deliveries Only: 225 W. Washington, 24th Floor
Chicago, IL 60606

United States Postal Service: P.O. Box 469011, San Antonio, TX 78246
POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the Argonaut Insurance Company, a Corporation duly organized and existing under the laws of the State of Illinois and having its principal office in the County of Cook, Illinois does hereby nominate, constitute and appoint: **William T. Krumm**

Surety Bond No.: SUR0065118
Principal: Covanta Hempstead Company
Obligee: New York State Department of Environmental Conservation

Their true and lawful agent(s) and attorney(s)-in-fact, each in their separate capacity if more than one is named above, to make, execute, seal and deliver for and on its behalf as surety, and as its act and deed any and all bonds, contracts, agreements of indemnity and other undertakings in suretyship provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed the sum of:

\$97,550,000.00

This Power of Attorney is granted and is signed and sealed under and by the authority of the following Resolution adopted by the Board of Directors of Argonaut Insurance Company:

"RESOLVED, That the President, Senior Vice President, Vice President, Assistant Vice President, Secretary, Treasurer and each of them hereby is authorized to execute powers of attorney, and such authority can be executed by use of facsimile signature, which may be attested or acknowledged by any officer or attorney, of the Company, qualifying the attorney or attorneys named in the given power of attorney, to execute in behalf of, and acknowledge as the act and deed of the Argonaut Insurance Company, all bond undertakings and contracts of suretyship, and to affix the corporate seal thereto."

IN WITNESS WHEREOF, Argonaut Insurance Company has caused its official seal to be hereunto affixed and these presents to be signed by its duly authorized officer on the 19th day of November, 2021.

Argonaut Insurance Company



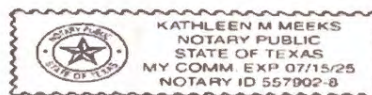
by:

Gary E. Grose, President

STATE OF TEXAS
COUNTY OF HARRIS SS:

On this 19th day of November, 2021 A.D., before me, a Notary Public of the State of Texas, in and for the County of Harris, duly commissioned and qualified, came THE ABOVE OFFICER OF THE COMPANY, to me personally known to be the individual and officer described in, and who executed the preceding instrument, and he acknowledged the execution of same, and being by me duly sworn, deposed and said that he is the officer of the said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority and direction of the said corporation, and that Resolution adopted by the Board of Directors of said Company, referred to in the preceding instrument is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand, and affixed my Official Seal at the County of Harris, the day and year first above written.



(Notary Public)

I, the undersigned Officer of the Argonaut Insurance Company, Illinois Corporation, do hereby certify that the original POWER OF ATTORNEY of which the foregoing is a full, true and correct copy is still in full force and effect and has not been revoked.

IN WITNESS WHEREOF, I have hereunto set my hand, and affixed the Seal of said Company, on the 24th day of January, 2023.



Austin W. King, Secretary

IF YOU HAVE QUESTIONS ON AUTHENTICITY OF THIS DOCUMENT CALL (833) 820 - 9137.