If you require this information in an accessible format, please contact The Regional Municipality of Durham at 1-800-372-1102 ext. 3560.

Energy from Waste Advisory Committee (EFWAC) Agenda
Meeting #20

Monday, December 18, 2023
9:30 a.m. to 11:30 a.m.

The Regional Municipality of Durham Headquarters Building
605 Rossland Road East, Whitby

Please note: The Region of Durham continues to hold electronic meetings for Advisory Committees with limited in-person attendance at this time. Members of the public may view the Committee meeting via live streaming.

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1. **Welcome and Introductions**
2. **Durham York Energy Centre (DYEC) 2022 Annual Compliance Report (ECA)**

   The Project Team will respond to questions by EFWAC members regarding the DYEC 2022 Annual Compliance Report.
3. **Updates**
   a. DYEC Streamlined Environmental Assessment (increase from 140,000 to 160,000 tonnes per year capacity)
   b. Extended Producer Responsibility
   c. Update – Durham Region Organics Management
4. **Next Meeting**
5. **Meeting Adjourns**

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Written information (either paper or electronic) that you send to Durham Regional Council or Committees, including home address, phone numbers and email addresses, will become part of the public record. This also includes oral submissions at meetings. If you have any questions about the collection of information, please contact the Regional Clerk/Director of Legislative Services.

Durham York Energy Centre

ECA 7306-8FDKNX

2022 Annual Report

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1. Introduction

The Regional Municipality of Durham, the Regional Municipality of York (collectively referred to as "the Regions"), and Covanta Durham York Renewable Energy Limited Partnership ("Covanta") respectfully submit the 2022 Durham York Energy Centre ("DYEC") Annual Report, covering operations during the 2022 calendar year.

This report is being submitted in accordance with Condition 15(1) of the Environmental Compliance Approval ("ECA") 7306-8FDKNX, which states the following:

> ***By March 31st following the end of each operating year, the Owner shall prepare and submit to the District Manager and the Advisory Committee, an Annual Report summarizing the operation of the Site covering the previous calendar year.***

The reporting requirements in Condition 15(1) of the ECA are listed in **Table 1** together with references to the sections of this report where those reporting requirements are addressed.

The DYEC is a thermal treatment facility used for the receipt of solid non-hazardous post-diversion municipal waste ("Waste"), temporary storage and thermal treatment of the Waste, abatement of the emissions from the processes and activities undertaken at the Site, handling, screening, sorting and/or/ conditioning of the residual wastes, and management of the wastewater and the non-contact stormwater generated at the Site. The Facility's nominal electricity generation rate is 17.5 Megawatts, and the nominal steam generation rate is approximately 67,200 kilograms per hour.

The Facility was built to operate on a continuous basis, 24 hours per day, seven days a week, except during periods of regularly scheduled maintenance. Waste may be delivered Monday through Saturday between 7:00 am to 7:00 pm. This operating schedule may be adjusted depending on demand and facility needs within the established protocol indicated in the ECA. The ECA was originally issued on June 28, 2011, and amended on August 12, 2014, October 24, 2014, February 24, 2015, December 23, 2015, March 14, 2016, April 22, 2020, and December 23, 2021. The final amendment was

issued to manage the increase in Waste receipt due to the COVID-19 pandemic. This Amendment was in effect up until December 31, 2021.

Table 1: Annual Report Requirements

	ECA Condition	Section
14.3	**The Owner shall maintain an on-Site written or digital record of activities undertaken at the Site. All measurements shall be recorded in consistent metric units of measurement. As a minimum, the record shall include the following:**	N/A
(a)	date of record and the name and signature of the person completing the report;	Onsite records
(b)	quantity and source of the incoming Waste received at the Site;	2.2, 2.3
(c)	records of the estimated quantity of Waste thermally treated in the Boilers;	2.3
(d)	quantity of the Unacceptable Waste received at the Site by the end of the approved Waste receipt period and the type(s) of the Unacceptable Waste received;	2.4
(e)	quantity and type of the Residual Waste shipped from the Site, including any required outgoing Residual Waste characterization results;	3.3, Appendix 2
(f)	destination and / or receiving site(s) for the Residual Waste shipped from the Site;	3.1, 3.2
(g)	quantity and type of any Rejected Waste accepted at the Site;	2.4
(h)	destination and / or receiving site(s) for the Rejected Waste shipped from the Site;	2.4
(i)	housekeeping activities, including litter collection and washing/cleaning activities, etc.	10.4
(j)	amount of electricity produced	4.2
(k)	amount of excess electricity exported to the electrical grid	4.2

	ECA Condition	Section
14.4	**The Owner shall maintain an on-Site written or digital record of activities undertaken at the Site. All measurements shall be recorded in consistent metric units of measurement. As a minimum, the record shall include the following:**	N/A
(a)	day and time of the activity;	Onsite records
(b)	all original records produced by the recording devices associated with the CEM Systems;	Onsite records
(c)	a summary of daily records of readings of the CEM Systems, including: **i.** the daily minimum and maximum 4-hour average readings for carbon monoxide; **ii.** the daily minimum and maximum one-hour average readings for oxygen; **iii.** the daily minimum and maximum 10-minute average readings for organic matter; **iv.** the daily minimum and maximum 24-hour average readings for sulphur dioxide; **v.** the daily minimum and maximum 24-hour average readings for nitrogen oxides; **vi.** the daily minimum and maximum 24-hour average readings for hydrogen chloride; **vii.** the daily minimum and maximum 6-minute average and 2-hour average opacity readings; and **viii.** the daily minimum and maximum one-hour average readings for temperature measurements.	5.1
(d)	records of all excursions from the applicable Performance Requirements as measured by the CEM Systems, duration of the excursions, reasons for the excursions and corrective measures taken to eliminate the excursions;	5.3, 5.4

	ECA Condition	Section
(e)	all records produced during any Acoustic Audit;	7
(f)	all records produced during any Source Testing;	5.5, Appendix 3, Appendix 4
(g)	all records produced by the long-term sampling program for Dioxins and Furans required by this Certificate;	5.6
(h)	all records produced during the Residual Waste compliance testing;	3.1, Appendix 2
(i)	all records produced during the Soil Testing;	8
(j)	all records produced during the Groundwater and Surface Water Monitoring required by this Certificate;	9
(k)	all records produced during the Ambient Air Monitoring required by this Certificate;	6, Appendix 5
(l)	all records associated with radiation monitoring of the incoming Waste, including but not limited to: **(i)** transaction number; **(ii)** hauler; **(iii)** vehicle ID; **(iv)** alarm level; **(v)** maximum CPS; **(vi)** µSv / hr; **(vii)** comment; **(viii)** background CPS; **(ix)** driver time in and out; and **(x)** name of the Trainer Personnel that carried out the monitoring.	2.4
(m)	results of the containment testing carried out in the buildings, conveyors, tanks and silos, as required;	10.1
(n)	results the negative pressure in the Tipping Building carried out, as required.	10.2

	ECA Condition	Section
14.5	**The Owner shall maintain an on-Site written or digital record of inspections and maintenance as required by this Certificate. As a minimum, the record shall include the following:**	N/A
(a)	the name and signature of the Trained Personnel that conducted the inspection;	10, Appendix 6
(b)	the date and time of the inspection;	10, Appendix 6
(c)	the list of any deficiencies discovered, including the need for a maintenance or repair activity;	10, Appendix 6
(d)	the recommendations for remedial action;	10, Appendix 6
(e)	the date, time and description of actions (repair or maintenance) undertaken;	10, Appendix 6
(f)	the name and signature of the Trained Personnel who undertook the remedial action; and	10, Appendix 6
(g)	an estimate of the quantity of any materials removed during cleaning of the Works.	10, Appendix 6
14.6	**The Owner shall maintain an on-Site written or digital record of the emergency situations. As a minimum, the record shall include the following:**	N/A
(a)	the type of an emergency situation	12
(b)	description of how the emergency situation was handled;	12
(c)	the type and amount of material spilled, if applicable;	12
(d)	description of how the material was cleaned up and stored, if generated; and	12
(e)	the location and time of final disposal, if applicable; and	12

	ECA Condition	Section
(f)	description of the preventative and control measures undertaken to minimize the potential for re-occurrence of the emergency situation in the future.	12
14.7	**The Owner shall establish and maintain a written or digital record of complaints received and the responses made as required by this Certificate.**	13
14.8	**The Owner shall maintain an on-Site written or digital record of training as required by this Certificate. As a minimum, the record shall include the following:**	N/A
(a)	date of training;	15
(b)	name and signature of person who has been trained; and	15
(c)	description of the training provided	15
15.1	**By March 31st following the end of each operating year, the Owner shall prepare and submit to the District Manager and to the Advisory Committee, an Annual Report summarizing the operation of the Site covering the previous calendar year. This Annual Report shall include, as a minimum, the following information:**	N/A
(a)	a summary of the quality and the quantity of the Wastes accepted at the Site, including the maximum amount of the Waste received annually and daily and the sources of the Waste;	2
(b)	a summary of the quality and the quantity of the Residual Waste shipped from the Site, including the analytical data required to characterize the Residual Waste, the off-Site destinations for the Residual Waste and its subsequent use, if known;	3 Appendix 2
(c)	estimated material balance for each month documenting the maximum amount of wastes stored at the Site;	3.3
(d)	annual water usage;	4.1

	ECA Condition	Section
(e)	annual amount of the electricity produced and the annual amount of the electricity exported to the electrical grid;	4.2
(f)	summaries and conclusions from the records required by Conditions 14.(3) through 14.(8) of this Certificate;	N/A
(g)	the Emission Summary Table and the Acoustic Assessment Summary Table for the Facility as of December 31 from the previous calendar year;	Appendix 3, Appendix 4
(h)	a summary of dates, duration and reasons for any environmental and operational problems, Boilers downtime, APC Equipment and CEM System malfunctions that may have negatively impacted the quality of the environment, or any incidents triggered by the Emergency Response and Contingency Plan and corrective measures taken to eliminate the environmental impacts of the incidents;	11
(i)	a summary of the dates, duration and reasons for all excursions from the applicable Performance Requirements as measured by the CEM Systems or as reported by the annual Source Testing, reasons for the excursions and corrective measures taken to eliminate the excursions;	5.3, 5.4
(j)	results of the evaluation of the performance of the long-term sampling system in determining the Dioxins and Furans emission trends and / or fluctuations for the year reported on as well as demonstrating the ongoing performance of the APC Equipment associated with the Boilers;	5.6
(k)	dates of all environmental complaints relating to the Site together with cause of the Complaints and actions taken to prevent future Complaints and / or events that could lead to future Complaints;	13
(l)	any environmental and operational problems that could have negatively impacted the environment, discovered as a result of daily inspections or otherwise and any mitigative actions taken;	11

	ECA Condition	Section
(m)	a summary of any emergency situations that have occurred at the Site and how they were handled;	12
(n)	the results and an interpretive analysis of the results of the groundwater and surface water, including an assessment of the need to amend the monitoring programs;	9
(o)	summaries of the Advisory Committee meetings, including the issues raised by the public and their current status;	14
(p)	any recommendations to improve the environmental and process performance of the Site in the future;	17
(q)	statement of compliance with this Certificate, including compliance with the O. Reg. 419/05 and all air emission limits based on the results of source testing, continuous monitoring and engineering calculations, as may be appropriate; and	1.1, 5.5, 6
(r)	interpretation of the results and comparison to the results from previous Annual Reports to demonstrate the Facility's impact on the environment.	16

For a summary of the Environmental Assessment Notice of Approval (EA) / Environmental Compliance Approval (ECA) reports submitted to the Ministry of the Environment, Conservation and Parks (MECP) for the 2022 reporting year, refer to Appendix 1: MECP 2022 EA/ECA Report Submittals.

1.1. Statement of Compliance

During the 2022 calendar year, the DYEC operated in full compliance with the ECA.

2. Municipal Solid Waste

2.1. Waste Quality

The high quality of waste received at the Facility is achieved by implementing the following procedures:

- robust regional promotion and education programs to inform the public on how to source separate at the household level
- the provision of multiple receptacles to each household
- regionally enforced By-Laws restricting generators from placing recyclable or hazardous materials in the waste stream
- regional waste contractors are required by contract to inspect and reject unacceptable waste, if necessary, at the curbside;
- waste collected at the curbside is inspected at transfer stations before being repackaged into highway haulers and roll-offs for delivery to DYEC; and
- once per hour, a truck, if present, is unloaded onto the Tipping Building floor for a manual visual inspection before being pushed into the pit.

The design heat content of the waste is 13 MJ/kg. Due to the variability of waste, the actual estimated heat content varied throughout the year between 11.94 MJ/kg and 13.30 MJ/kg with an average of 12.96 MJ/kg. The waste received is relatively homogenous with low moisture content regardless of weather conditions. Refuse HHV (higher heating value or gross calorific / energy value energy) is monitored using a specific steam correlation equation that was developed during the acceptance tests completed in October 2015. In general, the refuse is well sorted, homogenous and has good combustion qualities.

2.2. Waste Source

Waste processed at the facility includes waste that is collected through curbside collection programs in Durham and York and through Waste Management Facilities. Curbside waste is delivered to a transfer station for inspection and reloaded into 53-foot highway haulers or 10-foot roll-off trucks. The following transfer stations in turn deliver the waste to the DYEC.

Regional Municipality of Durham

- Brock Waste Management Facility
- Miller Waste Systems - Pickering

- Miller Waste Systems – Whitby
- Oshawa Waste Management Facility
- Scugog Waste Management Facility
- U-Pak - Courtice
- U-Pak - Pickering
- U-Pak - McPherson
- Waste Management – Courtice

Regional Municipality of York

- York Region Waste Management Centre
- Earl Turcott Waste Management Facility

2.3. Waste Quantity

The ECA currently allows the facility to thermally treat 140,000 tonnes of waste per year. The quantity of waste processed in the Boilers during 2022 was 140,000 tonnes. In 2022, DYEC received 140,660.58 net tonnes of waste from the aforementioned transfer stations. This value is different from the amount of acceptable waste received due to pit inventory and carryover. Refer to **Table 2.**

Table 2: Municipal Solid Waste (MSW) Material Balance (Tonnes)

Month	Durham	York	Total MSW Received	Rejected / Unacceptable MSW	Net MSW Received	Estimated Maximum Daily Onsite Storage
January	9,326	2,662	11,988	0.00	11,988	2,333
February	8,518	2,895	11,413	0.53	11,412	2,329
March	5,665	1,355	7,020	0.00	7,020	2,334
April	9,729	2,755	12,484	0.65	12,484	2,780
May	10,857	2,835	13,692	0.71	13,691	2,828
June	9,035	2,185	11,220	0.00	11,220	2,983
July	9,577	2,543	12,120	15.54	12,104	2,900

Month	Durham	York	Total MSW Received	Rejected / Unacceptable MSW	Net MSW Received	Estimated Maximum Daily Onsite Storage
August	10,385	2,687	13,072	29.31	13,043	2,582
September	9,503	2,533	12,036	5.11	12,030	2,210
October	9,249	2,530	11,779	27.12	11,752	2,999
November	9,914	3,172	13,086	8.81	13,077	2,643
December	8,749	2,003	10,752	21.27	10,730	2,717
Total	**110,506**	**30,155**	**140,661**	**109.05**	**140,552**	**-**

Note: All weights are recorded in tonnes and rounded to whole numbers except for Rejected / Unacceptable MSW.

Condition 2(4) of the ECA limits the amount of waste that can be accepted at the Facility to 1,520 tonnes per day. The maximum amount of waste received in one day was 865.77 tonnes on May 26th, 2022.

Condition 2(5)(a) limits the maximum amount of waste that can be stored in the Waste pit to 7,350 cubic metres. The greatest amount of waste stored in the Waste Pit was approximately 2,999 tonnes (approximately 7,226 m^3) on October 6th, 2022. (MSW density = 415 kg / m^3).

2.4. Rejected Waste

Rejected waste refers to either municipal waste that cannot be processed at the Facility or waste which the site is not approved to accept. Rejected waste includes, but is not limited to, Bulky Unprocessable Items and Unacceptable Waste.

2.4.1. Unacceptable Waste

Unacceptable Waste refers to incoming waste which does not meet the incoming waste quality criteria, is of hazardous nature, and/or requires caution when handling.

The DYEC truck scale is equipped with an LFM-3 Radiation Detection System. It is a multipurpose, modular system with two remote radiation detector assemblies. The detector assemblies oppose each other so that incoming vehicles can pass between them. Radiation detected includes low, medium, and high energy gammas and X-rays (>20keV). A handheld alarming Personal Radiation Detector (PRD) is also available for use when the mounted detectors are being serviced / calibrated and to precisely locate any radioactive material within the truck when the LFM-3 system detects elevated radiation. All records associated with the radiation monitoring of incoming waste are stored and available at the DYEC.

There were three loads rejected from the facility due to radiation during 2022. On March 30th, April 25th, and July 20th, 2022, the LFM-3 radiation detector identified one load on each day with elevated radiation. The PRD was used to confirm and locate the detected radioactive material within the truck. All three loads were in turn rejected and returned to their transfer station of origin.

Unacceptable Waste that is not of the hazardous content is screened by the Equipment Operator and stored in a secure berm area (which ensures no adverse effects from their storage) or in a dedicated cage outside the Tipping Floor. On June 11th, 2018, the MECP was notified that compressed gas cylinders removed from incoming waste must be stored outside of the Tipping Floor in a secure cage as per an external fire safety inspection completed by the Clarington Emergency and Fire Services. On June 13th, 2018, the local Environmental Officer attended the site to verify the location of the secure cage. The Environmental Officer was satisfied with the relocation of the compressed gas cylinders to comply with the Fire Code.

Condition 4(3)(a)(iv) requires the removal of Unacceptable Waste from the Facility within 4 days of its receipt or as acceptable to the District Manager. A letter dated January 9th, 2015, from the MECP District Manager permits the DYEC to extend this storage to 90 days per Regulation 347 made under the Environmental Protection Act, R.S.O. 1990. During 2022, four shipments of Unacceptable Waste were removed from the Facility within 90 days of generation. Refer to **Table 3** for tonnages, manifest numbers, and shipment dates for 2022.

2.4.2. Bulky Unprocessable Items

Bulky Unprocessable Items refers to incoming Waste received at the Site that cannot be processed in the Equipment. Thirty-four shipments of Bulky Unprocessable Items were removed from the Facility in 2022. These shipments included oversized items such as hot tubs, plastic totes, and pipes. Refer to **Table 3** for tonnage and shipment dates.

Table 3: Rejected Waste

Date	Category	Manifest Number	Tonnes
10-Feb-22	Bulky Unprocessable		0.30
18-Feb-22	Unacceptable		0.23
27-Apr-22	Bulky Unprocessable		0.65
27-May-22	Unacceptable	MX091944-3	0.71
7-Jul-22	Bulky Unprocessable		0.91
12-Jul-22	Bulky Unprocessable		2.09
15-Jul-22	Bulky Unprocessable		0.87
19-Jul-22	Bulky Unprocessable		0.28
21-Jul-22	Bulky Unprocessable		3.86
22-Jul-22	Bulky Unprocessable		0.68
25-Jul-22	Bulky Unprocessable		3.49

Date	Category	Manifest Number	Tonnes
27-Jul-22	Bulky Unprocessable		0.00
29-Jul-22	Bulky Unprocessable		3.36
2-Aug-22	Bulky Unprocessable		1.20
3-Aug-22	Bulky Unprocessable		3.25
4-Aug-22	Bulky Unprocessable		1.26
10-Aug-22	Bulky Unprocessable		2.72
12-Aug-22	Bulky Unprocessable		1.80
15-Aug-22	Bulky Unprocessable		1.53
17-Aug-22	Bulky Unprocessable		1.05
22-Aug-22	Bulky Unprocessable		0.62
24-Aug-22	Bulky Unprocessable		8.00
26-Aug-22	Bulky Unprocessable		6.95
29-Aug-22	Bulky Unprocessable		0.67
30-Aug-22	Unacceptable	MX729748-8	0.26
1-Sep-22	Bulky Unprocessable		0.85
19-Sep-22	Bulky Unprocessable		2.13
23-Sep-22	Bulky Unprocessable		2.13
6-Oct-22	Bulky Unprocessable		8.78
20-Oct-22	Bulky Unprocessable		8.10
26-Oct-22	Bulky Unprocessable		8.54
31-Oct-22	Bulky Unprocessable		1.70
4-Nov-22	Bulky Unprocessable		1.79
25-Nov-22	Unacceptable	MX091276-0	0.33
25-Nov-22	Bulky Unprocessable		6.69

Date	Category	Manifest Number	Tonnes
1-Dec-22	Bulky Unprocessable		8.73
5-Dec-22	Bulky Unprocessable		4.89
7-Dec-22	Bulky Unprocessable		7.65
TOTAL			**109.05**

Note: Only three removals required a manifest. All other shipments did not contain hazardous items.

Unacceptable Wastes were removed by Photech Environmental Solutions Inc., Waste Management System ECA – A841604, to Waste Disposal Site ECA - 6173-9UBLDJ.

Bulky Unprocessable Items were removed by Waste Management of Canada Corporation, Waste Management System ECA – A840311, and Waste Disposal Site ECA – A680243.

3. Residual Waste

Residual Waste refers to waste resulting from the waste processing activities at the Site and is limited to recovered ferrous metals, recovered non-ferrous metals, bottom ash (untreated) and fly ash (following conditioning). All Residual Waste is temporarily stored in an enclosed building prior to being removed from the Facility.

3.1. Ash

In accordance with ECA Condition 7(7)(d), the Ash Sampling and Testing Protocol dated June 2014 (the "Protocol") was approved by the MECP and implemented on the Commencement Date of Operation, February 9th, 2015. The objectives of the sampling plans within the Protocol are listed below.

1. To confirm the bottom ash generated at DYEC meets the definition of "incinerator ash" under Regulation 347 to ensure the materials are non-hazardous. The bottom ash should contain by weight less than 10% of combustible materials following

ASTM D 5468 Standard Test Method for Gross Calorific and Ash Value of Waste Materials.

2. To confirm the fly ash sent for disposal is not leachate toxic after conditioning using the Toxicity Characteristic Leaching Procedure (TCLP), as defined in Regulation 347 and the EPA Method 1311.

In 2022, bottom ash was transported to Modern Landfill in Model City, New York while fly ash was transported to Walker Environmental Group – South Landfill in Thorold, Ontario. Both bottom and conditioned fly ash are mixed with soil and used as daily / interim cover.

3.1.1. Bottom Ash

The Bottom Ash Handling System receives and transports water-quenched bottom ash from the ash discharger to the Residue Storage Building. The Bottom Ash Handling System also includes equipment that provides for the separation of ferrous and non-ferrous metals from the bottom ash residue stream. The Residue Storage Building is the temporary storage destination for all bottom ash residue and recovered metals before subsequent off-site removal.

During post commissioning operations, the bottom ash Comprehensive Ash Sampling Test Program (CASTP) consisted of sampling for five days yielding 4 daily composite samples for a total of 20 subsamples for submission to the laboratory for analysis. This process was repeated on an annual basis, until the compliance testing results indicated that the bottom ash met the "incinerator ash" definition set forth by Regulation 347 for three (3) consecutive years. The first triennial CASTP was executed on November 11th, 2017, and the second triennial on October 24th, 2020.

A statistical analysis of the data is used to determine if the bottom ash has less than 10% combustible materials. This statistical evaluation follows the calculation procedures specified by US EPA, SW-846, *“Test Methods for Evaluating Solid Waste, Physical / Chemical Methods”.*

To ensure consistent bottom ash quality between the conduct of the subsequent CASTPs, on a quarterly basis, a one-day sample program is performed. The results are “rolled up” with the data collected subsequently to and including the last CASTP and evaluated in accordance with the statistical procedures stated above. In 2022, quarterly samples were performed on February 15th, June 13th, September 13th, and November 8th.

The results in 2022 demonstrated the bottom ash continued to meet the “incinerator ash” definition, thus it could be managed as a non-hazardous solid waste. The ash continues to be used as daily cover.

To comply with the requirements of the National Pollutant Release Inventory (NPRI), samples were collected on a quarterly basis to determine pollutant releases to land. The samples were collected on February 15th, June 13th, September 13th, and November 8th, 2022.

Refer to **Appendix 2** for sampling results, statistical summaries, and plant operating conditions.

3.1.2. Fly Ash

The Fly Ash Handling System transports fly ash from the boiler and the Air Pollution Control (APC) system to the Residue Storage Building. It is conveyed into one of two surge bins from which it is metered into one of two pugmills for conditioning and stabilization. Stabilization of the fly ash requires a blend of pozzolanic material, Portland cement, and water. The pozzolan and cement are stored in silos located exterior to the Residue Storage Building. The two reagents are metered via rotary valves and conveyed into the pugmills through a shared conveyor. Water is added directly into the pugmills to aid with the thorough mixing of fly ash, pozzolan, and cement to ensure microencapsulation. The ash mixture is discharged into the first of seven fly ash bays and kept on site for a sufficient time to allow the treatment reaction to complete before it is shipped to landfill for disposal. All reported weights for this material are inclusive of these reagents.

During post commissioning operations, the fly ash CASTP consisted of sampling for five days yielding 4 daily composite samples for a total of 20 samples for submission to the laboratory for analysis. This process was repeated for three (3) consecutive years to demonstrate compliance that no TCLP thresholds for the constituents analyzed have been exceeded. The first triennial CASTP, post annual demonstration of compliance, was executed from November 11th to November 15th, 2017. The second triennial CASTP was executed from November 21st to November 25th, 2020.

During 2022, the DYEC was in the post commissioning triennial phase of fly ash testing and no TCLP was performed.

There were no shipments of untreated fly ash from the Facility during 2022. The ash continues to be used as daily cover.

On a quarterly basis, to comply with the requirements of the NPRI, samples are collected to determine pollutant releases to land. The samples were collected on February 15th, May 30th, August 29th, and November 8th, 2022.

3.2. Metals

In 2022, recovered ferrous and non-ferrous metals were shipped to Triple M Metal LP at their Brampton location. There are no analytical requirements for the ferrous and non-ferrous metal streams leaving the DYEC. Ferrous and non-ferrous tonnages are summarized in **Table 4.**

3.3. Residual Waste – Material Balance

ECA Condition 2(5)(c) to (f) describes maximum storage restrictions for Residual Wastes. Amended by Notice 5 dated March 14th, 2016, the maximum storage durations were removed. The maximum storage limit for bottom ash is 630 tonnes, for fly ash is 700 tonnes, for ferrous metal is 77 tonnes, and for non-ferrous metal is 120 tonnes.

A material balance was prepared showing the amount of Residual Waste shipped per month and the daily maximum amount of waste stored on site per month. Refer to **Table 4** and **Table 5.**

Table 4: Residual Waste Shipments (Tonnes)

Limit / Month	Bottom Ash	Fly Ash	Ferrous	Non-Ferrous
January	2,132	994	306	27
February	1,830	803	256	26
March	1,349	599	149	29
April	2,264	1,218	279	29
May	2,260	1,396	327	28
June	2,411	1,007	273	56
July	2,226	1,077	318	27
August	2,400	1,231	373	29
September	2,293	1,090	327	62
October	2,043	929	302	28
November	2,333	1,095	336	27
December	1,818	917	243	94
Total	**25,360**	**12,357**	**3,489**	**463**

Note: All weights are rounded to whole numbers.

Table 5: Residual Waste Daily Maximum Storage (Tonnes)

Limit / Month	Bottom Ash	Fly Ash	Ferrous	Non-Ferrous
January	458	262	60	42
February	476	239	42	47
March	401	250	53	44
April	458	302	57	30
May	565	436	59	28
June	535	355	24	31
July	608	492	67	27
August	566	428	71	29
September	617	414	45	42
October	367	448	68	43
November	469	474	55	36
December	468	471	57	49

Note: All weights are rounded to whole numbers.

4. Utilities

4.1. Water

The DYEC is a zero-process water discharge facility, and as such, no water from the process is sent to the sanitary sewer system or discharged into the environment. Under normal operations, the DYEC operates at a water deficit and requires water supplied from the Region of Durham's municipal water system. Wastewater generated by the Facility (except for sanitary discharges) is re-used in the process to cool flue

gas and bottom, and condition fly ash. Make up water is required to replenish these processes.

During 2022, 35,990 m^3 of water was drawn from the municipal water system.

4.2. Electricity

During 2022, the turbine generated 117,792 MWh of electricity of which 99,980 MWh were exported to the grid.

5. Air Emissions

5.1. Continuous Emission Monitoring System (CEMS)

The CEMS installed at the DYEC meets the Installation and Performance Parameters listed in Schedule F of the ECA. The purpose of the CEMS is to continuously monitor flue gas to maximize Boiler combustion efficiency and minimize emissions. The system is equipped to display current values, perform calibration checks, generate daily reports showing minimum, maximum, and average readings, and display system status and emissions alarms. Data collected from this system is available to the public via the Region of Durham's website in accordance with ECA Condition 16 – Public Access to Documentation and is also displayed on the LED display board on the front of the DYEC Visitors Centre.

The CEMS and Data Acquisition System ("DAS") measure and record concentrations on a dry-basis for carbon monoxide (CO), oxygen (O_2), sulphur dioxide (SO_2), nitrogen oxides (NO_x), ammonia (NH_3), hydrogen chloride (HCl), hydrogen fluoride (HF), total hydrocarbons / organic matter (THC), temperature, and mass flow of flue gas. The DAS also measures and records concentrations for moisture (H_2O) and opacity. The location of the analysis sampling points were intentionally selected to allow the efficiency of the APC system to be closely monitored. Flue gas is analyzed prior to entering the APC evaporative cooler (Quench Inlet) as well as in the APC outlet/induced fan inlet duct (Baghouse Outlet) of each Boiler. Records of daily minimum, maximum, and average readings for CO (4-hour average), O_2, combustion

and baghouse temperature (one-hour average), organic matter (10-minute average), SO_2, NO_x, HCl and HF (24-hour average), and opacity (6-minute and 2-hour average) are available at the site. Refer to **Table 6** and **Table 7** for Annual Emission Summaries.

A Relative Accuracy Test Audit ("RATA") and associated system bias performance evaluations were completed on September 7th, 2022 for Boiler 1 and September 8th, 2022, for Boiler 2. The RATA was completed while the Facility was operating at greater than 50% of the full thermal capacity as required by Environment Canada Report EPS 1/PG/7. Based on the RATA and associated system bias performance evaluation, all parameters met the criteria specified in Schedule F of the ECA.

Table 6: Boiler 1 Annual Emission Summary

Parameters	Averaging Periods	Units	Approval Limit	Minimum	Maximum	Average
Carbon Monoxide	4-hour rolling	mg / Rm^3	40	1	30	11
Opacity	2-hour rolling	%	5	0	3	1
Opacity	6-minute rolling	%	10	0	3	1
Oxygen	1-hour	%	≥6	6	21	8
Sulphur Dioxide	24-hour	mg / Rm^3	35	0	30	1
Nitrogen Oxides	24-hour	mg / Rm^3	121	79	119	108
Hydrogen Chloride	24-hour	mg / Rm^3	9	0	5	1
Combustion Temperature	1-hour	ºC	≥1000	1042	1389	1241

Parameters	Averaging Periods	Units	Approval Limit	Minimum	Maximum	Average
Baghouse Temperature	1-hour	ºC	>120 and <185	130	158	142
Organic Matter (THC)	10-minute	mg / Rm^3	NA	0	12	0

NOTE: Compliance of Organic Matter (THC) is monitored during source testing.

Table 7: Boiler 2 Annual Emission Summary

Parameters	Averaging Periods	Units	Approval Limit	Minimum	Maximum	Average
Carbon Monoxide	4-hour rolling	mg / Rm^3	40	2	36	14
Opacity	2-hour rolling	%	5	0	2	1
Opacity	6-minute rolling	%	10	0	2	1
Oxygen	1-hour	%	≥6	7	21	9
Sulphur Dioxide	24-hour	mg / Rm^3	35	0	22	0
Nitrogen Oxides	24-hour	mg / Rm^3	121	107	115	110
Hydrogen Chloride	24-hour	mg / Rm^3	9	0	6	4
Combustion Temperature	1-hour	ºC	>1000	1009	1464	1244
Baghouse Temperature	1-hour	ºC	>120 and <185	126	157	143

Parameters	Averaging Periods	Units	Approval Limit	Minimum	Maximum	Average
Organic Matter (THC)	10-minute	mg / Rm^3	NA	0	60	0

NOTE: Compliance of Organic Matter (THC) is monitored during source testing

5.2. Analyser Reliability

Schedule F of the ECA specifies the continuous monitoring and recording systems used to measure and record the temperature and emissions from the Boilers. The monitors for CO, O_2, HCl, NO_x, SO_2, THC, opacity, and combustion zone temperature are required to be operated and maintained to allow accurate data to be obtained during a minimum of 95 percent of the valid hours for each boiler for each calendar quarter in accordance with the ECA and EPS 1/PG/7. For the purposes of reliability calculations, EPS 1/PG/7 defines a valid hour to be an hour during which the generating unit burned fuel and the associated continuous emission monitoring system produced a minimum of 30 minutes of valid data.

Based on the definition above, analyser reliability for 2022 was calculated for each Boiler, for each calendar quarter, and confirmed to be greater than 95%. Refer to **Table 8** for analyser reliability summary.

Table 8: Continuous Emission Monitoring Systems Analyser Reliability (%)

Boiler 1	O_2e	SO_2	HCl	NO_x	CO	Opacity	THC	Combustion Temperature
Quarter 1	100	99	99	99	99	100	99	100
Quarter 2	96	99	100	100	100	100	98	100
Quarter 3	100	99	98	99	99	100	98	100
Quarter 4	99	99	99	99	99	100	98	100

Boiler 2	O_2e	SO_2	HCl	NO_x	CO	Opacity	THC	Combustion Temperature
Quarter 1	99	99	99	99	99	99	99	100
Quarter 2	98	99	100	99	100	100	99	100
Quarter 3	96	99	99	99	99	100	99	100
Quarter 4	98	100	100	99	100	100	99	100

Note: O_2e means O_2 measured at the Economizer Outlet.

5.3. Performance Requirements (Schedule C) - Excursions

During 2022, there were no excursions to Performance Requirements as listed in Schedule C.

5.4. Performance Requirements (Condition 6) Excursions

During 2022, there were no excursions to Performance Requirements as listed in Condition 6.

5.5. Source Testing

Source testing refers to monitoring, sampling, and testing to determine rate of emission of the Test Contaminants listed in Schedule D of the ECA. The procedures and schedule outlined in Schedule E of the ECA were followed and the Facility was confirmed to be within the operating parameters defined by the ECA. The results of these programs are summarized below. Full reports are available on the DYEC website, in accordance with the ECA.

5.5.1. Voluntary Source Test (VST)

ORTECH Consulting Inc. completed a VST at the DYEC between May 16 and May 19th, 2022, to satisfy the requirement put forth by Durham Region Council to perform emission testing twice per year.

Voluntary source testing was performed on the Quench Inlets and Baghouse Outlets of Boiler 1 and Boiler 2 for the test contaminants listed in Schedule D of the ECA.

The average results for the tests conducted along with the respective in-stack emission limits are summarized in **Table 9**.

Table 9: Voluntary Source Test Summary

Parameter	Limit	Boiler 1	Boiler 2
Total Suspended Particulate Matter (filterable)	9 mg / Rm^3	0.87	1.58
Cadmium	7 µg / Rm^3	<0.023	<0.039
Lead	50 µg / Rm^3	0.22	0.28
Mercury	15 µg / Rm^3	<0.089	<0.086
Dioxins and Furans	60 pg / Rm^3	<7.28	<4.10
Organic Matter	50 ppmdv	0.7	1.5
Hydrochloric Acid	9 mg / Rm^3	1.0	3.6
Sulphur Dioxide	35 mg / Rm^3	0.02	0.9
Nitrogen Dioxide	121 mg / Rm^3	110	111
Carbon Monoxide	40 mg / Rm^3	10.7	15.3

Note: Reference Conditions are dry and 25°C and 1 atmosphere, adjusted to 11% oxygen by volume.

5.5.2. Compliance Source Test

ORTECH Consulting Inc. completed an emission testing program at the DYEC between November 28 and December 02, 2022, to satisfy the requirements of ECA Condition 7(1).

Compliance source testing was performed on the Quench Inlets and Baghouse Outlets of Boiler 1 and Boiler 2 for the test contaminants listed in Schedule D of the ECA.

The average results for the tests conducted along with the respective in-stack emission limits are summarized in **Table 10.**

Table 10: Compliance Source Test Summary

Parameter	Limit	Boiler 1	Boiler 2
Total Suspended Particulate Matter (filterable)	9 mg / Rm^3	<0.27	<0.20
Cadmium	7 µg / Rm^3	0.063	0.028
Lead	50 µg / Rm^3	0.23	0.15
Mercury	15 µg / Rm^3	<0.093	<0.088
Dioxins and Furans	60 pg / Rm^3	<3.68	<3.91
Organic Matter	50 ppmdv	0.1	0.3
Hydrochloric Acid	9 mg / Rm^3	0.4	3.8
Sulphur Dioxide	35 mg / Rm^3	0.5	0.6
Nitrogen Dioxide	121 mg / Rm^3	112	111
Carbon Monoxide	40 mg / Rm^3	9.1	9.4

Note: Reference Conditions are dry and 25°C and 1 atmosphere, adjusted to 11% oxygen by volume.

Test results from Voluntary and Compliance Source Testing indicate the DYEC demonstrated compliance with all respective in-stack ECA limits. The predicted maximum

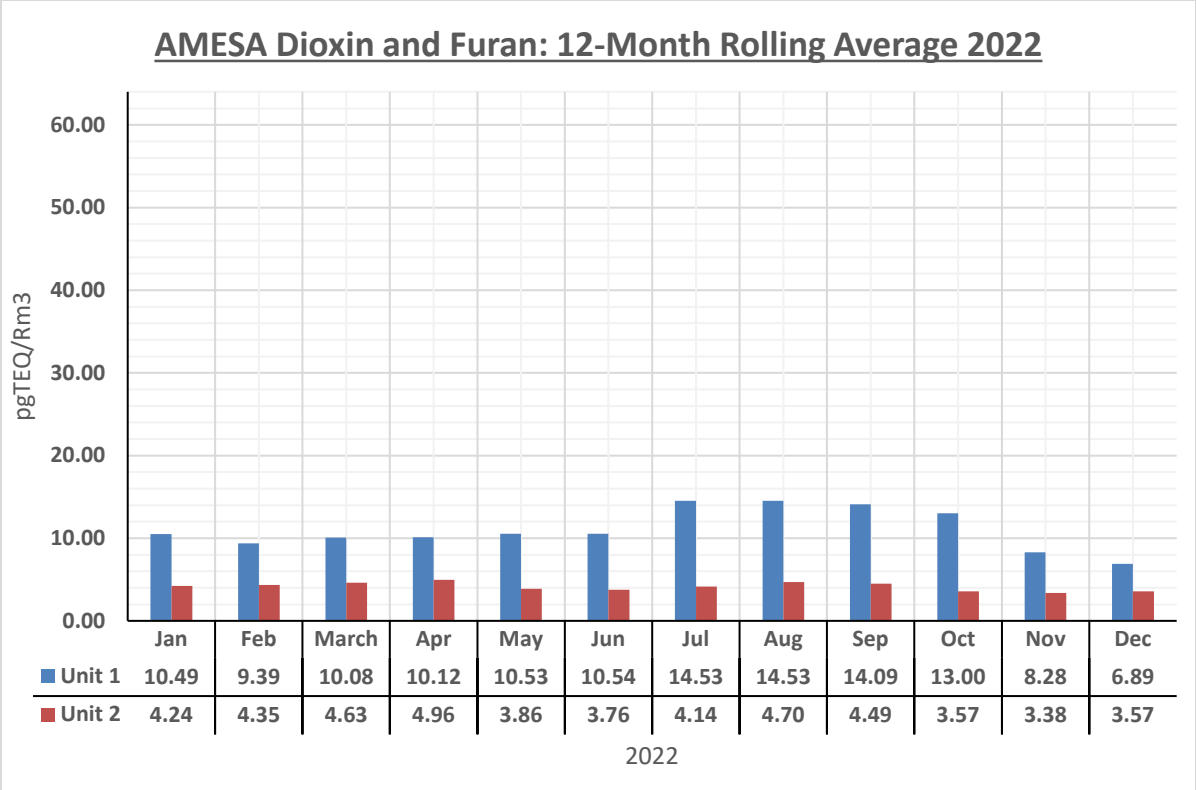
point of impingement concentrations, based on the average test results for both boilers, were calculated using CALPUFF Dispersion Model Version 7.2.1, show the facility to be operating well below all current standards in Regulation 419/05. Refer to Appendix 4.

5.6. Long Term Dioxin and Furan Sampling System (LTSS)

The AMESA (Adsorption Method for Sampling) system, installed on each of the two units at DYEC, is a dioxin and furan continuous sampling system designed to meet the requirements of the ECA Condition 7(3). The system is used to trend sample analysis results and evaluate the ongoing performance of the APC equipment. All laboratory analyzed resultant values obtained from the AMESA samples, regardless of short-term or long-term sampling periods, are not used for verifying compliance with the regulatory limits for dioxins and furans.

In 2022, the AMESA sampler was installed on both units to collect data for performance evaluation during long-term sampling (+/- 28-day periods) as dictated by the operational availability of each Unit. A spacer cartridge was inserted in Unit 2 for the December run as the unit was being taken offline.

To properly track APC equipment performance, data points from the sampling runs were used to calculate 12-month rolling averages. The averages for 2022 are presented below.



The Level of Quantification (LoQ) or the lowest concentration that can be accurately measured using sensitive but routine sampling and analytical methods is 32 pgTEQ/Rm^3 @ 11% O_2 (Environment Canada, 1989). Data points outside of the Target Range threshold of greater than 100% of the LOQ were assessed to ensure only valid data points were used in the calculation of a rolling average. This follows the intended path forward established in the 2021 AMESA Workplan Summary Report. In accordance with this workplan summary, a comprehensive evaluation of operational conditions and maintenance activities were completed on Unit 1 and Unit 2 for August and July 2022 runs respectively. These subject runs were invalidated due to non-isokinetic, non-steady state operating conditions during the sampling period.

The averages obtained from the AMESA sample runs illustrate the capable performance of the APC system to minimize emissions. In the event the 12-month rolling average exceeded greater than 100% of the LOQ (64 pgTEQ/Rm^3 @ 11%O_2), operation of the Boiler and APC equipment would have been verified in conformance with the principles of the 2016 Abatement Plan.

In summary, the ongoing performance of the APC equipment has been successfully demonstrated in accordance with ECA condition 7(3)(b) using certified procedures applicable to source testing and the CEMS for 2022. The AMESA analysis resultant values provide a degree of confidence in modelling process performance. On occasions, anomalous data points will occur due to conditions not representative of steady-state operation and isokinetic sampling which triggers a detailed and thorough examination of plant processes. Both voluntary and compliance source testing demonstrated full compliance with all ECA Performance Requirements (Schedule C). These results are presented in **Section 5.5** of the Annual report.

6. Ambient Air Monitoring

Ambient air monitoring is a requirement of Condition 11 of the Environmental Assessment (EA) and Condition 7(4) of the ECA. Ambient air monitoring is undertaken in accordance with the Ambient Air Monitoring Plan approved by the MECP in May 2012. There are two ambient air monitoring stations. An upwind station located in close proximity to the southwest of the DYEC at the Courtice Water Pollution Control Plant (Courtice WPCP) collects potential contaminant data at a predominantly upwind location. A downwind station located northeast of the DYEC near the intersection of Baseline Road and Rundle Road, collects contaminant data in the most dominant wind direction. For a summary list of the ambient air monitoring stations and monitoring parameters, refer to **Table 12**. See Appendix 5 for ambient air monitoring station locations.

Table 11: Ambient Air Monitoring Program Summary

Monitoring Station	Meteorological Data	Continuous Parameters	Non-Continuous Parameters
Upwind (Courtice WPCP)	• Wind speed and direction (@ 10 metres) • Ambient temperature • Relative humidity	• Sulfur Dioxide (SO_2) • Nitrogen Dioxide (NO_2) • Particulate Matter ($PM_{2.5}$)	• Metals • Total Suspended Particulate Matter (TSP) • Polycyclic Aromatic

Monitoring Station	Meteorological Data	Continuous Parameters	Non-Continuous Parameters
	• Rainfall • Barometric Pressure		Hydrocarbons (PAH's) • Dioxins and Furans
Downwind (Baseline and Rundle Road)	• Wind speed and direction (@ 10 metres) • Ambient temperature • Relative humidity • Rainfall	• Sulfur Dioxide (SO_2) • Nitrogen Dioxide (NO_2) • Particulate Matter ($PM_{2.5}$)	• Metals • Total Suspended Particulate Matter (TSP) • Polycyclic Aromatic Hydrocarbons (PAH's) • Dioxins and Furans

Quarterly and annual ambient air reports have been submitted to the MECP since the start of the monitoring program in 2013 per their respective due dates outlined in the Operations Manual for Air Quality Monitoring in Ontario (Ministry of Environment and Climate Change, 2018). The 2022 Annual Ambient Air Monitoring report is due to the MECP by May 15th, 2023. All reports are publicly available on the DYEC website in accordance with ECA Condition 7(4)(c). All contaminants were below their applicable MECP criteria as well as applicable Human Health Risk Assessment (HHRA) health-based standards with exceptions listed below in **Table 13**.

Table 12: Ambient Air Monitoring Quarterly Summary of Exceedances

Quarter	Parameter exceeded	Courtice Road Station events	Rundle Road Station events
Quarter 1	Benzo(a)pyrene	0	3
	Sulphur Dioxide 10 minute	39	0
	Sulphur Dioxide 1 hour	17	0
Quarter 2	Benzo(a)pyrene	0	1
	Sulphur Dioxide 10 minute	49	16
	Sulphur Dioxide 1 hour	22	6
Quarter 3	Benzo(a)pyrene	0	0
	Sulphur Dioxide 10 minute	36	0
	Sulphur Dioxide 1 hour	15	1
	Total Suspended Particulate	0	1
Quarter 4	Benzo(a)pyrene	0	1
	Sulphur Dioxide 10 minute	62	0

A review of the stack continuous emissions monitoring data on the dates exceedances were recorded indicate that there were no unusual emission levels from the DYEC Continuous Emissions Monitoring Systems (CEMS) and no operational issues.

The current Ontario 24-hour Ambient Air Quality Criterion for benzo(a)pyrene was introduced in 2011 and levels above this threshold are commonly measured throughout Ontario. However, the benzo(a)pyrene measurements noted above were well below the MECP Schedule 6 Upper Risk Threshold and the MECP O.Reg. 419/05 24-hour average guideline.

New Ambient Air Quality Criteria (AAQC) for Sulphur dioxide were implemented in 2020, including a 10-minute rolling average AAQC of 67 parts per billion (ppb), a 1-hour rolling average AAQC of 40ppb and an annual AAQC of 4 ppb. Elevated concentrations of sulphur dioxide continue to be reported within the ambient air quarterly reports.

7. Noise Monitoring

On June 27th, 2017, a revised Noise Monitoring and Reporting Plan was submitted to the MECP. Acknowledgement was received from the MECP on September 21st, 2017. The revised report recommended the removal of the requirement to conduct annual acoustic measurements. This requirement was revoked by the MECP on February 24th, 2016, by Amendment Notice Number 4. The requirement for undertaking acoustic auditing could be reinstated if significant changes to facility operations with the potential to alter noise generation are proposed, or at the request of the MECP.

An annual review of the Noise Monitoring and Reporting Plan was completed in July 2022. No modifications to the Plan were required.

8. Soil Testing

Soil testing is required under Condition 7(10), 13(4) and 15(4) of the ECA and is undertaken in accordance with the Durham York Energy Centre Soils Testing Plan approved by the MECP in March 2013. In accordance with the approved plan, the parameters tested include metals, polycyclic aromatic hydrocarbons (PAHs), and dioxins and furans (PCDDs/PCDFs). Soil samples are evaluated against Table 1 Full Depth Background Site Condition Standards-Soil, of the Ground Water and Sediment Standards for Use Under part XV.1 of the Environmental Protection Act.

Soil testing commenced in August 2013 to quantify baseline contaminant concentrations prior to DYEC operations. Soil sampling and ambient air monitoring occur at the same locations, as required by Condition 13(4)(a) of the ECA and the approved Soils Testing Plan. Soil testing is performed once during each of the first three years of operation, and every three years thereafter until notification is received from the MECP Regional Director advising that soil monitoring is no longer required.

The most recent soils testing event was carried out on August 19th, 2020. Results were documented in a Soils Testing Report dated October 20th, 2020.

The next soil testing event is scheduled to be undertaken in August 2023.

Results from all soils testing events are available to the public on the DYEC website.

9. Groundwater and Surface Water Monitoring

Groundwater and surface water monitoring is a requirement of the EA Condition 20 and the ECA Condition 7(14). Monitoring is conducted in accordance with the Durham York Energy Centre Groundwater and Surface Water Monitoring Plan approved by the MECP in October 2011. The monitoring program started in December 2011, prior to the commencement of facility operations to collect background water quality data.

9.1. Surface Water Monitoring Results

In April 2016, the Regions requested a suspension of the surface water monitoring due to construction of the Courtice Road and Highway 401 interchange and the Tooley Creek realignment activities undertaken by the Ministry of Transportation. The construction activities have caused significant disruption and prevent the placement of sondes in Tooley Creek. In a response letter dated May 17th, 2016, the MECP granted the request and concurred with the interpretation of the surface water results to date. As a result, no in-situ surface water sampling occurred in the upstream or downstream locations within Tooley Creek from 2017-2022.

9.2 Groundwater Monitoring Results

Groundwater samples are collected annually in the fall through a series of dedicated on-site monitoring wells. In 2022, the groundwater analytical results for the required parameters of analysis satisfied their respective Ontario Drinking Water Standard (ODWS), except for the chloride and sodium concentrations within the groundwater at monitoring well MW4. The elevated concentrations of chloride and sodium detected at MW4 in 2022 are interpreted to be attributed to the seasonal exfiltration of salt-impacted surface water from the East Storm Water Management Pond that is

interpreted to migrate with ease through the more permeable sandy silt and into the screened interval of monitoring well MW4.

An interpretive analysis for the 2022 groundwater and surface water monitoring activities will be discussed in the pending groundwater and surface water annual report. This report, covering the 2022 monitoring period, will be submitted to the MECP by April 30th, 2023, in accordance with the "Submission of Groundwater Well Development" letter dated January 28th, 2013, and the MECP acknowledgment letter dated March 4th, 2013.

Further discussion on the assessment of the monitoring plan and the need for amendments for 2023 will be included in the annual groundwater and surface water report with supporting documentation. If any amendments are recommended, it will be discussed with the MECP.

Refer to **Table 14** for the groundwater well and in-situ surface water sonde locations and parameters tested.

Table 13: Groundwater and Surface Water Monitoring Program Summary

Groundwater Well ID	Groundwater Well Location	Monitoring Parameters
MW1	Northwest corner of site	Field Measurements, Major Anions, Major Cations, Metals
MW2A & 2B (nested)	Northeast corner of site	Field Measurements, Major Anions, Major Cations, Metals
MW3A & 3B (nested)	Southwest corner of site	Field Measurements, Major Anions, Major Cations, Metals
MW4	Southeast corner of site	Field Measurements, Major Anions, Major Cations, Metals

Groundwater Well ID	Groundwater Well Location	Monitoring Parameters
MW5 & 5B (nested)	Centre of site	Field Measurements, Major Anions, Major Cations, Metals

Surface Water Sonde ID	Sonde Location	Monitoring Parameters
SW01	Upstream in Tooley Creek	Field Measurements
SW02	Downstream in Tooley Creek	Field Measurements

The 2022 groundwater and surface water monitoring activities meet the compliance requirements of the EA, the ECA and the approved Groundwater and Surface Water Monitoring Plan. Groundwater and surface water monitoring results and correspondence available to date are posted on the DYEC website in accordance with ECA Condition 16 – Public Access to Documentation.

10. Inspections Maintenance and Repairs

10.1. Containment Protocol Inspections

The ECA outlines requirements to confirm the effectiveness of the containment of conveyors, tanks, and silos in various buildings on site, by conducting inspections, testing and / or engineering reviews. Initial containment testing (including negative pressure / smoke test of the Tipping Building) was conducted in 2014. The DYEC Containment Test Protocol, revised in September 2014, lists additional subsequent periodic inspections to be conducted.

All subsequent periodic inspections were conducted in accordance with the requirements outlined in **Table 15.**

Table 14: Containment Periodic Inspections

Containment Enclosure	Periodic Inspection
Tipping Building	• Calibration of boiler combustion air flow venturi transmitter
Refuse Pit	• Ground water monitoring
Grizzly and Residue Buildings	• Daily general inspections • Quarterly US EPA Method 22
Ammonia Tank	• Daily general inspections • Annual calibration of alarms
Cement and Pozzolan Silos	• Daily general inspections • Quarterly US EPA Method 22
Diesel Fueling Station	• Daily general visual inspections
Fire Pump Diesel Tanks	• Daily general visual inspections
Exterior Bottom and Fly Ash Conveyors	• Daily general inspections • Quarterly US EPA Method 22
Settling Basin	• Daily general visual inspections • Groundwater monitoring

10.2. Combustion Air Flow – Negative Pressure

While the Boilers are in operation, combustion air flow is maintained through the Tip Hall and pit area. The Facility induces airflow through the Tipping Building and across the pit by pulling air used for combustion through intake ducts located above the hoppers on the charging deck via forced draft fans. A system of louvers is adjusted according to prevailing operating conditions, such as the number of Boilers in operation and if MSW is being delivered. Louver positions for various Boiler operating scenarios were developed during the 2014 containment (smoke) test. Regular

maintenance and inspection activities are performed to confirm the building envelope remains in good condition as well as the functionality of all doors and roof vents. The doors and louvers are inspected daily for proper operation. These activities ensure odour is effectively contained within the confines of the Tipping Building.

The continuous monitoring of the combustion airflow rate through the Tipping Building is a surrogate for confirming that induced air flow is being maintained within the building. Temperatures, pressures, and flow rates are monitored throughout the combustion air and flue gas path in both units. Combustion airflows (1/2-FIT-4202) in each of the two thermal treatment units are monitored continuously to ensure proper airflow (odour containment) in the Tipping Building. As operating conditions change (i.e., shutdowns, non-delivery times), the airflow is adjusted with the use of louvers on the north wall of the Tipping Building to maintain sufficient airflow to prevent odourous air from leaving the building. An alarm indicator on the Distributed Control System (DCS) will alert the control room operator of low combustion air flows requiring possible louver repositioning as necessary. Periodic inspection and annual verification of the combustion air flow transmitters is conducted in accordance with the Containment Test Protocol.

10.3. Maintenance Review

Planned maintenance and inspection activities are an integral part of maintaining all plant processes and equipment. Covanta uses the PeopleSoft Asset Lifecycle Management system to track all maintenance and preventative maintenance activities at the DYEC. These activities include work identification, planning, scheduling, execution, detailing and cost-control, inventory management, preventative maintenance, purchasing, and equipment asset management. All critical equipment is systematically and repetitively inspected and tested. Critical equipment is also subjected to a systematic and detailed program of preventative maintenance, repair, and replacement. The system auto-generates work orders for all scheduled maintenance activities.

In 2022, scheduled preventative maintenance activities were completed on the Boilers, APC equipment, CEMS, and other auxiliary systems. See Appendix 6 for details.

10.4. Inspection Summaries

Records of activities are written or digital and include the date of record and the name and / or signature of the person completing the report.

An outside environmental checklist is completed by an operator daily to fulfill the requirements of ECA Condition 5(5) - Inspections. The weekly environmental inspection is completed by the Facility's Environmental Specialist through Process Map, a cloud based Environmental, Health, and Safety platform. A facility wide housekeeping initiative is also in place. Once per month all available employees participate in a clean-up (washing, cleaning, litter pick up etc.) and note any safety, environmental, and/or operational issues.

All records are available at the site and will be retained on site for a minimum of seven (7) years from the date of their creation, per ECA Condition 14(2).

No environmental or operational problems that could have negatively impacted the environment were identified during these inspections in 2022.

10.5. Sewage Works

In accordance with ECA Condition 5(7) Inspections and Maintenance of the Works, the Owner shall inspect the Works at least once a year and, if necessary, clean and maintain the Works to prevent the excessive build-up of sediments and / or vegetation.

The annual sewage works inspection was performed on November 1st, 2022. No deficiencies were found.

11. Operational Issues and Mitigation Measures

Under normal circumstances, with at least one Boiler in operation, the Facility maintains odour containment within the waste storage area (Tipping Building pit) by drawing

combustion air from inside the building, which prevents odours from escaping. In cold iron outage situations, where both Boilers are offline, odour control mitigation measures are implemented to minimize any potential offsite environmental impacts. Mitigation measures include diverting waste for disposal to alternate locations, misting micronutrients over the pit area and conducting regular on-site and off-site inspections to check for fugitive odours.

The DYEC entered cold iron outages on the dates listed below.

Date	Duration	Cause
March 7th to 20th	314 hours	Spring Major Outage
March 25th	6 hours	Utility Trip (external)
April 27th	19 hours	Utility Trip (external)
June 15th to June 20th	116 hours	Low Water Cutoff
August 1st	8 hours	Utility Trip (external)
August 22nd	3 hours	Utility Trip (external)
September 30th to October 5th	148 hours	Fall Minor Outage
October 13th	10 hours	Utility Trip (external)
December 16th	11 hours	Utility Trip (external)

No off-site odour concerns were noted during any of the cold-iron outages.

In 2022, there were no operational issues with potential impact to the environment. There were no malfunctions on the APC system or the CEM System that would have impacted the quality of the environment. Additional details on CEM System operational performance are provided in Section 5 - Air Emissions.

12. Emergency Situations

There was one reportable spill to MECP in 2022.

On September 15th, 2022, a roll-off truck sprung a hydraulic oil leak on the Tip Floor. The spill was contained and cleaned up according to procedure and the truck was verified to be leak free prior to exiting the Tipping Building. A thin stain trail was observed as the truck approached the outbound scale. No further trail was noted beyond Haul Rd. Despite the spill meeting the exemption for reporting under Ontario Regulation 675/98, out of an abundance of caution, the spill was reported to the Environmental Officer.

13. Complaints and Inquiries

The monitoring of complaints and inquiries is a requirement of the EA Condition 6 and the ECA Condition 10. A Complaint and Inquiry Log submission is provided to the MECP York Durham District Office District Manager monthly in accordance with the "Waste Complaint Protocol for Design, Construction & Operations" approved by the MECP in July 2011. Hard copies and digital records of complaints and the complaint investigation and responses are maintained on site. All Complaint and Inquiry Logs are available on the DYEC website. A summary of the 2022 complaints and inquiries is listed in **Table 16**. Any inquiries, comments, or complaints with the DYEC Environmental Screening Report will be treated separately in the Record of Consultation.

Table 15: Complaint and Inquiry Summary

Year	Durham	York	Covanta	Total
Complaints to DYEC directly	2	0	2	4
Complaints to Regional Councils	0	0	0	0
Inquiries to DYEC directly	9	0	0	9
Inquiries to Regional Councils	0	0	0	0

14. Energy from Waste Advisory Committee (EFWAC)

The Energy from Waste Advisory Committee (EFWAC) is a requirement of the EA Condition 8 and the ECA Condition 17. The committee was established in 2011 with membership outlined in the EA Condition 8. The meetings were advertised on the DYEC website in advance of upcoming meetings. The EFWAC is governed by their Terms of Reference which outlines the role of the EFWAC, presents guidelines for how the committee will operate, the membership composition, and when meetings will take place. The committee is chaired by a facilitator hired by the Regions of Durham and York. A summary of the 2022 EFWAC Committee meeting is provided in **Table 17**.

Table 16: EFWAC Meeting Summary

EFWAC Meeting #	Date	Time	Agenda Topics
19	December 20, 2022	2:00-4:00 PM	• Durham York Energy Centre 2021 Annual Compliance Report • Durham York Energy Centre Streamlined Environmental Assessment increase from 140,000 to 160,000 tonnes per year) • Extended Producer Responsibility • Durham Region Organics Management

The minutes from the meeting held December 20th, 2022, will be posted to the DYEC website following acceptance of the draft minutes by the members at the next meeting.

15. Training

The operator training program for the DYEC was developed to be a comprehensive program to ensure the Facility has technically competent, safe, and environmentally conscious operators. All operators are trained with respect to Condition 9 of the ECA, per

the specific job requirements of each individual operator. All written or digital records of training including date of training, name, and signature of the person who was trained, and a description of the training provided will be maintained on site for seven (7) years from the date of their creation per Condition 14(2). In addition to new hire training, training is continuously provided when procedures or equipment change and as a refresher.

16. Comparison to Report Results from Prior Years

Stack Emissions

Since 2016, there have been 13 consecutive source tests that have demonstrated full compliance to all ECA limits. All dispersion modelling performed in conjunction with the source tests met the stipulated 24-hour average guideline limits within Ontario Regulation 419/05.

Ash Testing

Consistent with annual results from 2016 – 2021, 2022 bottom ash testing results continued to meet the definition of a solid non-hazardous material. See Appendix 2 for statistical analyses.

Ambient Air

Similar to previous operating years, all contaminants were below their applicable MECP criteria as well as applicable HHRA health-based standards with the exception of benzo(a)pyrene and sulphur dioxide (SO_2) 10-minute rolling average and hourly rolling average. In 2022, the fourth quarter recorded the majority of elevated SO_2 concentrations, which is similar to the results in 2021. New Ambient Air Quality Criteria (AAQC) for sulphur dioxide were implemented in 2020, including a 10-minute rolling average AAQC of 67 parts per billion (ppb), a 1-hour rolling average AAQC of 40 ppb and an annual AAQC of 4 ppb. Elevated concentrations of sulphur dioxide will continue to be reported within the ambient air quarterly reports.

Groundwater and Surface Water

Similar to previous years, the 2022 groundwater monitoring activities meet the compliance requirements of the EA, the ECA, and the approved Groundwater and Surface Water Monitoring Plan. Suspension of the surface water monitoring program continued throughout 2022.

Soil

The most recent soil testing event was carried out in 2020. The results from the sampling event indicated results comparable to the previous sampling events. The next soil testing event is scheduled to be undertaken in August 2023.

Complaints and Inquiries

Complaints were received through Regional Council, the DYEC website and through direct communication. Compared to 2021, complaints increased by 4%. The increase from 2021 to 2022 results from concerns and inquiries submitted to Durham Regional Council by members of the public related to the ongoing application for DYEC waste capacity increase to process 160,000 tonnes per year. Complaints and inquiries continue to be recorded.

17. Recommendations for Improvement

17.1. Status of Recommendations from the 2022 Annual Report

Recommendations for 2022

1) Maintain ISO 14001:2015 Environmental Management System (EMS) Certification

   Status: ISO14001:2015 EMS certification was initially granted on January 28th, 2018. A recertification audit was conducted on January 24th and 25th, 2022 with no non-conformances identified. The EMS continues to be effective in addressing environmental risk and opportunities as well as assisting the Facility to fulfill all compliance obligations.

2) Continue to optimize facility operations to decrease reagent consumption while maintaining full compliance with all regulatory limits.

   Status: Research in optimizing reagent usage was conducted in 2022 that demonstrated a strong potential for a reduction of reagent on conditioned ash or flue gas cleaning without having an adverse effect on the environment. This will be further explored in 2023.

3) Optimize the demand for boiler feedwater treatment as it is energy and reagent intensive.

   Status: Efforts during 2022 to optimize boiler feedwater treatment showed limited progress. Optimization will continue into 2023.

4) Fine tune combustion operations control to reduce auxiliary fuel usage

   Status: Fuel usage increased in 2022 because of utility disruptions and equipment breakdowns. Efforts to reduce auxiliary fuel usage during normal steady state conditions will carry over to 2023.

17.2. Recommendations for 2023

Below is a summary of recommendations to improve the environmental and process performance of the site.

1) Maintain ISO 14001:2015 Environmental Management System Certification.
2) Continue to expand and work on the opportunities found in 2022 for optimizing reagent usage.
3) Continue to optimize the demand for boiler feedwater treatment.
4) Explore opportunities to improve combustion operations to reduce auxiliary fuel usage.

Appendix 1: MECP EA / ECA 2022 Report Submittals

Appendix 1: MECP EA/ECA Report Submittals

Report Type	Report Name	Submission Date
Ambient Air Monitoring Reports as per ECA 7(4)(b), EA 11.7, Operations Manual for AQ Monitoring in Ontario	2021 Ambient Air Q4 Report	February 14, 2022
Ambient Air Monitoring Reports as per ECA 7(4)(b), EA 11.7, Operations Manual for AQ Monitoring in Ontario	2021 Ambient Air Annual Report	May 13, 2022
Ambient Air Monitoring Reports as per ECA 7(4)(b), EA 11.7, Operations Manual for AQ Monitoring in Ontario	2022 Ambient Air Q1 Report	May 13, 2022
Ambient Air Monitoring Reports as per ECA 7(4)(b), EA 11.7, Operations Manual for AQ Monitoring in Ontario	2022 Ambient Air Q2 Report	August 12, 2022
Ambient Air Monitoring Reports as per ECA 7(4)(b), EA 11.7, Operations Manual for AQ Monitoring in Ontario	2022 Ambient Air Q3 Report	November 14, 2022
Ambient Air Monitoring Reports as per ECA 7(4)(b), EA 11.7, Operations Manual for AQ Monitoring in Ontario	2022 Ambient Air Q4 Report	February 14, 2022
Annual Report as per ECA (15)(1)	2021 Annual Report	March 31, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	January Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	February Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	March Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	April Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	May Complaint & Inquiry Log	October 28, 2022

Report Type	Report Name	Submission Date
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	June Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	July Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	August Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	September Complaint & Inquiry Log	October 28, 2022
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	October Complaint & Inquiry Log	January 27, 2023
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	November Complaint & Inquiry Log	January 27, 2023
Complaint and Inquiry Logs as per ECA 10(1), ECA 10(2), 14(7)	December Complaint & Inquiry Log	January 27, 2023
Compliance Monitoring Report as per EA 5.4	2022 Compliance Monitoring Report	November 3, 2022
Groundwater and Surface Water Monitoring Reports as per ECA 7(14)(b), EA 20.8	2021 Annual Groundwater and Surface Water Reports	April 29, 2022
Noise Monitoring and Mitigation Reports- Acoustic Audit Reports as per Noise Monitoring Plan	2022 Acoustic Audit	N/A
Odour Management and Mitigation Monitoring Report as per ECA 8(9)(b)	2022 Odour Management and Mitigation Monitoring Report	November 25, 2022
Soil Testing Report as per ECA 15(4)	Not required	Not required
Source Test as per ECA 7(1), Schedule E(1), ECA Schedule E(7) and Schedule E(8) respectively	2022 Source Test Report	March 3, 2023
Source Test as per ECA 7(1), Schedule E(1), ECA Schedule E(7) and Schedule E(8) respectively	Source Test Pre-test Plan	September 29, 2022
Source Test as per ECA 7(1), Schedule E(1), ECA Schedule	Notification to MECP 15 days prior to Source test	November 14, 2022

Report Type	Report Name	Submission Date
E(7) and Schedule E(8) respectively		
Third Party Audit Report as per ECA 15(3), EA 16	2021 Third Party Operations Audit	April 29, 2022
Waste Diversion Monitoring Report as per EA 10.4	2021 Annual Waste Diversion Reports	October 28, 2022 & October 14, 2022

Appendix 2: Bottom and Fly Ash Sampling

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DURHAM YORK ENERGY CENTRE
SUMMARY OF PLANT OPERATING CONDITIONS
BOTTOM ASH SAMPLING - 2022

2022	Scalehouse Record of Waste Received (tonnes)	Waste Processed (tonnes)	Combustion Temperature (avg C)	Combustion O_2 Level (avg %)	Carbon Monoxide Level (4 hour mg/Rm^3 @11% O_2 avg)	Opacity (avg %)	Lime Use (kg)	Carbon Use (kg)	Ammonia Use (L)	Generated Ash (tonnes)
Q1: 15-FEB-22	452	373	1,257	9	9	1	8,459	254	1,695	86
Q2: 13-JUN-22	486	430	1,262	9	13	1	7,808	304	1,260	90
Q3: 13-SEP-22	672	452	1,298	9	14	1	7,720	255	1,525	72
Q4: 08-NOV-22	669	444	1,165	10	10	1	7,385	254	1,405	73

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DURHAM YORK ENERGY CENTRE
LABORATORY RESULTS: BOTTOM ASH (ASTMD5468)
Q4 2020 CASTP TO Q4 2022

SAMPLE ID NUMBER	SAMPLE DATE	MOISTURE TOTAL (%)	LOSS ON IGNITION
DYEC/BA/201024/SGS-1	24-Oct-20	15.43	1.55
DYEC/BA/201024/SGS-2	24-Oct-20	14.96	1.12
DYEC/BA/201024/SGS-3	24-Oct-20	15.13	0.89
DYEC/BA/201024/SGS-4	24-Oct-20	15.13	1.32
DYEC/BA/201025/SGS-1	25-Oct-10	14.23	0.92
DYEC/BA/201025/SGS-2	25-Oct-10	14.14	0.99
DYEC/BA/201025/SGS-3	25-Oct-10	13.82	0.95
DYEC/BA/201025/SGS-4	25-Oct-10	13.88	0.88
DYEC/BA/201027/SGS-1	27-Oct-20	13.89	0.76
DYEC/BA/201027/SGS-2	27-Oct-20	14.43	<0.59
DYEC/BA/201027/SGS-3	27-Oct-20	14.05	<0.59
DYEC/BA/201027/SGS-4	27-Oct-20	13.90	<0.59
DYEC/BA/201028/SGS-1	28-Oct-20	16.14	<0.58
DYEC/BA/201028/SGS-2	28-Oct-20	15.86	<0.58
DYEC/BA/201028/SGS-3	28-Oct-20	18.37	<0.56
DYEC/BA/201028/SGS-4	28-Oct-20	15.77	<0.58
DYEC/BA/201029/SGS-1	29-Oct-20	13.82	<0.59
DYEC/BA/201029/SGS-2	29-Oct-20	13.87	<0.59
DYEC/BA/201029/SGS-3	29-Oct-20	13.71	<0.60
DYEC/BA/201029/SGS-4	29-Oct-20	13.83	<0.59
DYEC/BA/210223/SGS-1	23-Feb-21	21.15	0.97
DYEC/BA/210223/SGS-2	23-Feb-21	21.35	0.99
DYEC/BA/210223/SGS-3	23-Feb-21	21.11	1.03
DYEC/BA/210223/SGS-4	23-Feb-21	21.09	1.34
DYEC/BA/210518/SGS-1	18-May-21	12.84	0.59
DYEC/BA/210518/SGS-2	18-May-21	12.96	0.70
DYEC/BA/210518/SGS-3	18-May-21	13.09	<0.60
DYEC/BA/210518/SGS-4	18-May-21	12.76	0.54
DYEC/BA/210920/SGS-1	20-Sep-21	15.61	1.09
DYEC/BA/210920/SGS-2	20-Sep-21	15.50	0.95
DYEC/BA/210920/SGS-3	20-Sep-21	15.45	0.96
DYEC/BA/210920/SGS-4	20-Sep-21	15.55	0.88
DYEC/BA/211109/SGS-1	9-Nov-21	19.06	1.22
DYEC/BA/211109/SGS-2	9-Nov-21	14.94	0.99
DYEC/BA/211109/SGS-3	9-Nov-21	14.25	1.17
DYEC/BA/211109/SGS-4	9-Nov-21	10.51	1.32
DYEC/BA/220215/SGS-1	15-Feb-22	16.80	0.94
DYEC/BA/220215/SGS-2	15-Feb-22	16.82	0.85
DYEC/BA/220215/SGS-3	15-Feb-22	16.85	0.85
DYEC/BA/220215/SGS-4	15-Feb-22	16.65	0.90

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DURHAM YORK ENERGY CENTRE
LABORATORY RESULTS: BOTTOM ASH (ASTMD5468)
Q4 2020 CASTP TO Q4 2022

DYEC/BA/220613/SGS-1	13-Jun-22	12.50	0.60
DYEC/BA/220613/SGS-2	13-Jun-22	12.82	0.60
DYEC/BA/220613/SGS-3	13-Jun-22	12.66	0.60
DYEC/BA/220613/SGS-4	13-Jun-22	12.53	0.60
DYEC/BA/220912/SGS-1	12-Sep-22	16.28	0.58
DYEC/BA/220912/SGS-2	12-Sep-22	16.50	0.58
DYEC/BA/220912/SGS-3	12-Sep-22	16.16	0.58
DYEC/BA/220912/SGS-4	12-Sep-22	16.23	0.58
DYEC/BA/2221108/SGS-1	8-Nov-22	16.52	0.40
DYEC/BA/2221108/SGS-2	8-Nov-22	16.42	0.58
DYEC/BA/2221108/SGS-3	8-Nov-22	16.31	0.57
DYEC/BA/2221108/SGS-4	8-Nov-22	16.27	0.58

CONSOLIDATED COMPOSITE SAMPLE STATISTICAL RESULTS

NUMBER OF SAMPLES	52
DEGREES OF FREEDOM	51
SAMPLE MEAN (XBAR)	0.80
SAMPLE VARIANCE (S^2)	0.07
STANDARD DEVIATION (S)	0.26
STD ERROR (S XBAR)	0.04
90% CI, one sided (upper limit)	**0.85**
MAXIMUM	1.55
MINIMUM	0.40
REGULATORY THRESHOLD	**10**

NOTE:
(a) Less than symbol (<) indicates laboratory result below the detection limit. The value used in this table is the detection limit provided by the laboratory.

Appendix 3: Voluntary Source Test

Covanta Durham York Renewable Energy Limited Partnership, Durham York Energy Centre, 2022 Voluntary Compliance Emission Testing Program

Executive Summary

CalPuff Modelling for June 2022 Voluntary Source Testing at Durham York Energy Centre (Emission Summary Table)

EXECUTIVE SUMMARY

ORTECH Consulting Inc. (ORTECH) completed a voluntary compliance emission testing program at the Durham York Energy Centre (DYEC) located in Courtice, Ontario between May 16 and May 19, 2022. The voluntary emission testing program was performed at the request of the Regions of Durham and York. The current test program is the seventh voluntary test program conducted at the facility.

Ontario Ministry of the Environment, Conservation and Parks (MECP) Amended Environmental Compliance Approval (ECA) No. 7306-8FDKNX Section 7(1) states that "the owner shall perform annual source testing, in accordance with the procedures and schedule outlined in the attached Schedule E, to determine the rates of emissions of the test contaminants from the stack. The program shall be conducted not later than six months after the commencement date of operation of the facility/equipment and subsequent source testing programs shall be conducted once every calendar year thereafter". A list of the test programs conducted by ORTECH to date is provided below:

Test Program	Test Date	ORTECH Report No.
2015 Compliance	September/October 2015	21546
2016 Voluntary	May 2016	21656
2016 Compliance	October/November 2016	21698
2017 Voluntary	May 2017	21754
2017 Compliance	October 2017	21800
2018 Voluntary	May/June 2018	21840
2018 Compliance	September 2018	21880
2019 Voluntary	June 2019	21936
2019 Compliance	September 2019	21960
2020 Voluntary	June 2020	22001
2020 Compliance	November 2020	22050
2021 Voluntary	June 2021	22081
2021 Compliance	November/December 2021	22085
2022 Voluntary	May 2022	22158

Source testing was performed on the Baghouse (BH) Outlet of Boiler No. 1 and BH Outlet of Boiler No. 2 for the test contaminants listed in Schedule D of the ECA.

Triplicate emission tests were completed for particulate matter, metals, semi-volatile organic compounds, acid gases, volatile organic compounds, aldehydes and combustion gases at the BH Outlet of each Boiler. Triplicate emission tests were also completed for total hydrocarbons at the Quench Inlet of each Boiler. The contaminant groups included in the emission test program and the reference test methods used are summarized below:

Test Groups	Reference Method
Particulate and Metals	US EPA Method 29
$PM_{2.5}$/PM_{10} and Condensable Particulate	US EPA Methods 201A and 202
Semi-Volatile Organic Compounds	Environment Canada Method EPS 1/RM/2
Volatile Organic Compounds	US EPA SW-846 Method 0030 (SLO VOST modification)
Aldehydes	NCASI Method ISS/FP-A105.01
Halides and Ammonia	US EPA Method 26A
Combustion Gases:	
Oxygen and Carbon Dioxide	Facility CEM
Carbon Monoxide	Facility CEM
Sulphur Dioxide	Facility CEM
Nitrogen Oxides	Facility CEM
Total Hydrocarbons	ORTECH per US EPA Method 25A

Schedule C of ECA No. 7306-8FDKNX lists in-stack limits for the emissions of various compounds. In-stack emissions limits are given for particulate matter, mercury, cadmium, lead, dioxins and furans and organic matter for comparison with the results from compliance source testing. In-stack emission limits are also given for hydrochloric acid, sulphur dioxide, nitrogen oxides and carbon monoxide calculated as the rolling arithmetic average of data measured by a continuous emission monitoring system (CEMS).

Since relative accuracy and system bias testing was conducted in June 2021, the data recorded by the DYEC CEMS was used to assess against the in-stack emissions limits detailed in Schedule C of the ECA for hydrochloric acid, sulphur dioxide, nitrogen oxides and carbon monoxide. Note the DYEC CEMS data for the days when isokinetic testing was performed at each unit (May 17 to May 19, 2022 for Boiler No. 1, and May 16 to May 19, 2022 for Boiler No. 2) was used to determine the minimum, average and maximum concentrations of the combustion gases listed in the ECA. Concentration data measured by ORTECH on May 16 and May 17, 2022 was used to assess against the total hydrocarbons (organic matter) in-stack emissions limit detailed in Schedule C of the ECA.

Consistent with the approach commonly required by the MECP for compliance emission testing programs, the following results are conservative in the sense that when the analytical result is reported to be below the detection limit, the full detection limit is used to calculate emission data and is shown by a "<" symbol. Also, when one or both Boiler results are reported to be below the detection limit, the detection limit was used to conservatively estimate the total emission rate for the Main Stack.

The MECP "Summary of Standards and Guidelines to Support Ontario Regulation 419/05 – Air Pollution – Local Air Quality", dated April 2012, provides an updated framework for calculating dioxin and furan toxicity equivalent concentrations which includes emission data for 12 dioxin-like PCBs. This document was replaced by "Air Contaminants Benchmarks List: standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", with the most recent version published on April 27, 2018, however the dioxin and furan toxicity equivalent calculation methodology remains the same. The dioxins, furans and dioxin-like PCBs toxicity equivalent emission data was also calculated using half the detection limit for those compounds not detected. The half detection limit data was used to assess against the dispersion modelling Point of Impingement limit. The toxicity equivalent concentrations calculated using the full detection limit, for those compounds less than the reportable detection limit, were used to assess against the in-stack limit detailed in Schedule C of the ECA.

The average results for the tests conducted at Boiler No. 1, along with the respective in-stack emission limits, are summarized in the following table:

Parameter	Test No. 1	Test No. 2	Test No. 3	Average	In-Stack Limit
Total Power Output (MWh/day)*	-	-	-	385	-
Average Combustion Zone Temp. (°C)*	-	-	-	1258	-
Steam (tonnes/day)*	-	-	-	814	-
MSW Combusted (tonnes/day)*	-	-	-	210	-
NO_X Reagent Injection Rate (liters/day)*	-	-	-	695	-
Carbon Injection (kg/day)*	-	-	-	126	-
Lime Injection (kg/day)*	-	-	-	4109	-
Filterable Particulate (mg/Rm^3) (1)	1.09	0.67	0.84	0.87	9
PM_{10} with Condensable (mg/Rm^3) (1)	4.25	4.30	5.56	4.70	-
$PM_{2.5}$ with Condensable (mg/Rm^3) (1)	3.78	3.91	5.35	4.35	-
Hydrogen Fluoride (mg/Rm^3) (1)	<0.091	<0.10	<0.10	<0.097	-
Ammonia (mg/Rm^3) (1)	0.89	0.82	0.86	0.86	-
Cadmium (µg/Rm^3) (1)	<0.022	0.025	0.022	<0.023	7
Lead (µg/Rm^3) (1)	0.21	0.21	0.23	0.22	50
Mercury (µg/Rm^3) (1)	<0.082	<0.090	<0.094	<0.089	15
Antimony (µg/Rm^3) (1)	0.067	0.18	0.077	0.11	-
Arsenic (µg/Rm^3) (1)	<0.044	<0.045	<0.043	<0.044	-
Barium (µg/Rm^3) (1)	0.22	1.40	1.33	0.98	-
Beryllium (µg/Rm^3) (1)	<0.044	<0.045	<0.043	<0.044	-
Chromium (µg/Rm^3) (1)	0.70	0.64	0.63	0.66	-
Cobalt (µg/Rm^3) (1)	0.030	<0.045	<0.043	<0.039	-
Copper (µg/Rm^3) (1)	1.86	2.11	2.13	2.03	-
Molybdenum (µg/Rm^3) (1)	7.99	7.96	7.20	7.72	-
Nickel (µg/Rm^3) (1)	0.49	0.52	0.52	0.51	-
Selenium (µg/Rm^3) (1)	<0.22	<0.22	<0.21	<0.22	-
Silver (µg/Rm^3) (1)	<0.044	<0.045	<0.043	<0.044	-
Thallium (µg/Rm^3) (1)	<0.044	<0.045	<0.043	<0.044	-
Vanadium (µg/Rm^3) (1)	<0.022	<0.022	<0.021	<0.022	-
Zinc (µg/Rm^3) (1)	3.46	3.87	5.70	4.34	-
Dioxins and Furans (pg TEQ/Rm^3) (3)	<8.32	<8.00	<5.51	<7.28	60
Total Chlorobenzenes (ng/Rm^3) (1)	<75.1	<89.9	<103	<89.3	-
Total Chlorophenols (ng/Rm^3) (1)	<165	<165	<162	<164	-
Total PAHs (ng/Rm^3) (1)	<177	<1627	<196	<667	-
VOCs (µg/Rm^3) (1)	<1829	<536	<596	<987	-
Aldehydes (µg/Rm^3) (1)	<49.1	<40.1	<40.6	<43.3	-
Total VOCs (µg/Rm^3) (1) (4)	<1878	<576	<637	<1030	-
Quench Inlet Organic Matter (THC) (ppm, dry) (2)	0.9	0.7	0.4	0.7	50

* based on process data provided by Covanta

(1) dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(2) dry basis as equivalent methane (average of each 60 minute test with data recorded in 1-minute intervals)

(3) calculated using the NATO/CCMS (1989) toxicity equivalence factors and the full detection limit for those isomers below the analytical detection limit, dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(4) Includes all components from the volatile organic compounds test list in the ECA (i.e. Volatile Organic Sampling Train and Aldehyde Sampling train components).

The average results for the tests conducted at Boiler No. 2, along with the respective in-stack emission limits, are summarized in the following table:

Parameter	Test No. 1	Test No. 2	Test No. 3	Average	In-Stack Limit
Total Power Output (MWh/day)*	-	-	-	385	-
Average Combustion Zone Temp. (°C)*	-	-	-	1192	-
Steam (tonnes/day)*	-	-	-	808	-
MSW Combusted (tonnes/day)*	-	-	-	210	-
NO_X Reagent Injection Rate (liters/day)*	-	-	-	568	-
Carbon Injection (kg/day)*	-	-	-	126	-
Lime Injection (kg/day)*	-	-	-	4185	-
Filterable Particulate (mg/Rm^3) (1)	3.04	0.67	1.01	1.58	9
PM_{10} with Condensable (mg/Rm^3) (1)	4.83	5.38	<4.13	<4.78	-
$PM_{2.5}$ with Condensable (mg/Rm^3) (1)	4.28	5.10	<3.86	<4.41	-
Hydrogen Fluoride (mg/Rm^3) (1)	<0.098	<0.093	<0.10	<0.097	-
Ammonia (mg/Rm^3) (1)	0.57	0.55	3.00	1.37	-
Cadmium (µg/Rm^3) (1)	0.064	<0.021	0.033	<0.039	7
Lead (µg/Rm^3) (1)	0.38	0.21	0.25	0.28	50
Mercury (µg/Rm^3) (1)	<0.083	<0.082	<0.092	<0.086	15
Antimony (µg/Rm^3) (1)	0.27	0.14	0.044	0.15	-
Arsenic (µg/Rm^3) (1)	<0.047	<0.042	<0.040	<0.043	-
Barium (µg/Rm^3) (1)	1.56	1.42	1.86	1.62	-
Beryllium (µg/Rm^3) (1)	<0.047	<0.042	<0.040	<0.043	-
Chromium (µg/Rm^3) (1)	0.83	1.32	0.67	0.94	-
Cobalt (µg/Rm^3) (1)	0.037	0.035	0.021	0.031	-
Copper (µg/Rm^3) (1)	2.38	2.13	2.16	2.22	-
Molybdenum (µg/Rm^3) (1)	8.15	7.45	7.30	7.63	-
Nickel (µg/Rm^3) (1)	0.65	0.76	0.52	0.64	-
Selenium (µg/Rm^3) (1)	<0.24	<0.21	<0.20	<0.22	-
Silver (µg/Rm^3) (1)	<0.047	<0.042	<0.040	<0.043	-
Thallium (µg/Rm^3) (1)	<0.047	<0.042	<0.040	<0.043	-
Vanadium (µg/Rm^3) (1)	<0.024	<0.021	<0.020	<0.022	-
Zinc (µg/Rm^3) (1)	7.46	3.57	5.78	5.60	-
Dioxins and Furans (pg TEQ/Rm^3) (3)	<4.21	<4.04	<4.05	<4.10	60
Total Chlorobenzenes (ng/Rm^3) (1)	<101	<75.6	<89.1	<88.6	-
Total Chlorophenols (ng/Rm^3) (1)	<160	<158	<161	<160	-
Total PAHs (ng/Rm^3) (1)	<194	<181	<212	<196	-
VOCs (µg/Rm^3) (1)	<827	<531	<807	<722	-
Aldehydes (µg/Rm^3) (1)	<64.9	<47.7	<77.8	<63.4	-
Total VOCs (µg/Rm^3) (1) (4)	<892	<579	<885	<785	-
Quench Inlet Organic Matter (THC) (ppm, dry) (2)	1.2	1.8	1.4	1.5	50

* based on process data provided by Covanta

(1) dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(2) dry basis as equivalent methane (average of each 60 minute test with data recorded in 1-minute intervals)

(3) calculated using the NATO/CCMS (1989) toxicity equivalence factors and the full detection limit for those isomers below the analytical detection limit, dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(4) Includes all components from the volatile organic compounds test list in the ECA (i.e. Volatile Organic Sampling Train and Aldehyde Sampling train components).

A summary of the minimum, average and maximum concentrations for the combustion gases measured by the DYEC CEMS with in-stack limits listed in the ECA is provided below for the two units.

Boiler No.	Parameter	Minimum	Average	Maximum	In-Stack Limit
Boiler No. 1	Carbon Monoxide (mg/Rm^3) (1)	5.5	10.7	15.0	40
	Hydrogen Chloride (mg/Rm^3) (2)	0.5	1.0	1.5	9
	Nitrogen Oxides (mg/Rm^3) (2)	108	110	111	121
	Sulphur Dioxide (mg/Rm^3) (2)	0	0.02	0.1	35
Boiler No. 2	Carbon Monoxide (mg/Rm^3) (1)	9.0	15.3	29.8	40
	Hydrogen Chloride (mg/Rm^3) (2)	3.2	3.6	3.9	9
	Nitrogen Oxides (mg/Rm^3) (2)	108	110	111	121
	Sulphur Dioxide (mg/Rm^3) (2)	0	0.9	2.0	35

(1) 4-hour average measured by DYEC CEMS, dry at 25°C and 1 atmosphere adjusted to 11% oxygen by volume
(2) 24-hour average measured by DYEC CEMS, dry at 25°C and 1 atmosphere adjusted to 11% oxygen by volume

The emission data measured at each Boiler BH Outlet during the testing program was combined and used to assess the emissions from the Main Stack against the current point of impingement criteria detailed in Ontario Regulation 419/05.

Dispersion modelling was completed using the CALPUFF model (using Version 7.2.1 level 150618) by Golder Associates. A summary of the results are provided in the tables appended to this report (Appendix 27) based on calculated ground level Point of Impingement (POI) concentrations for the average total Main Stack emissions. As shown in the tables, the calculated impingement concentrations for all of the contaminants were well below the relevant MECP standards.

In summary, the key results of the emission testing program are:

- The facility was maintained within the operational parameters defined by the amended ECA that constitutes normal operation during the stack test periods. Testing was conducted at a steam production rate of greater than 807 tonnes of steam per day for each Boiler (approximately 99.9% of maximum continuous rating). The maximum continuous rating for the facility is 1614.7 tonnes of steam per day for the two Boilers combined (33.64 tonnes of steam per hour or 807.4 tonnes per day for each Boiler).
- The in-stack concentrations of the components listed in the ECA were all below the concentration limits provided in Schedule C of the ECA.
- Using CALPUFF dispersion modelling techniques, the predicted maximum point of impingement concentrations, based on the average test results for both boilers, show DYEC to be operating well below all current standards in Regulation 419/05 under the Ontario Environmental Protection Act and other MECP criteria including guidelines and upper risk thresholds.

Tables referenced in this report for the tests conducted at Boiler No. 1 and Boiler No. 2 are provided in Appendix 1 and Appendix 2, respectively.

Appendix B
Emission Summary Table

Contaminant	CAS No.	Total Facility Emission Rate [g/s]	Air Dispersion Model Used	Maximum POI Concentration Before Meteorological Anomaly Removal [µg/m³]	Maximum POI Concentration After Meeorological Anomaly Removal [µg/m³]	Averaging Period	MECP POI Limit [µg/m³]	Limiting Effect	Schedule	Source	Benchmark	Percentage of MECP Limit [%]	Notes	Version of Date of ACB List
1 – methylnaphthalene	90-12-0	4.77E-07	Calpuff	5.84E-07	5.56E-07	24-hour	35.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
1,2,4 – Trichlorobenzene	120-82-1	1.06E-07	Calpuff	1.30E-07	1.24E-07	24-hour	400	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
1,2,4,5-Tetrachlorobenzene	95-94-3	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	1	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
1,2-Dichlorobenzene	95-50-1	3.45E-07	Calpuff	9.97E-06	3.60E-06	1-hour	30500	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
2 – methylnaphthalene	91-57-6	1.08E-06	Calpuff	1.32E-06	1.26E-06	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
2,3,4,6-Tetrachlorophenol	58-90-2	3.85E-07	Calpuff	4.71E-07	4.49E-07	24-hour	0.75	Health	—	SL-JSL	B2	Below SL-JSL	—	Apr-18
2,4,6-Trichlorophenol	88-06-2	3.85E-07	Calpuff	4.71E-07	4.49E-07	24-hour	1.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
2,4-Dichlorophenol	120-83-2	3.85E-07	Calpuff	4.71E-07	4.49E-07	24-hour	33.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
3-Methylcholanthrene	56-49-5	3.85E-07	Calpuff	4.71E-07	4.49E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
7,12-Dimethylbenzo(a)anthracene	57-97-6	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Acenaphthene	83-32-9	8.50E-08	Calpuff	1.04E-07	9.91E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Acenaphthylene	208-96-8	8.31E-08	Calpuff	1.02E-07	9.69E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Acetaldehyde	75-07-0	1.37E-03	Calpuff	1.68E-03	1.60E-03	24-hour	500	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Acetaldehyde	75-07-0	1.37E-03	Calpuff	1.68E-03	1.60E-03	24-hour	5000	—	Sch. 6	URT	—	<1%	—	—
Acrolein	107-02-8	9.80E-05	Calpuff	1.20E-04	1.14E-04	24-hour	0.4	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Acrolein	107-02-8	9.80E-05	Calpuff	2.83E-03	1.02E-03	1-hour	4.5	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Acrolein	107-02-8	9.80E-05	Calpuff	1.20E-04	1.14E-04	24-hour	4	Health	Sch. 6	URT	—	<1%	—	Apr-18
Ammonia	7664-41-7	4.41E-02	Calpuff	5.40E-02	5.15E-02	24-hour	100	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Ammonia	7664-41-7	4.41E-02	Calpuff	5.40E-02	5.15E-02	24-hour	1000	Health	Sch. 6	URT	—	<1%	—	Apr-18
Anthracene	120-12-7	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Antimony	7440-36-0	5.05E-06	Calpuff	6.19E-06	5.89E-06	24-hour	25	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Arsenic	7440-38-2	1.72E-06	Calpuff	2.10E-06	2.00E-06	24-hour	0.3	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Barium	7440-39-3	5.14E-05	Calpuff	6.29E-05	6.00E-05	24-hour	10	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Benzene	71-43-2	2.55E-04	Calpuff	1.44E-05	1.44E-05	Annual	0.45	Health	Sch. 3	Standard	B1	<1%	Note 19, Table 2, 3 URT - Note 4, Table 4	Apr-18
Benzene	71-43-2	2.55E-04	Calpuff	3.13E-04	2.98E-04	24-hour	100	Health	Sch. 6	URT/DAV	B1	<1%	—	—
Benzene	71-43-2	2.55E-04	Calpuff	1.44E-05	1.44E-05	Annual	4.5	Health	—	AAV	—	<1%	—	Apr-18
Benzo(a)anthracene	56-55-3	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(a)fluorene	238-84-6	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(a)pyrene	50-32-8	7.69E-08	Calpuff	4.35E-09	4.35E-09	Annual	0.00001	Health	Sch. 3	Standard	B1	<1%	Note 7, 19, Table 2, 3URT - Note 4, Table 4	Apr-18
Benzo(a)pyrene	50-32-8	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.005	Health	Sch. 6	URT	—	<1%	—	Apr-18
Benzo(a)pyrene	50-32-8	7.69E-08	Calpuff	4.35E-09	4.35E-09	Annual	0.0001	Health	—	AAV	—	<1%	—	Apr-18
Benzo(b)fluoranthene	205-99-2	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(b)fluorene	243-17-4	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(e)pyrene	192-97-2	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(g,h,i)perylene	191-24-2	9.16E-08	Calpuff	1.12E-07	1.07E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(k)fluoranthene	207-08-9	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Beryllium	7440-41-7	1.72E-06	Calpuff	2.10E-06	2.00E-06	24-hour	0.01	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Biphenyl	92-51-3	1.83E-07	Calpuff	2.24E-07	2.13E-07	24-hour	175	Health	—	SL-JSL	B2	Below SL-JSL	—	Apr-18
Bromodichloromethane	75-27-4	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	350	Health	—	SL-JSL	B2	Below SL-JSL	—	Apr-18
Bromoform	75-25-2	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	55	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Bromomethane	74-83-9	1.16E-03	Calpuff	1.42E-03	1.35E-03	24-hour	1350	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Cadmium	7440-43-9	1.22E-06	Calpuff	1.49E-06	1.42E-06	24-hour	0.025	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Cadmium	7440-43-9	1.22E-06	Calpuff	1.49E-06	1.42E-06	24-hour	0.25	Health	Sch. 6	URT	—	<1%	—	Apr-18
Carbon Monoxide	630-08-0	5.18E-01	Calpuff	1.79E+01	6.48E+00	1/2-hour	6000	Health	Sch. 3	Standard	B1	<1%	Note 9	Apr-18
Carbon tetrachloride	56-23-5	4.16E-05	Calpuff	5.09E-05	4.85E-05	24-hour	2.4	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Carbon tetrachloride	56-23-5	4.16E-05	Calpuff	5.09E-05	4.85E-05	24-hour	24	Health	Sch. 6	URT	—	<1%	—	Apr-18
Chlorobenzene	108-90-7	1.87E-06	Calpuff	5.41E-05	1.95E-05	1-hour	3500	Health	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Chlorobenzene	108-90-7	1.87E-06	Calpuff	8.93E-05	3.22E-05	10-minute	4500	Odour	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Chloroform	67-66-3	6.88E-05	Calpuff	8.42E-05	8.02E-05	24-hour	1	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Chloroform	67-66-3	6.88E-05	Calpuff	8.42E-05	8.02E-05	24-hour	100	Health	Sch. 6	URT	—	<1%	—	Apr-18
Chromium (hexavalent)	18540-29-9	3.16E-05	Calpuff	1.79E-06	1.79E-06	Annual	0.00014	Health	Sch. 3	Standard	B1	1%	Notes 11, 19, Table 2, 3URT - Note 4, Table 4	Apr-18
Chromium (hexavalent)	18540-29-9	3.16E-05	Calpuff	3.87E-05	3.69E-05	24-hour	0.07	Health	Sch. 6	URT	—	<1%	—	—
Chrysene	218-01-9	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Cobalt	7440-48-4	1.37E-06	Calpuff	1.68E-06	1.60E-06	24-hour	0.1	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Copper	7440-50-8	8.38E-05	Calpuff	1.03E-04	9.78E-05	24-hour	50	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Dibenzo(a,c)anthracene	215-58-7	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Dibenzo(a,h)anthracene	53-70-3	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Dichlorodifluoromethane	75-71-8	2.01E-04	Calpuff	2.46E-04	2.35E-04	24-hour	500000	Health	Sch. 3	Guideline	B1	<1%	Note 10	Apr-18
Dichloroethene, 1,1 -	75-34-3	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	165	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Dichloroethene, 1,1 -	75-34-3	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	1650	Health	Sch. 6	URT	—	<1%	—	Apr-18
Dichloromethane	75-09-2	2.14E-02	Calpuff	2.62E-02	2.50E-02	24-hour	220	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Dichloromethane	75-09-2	2.14E-02	Calpuff	2.62E-02	2.50E-02	24-hour	22000	Health	Sch. 6	URT	—	<1%	—	Apr-18
Dioxins, Furans and Dioxin- like PCBs	N/A	0.00024 µg TEQ/s	Calpuff	0.0003 pg TEQ/m³	0.00029 pg TEQ/m³	24-hour	0.1 pg TEQ/m³	Health	Sch. 3	Guideline	B1	<1%	Note 8, 8a, Table 1URT - Note 4, Table 4	Apr-18
Ethylbenzene	100-41-4	1.45E-04	Calpuff	1.77E-04	1.69E-04	24-hour	1000	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Ethylbenzene	100-41-4	1.45E-04	Calpuff	6.90E-03	2.49E-03	10-minute	1900	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Ethylbenzene	100-41-4	1.45E-04	Calpuff	1.77E-04	1.69E-04	24-hour	14000	Not Applicable	Sch. 6	URT	—	<1%	—	Apr-18
Ethylene Dibromide	106-93-4	2.89E-05	Calpuff	3.53E-05	3.37E-05	24-hour	3	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Fluoranthene	206-44-0	1.19E-07	Calpuff	1.46E-07	1.39E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Fluorides	7664-39-3	3.75E-03	Calpuff	4.59E-03	4.38E-03	24-hour	0.86	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	3.75E-03	Calpuff	6.38E-04	6.38E-04	30-day	0.34	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	3.75E-03	Calpuff	4.59E-03	4.38E-03	24-hour	1.74	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	3.75E-03	Calpuff	6.38E-04	6.38E-04	30-day	0.69	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	3.75E-03	Calpuff	4.59E-03	4.38E-03	24-hour	3.44	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	3.75E-03	Calpuff	6.38E-04	6.38E-04	30-day	1.38	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18

Appendix B
Emission Summary Table

Contaminant	CAS No.	Total Facility Emission Rate [g/s]	Air Dispersion Model Used	Maximum POI Concentration Before Meteorological Anomaly Removal [µg/m³]	Maximum POI Concentration After Meeorological Anomaly Removal [µg/m³]	Averaging Period	MECP POI Limit [µg/m³]	Limiting Effect	Schedule	Source	Benchmark	Percentage of MECP Limit [%]	Notes	Version of Date of ACB List
Fluorene	86-73-7	8.05E-08	Calpuff	9.86E-08	9.39E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Formaldehyde	50-00-0	7.00E-04	Calpuff	8.57E-04	8.17E-04	24-hour	65	Odour & Irritation	Sch. 3	Standard	B1	<1%	—	Apr-18
Hexachlorobenzene	118-74-1	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.011	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Hydrogen Chloride	7647-01-0	1.45E-01	Calpuff	1.77E-01	1.69E-01	24-hour	20	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Hydrogen Chloride	7647-01-0	1.45E-01	Calpuff	1.77E-01	1.69E-01	24-hour	200	Health	Sch. 6	URT	—	<1%	—	Apr-18
Indeno(1,2,3 – cd)pyrene	193-39-5	8.35E-08	Calpuff	1.02E-07	9.74E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Lead	7439-92-1	9.71E-06	Calpuff	1.19E-05	1.13E-05	24-hour	0.5	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Lead	7439-92-1	9.71E-06	Calpuff	1.65E-06	1.65E-06	30-day	0.2	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Lead	7439-92-1	9.71E-06	Calpuff	1.19E-05	1.13E-05	24-hour	2	Health	Sch. 6	URT	—	<1%	Note 2URT - Note 4, Table 4	Apr-18
Mercury	7439-97-6	3.44E-06	Calpuff	4.21E-06	4.01E-06	24-hour	2	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Molybdenum	7439-98-7	3.02E-04	Calpuff	3.70E-04	3.52E-04	24-hour	120	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
Naphthalene	91-20-3	1.01E-05	Calpuff	1.24E-05	1.18E-05	24-hour	22.5	Odour	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Naphthalene	91-20-3	1.01E-05	Calpuff	4.81E-04	1.74E-04	10-minute	50	Odour	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Nickel	7440-02-0	2.27E-05	Calpuff	1.28E-06	1.28E-06	Annual	0.04	Health	Sch. 3	Standard	B1	<1%	Note 19, Table 2, 3URT - Note 4, Table 4	Apr-18
Nickel	7440-02-0	2.27E-05	Calpuff	2.78E-05	2.65E-05	24-hour	2	Health	Sch. 6	URT	—	<1%	—	Apr-18
Nickel	7440-02-0	2.27E-05	Calpuff	1.28E-06	1.28E-06	Annual	0.4	Health	—	AAV	—	<1%	—	Apr-18
Nitrogen Oxides	10102-44-0	4.35E+00	Calpuff	5.33E+00	5.08E+00	24-hour	200	Health	Sch. 3	Standard	B1	3%	Notes 2, 17	Apr-18
Nitrogen Oxides	10102-44-0	4.35E+00	Calpuff	1.26E+02	4.54E+01	1-hour	400	Health	Sch. 3	Standard	B1	11%	Notes 2, 17	Apr-18
O-terphenyl	84-15-1	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	—
PM_{10} (Condensable and Filterable)	N/A	1.87E-01	Calpuff	3.13E-01	2.61E-01	24-hour	50	—	—	AAQC	—	<1%	—	—
PM_{10} (Filterable Only)	N/A	3.08E-02	Calpuff	2.38E-01	1.69E-01	24-hour	50	—	—	AAQC	—	<1%	—	—
$PM_{2.5}$ (Condensable and Filterable)	N/A	1.73E-01	Calpuff	3.05E-01	2.45E-01	24-hour	27	—	—	AAQC	—	<1%	—	—
$PM_{2.5}$ (Filterable Only)	N/A	1.66E-02	Calpuff	2.34E-01	1.66E-01	24-hour	27	—	—	AAQC	—	<1%	—	—
Pentachlorobenzene	608-93-5	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	80	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Pentachlorophenol	87-86-5	3.85E-07	Calpuff	4.71E-07	4.49E-07	24-hour	20	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Perylene	198-55-0	7.69E-08	Calpuff	9.42E-08	8.98E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Phenanthrene	85-01-8	3.55E-07	Calpuff	4.35E-07	4.14E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Pyrene	129-00-0	1.61E-07	Calpuff	1.97E-07	1.88E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Selenium	7782-49-2	8.58E-06	Calpuff	1.05E-05	1.00E-05	24-hour	10	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Silver	7440-22-4	1.72E-06	Calpuff	2.10E-06	2.00E-06	24-hour	1	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Sulphur Dioxide	7446-09-5	1.47E-02	Calpuff	1.80E-02	1.72E-02	24-hour	275	Health	Sch. 3	Standard	B1	<1%	Effective until July 1, 2023Note 2URT - Note 4, Table 4	Apr-18
Sulphur Dioxide	7446-09-5	1.47E-02	Calpuff	4.25E-01	1.54E-01	1-hour	690	Health	Sch. 3	Standard	B1	<1%	Effective until July 1, 2023Note 2URT - Note 4, Table 4	Apr-18
Tetrachloroethene	127-18-4	1.86E-05	Calpuff	2.28E-05	2.17E-05	24-hour	360	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Tetrachloroethene	127-18-4	1.86E-05	Calpuff	2.28E-05	2.17E-05	24-hour	3600	Health	Sch. 6	URT	—	<1%	—	
Tetralin	119-64-2	1.28E-06	Calpuff	1.56E-06	1.49E-06	24-hour	151.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Thallium	7440-28-0	1.72E-06	Calpuff	2.10E-06	2.00E-06	24-hour	0.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Toluene	108-88-3	8.23E-03	Calpuff	1.01E-02	9.60E-03	24-hour	2000	Not Applicable	Sch. 3	Guideline	B1	<1%	To be updated - Note 5	Apr-18
Total Chromium (and compounds)	7440-47-3	3.16E-05	Calpuff	3.87E-05	3.69E-05	24-hour	0.5	Health	Sch. 3	Standard	B1	<1%	Note 11aURT - Note 4, Table 4	Apr-18
Total Chromium (and compounds)	7440-47-3	3.16E-05	Calpuff	3.87E-05	3.69E-05	24-hour	5	Health	Sch. 6	URT	—	<1%	—	Apr-18
Total Particulate Matter (Condensable and Filterable)	N/A	2.04E-01	Calpuff	3.23E-01	2.81E-01	24-hour	120	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
Total Particulate Matter (Filterable only)	N/A	4.73E-02	Calpuff	2.43E-01	1.71E-01	24-hour	120	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
Trichloroethane, 1,1,1 -	71-55-6	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	115000	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Trichloroethene	79-01-6	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Trichloroethylene, 1,1,2 -	79-01-6	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	12	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Trichloroethylene, 1,1,2 -	79-01-6	1.44E-05	Calpuff	1.77E-05	1.68E-05	24-hour	1200	Health	Sch. 6	URT	—	<1%	—	Apr-18
Trichlorofluoromethane	75-69-4	7.12E-05	Calpuff	8.72E-05	8.31E-05	24-hour	6000	Health	Sch. 3	Guideline	B1	<1%	Note 10	Apr-18
Vanadium	7440-62-2	8.58E-07	Calpuff	1.05E-06	1.00E-06	24-hour	2	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Vinyl chloride	75-01-4	2.99E-05	Calpuff	3.66E-05	3.49E-05	24-hour	1	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Vinyl chloride	75-01-4	2.99E-05	Calpuff	3.66E-05	3.49E-05	24-hour	100	Health	Sch. 6	URT	—	<1%	—	Apr-18
Xylenes, m-, p- and o-	1330-20-7	8.71E-04	Calpuff	1.07E-03	1.02E-03	24-hour	730	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3, 22	Apr-18
Xylenes, m-, p- and o-	1330-20-7	8.71E-04	Calpuff	4.15E-02	1.50E-02	10-minute	3000	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3, 22	Apr-18
Xylenes, m-, p- and o-	1330-20-7	8.71E-04	Calpuff	1.07E-03	1.02E-03	24-hour	7300	Not Applicable	Sch. 6	URT	—	<1%	—	Apr-18
Zinc	7440-66-6	1.95E-04	Calpuff	2.39E-04	2.28E-04	24-hour	120	Particulate	Sch. 3	Standard	B1	<1%	—	Apr-18

Appendix 4: Compliance Source Test

Covanta Durham York Renewable Energy Limited Partnership, Durham York Energy Centre 2022 Compliance Emission Testing in Accordance with Amended Environmental Compliance Approval (ECA) No. 7306-8FDKNX

Executive Summary

CalPuff Modelling for September 2022 Compliance Source Testing at Durham York Energy Centre (Emission Summary Table)

EXECUTIVE SUMMARY

ORTECH Consulting Inc. (ORTECH) completed the annual compliance emission testing program at the Durham York Energy Centre (DYEC) located in Courtice, Ontario between November 29 and December 2, 2022. The emission testing program was performed to satisfy the requirements of the Ontario Ministry of the Environment, Conservation and Parks (MECP) Amended Environmental Compliance Approval (ECA) No. 7306-8FDKNX. Section 7(1) of the ECA states that "the owner shall perform annual source testing, in accordance with the procedures and schedule outlined in the attached Schedule E, to determine the rates of emissions of the test contaminants from the stack. The program shall be conducted not later than six months after the commencement date of operation of the facility/equipment and subsequent source testing programs shall be conducted once every calendar year thereafter". This program is the fifteenth comprehensive Schedule E source testing program conducted at the facility. A list of the test programs conducted by ORTECH to date is provided below:

Test Program	Test Date	ORTECH Report No.
2015 Compliance	September/October 2015	21546
2016 Voluntary	May 2016	21656
2016 Compliance	October/November 2016	21698
2017 Voluntary	May 2017	21754
2017 Compliance	October 2017	21800
2018 Voluntary	May/June 2018	21840
2018 Compliance	September 2018	21880
2019 Voluntary	June 2019	21936
2019 Compliance	September 2019	21960
2020 Voluntary	June 2020	22001
2020 Compliance	November 2020	22050
2021 Voluntary	June 2021	22081
2021 Compliance	November/December 2021	22085
2022 Voluntary	May 2022	22158
2022 Compliance	November/December 2022	22160

Source testing was performed on the Baghouse (BH) Outlet of Boiler No. 1 and BH Outlet of Boiler No. 2 for the test contaminants listed in Schedule D of the ECA.

Triplicate emission tests were completed for particulate matter, metals, semi-volatile organic compounds, acid gases, volatile organic compounds, aldehydes and combustion gases at the BH Outlet of each Boiler. Triplicate emission tests were also completed for total hydrocarbons at the Quench Inlet of each Boiler. The contaminant groups included in the emission test program and the reference test methods used are summarized below:

Test Groups	Reference Method
Particulate and Metals	US EPA Method 29
$PM_{2.5}$/PM_{10} and Condensable Particulate	US EPA Methods 201A and 202
Semi-Volatile Organic Compounds	Environment Canada Method EPS 1/RM/2
Volatile Organic Compounds	US EPA SW-846 Method 0030 (SLO VOST modification)
Aldehydes	NCASI Method ISS/FP-A105.01
Halides and Ammonia	US EPA Method 26A
Combustion Gases:	
Oxygen and Carbon Dioxide	Facility CEM
Carbon Monoxide	Facility CEM
Sulphur Dioxide	Facility CEM
Nitrogen Oxides	Facility CEM
Total Hydrocarbons	ORTECH per US EPA Method 25A

Schedule C of ECA No. 7306-8FDKNX lists in-stack limits for the emissions of various compounds. In-stack emissions limits are given for particulate matter, mercury, cadmium, lead, dioxins and furans and organic matter for comparison with the results from compliance source testing. In-stack emission limits are also given for hydrochloric acid, sulphur dioxide, nitrogen oxides and carbon monoxide calculated as the rolling arithmetic average of data measured by a continuous emission monitoring system (CEMS).

Since relative accuracy and system bias testing was conducted in September 2022, the data recorded by the DYEC CEMS was used to assess against the in-stack emissions limits detailed in Schedule C of the ECA for hydrochloric acid, sulphur dioxide, nitrogen oxides and carbon monoxide. Note the DYEC CEMS data for the days when isokinetic testing was performed at each unit (November 29 to December 2, 2022) was used to determine the minimum, average and maximum concentrations of the combustion gases listed in the ECA. Concentration data measured by ORTECH on November 29, 2022 was used to assess against the total hydrocarbons (organic matter) in-stack emissions limit detailed in Schedule C of the ECA.

Consistent with the approach commonly required by the MECP for compliance emission testing programs, the following results are conservative in the sense that when the analytical result is reported to be below the detection limit, the full detection limit is used to calculate emission data and is shown by a "<" symbol. Also, when one or both Boiler results are reported to be below the detection limit, the detection limit was used to conservatively estimate the total emission rate for the Main Stack.

The MECP "Summary of Standards and Guidelines to Support Ontario Regulation 419/05 – Air Pollution – Local Air Quality", dated April 2012, provides an updated framework for calculating dioxin and furan toxicity equivalent concentrations which includes emission data for 12 dioxin-like PCBs. This document was replaced by "Air Contaminants Benchmarks List: standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", with the most recent version published on April 27, 2018, however the dioxin and furan toxicity equivalent calculation methodology remains the same. The dioxins, furans and dioxin-like PCBs toxicity equivalent emission data was also calculated using half the detection limit for those compounds not detected. The half detection limit data was used to assess against the dispersion modelling Point of Impingement limit. The toxicity equivalent concentrations calculated using the full detection limit, for those compounds less than the reportable detection limit, were used to assess against the in-stack limit detailed in Schedule C of the ECA.

The average results for the tests conducted at Boiler No. 1, along with the respective in-stack emission limits, are summarized in the following table:

Parameter	Test No. 1	Test No. 2	Test No. 3	Average	In-Stack Limit
Total Power Output (MWh/day)*	-	-	-	392	-
Average Combustion Zone Temp. (°C)*	-	-	-	1169	-
Steam (tonnes/day)*	-	-	-	806	-
MSW Combusted (tonnes/day)*	-	-	-	206	-
NO_X Reagent Injection Rate (liters/day)*	-	-	-	1008	-
Carbon Injection (kg/day)*	-	-	-	126	-
Lime Injection (kg/day)*	-	-	-	4158	-
Filterable Particulate (mg/Rm^3) (1)	<0.38	<0.20	0.25	<0.27	9
PM_{10} with Condensable (mg/Rm^3) (1)	<3.76	<4.26	<4.00	<4.01	-
$PM_{2.5}$ with Condensable (mg/Rm^3) (1)	<3.29	<4.19	<3.94	<3.81	-
Hydrogen Fluoride (mg/Rm^3) (1)	<0.11	<0.11	<0.11	<0.11	-
Ammonia (mg/Rm^3) (1)	1.06	1.10	1.12	1.09	-
Cadmium (µg/Rm^3) (1)	0.032	0.11	0.046	0.063	7
Lead (µg/Rm^3) (1)	0.21	0.26	0.22	0.23	50
Mercury (µg/Rm^3) (1)	<0.092	<0.095	<0.091	<0.093	15
Antimony (µg/Rm^3) (1)	<0.045	<0.044	<0.045	<0.044	-
Arsenic (µg/Rm^3) (1)	<0.045	<0.044	<0.045	<0.044	-
Barium (µg/Rm^3) (1)	1.67	1.50	1.66	1.61	-
Beryllium (µg/Rm^3) (1)	<0.045	<0.044	<0.045	<0.044	-
Chromium (µg/Rm^3) (1)	1.20	1.64	1.06	1.30	-
Cobalt (µg/Rm^3) (1)	0.028	0.15	<0.045	<0.074	-
Copper (µg/Rm^3) (1)	3.41	2.04	2.26	2.57	-
Molybdenum (µg/Rm^3) (1)	7.87	7.71	5.62	7.07	-
Nickel (µg/Rm^3) (1)	2.14	1.46	1.12	1.57	-
Selenium (µg/Rm^3) (1)	<0.22	<0.22	<0.22	<0.22	-
Silver (µg/Rm^3) (1)	<0.045	<0.044	<0.045	<0.044	-
Thallium (µg/Rm^3) (1)	<0.045	<0.044	<0.045	<0.044	-
Vanadium (µg/Rm^3) (1)	0.028	0.039	0.029	0.032	-
Zinc (µg/Rm^3) (1)	4.47	4.39	5.02	4.63	-
Dioxins and Furans (pg TEQ/Rm^3) (3)	<3.90	<3.62	<3.53	<3.68	60
Total Chlorobenzenes (ng/Rm^3) (1) (5)	<102	<114	<88.3	<102	-
Total Chlorophenols (ng/Rm^3) (1)	<169	<172	<165	<168	-
Total PAHs (ng/Rm^3) (1)	<271	<538	<169	<326	-
VOCs (µg/Rm^3) (1)	<128	<45.0	<204	<125	-
Aldehydes (µg/Rm^3) (1)	<13.0	<11.7	<11.8	<12.2	-
Total VOCs (µg/Rm^3) (1) (4)	<141	<56.7	<216	<137	-
Quench Inlet Organic Matter (THC) (ppm, dry) (2)	0.1	0	0.2	0.1	50

* based on process data provided by Covanta

(1) dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(2) dry basis as equivalent methane (average of each 60 minute test with data recorded in 1-minute intervals)

(3) calculated using the NATO/CCMS (1989) toxicity equivalence factors and the full detection limit for those isomers below the analytical detection limit, dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(4) Includes all components from the volatile organic compounds test list in the ECA (i.e. Volatile Organic Sampling Train and Aldehyde Sampling train components).

(5) Total excludes monochlorobenzene as the analytical lab couldn't quantify this compound from the SVOC test train. Chlorobenzene was below the detection limit in the VOC test trains.

The average results for the tests conducted at Boiler No. 2, along with the respective in-stack emission limits, are summarized in the following table:

Parameter	Test No. 1	Test No. 2	Test No. 3	Average	In-Stack Limit
Total Power Output (MWh/day)*	-	-	-	392	-
Average Combustion Zone Temp. (°C)*	-	-	-	1281	-
Steam (tonnes/day)*	-	-	-	804	-
MSW Combusted (tonnes/day)*	-	-	-	180	-
NO_X Reagent Injection Rate (liters/day)*	-	-	-	929	-
Carbon Injection (kg/day)*	-	-	-	128	-
Lime Injection (kg/day)*	-	-	-	4234	-
Filterable Particulate (mg/Rm^3) (1)	<0.19	0.22	0.20	<0.20	9
PM_{10} with Condensable (mg/Rm^3) (1)	<2.86	<3.51	<3.73	<3.37	-
$PM_{2.5}$ with Condensable (mg/Rm^3) (1)	<2.64	<3.29	<3.66	<3.20	-
Hydrogen Fluoride (mg/Rm^3) (1)	<0.11	<0.10	<0.10	<0.10	-
Ammonia (mg/Rm^3) (1)	1.01	0.74	0.75	0.83	-
Cadmium (µg/Rm^3) (1)	0.026	0.025	0.033	0.028	7
Lead (µg/Rm^3) (1)	0.17	0.049	0.22	0.15	50
Mercury (µg/Rm^3) (1)	<0.088	<0.087	<0.088	<0.088	15
Antimony (µg/Rm^3) (1)	<0.021	<0.022	0.051	<0.031	-
Arsenic (µg/Rm^3) (1)	<0.043	<0.043	<0.044	<0.043	-
Barium (µg/Rm^3) (1)	0.12	1.24	1.37	0.91	-
Beryllium (µg/Rm^3) (1)	<0.043	<0.043	<0.044	<0.043	-
Chromium (µg/Rm^3) (1)	0.85	0.70	1.01	0.85	-
Cobalt (µg/Rm^3) (1)	<0.021	<0.022	<0.022	<0.022	-
Copper (µg/Rm^3) (1)	2.03	1.95	2.08	2.02	-
Molybdenum (µg/Rm^3) (1)	7.21	7.41	7.79	7.47	-
Nickel (µg/Rm^3) (1)	1.16	1.13	0.92	1.07	-
Selenium (µg/Rm^3) (1)	<0.21	<0.22	<0.22	<0.22	-
Silver (µg/Rm^3) (1)	<0.043	<0.043	<0.044	<0.043	-
Thallium (µg/Rm^3) (1)	<0.043	<0.043	<0.044	<0.043	-
Vanadium (µg/Rm^3) (1)	<0.021	<0.022	<0.022	<0.022	-
Zinc (µg/Rm^3) (1)	3.92	3.53	5.33	4.26	-
Dioxins and Furans (pg TEQ/Rm^3) (3)	<2.05	<7.79	<1.90	<3.91	60
Total Chlorobenzenes (ng/Rm^3) (1) (5)	<141	<119	<123	<128	-
Total Chlorophenols (ng/Rm^3) (1)	<169	<170	<169	<169	-
Total PAHs (ng/Rm^3) (1)	<177	<294	<248	<240	-
VOCs (µg/Rm^3) (1)	<102	<103	<55.7	<87.1	-
Aldehydes (µg/Rm^3) (1)	<14.2	<17.4	<14.3	<15.3	-
Total VOCs (µg/Rm^3) (1) (4)	<116	<120	<70.0	<102	-
Quench Inlet Organic Matter (THC) (ppm, dry) (2)	0.1	0.2	0.7	0.3	50

* based on process data provided by Covanta

(1) dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(2) dry basis as equivalent methane (average of each 60 minute test with data recorded in 1-minute intervals)

(3) calculated using the NATO/CCMS (1989) toxicity equivalence factors and the full detection limit for those isomers below the analytical detection limit, dry at 25°C and 1 atmosphere, adjusted to 11% oxygen by volume

(4) Includes all components from the volatile organic compounds test list in the ECA (i.e. Volatile Organic Sampling Train and Aldehyde Sampling train components).

(5) Total excludes monochlorobenzene as the analytical lab couldn't quantify this compound from the SVOC test train. Chlorobenzene was below the detection limit in the VOC test trains.

A summary of the minimum, average and maximum concentrations for the combustion gases measured by the DYEC CEMS with in-stack limits listed in the ECA is provided below for the two units.

Boiler No.	Parameter	Minimum	Average	Maximum	In-Stack Limit
Boiler No. 1	Carbon Monoxide (mg/Rm^3) (1)	5.8	9.1	17.0	40
	Hydrogen Chloride (mg/Rm^3) (2)	0.2	0.4	0.6	9
	Nitrogen Oxides (mg/Rm^3) (2)	111	112	113	121
	Sulphur Dioxide (mg/Rm^3) (2)	0	0.5	0.8	35
Boiler No. 2	Carbon Monoxide (mg/Rm^3) (1)	6.0	9.4	13.5	40
	Hydrogen Chloride (mg/Rm^3) (2)	3.3	3.8	4.3	9
	Nitrogen Oxides (mg/Rm^3) (2)	110	111	112	121
	Sulphur Dioxide (mg/Rm^3) (2)	0	0.6	1.4	35

(1) 4-hour average measured by DYEC CEMS, dry at 25°C and 1 atmosphere adjusted to 11% oxygen by volume
(2) 24-hour average measured by DYEC CEMS, dry at 25°C and 1 atmosphere adjusted to 11% oxygen by volume

The emission data measured at each Boiler BH Outlet during the testing program was combined and used to assess the emissions from the Main Stack against the current point of impingement criteria detailed in Ontario Regulation 419/05.

Dispersion modelling was completed using the CALPUFF model (using Version 7.2.1 level 150618 as approved by the MECP in December 2021) by WSP Canada Inc. (formerly Golder Associates). A summary of the results are provided in the tables appended to this report (Appendix 27) based on calculated ground level Point of Impingement (POI) concentrations for the average total Main Stack emissions. As shown in the tables, the calculated impingement concentrations for all the contaminants were well below the relevant MECP standards.

In summary, the key results of the emission testing program are:

- The facility was maintained within the operational parameters defined by the amended ECA that constitutes normal operation during the stack test periods. Testing was conducted at a steam production rate of greater than 797 tonnes of steam per day for each Boiler (approximately 98.7% of maximum continuous rating). The maximum continuous rating for the facility is 1614.7 tonnes of steam per day for the two Boilers combined (33.64 tonnes of steam per hour or 807.4 tonnes per day for each Boiler).
- The in-stack concentrations of the components listed in the ECA were all below the concentration limits provided in Schedule C of the ECA.
- Using CALPUFF dispersion modelling techniques, the predicted maximum point of impingement concentrations, based on the average test results for both boilers, show DYEC to be operating well below all current standards in Regulation 419/05 under the Ontario Environmental Protection Act and other MECP criteria including guidelines and upper risk thresholds.

Tables referenced in this report for the tests conducted at Boiler No. 1 and Boiler No. 2 are provided in Appendix 1 and Appendix 2, respectively.

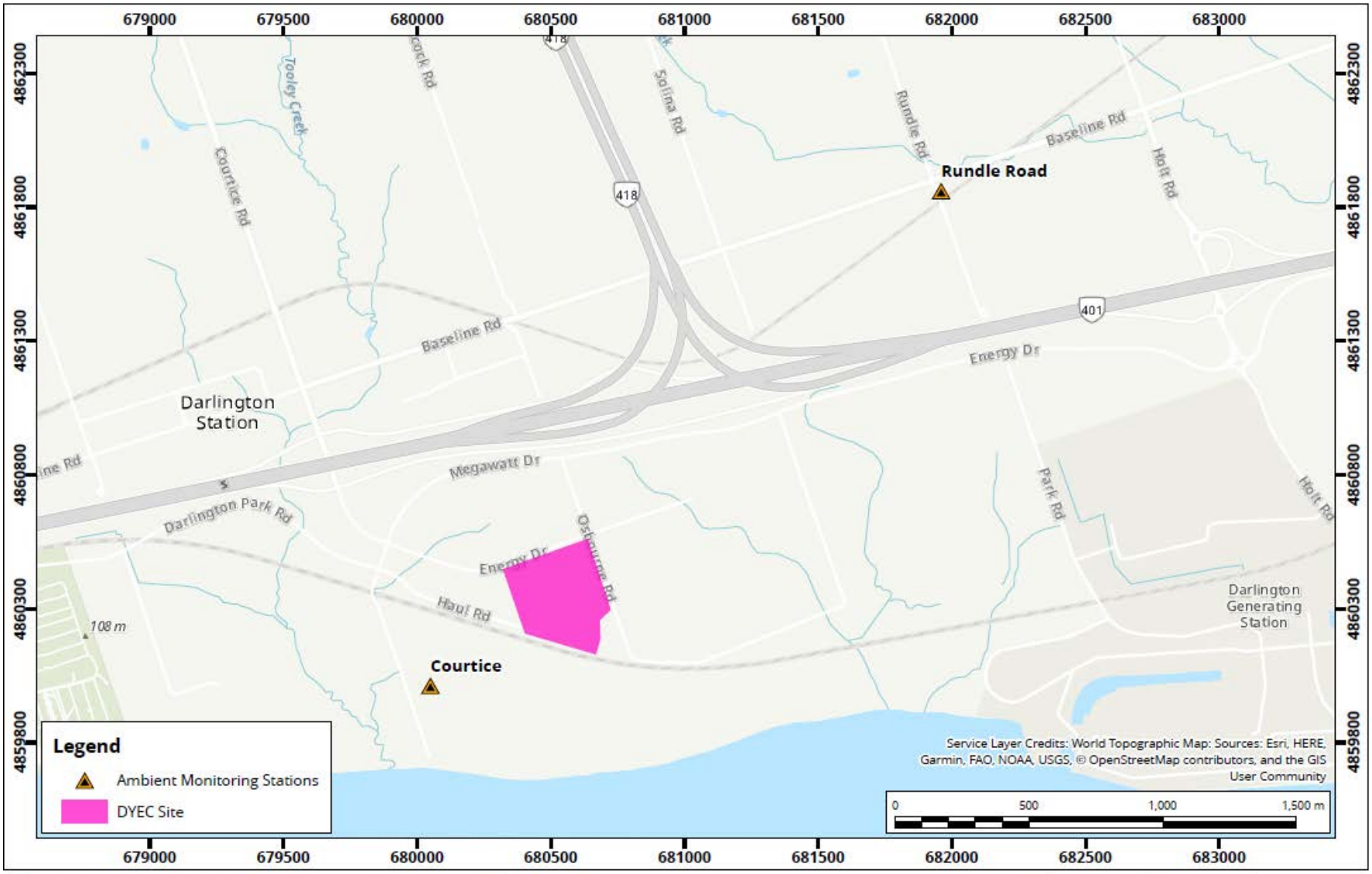
Appendix B
Emission Summary Table

Contaminant	CAS No.	Total Facility Emission Rate [g/s]	Air Dispersion Model Used	Maximum POI Concentration Before Meteorological Anomaly Removal [µg/m³]	Maximum POI Concentration After Meeorological Anomaly Removal [µg/m³]	Averaging Period	MECP POI Limit [µg/m³]	Limiting Effect	Schedule	Source	Benchmark	Percentage of MECP Limit [%]	Notes	Version of Date of ACB List
1 – methylnaphthalene	90-12-0	2.79E-07	Calpuff	3.41E-07	3.25E-07	24-hour	35.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
1,2,4 – Trichlorobenzene	120-82-1	3.15E-07	Calpuff	3.85E-07	3.67E-07	24-hour	400	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
1,2,4,5-Tetrachlorobenzene	95-94-3	1.04E-07	Calpuff	1.28E-07	1.22E-07	24-hour	1	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
1,2-Dichlorobenzene	95-50-1	1.01E-06	Calpuff	2.92E-05	1.06E-05	1-hour	30500	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
2 – methylnaphthalene	91-57-6	5.23E-07	Calpuff	6.40E-07	6.10E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
2,3,4,6-Tetrachlorophenol	58-90-2	3.88E-07	Calpuff	4.76E-07	4.53E-07	24-hour	0.75	Health	—	SL-JSL	B2	Below SL-JSL	—	Apr-18
2,4,6-Trichlorophenol	88-06-2	3.88E-07	Calpuff	4.76E-07	4.53E-07	24-hour	1.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
2,4-Dichlorophenol	120-83-2	3.88E-07	Calpuff	4.76E-07	4.53E-07	24-hour	33.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
3-Methylcholanthrene	56-49-5	3.88E-07	Calpuff	4.76E-07	4.53E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
7,12-Dimethylbenzo(a)anthracene	57-97-6	1.28E-07	Calpuff	1.56E-07	1.49E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Acenaphthene	83-32-9	1.32E-07	Calpuff	1.62E-07	1.54E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Acenaphthylene	208-96-8	8.07E-08	Calpuff	9.88E-08	9.41E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Acetaldehyde	75-07-0	1.07E-04	Calpuff	1.31E-04	1.25E-04	24-hour	500	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Acetaldehyde	75-07-0	1.07E-04	Calpuff	1.31E-04	1.25E-04	24-hour	5000	—	Sch. 6	URT	—	<1%	—	—
Acrolein	107-02-8	1.07E-04	Calpuff	1.31E-04	1.25E-04	24-hour	0.4	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Acrolein	107-02-8	1.07E-04	Calpuff	3.09E-03	1.12E-03	1-hour	4.5	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Acrolein	107-02-8	1.07E-04	Calpuff	1.31E-04	1.25E-04	24-hour	4	Health	Sch. 6	URT	—	<1%	—	Apr-18
Ammonia	7664-41-7	3.79E-02	Calpuff	4.64E-02	4.42E-02	24-hour	100	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Ammonia	7664-41-7	3.79E-02	Calpuff	4.64E-02	4.42E-02	24-hour	1000	Health	Sch. 6	URT	—	<1%	—	Apr-18
Anthracene	120-12-7	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Antimony	7440-36-0	1.48E-06	Calpuff	1.82E-06	1.73E-06	24-hour	25	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Arsenic	7440-38-2	1.73E-06	Calpuff	2.12E-06	2.02E-06	24-hour	0.3	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Barium	7440-39-3	4.93E-05	Calpuff	6.04E-05	5.76E-05	24-hour	10	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Benzene	71-43-2	8.71E-05	Calpuff	4.92E-06	4.92E-06	Annual	0.45	Health	Sch. 3	Standard	B1	<1%	Note 19, Table 2, 3 URT - Note 4, Table 4	Apr-18
Benzene	71-43-2	8.71E-05	Calpuff	1.07E-04	1.02E-04	24-hour	100	Health	Sch. 6	URT/DAV	B1	<1%	—	—
Benzene	71-43-2	8.71E-05	Calpuff	4.92E-06	4.92E-06	Annual	4.5	Health	—	AAV	—	<1%	—	Apr-18
Benzo(a)anthracene	56-55-3	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(a)fluorene	238-84-6	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(a)pyrene	50-32-8	8.79E-08	Calpuff	4.97E-09	4.97E-09	Annual	0.00001	Health	Sch. 3	Standard	B1	<1%	Note 7, 19, Table 2, 3URT - Note 4, Table 4	Apr-18
Benzo(a)pyrene	50-32-8	8.79E-08	Calpuff	1.08E-07	1.03E-07	24-hour	0.005	Health	Sch. 6	URT	—	<1%	—	Apr-18
Benzo(a)pyrene	50-32-8	8.79E-08	Calpuff	4.97E-09	4.97E-09	Annual	0.0001	Health	—	AAV	—	<1%	—	Apr-18
Benzo(b)fluoranthene	205-99-2	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(b)fluorene	243-17-4	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(e)pyrene	192-97-2	1.30E-07	Calpuff	1.59E-07	1.52E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(g,h,i)perylene	191-24-2	4.47E-07	Calpuff	5.47E-07	5.21E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Benzo(k)fluoranthene	207-08-9	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Beryllium	7440-41-7	1.73E-06	Calpuff	2.12E-06	2.02E-06	24-hour	0.01	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Biphenyl	92-51-3	1.60E-07	Calpuff	1.96E-07	1.87E-07	24-hour	175	Health	—	SL-JSL	B2	Below SL-JSL	—	Apr-18
Bromodichloromethane	75-27-4	2.02E-05	Calpuff	2.47E-05	2.35E-05	24-hour	350	Health	—	SL-JSL	B2	Below SL-JSL	—	Apr-18
Bromoform	75-25-2	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	55	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Bromomethane	74-83-9	1.46E-04	Calpuff	1.79E-04	1.71E-04	24-hour	1350	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Cadmium	7440-43-9	1.78E-06	Calpuff	2.18E-06	2.08E-06	24-hour	0.025	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Cadmium	7440-43-9	1.78E-06	Calpuff	2.18E-06	2.08E-06	24-hour	0.25	Health	Sch. 6	URT	—	<1%	—	Apr-18
Carbon Monoxide	630-08-0	3.55E-01	Calpuff	1.23E+01	4.44E+00	1/2-hour	6000	Health	Sch. 3	Standard	B1	<1%	Note 9	Apr-18
Carbon tetrachloride	56-23-5	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	2.4	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Carbon tetrachloride	56-23-5	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	24	Health	Sch. 6	URT	—	<1%	—	Apr-18
Chlorobenzene	108-90-7	1.63E-05	Calpuff	4.70E-04	1.69E-04	1-hour	3500	Health	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Chlorobenzene	108-90-7	1.63E-05	Calpuff	7.75E-04	2.80E-04	10-minute	4500	Odour	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Chloroform	67-66-3	4.57E-05	Calpuff	5.60E-05	5.34E-05	24-hour	1	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Chloroform	67-66-3	4.57E-05	Calpuff	5.60E-05	5.34E-05	24-hour	100	Health	Sch. 6	URT	—	<1%	—	Apr-18
Chromium (hexavalent)	18540-29-9	4.22E-05	Calpuff	2.38E-06	2.38E-06	Annual	0.00014	Health	Sch. 3	Standard	B1	2%	Notes 11, 19, Table 2, 3URT - Note 4, Table 4	Apr-18
Chromium (hexavalent)	18540-29-9	4.22E-05	Calpuff	5.17E-05	4.92E-05	24-hour	0.07	Health	Sch. 6	URT	—	<1%	—	—
Chrysene	218-01-9	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Cobalt	7440-48-4	1.87E-06	Calpuff	2.29E-06	2.18E-06	24-hour	0.1	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Copper	7440-50-8	9.01E-05	Calpuff	1.10E-04	1.05E-04	24-hour	50	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Dibenzo(a,c)anthracene	215-58-7	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Dibenzo(a,h)anthracene	53-70-3	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Dichlorodifluoromethane	75-71-8	3.25E-05	Calpuff	3.98E-05	3.79E-05	24-hour	500000	Health	Sch. 3	Guideline	B1	<1%	Note 10	Apr-18
Dichloroethene, 1,1 -	75-34-3	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	165	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Dichloroethene, 1,1 -	75-34-3	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	1650	Health	Sch. 6	URT	—	<1%	—	Apr-18
Dichloromethane	75-09-2	1.09E-03	Calpuff	1.33E-03	1.27E-03	24-hour	220	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Dichloromethane	75-09-2	1.09E-03	Calpuff	1.33E-03	1.27E-03	24-hour	22000	Health	Sch. 6	URT	—	<1%	—	Apr-18
Dioxins, Furans and Dioxin- like PCBs	N/A	0.00017 µg TEQ/s	Calpuff	0.00021 pg TEQ/m³	0.0002 pg TEQ/m³	24-hour	0.1 pg TEQ/m³	Health	Sch. 3	Guideline	B1	<1%	Note 8, 8a, Table 1URT - Note 4, Table 4	Apr-18
Ethylbenzene	100-41-4	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	1000	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Ethylbenzene	100-41-4	1.63E-05	Calpuff	7.75E-04	2.80E-04	10-minute	1900	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Ethylbenzene	100-41-4	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	14000	Not Applicable	Sch. 6	URT	—	<1%	—	Apr-18
Ethylene Dibromide	106-93-4	3.25E-05	Calpuff	3.98E-05	3.79E-05	24-hour	3	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Fluoranthene	206-44-0	3.25E-07	Calpuff	3.99E-07	3.80E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Fluorides	7664-39-3	4.17E-03	Calpuff	5.11E-03	4.87E-03	24-hour	0.86	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	4.17E-03	Calpuff	7.10E-04	7.10E-04	30-day	0.34	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	4.17E-03	Calpuff	5.11E-03	4.87E-03	24-hour	1.74	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	4.17E-03	Calpuff	7.10E-04	7.10E-04	30-day	0.69	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	4.17E-03	Calpuff	5.11E-03	4.87E-03	24-hour	3.44	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18
Fluorides	7664-39-3	4.17E-03	Calpuff	7.10E-04	7.10E-04	30-day	1.38	Vegetation	Sch. 3	Standard	B1	<1%	Note 2, 20	Apr-18

Appendix B
Emission Summary Table

Contaminant	CAS No.	Total Facility Emission Rate [g/s]	Air Dispersion Model Used	Maximum POI Concentration Before Meteorological Anomaly Removal [µg/m³]	Maximum POI Concentration After Meeorological Anomaly Removal [µg/m³]	Averaging Period	MECP POI Limit [µg/m³]	Limiting Effect	Schedule	Source	Benchmark	Percentage of MECP Limit [%]	Notes	Version of Date of ACB List
Fluorene	86-73-7	1.20E-07	Calpuff	1.47E-07	1.40E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Formaldehyde	50-00-0	3.40E-04	Calpuff	4.16E-04	3.97E-04	24-hour	65	Odour & Irritation	Sch. 3	Standard	B1	<1%	—	Apr-18
Hexachlorobenzene	118-74-1	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.011	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Hydrogen Chloride	7647-01-0	1.21E-01	Calpuff	1.48E-01	1.41E-01	24-hour	20	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Hydrogen Chloride	7647-01-0	1.21E-01	Calpuff	1.48E-01	1.41E-01	24-hour	200	Health	Sch. 6	URT	—	<1%	—	Apr-18
Indeno(1,2,3 – cd)pyrene	193-39-5	9.23E-08	Calpuff	1.13E-07	1.08E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Lead	7439-92-1	7.40E-06	Calpuff	9.07E-06	8.64E-06	24-hour	0.5	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Lead	7439-92-1	7.40E-06	Calpuff	1.26E-06	1.26E-06	30-day	0.2	Health	Sch. 3	Standard	B1	<1%	Note 2URT - Note 4, Table 4	Apr-18
Lead	7439-92-1	7.40E-06	Calpuff	9.07E-06	8.64E-06	24-hour	2	Health	Sch. 6	URT	—	<1%	Note 2URT - Note 4, Table 4	Apr-18
Mercury	7439-97-6	3.55E-06	Calpuff	4.35E-06	4.14E-06	24-hour	2	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Molybdenum	7439-98-7	2.86E-04	Calpuff	3.51E-04	3.34E-04	24-hour	120	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
Naphthalene	91-20-3	2.71E-06	Calpuff	3.32E-06	3.16E-06	24-hour	22.5	Odour	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Naphthalene	91-20-3	2.71E-06	Calpuff	1.29E-04	4.66E-05	10-minute	50	Odour	Sch. 3	Guideline	B1	<1%	Note 2, 3	Apr-18
Nickel	7440-02-0	5.18E-05	Calpuff	2.93E-06	2.93E-06	Annual	0.04	Health	Sch. 3	Standard	B1	<1%	Note 19, Table 2, 3URT - Note 4, Table 4	Apr-18
Nickel	7440-02-0	5.18E-05	Calpuff	6.35E-05	6.05E-05	24-hour	2	Health	Sch. 6	URT	—	<1%	—	Apr-18
Nickel	7440-02-0	5.18E-05	Calpuff	2.93E-06	2.93E-06	Annual	0.4	Health	—	AAV	—	<1%	—	Apr-18
Nitrogen Oxides	10102-44-0	4.40E+00	Calpuff	5.38E+00	5.13E+00	24-hour	200	Health	Sch. 3	Standard	B1	3%	Notes 2, 17	Apr-18
Nitrogen Oxides	10102-44-0	4.40E+00	Calpuff	1.27E+02	4.58E+01	1-hour	400	Health	Sch. 3	Standard	B1	11%	Notes 2, 17	Apr-18
O-terphenyl	84-15-1	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	—
PM_{10} (Condensable and Filterable)	N/A	1.47E-01	Calpuff	2.87E-01	2.11E-01	24-hour	50	—	—	AAQC	—	<1%	—	—
PM_{10} (Filterable Only)	N/A	1.58E-02	Calpuff	2.41E-01	1.68E-01	24-hour	50	—	—	AAQC	—	<1%	—	—
$PM_{2.5}$ (Condensable and Filterable)	N/A	1.40E-01	Calpuff	2.83E-01	2.05E-01	24-hour	27	—	—	AAQC	—	<1%	—	—
$PM_{2.5}$ (Filterable Only)	N/A	8.37E-03	Calpuff	2.34E-01	1.67E-01	24-hour	27	—	—	AAQC	—	<1%	—	—
Pentachlorobenzene	608-93-5	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	80	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Pentachlorophenol	87-86-5	3.88E-07	Calpuff	4.76E-07	4.53E-07	24-hour	20	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Perylene	198-55-0	7.77E-08	Calpuff	9.51E-08	9.06E-08	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Phenanthrene	85-01-8	6.51E-07	Calpuff	7.98E-07	7.60E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Pyrene	129-00-0	6.81E-07	Calpuff	8.35E-07	7.95E-07	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Selenium	7782-49-2	8.64E-06	Calpuff	1.06E-05	1.01E-05	24-hour	10	Health	Sch. 3	Guideline	B1	<1%	—	Apr-18
Silver	7440-22-4	1.73E-06	Calpuff	2.12E-06	2.02E-06	24-hour	1	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Sulphur Dioxide	7446-09-5	1.97E-02	Calpuff	2.42E-02	2.30E-02	24-hour	275	Health	Sch. 3	Standard	B1	<1%	Effective until July 1, 2023Note 2URT - Note 4, Table 4	Apr-18
Sulphur Dioxide	7446-09-5	1.97E-02	Calpuff	5.70E-01	2.06E-01	1-hour	690	Health	Sch. 3	Standard	B1	<1%	Effective until July 1, 2023Note 2URT - Note 4, Table 4	Apr-18
Tetrachloroethene	127-18-4	2.29E-05	Calpuff	2.80E-05	2.67E-05	24-hour	360	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Tetrachloroethene	127-18-4	2.29E-05	Calpuff	2.80E-05	2.67E-05	24-hour	3600	Health	Sch. 6	URT	—	<1%	—	
Tetralin	119-64-2	1.07E-06	Calpuff	1.31E-06	1.25E-06	24-hour	151.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Thallium	7440-28-0	1.73E-06	Calpuff	2.12E-06	2.02E-06	24-hour	0.5	Health	Sch. 3	SL-JSL	B2	Below SL-JSL	—	Apr-18
Toluene	108-88-3	2.29E-03	Calpuff	2.81E-03	2.67E-03	24-hour	2000	Not Applicable	Sch. 3	Guideline	B1	<1%	To be updated - Note 5	Apr-18
Total Chromium (and compounds)	7440-47-3	4.22E-05	Calpuff	5.17E-05	4.92E-05	24-hour	0.5	Health	Sch. 3	Standard	B1	<1%	Note 11aURT - Note 4, Table 4	Apr-18
Total Chromium (and compounds)	7440-47-3	4.22E-05	Calpuff	5.17E-05	4.92E-05	24-hour	5	Health	Sch. 6	URT	—	<1%	—	Apr-18
Total Particulate Matter (Condensable and Filterable)	N/A	1.41E-01	Calpuff	2.84E-01	2.05E-01	24-hour	120	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
Total Particulate Matter (Filterable only)	N/A	9.35E-03	Calpuff	2.36E-01	1.67E-01	24-hour	120	Particulate	Sch. 3	Guideline	B1	<1%	—	Apr-18
Trichloroethane, 1,1,1 -	71-55-6	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	115000	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Trichloroethene	79-01-6	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	0.1	—	—	De Minimus	—	Below De Minimus	—	Apr-18
Trichloroethylene, 1,1,2 -	79-01-6	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	12	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Trichloroethylene, 1,1,2 -	79-01-6	1.63E-05	Calpuff	1.99E-05	1.90E-05	24-hour	1200	Health	Sch. 6	URT	—	<1%	—	Apr-18
Trichlorofluoromethane	75-69-4	3.25E-05	Calpuff	3.98E-05	3.79E-05	24-hour	6000	Health	Sch. 3	Guideline	B1	<1%	Note 10	Apr-18
Vanadium	7440-62-2	1.05E-06	Calpuff	1.29E-06	1.23E-06	24-hour	2	Health	Sch. 3	Standard	B1	<1%	—	Apr-18
Vinyl chloride	75-01-4	3.25E-05	Calpuff	3.98E-05	3.79E-05	24-hour	1	Health	Sch. 3	Standard	B1	<1%	URT - Note 4, Table 4	Apr-18
Vinyl chloride	75-01-4	3.25E-05	Calpuff	3.98E-05	3.79E-05	24-hour	100	Health	Sch. 6	URT	—	<1%	—	Apr-18
Xylenes, m-, p- and o-	1330-20-7	6.50E-05	Calpuff	7.97E-05	7.59E-05	24-hour	730	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3, 22	Apr-18
Xylenes, m-, p- and o-	1330-20-7	6.50E-05	Calpuff	3.10E-03	1.12E-03	10-minute	3000	Not Applicable	Sch. 3	Guideline	B1	<1%	Note 2, 3, 22	Apr-18
Xylenes, m-, p- and o-	1330-20-7	6.50E-05	Calpuff	7.97E-05	7.59E-05	24-hour	7300	Not Applicable	Sch. 6	URT	—	<1%	—	Apr-18
Zinc	7440-66-6	1.75E-04	Calpuff	2.14E-04	2.04E-04	24-hour	120	Particulate	Sch. 3	Standard	B1	<1%	—	Apr-18

Appendix 5: Ambient Air Monitoring Station Locations



DYEC Site and Ambient Monitoring Station Locations

True North

Drawn by: DJH | Figure: 1

Approx. Scale: 1:20,000

Date Revised: Apr 17, 2020

Map Projection: NAD 1983 UTM Zone 17N

DYEC - Region of Durham, Ontario

Project #: 1803743

Appendix 6: Maintenance Summary

JANUARY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	17367	Top steam valve leaking closes to drum.So steam and water valves close. (RB:FTROTTIE)	CM	1-LE-5005	STEAM DRUM EYE-HYE LEVEL PROBE UNIT 1	Complete
2	17368	Replace recirculation valve on discharge line from settling basin pump to the basin valve is getting hard to open and close. (RB:FTROTTIE)	CM	WW-TK-002	WASTE WATER SETTLING BASIN	Complete
3	17366	low pressure 20 psi (RB:FTROTTIE)	CM	SB-ROT-116	ECONOMIZER ROTARY SOOTBLOWER 16 UNIT 1	Complete
4	17370	Hinge on inspection door lid is broken. (RB:CSHAFER)	CM	AH-MIX-001B	FLYASH PUGMILL B	Complete
5	17369	3 inch wide hole in #4 Screen (RB:CSHAFER)	CM	AH-CV-012	NON-FERROUS VIBRATING SCREEN CONVEYOR	Complete
6	17361	Conveyor is badly torn and needs to be replaced (RB:GCOWLEY)	CM	AH-CV-013	NON-FERROUS EDDY CURRENT SEPARATOR	Complete
7	17362	fire pump B supply shut off valve shows alarm on fire panel switch was loose and drew reattached it, but alarm came back in later. Please check out. (RB:GCOWLEY)	CM	FP-PIP-COM	FIRE PROTECTION PIPING, VALVES AND ATTACHMENTS	Complete
8	17360	Making loud noise (RB:FTROTTIE)	CM	SB-ROT-117	ECONOMIZER ROTARY SOOTBLOWER 17 UNIT 1	Complete
9	17365	Stack MCC air conditioner unit "A" fault. Reset fault but comes back in (RB:BMURPHY2)	CM	BLD-STK-ELE	STACK AREA ELECTRICAL BUILDING	Complete
10	17363	Unsure if there was a level or temp probe previously located here. However the port is missing a cap and is currently being plugged with a rag. Sometime more permanent I think should be used. Thx (RB:CSHAFER)	CM	AH-BIN-001A	FLYASH SURGE BIN A	Complete
11	17372	Elevator not working .Doors will not open. (RB:FTROTTIE)	CM	ELV-BB	BOILER BUILDING ELEVATOR	Complete
12	17371	East side of #1 boiler Ammonia sensor failed (RB:FTROTTIE)	CM	1-FIC-3854	AQUEOUS AMMONIA INJECTION FLOW INDICATING CONTROL STATION UNIT 1	Complete
13	17672	Water line is frozen. heat tracing is on. Damage or lack of insulation in sections of the water line make it difficult to un-thaw. Will try to make due in the mean time. (RB:CSHAFER)	CM	AH-MIX-001B	FLYASH PUGMILL B	Complete
14	17673	Sprocket on the rotary motor drive broke. Korey was in and able to help find us a replacement. B rotary back up and running. (RB:CSHAFER)	CM	AH-RV-001B	FLYASH PUGMILL B ROTARY FEEDER	Complete
15	17671	A2 plattco #2 is not closing very well. Seems to not have enough air pressure to close properly (RB:GCOWLEY)	CM	2-HV-7803	SUPERHEATER HOPPER A2 DUMP VALVE UNIT 2	Complete
16	17667	Bag house 207 vibrator not working HS-4895 (RB:FTROTTIE)	CM	FG-BG-200	BAGHOUSE UNIT 2	Complete
17	17668	Crane alarm - K7 Brake relay - Closed during driving. Talked to Randy, said to park it and E&I will look into it. (RB:CSHAFER)	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
18	17666	Boiler 2 recirc hopper/wetting mixer area required clean up and temp repair due to collapsed expansion joint. Lakeland called in to support on Sept 12/21 (RB:JPURCELL)	CM	AH-TK-201	RECIRC FLYASH HOPPER UNIT 2	Complete
19	17670	bottom valve of the drum drain in northwest corner of tipping hall is leaking. risk that if top valve fails the fire system will be activated due to loss of air pressure (RB:GCOWLEY)	CM	FP-PIP-COM	FIRE PROTECTION PIPING, VALVES AND ATTACHMENTS	Complete

JANUARY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
20	17682	Boiler 1 AD upper door requires chain to prevent swinging wide open (process map item from Mark) (RB:JPURCELL)	CM	SR-DC-101	ASH DISCHARGER UNIT 1	Complete
21	17683	Boiler 2 AD upper door requires chain to prevent swinging wide open (process map item from Mark) (RB:JPURCELL)	CM	SR-DC-201	ASH DISCHARGER UNIT 2	Complete
22	17681	Upon morning inspection UO found loader side mirror cracked (RB:BMURPHY2)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
23	17686	We played around with this all shift and can't get it to pump properly. Suction hose could be plugged. Please check it out. (RB:GCOWLEY)	CM	WW-PU-002B	WASTE WATER SETTLING BASIN SUMP PUMP B	Complete
24	17685	#1 watchdog alarms causing MICC camera failure - fixed by JF (RB:BMUIR)	CM	RF-PLC-101	STOKER PROCESS CONTROLS UNIT 1	Complete
25	17678	List of the following damaged/no working Exit Signs. (can't find the proper tag, if there is one) 10, 57, 165, 168, 196, 200, 208, 220, 234 (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
26	17676	Screen #2 has a large hole in it. (RB:CSHAFER)	CM	AH-CV-012	NON-FERROUS VIBRATING SCREEN CONVEYOR	Complete
27	17680	Leaking water causing large icicles that prevent the shower from operating. (RB:CSHAFER)	CM	PW-SS-0001	AQUEOUS AMMONIA STORAGE TANK AREA SAFETY SHOWER/EYEWASH STATION	Complete
28	17679	Water Leak and frozen. (RB:CSHAFER)	CM	PW-SS-0012	PORTLAND CEMENT/POZZOLAN SILOS SAFETY SHOWER/EYEWASH STATION	Complete
29	17380	Provide Millwright for vacation coverage for Maintenance.	CM	RF-BO-201	BOILER UNIT 2	Complete
30	17377	Replace Bearing for CA fan Unit 2	CM	CA-FN-201	COMBUSTION AIR FAN UNIT 2	Complete
31	17401	boiler 2 preheat trap drain to atmosphere leaking (ground floor) (pic attached) (RB:JPURCELL)	CM	CA-HX-201	STEAM COIL AIR PREHEATER UNIT 2	Complete
32	17382	Emergency Call to repair HVAC issue for Ash Residue PDC	CM	HV-B-01	VISITOR CENTRE HEATING BOILER 1	Complete
33	17661	Transmitter showing 0 without any failure on DCS. (RB:LMCDONEL)	CM	1-TT-4846	ID FAN SUCTION FLUE GAS TEMPERATURE TRANSMITTER UNIT 1	Complete
34	17662	A1 Fan tripped multiple times "Inverter Fault" on HMI but goes away. I&E notified and looking into it. (RB:LMCDONEL)	CM	C-SIC-0830	ACC CELL 1 FAN VARIABLE FREQUENCY DRIVE	Complete
35	17664	Unit 1 Quench chamber 1 1-TT-4763-1 outlet temp. Thermocouple acting erratic sending false temp readings (RB:BMURPHY2)	CM	1-FIT-4757	EVAPORATIVE COOLER QUENCH WATER FLOW TRANSMITTER UNIT 1	Complete
36	17655	Both Boot brush/scrapper at residue building east entrance (top/bottom) are not bolted down. Picture included of the top floor. Bottom one is just outside of pugmill bay door. (RB:CSHAFER)	CM	BLD-RES	RESIDUE BUILDING	Complete
37	17402	Boiler 2 bottom header drain west by barn door (upper) needs replaced. (pic attached) (RB:JPURCELL)	CM	DRN-PIP-1	BOILER DRAIN PIPING, VALVES AND ATTACHMENTS UNIT 1	Complete
38	17658	AH-CV-009 inclined conveyor belt scraper needs adjusting (RB:BMURPHY2)	CM	BLD-RES	RESIDUE BUILDING	Complete
39	17656	seal on pressure washer is leaking water. UO's are using a garbage pail to catch water so it doesn't flood Bay 2 (RB:CSHAFER)	CM	BLD-RES	RESIDUE BUILDING	Complete

JANUARY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
40	17379	Pump trip on vibration .Reset button keeping it pressed in we can keep pump running. Pump stops and we press reset for the vibration it will not reset the switch. We can't feel any difference between pump A and B. (RB:FTROTTIE)	CM	FW-PU-001B	ELECTRIC BFW PUMP B	Complete
41	17660	THC unit 1 out of control 4 times (RB:FTROTTIE)	CMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
42	17657	Unit 1 AMESA exchange (RB:LKWAN)	CMENV	1-AE-4712	STACK CEM SYSTEM UNIT 1	Complete
43	17663	#1 Boiler THC out of control (RB:FTROTTIE)	CMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete

FEBRUARY 2022 CORRECTIVE MAINTENANCE						
Select	**Work Order ID**	**Task Description**	**WO Type**	**Tag Number**	**Asset Description**	**Status**
1	17794	At the stop and start buttons .Horn bracket is broken and needs fasten. (RB:FTROTTIE)	CM	AH-CV-010	FERROUS DRUM MAGNET VIBRATING FEEDER	Complete
2	17775	Motor sounds awful while the conveyor is running. I reset each motor at their breakers but doesn't seem to have changed anything. Lower motor that I can put my hand on feels very warm. (RB:CSHAFER)	CM	AH-CV-016	FERROUS METAL VIBRATING SCREEN CONVEYOR	Complete
3	17795	Residue loader side plate cutting edge need to be retorqued (RB:BMURPHY2)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete

MARCH 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	16793	Trouble shooting for Kone Cabinet HVAC unit East	CM	RC-MCC-001A	REFUSE CRANE EAST MOTOR CONTROLS	Complete
2	16799	Repair CEMs AMESA chiller not working	CM	1-STK-CHR	STACK CEMS CHILLER UNIT 1	Complete
3	16800	Power washer leaking at filter (RB:FTROTTIE)	CM	BLD-RES	RESIDUE BUILDING	Complete
4	16846	Manual ball valve on discharge line passing. (RB:LKWAN)	CM	WW-TK-001	BOILER DRAIN TANK	Complete
5	16888	Make up valve to RO rec. tank passing. and tank overflowing to floor when RO is off. (RB:FTROTTIE)	CM	RO-SKD-2	RO FEED PUMP SKID	Complete
6	17013	Boiler 1 & 2 Gauge Glass cameras have zero signal. These are a part of our TSSA requirement I believe. (RB:CSHAFER)	CM	TV-CAM-PROC	PROCESS CAMERAS	Complete
7	17020	Provide Vibration check with complete analysis for CA fan Unit 2	CM	CA-FN-201	COMBUSTION AIR FAN UNIT 2	Complete
8	17029	Residue front end loader bucket is damaged on both sides up top *Attached are photos of the damage (RB:BMURPHY2)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
9	17036	Emergency call in for West Refuse crane not feeding in Auto	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
10	17135	Supply only a new Dynareg Inverter. INVERTER D2V315RK10E7KREBB 575V, 325A REGENERATION UNIT REGEN UNIT SHIPS WITH REG3V090 SOFTWARE AND FACTORY TEST PARAMETERS	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
11	17212	Replace/rebuild Vibratory conveyor FINGER DECK WELDMENT	CM	AH-CV-008	GRIZZLY SCALPER	Complete
12	17222	Failed, Randy knows about it (RB:GCOWLEY)	CM	1-PIT-4846-3	ID FAN SUCTION FLUE GAS PRESSURE TRANSMITTER 3 UNIT 1	Complete
13	17224	Air line near conveyor 11 in residue needs replacing. It is leaking. (RB:GCOWLEY)	CM	SA-PIP-COM	SERVICE AIR PIPING, VALVES AND ATTACHMENTS	Complete
14	17237	TE has detached itself. Randy asked I put this in for repair or if any parts are required. (RB:LMCDONEL)	CM	1-TE-4819	CRUDE/CLEAN GAS CHAMBER TEMPERATURE ELEMENT UNIT 1	Complete
15	17245	Replace the HMI board on Air Dryer	CM	SA-AD-001	INSTRUMENT AIR DRYER	Complete
16	17251	ECS BELT NEEDS REPLACEMENT	CM	AH-CV-013	NON-FERROUS EDDY CURRENT SEPARATOR	Complete
17	17375	Insulation and Lagging Work	CM	RF-BO-101	BOILER UNIT 1	Complete
18	17375	Feed Chute Repair Work	CM	RF-BO-101	BOILER UNIT 1	Complete
19	17375	Pressure Part repair (non-CAPEX)	CM	RF-BO-101	BOILER UNIT 1	Complete
20	17665	C-PV-0005 Block valve to 003 CV. Staying open, even when put in manual and closed on DCS. confirmed in the field valve not closing (RB:BMURPHY2)	CM	C-PV-0005	MAIN STEAM TURBINE BYPASS DESUPERHEATER MAIN STEAM AUTOMATIC ISOLATION VALVE	Complete
21	17669	Can't find the right tag. The water fountain in the control room isn't working. piping is plugged but also leaks(?) (RB:CSHAFER)	CM	PW-PIP-COM	DOMESTIC/POTABLE WATER PIPING AND ATTACHMENTS	Complete
22	17674	LIST OF Deficiencies from weekly inspection #107 broken pressure gauge #121 popper valve leak #122 popper valve leak (RB:CSHAFER)	CM	SB-TCV-101	SOOTBLOWER HEADER THERMAL DRAIN VALVE UNIT 1	Complete
23	17772	Replace West Crane Rope Drum (expense)	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
24	17772	Replace East Crane Rope Drum (expense)	CM	RF-RC-001A	REFUSE CRANE EAST	Complete
25	17795	Residue loader side plate cutting edge need to be retorqued (RB:BMURPHY2)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
26	17886	valve has significant steam leak at stem (RB:BMUIR)	CM	C-PCV-0027	MEDIUM PRESSURE DESUPERHEATER INLET MAIN STEAM AUTOMATIC ISOLATION VALVE	Complete

MARCH 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
27	17887	West gauge glass blown .Needs replacing (RB:FTROTTIE)	CM	RF-BO-101	BOILER UNIT 1	Complete
28	17888	Pump not pumping . (RB:FTROTTIE)	CM	C-LSH-006	BOOT WASH/CLEAN ROOM SUMP LEVEL SWITCH HI	Complete
29	17892	Train 1 has a leak on cam lock to discharge hose needs replacing (RB:FTROTTIE)	CM	CF-SO-C01	ACTIVATED CARBON SILO	Complete
30	17897	Finger deck: Upper south side tooth has a hole and a crack leading to the tooth potentially breaking off soon. weld bead of crack and patch hole. (RB:CSHAFER)	CM	AH-CV-008	GRIZZLY SCALPER	Complete
31	17898	Loud squealing noise from fan belt. Fan has be turned off for now. (RB:CSHAFER)	CM	HV-FN-002	BOILER BUILDING REVERSIBLE POWER ROOF VENTILATOR 2	Complete
32	17899	Tipping Floor Loader: EGR valve not responding (E 1121-2) It was loosing its power trying to push trash into pit. (RB:CSHAFER)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
33	17900	flange on sample port EL 12 rotted off. (RB:GCOWLEY)	CM	1-IN-LN	INLET CEMS SAMPLE LINES UNIT 1	Complete
34	17901	Hose leak on discharge #1 in carbon silo. Duct tape on it for now. (RB:GCOWLEY)	CM	CAR-PIP-COM	ACTIVATED CARBON PIPING, VALVES AND ATTACHMENTS	Complete
35	17902	Boiler 2 Run 2 Zone 2 Hopper damper has a hole in the damper (RB:CSHAFER)	CM	RF-GR-2012	STOKER GRATE RUN 2 UNIT 2	Complete
36	17905	AH-CV-009 Dog house scraper is loose and needs tightening (RB:BMURPHY2)	CM	AH-CV-009	INCLINED BELT CONVEYOR	Complete
37	17907	Pugmill B inspection door hinge broken *picture attached (RB:BMURPHY2)	CM	AH-MIX-001B	FLYASH PUGMILL B	Complete
38	17908	Please check d/p on lime bag house and level transmitter. Lime delivery have been dusting out plant . (RB:FTROTTIE)	CM	C-PDSH-4750	HYDRATED LIME SILO VENT FILTER PRESSURE DIFFERENTIAL SWITCH HI	Complete
39	17909	Tipping floor loader. EGR valve code:E1121-2. Loader losing power and shutting down. (RB:FTROTTIE)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
40	17910	East crane support wire strain broken .Needs replacing (RB:FTROTTIE)	CM	RF-RC-001A	REFUSE CRANE EAST	Complete
41	17911	Lime silo level transmitter reading "0" on DCS and in the field (RB:BMURPHY2)	CM	C-LIT-4755	HYDRATED LIME SILO LEVEL TRANSMITTER	Complete
42	17912	RO will not start tripping due to 1st pass no reject flow. FIT 202 transmitter (1st pass reject flow) is reading 0 lpm even when auto valve is open or when we open up bypass fully (RB:BMURPHY2)	CM	C-LIT-8705	BOILER MAKE-UP WATER STORAGE TANK LEVEL TRANSMITTER	Complete
43	17913	AH-CV-016 ferrous metal vibrating screen conveyor motor tripped 2x (RB:BMURPHY2)	CM	AH-CV-016	FERROUS METAL VIBRATING SCREEN CONVEYOR	Complete
44	17914	At 00:35 the West crane had "dynAreg" alarm. Operator parked west crane and took out the East for use (RB:BMURPHY2)	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
45	17915	Boiler 2- 2nd pass plattco solenoid held on by 1 screw (RB:BMURPHY2)	CM	AH-CV-201	SECOND PASS/SUPERHEATER HOPPER FLYASH COLLECTION SCREW CONVEYOR UNIT 2	Complete
46	17917	Temp prob C-TI-0205 showing bad reading -54C and trip out extraction on LP heater (RB:FTROTTIE)	CM	C-LCV-0952A	LP FEEDWATER HEATER 2 LEVEL CONTROL VALVE	Complete
47	17918	Alarm on panel low coolant temperature. (RB:FTROTTIE)	CM	BLD-DGEN	STANDBY DIESEL ELECTRIC GENERATOR ENCLOSURE	Complete
48	17919	Residue loader cutting edge needs to be re torqued (RB:BMURPHY2)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
49	17921	Conveyor tripped a couple times due to Motion LoLo. Could not determine the cause or reason. The Motor felt warmer in comparison than other conveyor motors and the conveyor appears to be vibrating faster than normal. (RB:CSHAFER)	CM	AH-CV-016	FERROUS METAL VIBRATING SCREEN CONVEYOR	Complete

MARCH 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
50	17922	extra power cable on top of the grapple is a bit loose. Please check and make sure it is okay as it is (RB:GCOWLEY)	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
51	17924	Holes in #1 Ash Discharger. Needs plate welded over. (RB:CSHAFER)	CM	SR-DC-101	ASH DISCHARGER UNIT 1	Complete
52	17925	Tipping floor loader door is jammed and hard to open. (RB:CSHAFER)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
53	17926	Leaking seal (RB:GCOWLEY)	CM	SB-RET-102	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 1	Complete
54	17927	Malfunction alarm comes up on control panel when running. Runs okay (RB:GCOWLEY)	CM	SB-RET-106	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 6 UNIT 1	Complete
55	17928	Packing leaking (RB:GCOWLEY)	CM	SB-RET-202	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 2	Complete
56	17930	Pleae check out pump. We are losing flow on this pump. Inlet strainer has been clean and not showing any signs of plug age at strainer. (RB:FTROTTIE)	CM	WW-PU-001A	WASTE WATER PUMP A	Complete
57	17933	Not working. (RB:GCOWLEY)	CM	1-TT-4763-3	EVAPORATIVE COOLER OUTLET FLUE GAS TEMPERATURE TRANSMITTER 3 UNIT 1	Complete
58	17936	Unloading ground wire for hook up to truck need a new clip. Clip missing (RB:FTROTTIE)	CM	AH-SILO-001	POZZOLAN STORAGE SILO	Complete
59	17937	Leaking down shaft. (RB:FTROTTIE)	CM	SB-RET-101	EVAPORATOR RETRACTABLE SOOTBLOWER 1 UNIT 1	Complete
60	17938	Making loud noise when in operation. (RB:FTROTTIE)	CM	SB-ROT-109	ECONOMIZER ROTARY SOOTBLOWER 9 UNIT 1	Complete
61	17939	2 holes in the south face throat of boiler 1 ash discharger (RB:BMURPHY2)	CM	SR-DC-101	ASH DISCHARGER UNIT 1	Complete
62	17946	Please add some oil to both martin hydraulic systems before the weekend (RB:GCOWLEY)	CM	RF-PU-101A	STOKER HYDRAULIC PUMP A UNIT 1	Complete
63	17948	plant security camera at the grizzly area is inoperative and requires replacement (Feb 25) (RB:JPURCELL)	CM	TV-CAM-SEC	SECURITY CAMERAS	Complete
64	17952	#7 solenoid for compartment 202 not firing (RB:GCOWLEY)	CM	IA-TK-202	RECIRC FLYASH HOPPER DISCHARGE 2 FLUIDIZING NOZZLES INSTRUMENT AIR RECEIVER TANK UNIT 2	Complete
65	17953	#1 Baghouse pulse air: 2 solenoids are firing at the same time in sequence. Only 1 solenoid should be activate at a time. (RB:CSHAFER)	CM	FG-BG-100	BAGHOUSE UNIT 1	Complete
66	17954	kEEPS TRIPPING STARTED AT 03:05 AM TO END OF SHIFT HAD TO JOG AND RESET BREAKER.AND WILL NOT START UP NORMAL. (RB:FTROTTIE)	CM	AH-CV-016	FERROUS METAL VIBRATING SCREEN CONVEYOR	Complete
67	17956	Fan is tripping. Getting alarm for high heat sink temp. Please check out. Left cabinet door open for now. (RB:GCOWLEY)	CM	C-SIC-0834	ACC CELL 3 FAN VARIABLE FREQUENCY DRIVE	Complete
68	17957	Thermocouple failed (RB:GCOWLEY)	CM	2-TT-4763-3	EVAPORATIVE COOLER OUTLET FLUE GAS TEMPERATURE TRANSMITTER 3 UNIT 2	Complete
69	17959	2nd pass plattco not working. part of actuator fell off and we could not get it back on. May need a new one. (RB:GCOWLEY)	CM	2-HV-7801	SECOND PASS HOPPER DUMP VALVE UNIT 2	Complete
70	17960	"hihi vibration" on outboard bearing (RB:BMURPHY2)	CM	CA-FN-101	COMBUSTION AIR FAN UNIT 1	Complete
71	17961	Potable water line to NH3 safety shower/ eyewash station leaking bad. NH3 dyke area (RB:BMURPHY2)	CM	PW-SS-0002	AQUEOUS AMMONIA UNLOADING AREA SAFETY SHOWER/EYEWASH STATION	Complete

MARCH 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
72	17962	Smells of Oil burning and blueish blue smoke. Hopefully its nothing. (RB:CSHAFER)	CM	MOB-SKDSR-1	SKID STEER	Complete
73	17963	Randy thinks the diagram is broken. Acting erratic (RB:CSHAFER)	CM	2-PCV-4209	OFA HEADER FRONT FLOW CONTROL DAMPER UNIT 2	Complete
74	17964	APC-AH-CV-201 inlet screw conveyor motor gear box needs replacing (RB:BMURPHY2)	CM	AH-CV-205	BOILER /APC FLYASH COLLECTION SCREW CONVEYOR UNIT 2	Complete
75	17966	Service water vale on west wall, beside air line, just west of #2 discharger is damaged due to freezing. It is isolated further upstream. Please repair/replace (RB:GCOWLEY)	CM	CY-PIP-COM	CITY WATER PIPING, VALVES AND ATTACHMENTS	Complete
76	17967	conveyor 10 material flow taper bar damaged causing material hang up. found on outage inspection. (March 16/2022) (RB:JPURCELL)	CM	AH-CV-010	FERROUS DRUM MAGNET VIBRATING FEEDER	Complete
77	17969	Water Leak at Ball valve that services Ammonia Safety Shower (RB:CSHAFER)	CM	C-FSH-3816	AQUEOUS AMMONIA STORAGE TANK AREA SAFETY SHOWER/EYEWASH STATION FLOW SWITCH HI	Complete
78	17983	#1 Quench tower bottom 0360L heating ground fault APC (RB:FTROTTIE)	CM	2-FIT-4757	EVAPORATIVE COOLER QUENCH WATER FLOW TRANSMITTER UNIT 2	Complete
79	17985	West gauge glass needs replacing. (RB:FTROTTIE)	CM	1-LG-5006	STEAM DRUM WATER LEVEL SIGHTGLASS UNIT 1	Complete
80	17991	AH-RV-101 APC Train #1 VFD failed after black plant. Required replacement (RB:JPURCELL)	CM	AH-RV-101	RECIRC FLYASH HOPPER DISCHARGE 1 ROTARY VALVE UNIT 1	Complete
81	17992	TG steam bypass block valve (C-PV-0005) requires limit switch adjustment. Valve showing partly open from DCS. (RB:JPURCELL)	CM	C-PV-0005	MAIN STEAM TURBINE BYPASS DESUPERHEATER MAIN STEAM AUTOMATIC ISOLATION VALVE	Complete
82	17994	Water valve solenoid needs replacing. (RB:FTROTTIE)	CM	WW-WC-101	RECIRC FLYASH MIXER 1 WATER CABINET UNIT 1	Complete
83	17997	Bag house 104 E150-02C and baghouse 102 E146-02C solenoid diaphragm need replacing (RB:FTROTTIE)	CM	IA-TK-117	BAGHOUSE COMPARTMENT 2 INSTRUMENT AIR RECEIVER UNIT 1	Complete
84	18010	Boiler 1 O2 inlet and O2 outlet have a 2-3% spread. Requires CEMS to check out. (RB:JPURCELL)	CM	1-AE-4701	ECONOMIZER OUTLET O2 ANALYZER UNIT 1	Complete
85	17890	GHG Sampling for Q1 (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
86	17916	Getting high HF on unit 2. (RB:FTROTTIE)	CMENV	2-IN-CHR	INLET CEMS CHILLER UNIT 2	Complete
87	17920	AMESA exchange on unit 2 (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
88	17934	Unit 2 Outlet HF reading above 24hr limit of 0.9. Call out made, Daryl coming in to fix. (RB:CSHAFER)	CMENV	2-IN-PRB	INLET CEMS SAMPLE PROBE UNIT 2	Complete
89	17942	AMESA Unit 1 removal, spacer trap insert (RB:LKWAN)	CMENV	1-AE-4712	STACK CEM SYSTEM UNIT 1	Complete
90	17943	AMESA Unit 2 removal, spacer trap insert (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
91	17955	CO unit 1 out of control (RB:FTROTTIE)	CMENV	1-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 1	Complete
92	18004	AMESA U1 EXCHANGE - PIECES A (RB:LKWAN)	CMENV	1-AE-4712	STACK CEM SYSTEM UNIT 1	Complete
93	18005	AMESA install - trap and pieces B (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
94	16957	Month 10 JHSC Walkdown Finding - El.18 Deaerator missing insulation - thermal hazard. Please re-affix. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete

MARCH 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
95	17891	Door #605 on el.18 west side of #2 boiler going out to the charging deck does not open from boiler building to charging deck and vise versa. Please repair. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
96	17894	Month 01 JHSC Walkdown Finding - Grizzy Building - Exits GR101 & GR102 blocked with snow. Emergency egress impeded. Please clear obstruction. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
97	17895	Month 01 JHSC Walkdown Finding - Housekeeping – Residue Building - air hose hanging west of magnetic drum is frayed leaking excessive air. Please repair or replace. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
98	17923	Please install (2) Hauler Safety Rules Signs at the truck entrances on both the east and west sides, per an action item on the JHSC minutes. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
99	17958	Please hang Life Critical Rules Poster-Frames. Please confirm location with FM (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
100	18000	Water leak in multiple areas on floor in the Visitor Centre tunnel. Please investigate and repair. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete

APRIL 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	18087	Transfer case when engaging forward to reverse it goes into crawl mode and been continuingly getting worse. The reverse lights are also burnt out (RB:BMURPHY2)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
2	18099	Louvres barely open when fan is in operation. (RB:CSHAFER)	CM	HV-FN-002	BOILER BUILDING REVERSIBLE POWER ROOF VENTILATOR 2	Complete
3	18100	Vacuum breaker leaks (RB:CSHAFER)	CM	SB-ROT-217	ECONOMIZER ROTARY SOOTBLOWER 17 UNIT 2	Complete
4	18101	Steam traps missing insulation (RB:CSHAFER)	CM	CA-HX-101	STEAM COIL AIR PREHEATER UNIT 1	Complete
5	18102	Steam traps missing insulation. (RB:CSHAFER)	CM	CA-HX-201	STEAM COIL AIR PREHEATER UNIT 2	Complete
6	18103	Air line to level control valve is beaten up and leaking. hanging support for instrument line was damaged by CFS during #1 Econ tube bundle replacement. (RB:CSHAFER)	CM	C-FV-3015-1	WASTE WATER HOLDING TANK AUTOMATIC DRAIN VALVE	Complete
7	18104	GE steam turbine lube oil filter was replaced (4/1/22). Replacement filter required (RB:JPURCELL)	CM	TGS-LO-F100A	TURBINE LUBE OIL FILTER A	Complete
8	18105	Drain pood keeps flowing. Please check ELE. (RB:FTROTTIE)	CM	C-LV-0190	MEDIUM PRESSURE HEADER DRIP LEG AUTOMATIC DRAIN VALVE	Complete
9	18106	Mode lock keeps going to Manual. (RB:FTROTTIE)	CM	1-TCV-4211	ECONOMIZER WATER BYPASS TEMPERATURE CONTROL VALVE UNIT 1	Complete
10	18107	No Alarm coming to DCS in control room (RB:FTROTTIE)	CM	PW-SS-1011	BOILER BUILDING UNIT 1 EAST SAFETY SHOWER/EYEWASH STATION	Complete
11	18108	Line broken needs repair (RB:FTROTTIE)	CM	C-FSH-2307	PORTLAND CEMENT/POZZOLAN UNLOADING AREA SAFETY SHOWER/EYEWASH STATION FLOW SWITCH HI	Complete
12	18109	no flow line broken needs repair (RB:FTROTTIE)	CM	C-FSH-2308	PORTLAND CEMENT/POZZOLAN SILOS SAFETY SHOWER/EYEWASH STATION FLOW SWITCH HI	Complete
13	18111	Invertor outside battery room is showing power supply fault (RB:FTROTTIE)	CM	125-BACH-001	STATION BATTERY CHARGER 1	Complete
14	18112	Inclined conveyor counterweight north cage bottom hinge broken off and caged guarding not secure (RB:BMURPHY2)	CM	AH-CV-009	INCLINED BELT CONVEYOR	Complete
15	18113	Provide Crane for replacing vibrator motor for ash residue ferrous conveyor	CM	AH-CV-016	FERROUS METAL VIBRATING SCREEN CONVEYOR	Complete
16	18114	Scraper needs to be readjusted. (RB:CSHAFER)	CM	AH-CV-009	INCLINED BELT CONVEYOR	Complete
17	18140	#106 - FIRING AISLE - #1 Stoker West. E-light not working. (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
18	18141	Elv. 10M - #99 E-light not working. #1 Northeast, up high. (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
19	18142	Elv. 18M- E-light not working - #53 - #2 West (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
20	18145	Call in for HVAC tech for troubleshooting ash residue PDC	CM	347-LP106B2	347 V LIGHTING PANEL LP106-B2 RESIDUE PDC	Complete
21	18146	RESIDUE LOADER: LEFT SIDE MIRROR DAMAGED (RB:CSHAFER)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
22	18150	Inlet chamber ash hopper max-max temp fault (RB:BMURPHY2)	CM	2-TE-4819	CRUDE/CLEAN GAS CHAMBER TEMPERATURE ELEMENT UNIT 2	Complete
23	18157	MAINTENANCE #250 - BESIDE DOOR #161 - BLANK (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
24	18158	Burner will not light off after 300 second purge. Alarm: Lost of light off limit(s) (RB:CSHAFER)	CM	AB-BR-101	AUXILIARY BURNER UNIT 1	Complete
25	18160	SWING GATE INSPECTION #37 DUST COLLECTOR TOP OUTSIDE GRIZZLY: DOES NOT SWING CLOSED (RB:CSHAFER)	CM	SEC-GT-FRT	FRONT GATE	Complete
26	18161	EGR Diff Press out of calibration. Alarm came in at 7:10 am 4/12/22 (RB:FTROTTIE)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
27	18163	valve has small leak on cooling line. (RB:FTROTTIE)	CM	FP-PU-001A	FIRE WATER DIESEL PUMP A	Complete
28	18164	Valve FP-V-0078A need a new valve position switch broken. (RB:FTROTTIE)	CM	FP-PU-001A	FIRE WATER DIESEL PUMP A	Complete
29	18173	Valve RV-201 is sticking when trying to open. Sounds and feels like air is leaking. R.O would trip on start up. physically forced it open to get it not trip. Currently making a light clicking sound. (RB:CSHAFER)	CM	RO-SKD-1	RO SKID	Complete

APRIL 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
30	18176	Camera is losing image quality periodically, Lense has been cleaned. Computer host rebooted. Will read image for 10 mins, loss image quality % for 10 minutes. Not sure could be the issue. (RB:CSHAFER)	CM	TV-CAM-FUR-1	FURNACE VIDEO CAMERA UNIT 1	Complete
31	18172	THC out of control (RB:FTROTTIE)	CMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
32	18110	line broken needs repaired (RB:FTROTTIE)	CMSAF	PW-SS-0001	AQUEOUS AMMONIA STORAGE TANK AREA SAFETY SHOWER/EYEWASH STATION	Complete
33	18153	CA-DURHAM YORK-2022-CAL-AI-00018 - Trip Hazard Assessment. Potential trip hazard on El.3 outside elevator. Floor plating at elevator is raised, creating a potential trip hazard. Please repair. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete

MAY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	18257	Missing Protective cover on ammonia truck fill panel (RB:DPICKETT)	CM	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
2	18265	gas heater exhaust flume broken off needs repairing HV_UH-020 (RB:FTROTTIE)	CM	FP-PU-001A	FIRE WATER DIESEL PUMP A	Complete
3	18266	boiler 1 auxiliary burner failed to light off after black plant events (RB:JPURCELL)	CM	AB-BR-101	AUXILIARY BURNER UNIT 1	Complete
4	18267	Conduit hangers that are bent and unclipped. Located on the APC ground floor in the hallway south of #1 Conditioning Rotor (RB:CSHAFER)	CM	347-LP105A1	347 V LIGHTING PANEL LP105-A1 APC BLDG	Complete
5	18269	broken outbound scale arm, need replacement. (RB:LKWAN)	CM	SCL-TK-OUT	TRUCK SCALE OUTBOUND	Complete
6	18270	The crane was calibrated last week. Upper limit comes in during auto feeding. During auto-feeding when it goes above the hopper to feed. It doesn't lower itself when releasing refuse and doesn't return from above hopper. Limits issue?? (RB:CSHAFER)	CM	RF-RC-001A	REFUSE CRANE EAST	Complete
7	18271	Solenoid diaphragm E-248-08c and E248-07c need replacing. (RB:FTROTTIE)	CM	FG-BG-203	BAGHOUSE COMPARTMENT 2 UNIT 2	Complete
8	18272	Solenoid diaphragm E-256-08c need replacing. (RB:FTROTTIE)	CM	FG-BG-207	BAGHOUSE COMPARTMENT 6 UNIT 2	Complete
9	18273	Solenoid diaphragm E-256-06c need replacing. (RB:FTROTTIE)	CM	FG-BG-207	BAGHOUSE COMPARTMENT 6 UNIT 2	Complete
10	18274	Boiler 1 CA fan inlet temp. bad output . 1-TE-4218 (RB:BMURPHY2)	CM	1-TE-4218	COMBUSTION AIR FAN INLET AIR TEMPERATURE ELEMENT UNIT 1	Complete
11	18277	Probe failed need new temp prob. (RB:FTROTTIE)	CM	1-TT-4763-3	EVAPORATIVE COOLER OUTLET FLUE GAS TEMPERATURE TRANSMITTER 3 UNIT 1	Complete
12	18279	Broken Light Fixture Cover dome. (RB:CSHAFER)	CM	347-LP105A1	347 V LIGHTING PANEL LP105-A1 APC BLDG	Complete
13	18281	Lance not touching guide rollers (RB:CSHAFER)	CM	SB-RET-106	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 6 UNIT 1	Complete
14	18286	Packing leaking (RB:CSHAFER)	CM	SB-ROT-113	ECONOMIZER ROTARY SOOTBLOWER 13 UNIT 1	Complete
15	18287	Packing leakage (RB:CSHAFER)	CM	SB-ROT-121	ECONOMIZER ROTARY SOOTBLOWER 21 UNIT 1	Complete
16	18290	The following EXIT SIGNS have no charge = no light #5 - no light #21, #24, #29, #56 ,#57, #82, #84, #96, #99, #102, #104, #165, #166 #167, #206, #207, #208, #220, #234 # n/a - Top of baghouse stairs (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
17	18291	The Following EXIT SIGNS are missing #180 #200 #212 #218 #219 (RB:CSHAFER)	CM	120-EM	EMERGENCY LIGHTS	Complete
18	18296	West Crane DynAReg alarms came in twice today with in a span of 30 minutes. able to reset, power up and continue on. (RB:CSHAFER)	CM	RF-RC-001B	REFUSE CRANE WEST	Complete
19	18300	outbound entry ramp traffic light - RED light out (RB:LKWAN)	CM	SCL-TK-OUT	TRUCK SCALE OUTBOUND	Complete
20	18301	East side roll up door will only open 3/4 of the way. But will closed. (RB:FTROTTIE)	CM	BLD-RES	RESIDUE BUILDING	Complete
21	18303	Baghouse 205 pulse air 4th solenoid from south not working. Solenoid identified with yellow tag (RB:BMURPHY2)	CM	FG-BG-200	BAGHOUSE UNIT 2	Complete

MAY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
22	18304	Lost of power at 03:30 am .Check out found top plastic plate cracked .Must of shorted out. (RB:FTROTTIE)	CM	C-LIT-3015	WASTE WATER SETTLING BASIN LEVEL TRANSMITTER	Complete
23	18305	Please check out AH-RV-002B tripprd 3 times during shift and had to reset. (RB:FTROTTIE)	CM	AH-RV-002B	POZZOLAN ROTARY FEEDER B	Complete
24	18308	Swing gates that need adjusting swing gate doesn't swing back are Dust collector out side grizzly #37,38,39, carbon top#57 (RB:FTROTTIE)	CM	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
25	18321	Pozzolan/Slag rotary does not shut off when the pugmill shuts down. The switch has to be manually opened then closed again when the operator wants to start the pugmill again..Rotary for cement faults and has to be reset inside VFD cabinet (RB:GCOWLEY)	CM	AH-MIX-001A	FLYASH PUGMILL A	Complete
26	18322	keeps showing high on heat trace panel and sounding alarm. suspect it is a bad reading (RB:GCOWLEY)	CM	1-TE-4819	CRUDE/CLEAN GAS CHAMBER TEMPERATURE ELEMENT UNIT 1	Complete
27	18323	Plant radio repeater system not working. Plant radio's operating on channel 3 (may 6) (RB:JPURCELL)	CM	COM-RADIO	PORTABLE HANDHELD RADIOS	Complete
28	18324	Counter weight cage bolt has been stripped. Need to affix latch or new stud. (RB:LMCDONEL)	CM	AH-CV-009	INCLINED BELT CONVEYOR	Complete
29	18338	Riddlings pressure switch broken on Unit #2 in Martin cabiet. (RB:LMCDONEL)	CM	RF-GR-201	STOKER UNIT 2	Complete
30	18353	This one is getting noisy again. Please check out (RB:GCOWLEY)	CM	AH-CV-016	FERROUS METAL VIBRATING SCREEN CONVEYOR	Complete
31	18366	Pugmill A water solenoids not coming on (RB:BMURPHY2)	CM	AH-MIX-001A	FLYASH PUGMILL A	Complete
32	18367	please weld hing on inspection cover on lid of pug mill A (RB:FTROTTIE)	CM	AH-MIX-001A	FLYASH PUGMILL A	Complete
33	18368	Please check out water solenoids on pug mill A not working. (RB:FTROTTIE)	CM	AH-MIX-001A	FLYASH PUGMILL A	Complete
34	18370	#2 MICC Camera working intermittently, more off time than on. (RB:LMCDONEL)	CM	CM-FN-IR-2	FURNACE IR CAMERA UNIT 2	Complete
35	18371	Stopped working (RB:GCOWLEY)	CM	1-TT-4763-1	EVAPORATIVE COOLER OUTLET FLUE GAS TEMPERATURE TRANSMITTER 1 UNIT 1	Complete
36	18374	Please have E&I check out APC-FG-FN-101 and 201 lost of communication of temp and vibration all X out but fan was still running. .This happen at 21:55 pm on May 14 2022. (RB:FTROTTIE)	CM	FG-FN-101	ID FAN UNIT 1	Complete
37	18376	coming in but its not hi hi. and its stopping conveyors. (RB:FTROTTIE)	CM	C-LSHH-7860A	FLYASH SURGE BIN A LEVEL PROBE HI	Complete
38	18377	Pugmill A RV when running was turning very slow. Verified settings in MCC. When shutting down the pugmill to jog RV it would not shut down in normal stop sequence. RV did not shut down until breaker was opened. (RB:BMURPHY2)	CM	AH-RV-001A	FLYASH PUGMILL A ROTARY FEEDER	Complete

MAY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
39	18379	VALVE NOT OPENING FULLY MODE LOCK (RB:FTROTTIE)	CM	2-FV-5260	SUPERHEATER ATTEMPERATOR FEEDWATER AUTOMATIC ISOLATION VALVE UNIT 2	Complete
40	18380	Heat tracing AH-CV-001a-05 fault. Temp down (RB:FTROTTIE)	CM	AH-CV-001A	MAIN FLYASH TRANSPORT SCREW CONVEYOR 1A	Complete
41	18381	ORP reading high. Tests to a lower value (closer to normal) with the hand held. Bisulphite pump at 100% (RB:GCOWLEY)	CM	RO-PLC-1	RO SKID PROCESS CONTROLS	Complete
42	18382	getting noisy. please check out (RB:GCOWLEY)	CM	AH-CV-201	SECOND PASS/SUPERHEATER HOPPER FLYASH COLLECTION SCREW CONVEYOR UNIT 2	Complete
43	18385	AH-CV-001A-05 HEAT TRACING CONTACTOR FAULT. (RB:FTROTTIE)	CM	AH-CV-001A	MAIN FLYASH TRANSPORT SCREW CONVEYOR 1A	Complete
44	18386	Skid steer when using from low to high losing power .May be EGR valve problems. (RB:FTROTTIE)	CM	MOB-SKDSR-1	SKID STEER	Complete
45	18387	Please repair fly ash bin lid 2nd one that's outside lid bent.by the ele trailer. for blasting (RB:FTROTTIE)	CM	C-TSH-7892A	FLYASH SURGE BIN A TEMPERATURE SWITCH HI	Complete
46	18391	Baghouse 205 solenoid pulse air diaphragm E252-05C (RB:BMURPHY2)	CM	FG-BG-200	BAGHOUSE UNIT 2	Complete
47	18395	Main gate for truck call button not working (RB:FTROTTIE)	CM	SEC-GT-FRT	FRONT GATE	Complete
48	18398	Need to weld nut so can bolt down hand rail on loader .Bolt missing. (RB:FTROTTIE)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
49	18399	Compressor A Oil and Filter needs changing showing on screen (RB:FTROTTIE)	CM	SA-AC-001A	SERVICE AIR COMPRESSOR A	Complete
50	18401	Boiler 1 SB 103 not fully extending into the boiler (RB:BMURPHY2)	CM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
51	18404	Pugmill A inspection cover broken off (RB:BMURPHY2)	CM	AH-MIX-001A	FLYASH PUGMILL A	Complete
52	18405	Chain is very loose and looks like bracket for rotary valve is bent and transition piece from cement silo to rotary valve bottom separated from flange to rotary valve. (RB:FTROTTIE)	CM	AH-RV-003B	PORTLAND CEMENT ROTARY FEEDER B	Complete
53	18406	Please check ORP probe reading high on RO (RB:FTROTTIE)	CM	RO-SKD-1	RO SKID	Complete
54	18275	unit 1 o2 wet out of control (RB:FTROTTIE)	CMENV	1-AE-4789	STACK MOISTURE ANALYZER UNIT 1	Complete
55	18276	THC on unit 1 shows on CEMS out of control but analyzer is showing ok (RB:FTROTTIE)	CMENV	2-AE-4744	INLET THC ANALYZER UNIT 2	Complete
56	18292	AMESA EXCHANGE, PIECE C (RB:LKWAN)	CMENV	1-AE-4712	STACK CEM SYSTEM UNIT 1	Complete
57	18293	GHG sampling (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
58	18294	AMESA Unit 2 exchange, piece D (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
59	18297	NOX O/L analyzer 4x ooc (RB:BMURPHY2)	CMENV	2-AE-4739	STACK AMMONIA ANALYZER UNIT 2	Complete
60	18298	unit 2 SO2 analyzer 4x ooc (RB:BMURPHY2)	CMENV	2-AE-4733	INLET SULFUR DIOXIDE ANALYZER UNIT 2	Complete
61	18299	Unit 2 CO O/L analyzer 4x ooc (RB:BMURPHY2)	CMENV	2-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 2	Complete
62	18302	Unit 1 THC out of control (RB:FTROTTIE)	CMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
63	18310	NH3 OOS (RB:LMCDONEL)	CMENV	2-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 2	Complete
64	18311	THC out of cal (RB:LMCDONEL)	CMENV	1-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 1	Complete
65	18325	Unit 2 I/L S02 ooc (RB:BMURPHY2)	CMENV	2-AE-4733	INLET SULFUR DIOXIDE ANALYZER UNIT 2	Complete

MAY 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
66	18369	Unit 2 NH3 out is out of control (RB:FTROTTIE)	CMENV	2-AE-4739	STACK AMMONIA ANALYZER UNIT 2	Complete
67	18372	#1 UNIT THC OUT OF CONTROL (RB:FTROTTIE)	CMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
68	18373	CO, O2, SO2, THC OOC 4x (RB:BMURPHY2)	CMENV	1-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 1	Complete
69	18375	Unit 2 notice CO, SO2, HCL, O2 from CEMS data frozen number aren't moving. (RB:FTROTTIE)	CMENV	2-CEM-LOG	CEMS DATA LOGGERS UNIT 2	Complete
70	18384	Unit 1 THC out of control (RB:FTROTTIE)	CMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
71	18400	O2 wet unit 1 out of control (RB:FTROTTIE)	CMENV	1-AE-4789	STACK MOISTURE ANALYZER UNIT 1	Complete
72	18268	E-cord coil broken near top of incline conveyor. Please repair. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
73	18306	Month 04 JHSC Walkdown Finding - Carbon Silo - Rotary(s) not guarded. Please access and affix guarding, if needed. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
74	18312	Q1 2022 Safety Snapshot Finding -Maintenance Shop - Junk stored on top of flammable cabinet. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
75	18313	Q1 2022 Safety Snapshot Finding - Flammable cabinets not grounded. Please ground. 1) Maintenance shop 2) CEMS and 3) Residue Building Shed (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
76	18314	Q1 2022 Safety Snapshot Finding - Maintenance Shop - Grease gun not labelled & spray bottle with unidentified liquid not labelled. Please label accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
77	18316	Q1 2022 Snapshot Finding - Gas cylinder bottles not secured with chains at gas cylinder storage area 1st floor. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
78	18317	Q1 2022 Snapshot Finding - Top of baghouse - grating not secured properly. Please secure/replace clips (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
79	18365	VENTILATION INTAKE GRILLS & VENTALATION SYSTEM ADMIN SECTION & LUNCHROOM (RB:NCOTE)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
80	18388	The wind sock on the NE corner of the boiler house has blown off. These socks are required per the site EAP s.3.6.3 Aqueous Ammonia leak to determine wind direction. Please replace. Windsock in FSC office. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
81	18389	The mesh on the end bell for the motor for the conveyor is blown mostly off, exposing the operators to the moving shaft. Please repair/replace (RB:GCOWLEY)	CMSAF	AH-CV-013	NON-FERROUS EDDY CURRENT SEPARATOR	Complete

JUNE 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	18472	A! Fan on ACC Oil Pressure switch leaking (RB:FTROTTIE)	CM	C-PSL-0831	ACC CELL 1 FAN OIL PRESSURE SWITCH LOW	Complete
2	18473	Louver top west side are closed from fan A to Fan C .Broken linkage to louver on 2 compartment open and 10 compartment closed due to broken linkage. (RB:FTROTTIE)	CM	CC-FN-001A	CLOSED COOLING WATER HEAT EXCHANGER FAN A	Complete
3	18475	Pug mill A spool piece door to clear rotary valve needs position changed. Door needs to face west. (RB:FTROTTIE)	CM	AH-MIX-001A	FLYASH PUGMILL A	Complete
4	18476	Unit 1 carbon showing 0 flow on CEMS screen in control room .But we checked and we do have flow to unit1. (RB:FTROTTIE)	CM	CAR-PIP-COM	ACTIVATED CARBON PIPING, VALVES AND ATTACHMENTS	Complete
5	18477	needs a new exhauster for the air line (RB:GCOWLEY)	CM	1-HV-7802	SUPERHEATER HOPPER A1 DUMP VALVE UNIT 1	Complete
6	18478	Micc camera for #1 showing low coolant flow on night shift. Operator cracked the by pass and it is okay. Please check out to see if it needs a new filter. (RB:GCOWLEY)	CM	TV-CAM-FUR-1	FURNACE VIDEO CAMERA UNIT 1	Complete
7	18486	Repair/Replace/Rebuild Tail pulley for incline conveyor 7	CM	AH-CV-009	INCLINED BELT CONVEYOR	Complete
8	18487	Provide HVAC technician for repair CEM's Air conditioning.	CM	BLD-CEM	CEMS ENCLOSURE	Complete
9	18488	Tip floor loader has EGR out of cal alarm in (RB:LMCDONEL)	CM	MOB-FEL-1	FRONT END LOADER 1 CAT 950	Complete
10	18489	ACC A3 fan. "pressure low" unable to ramp up to speed trips at 8% (RB:BMURPHY2)	CM	CD-FN-003M	ACC CELL 3 FAN MOTOR	Complete
11	18490	Please adjust scraper on incline conveyor not touching belt . (RB:FTROTTIE)	CM	AH-CV-009	INCLINED BELT CONVEYOR	Complete
12	18493	Annual Inspection for Forklift , Skyjack and scissor lift	CM	MOB-FKLT-1	FORKLIFT TOYOTA	Complete
13	18538	Residue loader please check out bucket tilt binding when moving bucket reported on day shift loader report. (RB:FTROTTIE)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
14	18539	economizer plattco (RB:GCOWLEY)	CM	1-HV-7806	ECONOMIZER HOPPER A2 DOUBLE DUMP VALVE UNIT 1	Complete
15	18542	Boiler 1 econ bypass 100% open "mode lock" (RB:BMURPHY2)	CM	1-TCV-4211	ECONOMIZER WATER BYPASS TEMPERATURE CONTROL VALVE UNIT 1	Complete
16	18543	Please check loader bucket in residue the bucket pins are binding. They have been grease but still get worse. (RB:FTROTTIE)	CM	MOB-FEL-2	FRONT END LOADER 2 CAT 950	Complete
17	18545	Please repair leak from rotary valve photos attached. (RB:FTROTTIE)	CM	AH-RV-001B	FLYASH PUGMILL B ROTARY FEEDER	Complete
18	18547	Easr crane after calibration will not fee to #2 feed chute and still will not park (RB:FTROTTIE)	CM	RF-RC-001A	REFUSE CRANE EAST	Complete
19	18549	Flame scanner not picking up flame, no millivolt reading and no slag build up present. (RB:LMCDONEL)	CM	2-AB-PLC	AUXILIARY BURNER PROCESS CONTROLS UNIT 2	Complete
20	18551	re-install mesh on this one in future (RB:GCOWLEY)	CM	FW-ST-0001B	ELECTRIC BFW PUMP B SUCTION STRAINER	Complete
21	18552	Unit 1 carbon flow not showing on CEMS computer. Flow verified in field and on local panel (RB:BMURPHY2)	CM	CAR-PIP-1	ACTIVATED CARBON PIPING, VALVES AND ATTACHMENTS UNIT 1	Complete
22	18553	Unit 1 I/L 02 CEMS not reading (RB:BMURPHY2)	CM	1-AE-4790	INLET OXYGEN ANALYZER UNIT 1	Complete
23	18554	Condensate tank level A output failed (RB:BMURPHY2)	CM	C-LIT-0810-A	CONDENSATE TANK LEVEL TRANSMITTER A	Complete
24	18555	Unit 1 THC analyzer OOC (RB:BMURPHY2)	CM	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
25	18556	MICC camera temp issue. Randy already got it to go back in. (RB:LMCDONEL)	CM	CM-FN-IR-2	FURNACE IR CAMERA UNIT 2	Complete
26	18557	MICC camera won't go in. Just says there is a camera alarm. Please check out. (RB:GCOWLEY)	CM	TV-CAM-FUR-2	FURNACE VIDEO CAMERA UNIT 2	Complete

JUNE 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
27	18559	hi hi drum pressure comes in at 100 bar and trips boiler. hi pressure should come in first. HI hi should not come in until around 102 bar (RB:GCOWLEY)	CM	1-PSH-5202	BOILER OUTLET STEAM PRESSURE SWITCH HI 5202 UNIT 1	Complete
28	18562	Camera alarm and low coolant. We have change out the coolant filter and added coolant .But camera still in alarm. (RB:FTROTTIE)	CM	CM-FN-IR-2	FURNACE IR CAMERA UNIT 2	Complete
29	18563	Bioler 2 north west by nh3 port no alarm to DCs (RB:FTROTTIE)	CM	PW-SS-2010	BOILER BUILDING UNIT 2 WEST SAFETY SHOWER/EYEWASH STATION	Complete
30	18564	AH-CV-010 plate directing bottom ash to magnet 2 bolts have sheared off and plate is off to the side (RB:BMURPHY2)	CM	AH-CV-010	FERROUS DRUM MAGNET VIBRATING FEEDER	Complete
31	18565	Leaking at packing (RB:FTROTTIE)	CM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
32	18566	leaking at packing (RB:FTROTTIE)	CM	SB-RET-203	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 2	Complete
33	18567	Failed to extend in manual 3 times but extend on the 4th try (RB:FTROTTIE)	CM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
34	18568	not touching support rollers rides on 1 during extend (RB:FTROTTIE)	CM	SB-ROT-106	SUPERHEATER 1.2 ROTARY SOOTBLOWER 6 UNIT 1	Complete
35	18569	AH-CV-010 plate directing bottom ash to magnet 2 bolts have sheared off and plate is off to the side again (RB:BMURPHY2)	CM	AH-CV-010	FERROUS DRUM MAGNET VIBRATING FEEDER	Complete
36	18571	vac breaker passing (RB:FTROTTIE)	CM	SB-ROT-108	SUPERHEATER 1.1 ROTARY SOOTBLOWER 8 UNIT 1	Complete
37	18558	AMESA exchange on Unit 2. Insert SS and glass probe D and remove B (RB:LKWAN)	CMENV	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
39	18560	AMESA exchange on unit 1, insert pieces and probe C - remove pieces and probe A. DO NOT START. (RB:LKWAN)	CMENV	1-AE-4712	STACK CEM SYSTEM UNIT 1	Complete
41	18480	Housekeeping Audit Finding - APC El.12 E2 SW side - Broken spool of conduit laying in walkway for a long time. Please store in appropriate storage area. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
43	18481	Housekeeping Audit Finding - Flyash Conveyor 204 south end - defective guard (not in place). Please re-affix. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
45	18482	Housekeeping Audit Finding - Boiler House El.8 SE side flyash conveyor - guard bent exposing rotating shaft. Please fix. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
47	18483	Housekeeping Audit Finding - Rigging Cage - rigging components laying on the ground creating a potential trip hazard. Please store appropriately. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
49	18541	dust (residual lime) exhausting from vent fan during offload, offload pressure was under 10 psi - requesting for inspection of vent filter system to confirm normal operations (RB:LKWAN)	CMSAF	LI-BL-C02	HYDRATED LIME SILO ROOM VENT BLOWER	Complete
50	18546	Safety latch broken on blue bin hook - ground floor boiler house. Please replace/repair. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete

JULY 2022 CORRECTIVE MAINTENANCE

Select	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	18709	Housekeeping Audit Finding - #1 Economizer East Side - (EO's) - Material/debris from online blasting laying in walkway, creating a potential trip/fall hazard. Please store items accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
2	18704	Surge bin A rotary valve chain has to much slack and keeps falling off (RB:BMURPHY2)	CM	AH-RV-001A	FLYASH PUGMILL A ROTARY FEEDER	Complete
3	18701	Leaking steam and water (RB:FTROTTIE)	CM	SB-RET-102	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 1	Complete
4	18700	Leaking water and steam (RB:FTROTTIE)	CM	SB-RET-205	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 5 UNIT 2	Complete
5	18687	WEEKLY REFUSE CRANE INSPECT	PM	RF-RC-001A	REFUSE CRANE EAST	Complete
6	18687	WEEKLY REFUSE CRANE INSPECT	PM	RF-RC-001B	REFUSE CRANE WEST	Complete
7	18688	WEEKLY STOKER CLINKER WEIR INSPECT AND LUBE	PM	RF-GR-101	STOKER UNIT 1	Complete
8	18688	WEEKLY STOKER CLINKER WEIR INSPECT AND LUBE	PM	RF-GR-201	STOKER UNIT 2	Complete
9	18686	1-TT-4763-3 Unit 1 quench chamber #3 outlet temp "channel failure" failed thermocouple (RB:BMURPHY2)	CM	1-TT-4763-3	EVAPORATIVE COOLER OUTLET FLUE GAS TEMPERATURE TRANSMITTER 3 UNIT 1	Complete
10	18685	temperature very low. panel says disconnect open. disconnect does not appear to be open. causing poor flow of ash (RB:GCOWLEY)	CM	C-TIC-7892A	FLYASH SURGE BIN A TEMPERATURE CONTROLLER	Complete
11	18679	Damper positioners both showing active need to be removed from the direction you want to go to be able to move it. (RB:LMCDONEL)	CM	RF-CHT-201	FEEDCHUTE UNIT 2	Complete
12	18624	SEMI-ANNUAL FA SILO AND SYS INSPECT AND MAINT	PM	AH-SILO-002	PORTLAND CEMENT STORAGE SILO	Complete
13	18623	SEMI-ANNUAL MAIN VIB CONV/GRIZZLY SCALPER MAINT	PM	AH-CV-008	GRIZZLY SCALPER	Complete
14	18625	SEMI-ANNUAL RETRACT SOOTBLOWERS INSPECT AND MAINT	PM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
15	18624	SEMI-ANNUAL FA SILO AND SYS INSPECT AND MAINT	PM	AH-SILO-001	POZZOLAN STORAGE SILO	Complete
16	18626	SEMI-ANNUAL RETRACT SOOTBLOWERS INSPECT AND MAINT	PM	SB-RET-205	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 5 UNIT 2	Complete
17	18626	SEMI-ANNUAL RETRACT SOOTBLOWERS INSPECT AND MAINT	PM	SB-RET-201	EVAPORATOR RETRACTABLE SOOTBLOWER 1 UNIT 2	Complete
18	18623	SEMI-ANNUAL MAIN VIB CONV/GRIZZLY SCALPER MAINT	PM	AH-CV-007	MAIN VIBRATING CONVEYOR	Complete

AUGUST 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Status
1	18796	Boiler 2 AD plug - 2 lakeland support staff required for evening shift.(July 26) (RB:JPURCELL)	CM	COMP
2	18799	Boiler 2 steam coil air heaters require cleaning. Confined space required to complete job. (Aug 8) (RB:JPURCELL)	CM	COMP
3	18812	zone two has a deviation on the primary air (RB:GCOWLEY)	CM	COMP
4	18817	Tipping floor loader has heavy ash DPF alarm coming in (RB:LMCDONEL)	CM	COMP
5	18865	Boiler 2 SCAH are piled high from riddling's on boiler 2. Please clean it ASAP. possible contractor support needed (RB:JPURCELL)	CM	COMP
6	18868	probe failed (RB:GCOWLEY)	CM	COMP
7	18881	Diverter valve that separates material between bottom ash and non ferrous bays. Shaft is broken from the handle on the west side (RB:DALLEN3)	CM	COMP
8	18882	pug mill rotary jam, tripping on overload (RB:JMACLEOD)	CM	COMP
9	18883	The shutter that is supposed to close when the camera is removed is not closing. We wanted to clean the camera lens but it was not safe with the shutter open. (RB:GCOWLEY)	CM	COMP
10	18884	Failed, please replace (RB:GCOWLEY)	CM	COMP
11	18885	Unit 1 carbon on cems computer showing 0 flow. Flow confirmed in field (RB:BMURPHY2)	CM	COMP
12	18886	Change solenoid diaphragm on baghouse 207 B256-02c (RB:FTROTTIE)	CM	COMP
13	18887	Unit 2 THC analyzer 2x OOC (RB:BMURPHY2)	CM	COMP
14	18888	Speed pickup on rotary valve not picking up all four flags (RB:DALLEN3)	CM	COMP
15	18894	turning gear tripped while not in operation. was able to reset from control room (RB:DALLEN3)	CM	COMP
16	18895	Sootblower only extending a short distance before it starts to retract (RB:DALLEN3)	CM	COMP
17	18896	ORP for the RO not reading right, causing us to not get the correct Bisulphite dosing. We put the pump on manually for now. Please check it out. (RB:GCOWLEY)	CM	COMP
18	18897	the carbon on the cems shows zero flow. The DCS and local panel show normal flow. (RB:GCOWLEY)	CM	COMP
19	18898	Lourdes from the Region advised me that the emergency light is not functional in the region's building- women's washroom. (RB:NCOTE)	CM	COMP
20	18900	Please adjust scraper at the top of the conveyor. It is too far from the belt (RB:GCOWLEY)	CM	COMP
21	18901	Inlet stuck at 1017 mg/Rm3 (RB:DALLEN3)	CM	COMP
22	18902	#2 and #4 solenoid valves for the water are leaking by. Please replace (RB:GCOWLEY)	CM	COMP
23	18903	Please repair ash leaking top of rotary valve right side .You can see it when rotary valve is on and vibrator, (RB:FTROTTIE)	CM	COMP
24	18905	Fan Belt broken . Fan motor shut off .Not locked (RB:FTROTTIE)	CM	COMP
25	18906	Pugmill B flyash RV disconnect lock broken. Unable to safely hang lock on (RB:BMURPHY2)	CM	COMP
26	18907	Getting fault in mcc room when rotary valve trips even after resetting rotary trip .Panel says ash rotary feeder encoder fault (RB:FTROTTIE)	CM	COMP
27	18908	Need to install rack for extension ladder on 18. Brad and Korey had an idea just wanted an SR for tracking. (RB:LMCDONEL)	CM	COMP

AUGUST 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Status
28	18909	Solenoids on water nozzles are not operating correctly. UO is using water hose to get adequate mixture (RB:CSHAFER)	CM	COMP
29	18910	Outside above West Roll up door. UO reported that light is out and is difficult to see when navigating between inside and out. Creates blind spot from loader during transit. (RB:CSHAFER)	CM	COMP
30	18911	Compressor running with higher than normal air discharge pressure. Maintenance adjust the cooling water flow. Helped some but still not back to normal. Further investigation required (RB:DALLEN3)	CM	COMP
31	18913	Boiler 1 sootblower 103 retractable not extending into boiler (RB:BMURPHY2)	CM	COMP
32	18914	Surge bin B low level not coming in on DCS. (RB:FTROTTIE)	CM	COMP
33	18915	Pugmill B middle water line leaking on connection to pugmill (RB:BMURPHY2)	CM	COMP
55	18916	AMESA exchange, C for A (RB:LKWAN)	CMENV	COMP
56	18917	AMESA exchange part B for D (RB:LKWAN)	CMENV	COMP
58	18800	Housekeeping Audit Finding - Crew D (Boiler Platform El.10 up) - El.10 #1 plattco - tools, rodding poles, etc. laying on conveyor and grating. Please store accordingly. #2 plattco - west side - needs cleanup (sweeping) (RB:DPICKETT)	CMSAF	COMP
59	18801	Housekeeping Audit Finding - Crew D (Boiler Platform El.10 up) - El.18 #2 NW side - CSE needs re-hanging #2 South side - plywood (combustible) need removal #1 centre plattco - ash buildup. Please clean up (RB:DPICKETT)	CMSAF	COMP
60	18802	Housekeeping Audit Finding - Crew D (Boiler Platform El.10 up) - El.23 #2 west side - ladder leaning against wall. Please store #2 east side - tools laying on access stairs. Please remove and store (RB:DPICKETT)	CMSAF	COMP
61	18803	Housekeeping Audit Finding - Crew C (A/D Platforms and Ground Floor) - Boiler ground NW stairs - garbage can lids, etc. near stairwell SW door - bags of absorbent laying on floor S of vib pan - wheelbarrow, hoses, wood Please store (RB:DPICKETT)	CMSAF	COMP
62	18804	Housekeeping Audit Finding - Crew C (A/D Platforms and Ground Floor) - #1 AD top platform - Please remove tools and store accordingly. (RB:DPICKETT)	CMSAF	COMP
63	18805	Housekeeping Audit Finding - Crew C (A/D Platforms and Ground Floor) - #1&#2 AD's - general cleanup - clean floor, store tools, etc. (RB:DPICKETT)	CMSAF	COMP
64	18806	Month 05 JHSC Facility Walkdown Finding - APC El.12 Trip Hazard - Tarp from stack testing laying in middle of walkway, creating a trip hazard. Tarp removed out of walkway. Please store accordingly. (RB:DPICKETT)	CMSAF	COMP
65	18807	Housekeeping Audit Finding - Boiler House Ground Floor - (Crew C) - Fly Ash Conveyor 103 - refractor, materials, etc., laying on top of conveyor. Drop hazard. Please store appropriately. (RB:DPICKETT)	CMSAF	COMP

AUGUST 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Status
66	18808	Housekeeping Audit Finding - Turbine Hall Upper Level (B Crew) - Equipment part laying on top of storage cabinet - drop hazard. Please store accordingly. (RB:DPICKETT)	CMSAF	COMP
67	18809	Housekeeping Audit Finding - Turbine Hall Upper Level (B Crew) - Unidentified chemical container on filtration machine. Please affix workplace label. (RB:DPICKETT)	CMSAF	COMP
68	18810	Housekeeping Audit Finding - Carbon Silo - excessive accumulation of carbon under #2. Please clean up. (RB:DPICKETT)	CMSAF	COMP
69	18811	Housekeeping Audit Finding - (Crew C) El.23 #2 southwest side - Piece of plywood (combustible) laying in walkway. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	COMP
70	18825	Q3&Q4 Snapshot Finding - Housekeeping - Valve wrench used to prop open door in residue upper level. Please remove. (RB:DPICKETT)	CMSAF	COMP
71	18826	Q3&Q4 Snapshot Finding - Bottom of incline conveyor - accumulation of water at base of stairs creating a potential slip/trip hazard. Please clean up accordingly (RB:DPICKETT)	CMSAF	COMP
72	18827	Q3&Q4 Snapshot Finding - Housekeeping - Residue Building - ESC drive guard not properly secure. Please secure. (RB:DPICKETT)	CMSAF	COMP
73	18828	Q3&Q4 Snapshot Finding - Grizzly - Housekeeping - disconnect for overhead door blocked by material. Please relocate (RB:DPICKETT)	CMSAF	COMP
74	18829	Q3&Q4 Snapshot Finding - #2 Ash Discharger - housekeeping - fill hose strung across walkway. Please relocate. (RB:DPICKETT)	CMSAF	COMP
75	18830	Q3&Q4 Snapshot Finding - Incline Conveyor - Trip hazard - pipe laying in walkway. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	COMP
76	18831	Q3&Q4 Snapshot Finding - #2 Ash Discharger - Housekeeping - piece of plank laying on deck. Please remove and store accordingly (RB:DPICKETT)	CMSAF	COMP
77	18832	Q3&Q4 Snapshot Finding - Ash Dischargers - Housekeeping - buildup of riddings on AD platforms. Please cleanup accordingly. (RB:DPICKETT)	CMSAF	COMP
78	18833	Q3&Q4 Snapshot Finding - Housekeeping - Grizzly Building - air hose hanging on electrical box. Please install J hook to store hose on. (RB:DPICKETT)	CMSAF	COMP
79	18834	Q3&Q4 Snapshot Finding - Housekeeping - various gas cylinders not properly stored/secured in cages. Please store/secure appropriately. (RB:DPICKETT)	CMSAF	COMP
80	18835	Q3&Q4 Snapshot Finding - Housekeeping - Ground for cement delivery truck damaged/clamp missing. Please repair. (RB:DPICKETT)	CMSAF	COMP
81	18838	JHSC Walkdown Finding - Month 07 - Boiler House Ground Floor south side - Trip Hazard - electrical cord laying across south roll up door. Please re-direct/remove accordingly. (RB:DPICKETT)	CMSAF	COMP
82	18839	Q3&Q4 Snapshot Finding - Housekeeping - #2 AD covers not secured and #1 AD has plywood that needs removing. Please secure and remove accordingly. (RB:DPICKETT)	CMSAF	COMP
83	18840	Q3&Q4 Snapshot Finding - Housekeeping - Residue Building - Ash Conveyor Take-up - protective cage not adequately secured. Please secure appropriately. (RB:DPICKETT)	CMSAF	COMP

AUGUST 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Status
84	18841	Q3&Q4 Snapshot Finding - Slings on settling basin basket does not have capacity tags. Please remove from service. (RB:DPICKETT)	CMSAF	COMP
85	18844	CA-DURHAM YORK-22-I-0083 - Turbine Hall - Steam leak at connection on C-FIT-0201 has both danger and warning tape creating miscommunication. Please re-evaluate. (RB:DPICKETT)	CMSAF	COMP
86	18845	Month 05 JHSC Facility Walkdown Finding - Residue Building Pugmill Area - Insufficient/missing guarding - Pugmill B rotary valve guarding off. Pugmill A rotary valve guard held on with a zip tie. Please secure both adequately (RB:DPICKETT)	CMSAF	COMP
87	18846	Month 03 JHSC Walkdown Finding - Thermal Hazard - Unit #1 and #2 - multiple view ports missing protective covers. Please replace. (RB:DPICKETT)	CMSAF	COMP
88	18847	Month 05 JHSC Facility Walkdown Finding - APC El.8.5 - flanges on #1 and #2 flue gas duct sample ports not secured properly. Missing bolts and wrapped in tape. Please seal ports properly. (RB:DPICKETT)	CMSAF	COMP
89	18848	Housekeeping Audit Finding - (Crew C) El.23.9 b/t #1 & #2 - hose laying in walkway creating a potential trip/fall hazard. Please store appropriately. (RB:DPICKETT)	CMSAF	COMP
90	18849	Housekeeping Audit Finding - #1 &#2 Ash Dischargers - Crew B - Debris, tools, materials, etc, laying on top of and on adjacent platforms. Please store in appropriate storage areas. (RB:DPICKETT)	CMSAF	COMP
91	18850	Housekeeping Audit Finding - Boiler House Various Areas/Levels - Crew C - multiple areas have partially hanging danger tape. Please re-install or remove accordingly. (RB:DPICKETT)	CMSAF	COMP
92	18851	Housekeeping Audit Finding - Crew EO - Charging Deck - accumulation of water/grease/ash on floor east side creating a potential slip/fall hazard. Please clean up. (RB:DPICKETT)	CMSAF	COMP
93	18852	Housekeeping Audit Finding - All - Carbon Silo. Buildup of carbon on the grating. Please clean up. (RB:DPICKETT)	CMSAF	COMP
94	18853	JHSC Walkdown Finding - Month 07 - El.23 b/t boilers - Poor Housekeeping/trips hazards - hose, tarps, poke poles, ladder not stored. Please store accordingly (RB:DPICKETT)	CMSAF	COMP
95	18854	JHSC Walkdown Finding - Month 07 - El.23 #2 west side - silver thermal suit laying in walkway. Please remove and store accordingly (RB:DPICKETT)	CMSAF	COMP
96	18855	JHSC Walkdown Finding - Month 07 - El.20 b/t boilers - housekeeping - hose laying on grating. Please remove and store accordingly (RB:DPICKETT)	CMSAF	COMP
97	18856	JHSC Walkdown Finding - Month 07 - El.18 b/t boilers - Housekeeping - water bottles, cords, tags/tape and tools not properly stored. Please store accordingly (RB:DPICKETT)	CMSAF	COMP
98	18857	JHSC Walkdown Finding - Month 07 - El.10 - Housekeeping - Water bottles, tools, poke poles laying on/around ash dischargers. Please remove and store accordingly (RB:DPICKETT)	CMSAF	COMP
99	18858	JHSC Walkdown Finding - Month 07 - El.6 - Housekeeping - Tools, materials, PPE laying around. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	COMP

AUGUST 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Status
100	18859	JHSC Walkdown Finding - Month 07 - Outage Cage - Poor Housekeeping - Materials laying on floor creating trip hazards. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	COMP
101	18860	JHSC Walkdown Finding - Month 07 - Outside control room/Shift Supervisors Office - rodding PPE not store in supplied storage cabinet. Please remove and store accordingly (RB:DPICKETT)	CMSAF	COMP
102	18861	JHSC Walkdown Finding - Month 07 - Control Room - Housekeeping - dirty dishes, completed records, PPE laying around. Please remove and store/file accordingly (RB:DPICKETT)	CMSAF	COMP
103	18862	JHSC Walkdown Finding - Month 07 - El.13.5 - Housekeeping - access impeded to fire extinguisher 85. Please remove materials from extinguisher access. (RB:DPICKETT)	CMSAF	COMP
104	18863	JHSC Walkdown Finding - Month 07 - El.13.5 MCC - Electrical hazard - red danger tape on one side compromised allowing access to live components. Please re-evaluate and remove/re-affix accordingly. (RB:DPICKETT)	CMSAF	COMP
105	18864	JHSC Walkdown Finding - Month 07 - Boiler House Ground Floor - Housekeeping - hoses, tools, materials, laying around blue bins. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	COMP
106	18866	El.15 #2 - Flame Scanner - Cover missing - exposed electrical wires. Please replace cover. (RB:DPICKETT)	CMSAF	COMP
107	18867	Housekeeping Audit Finding - Crew A - RO Area southwest side - various areas have resin on floor, creating a potential slip/fall hazard. Please clean up. (RB:DPICKETT)	CMSAF	COMP
108	18876	Housekeeping Audit Finding - UO - Incline Conveyor - Fire Extinguisher missing mid-way. Please get one from bump out area and re-assign applicable number. (RB:DPICKETT)	CMSAF	COMP
109	18877	Housekeeping Audit Finding - UO - Grizzly - skid of rims not secured and fallen off impeding fire extinguisher/spill kit access. Please relocate (RB:DPICKETT)	CMSAF	COMP
110	18889	Q3&Q4 Snapshot Finding - LCSR Observations - communicate and ensure all Supervisors/Managers complete/input life critical rules BBS observations. (RB:DPICKETT)	CMSAF	COMP
111	18890	Q3&Q4 Snapshot Finding - Housekeeping - Inadequate respirator storage - have all employees check lockers and ensure respirators are stored appropriately (RB:DPICKETT)	CMSAF	COMP
112	18891	Q3&Q4 Snapshot Finding - Housekeeping - used respirator cartridges not being disposed of properly. Please re-iterate requirement. (RB:DPICKETT)	CMSAF	COMP
113	18892	Q3&Q4 Snapshot Finding - Incline Conveyor - Housekeeping - accumulation of ash buildup along horizontal surfaces. Please clean accordingly. (RB:DPICKETT)	CMSAF	COMP
114	18893	Q3&Q4 Snapshot Finding - Cement/Pozz Silo - Housekeeping. Accumulation of cement and pozz laying throughout. Please clean up accordingly. (RB:DPICKETT)	CMSAF	COMP
115	18912	Q3&Q4 Snapshot Finding - Housekeeping - Cement Mixer stored under #2 - damaged cord. Please repair. (RB:DPICKETT)	CMSAF	COMP
167	18904	Unit 1 NH3 out of control (RB:FTROTTIE)	PMENV	COMP
172	18899	Lourdes from the Region advised me that the emergency light is not functional in the region's building- women's washroom. (RB:NCOTE)	PMSAF	COMP

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	18987	Housekeeping Audit Finding - EO - Back of Martins - accumulation of debris in walkways. Please clean up. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
2	18988	Housekeeping Audit Finding - EO - Charging Deck - danger tape/tag referencing "grapple not fully opened 08-06-22". Grapple not in laydown area. Please remove barrier. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
3	18989	Housekeeping Audit Finding - EO - Charging Deck - 8ft ladder on west side missing inspection tag. Please affix tag. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
4	18983	Housekeeping Audit Finding - El.23 - Crew C - old CA filters (blue) laying in walkway. Please remove. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
5	18984	Housekeeping Audit Finding - Skid Steer Fire Extinguisher - No inspection tag showing proof of inspections for 2022. Please affix tag. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
6	18985	Various tape/tag stations are empty - ALL. Please refill. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
7	19007	Q3&Q4 Snapshot Finding - Control Room - SP.3 WHMIS Deficiency - label on spray bottle containing Simple Green illegible. Please relabel accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
8	19008	Q3&Q4 Snapshot Finding - Men's changeroom/cleanroom - Housekeeping - towels laying on floor and old respirator cartridges laying around clean sink area. Please eliminate practice. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
9	19009	Q3&Q4 Snapshot Finding - Men's change room - Housekeeping - couple of ceiling tiles not in place. Please re-install/replace. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
10	19010	Q3&Q4 Snapshot Finding - SSB. 07 Air lance Fabrication Standard Deficiency. various air lances noticed not meeting Covanta standards. Please assess and discard accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
11	19011	Q3&Q4 Snapshot Finding - Housekeeping - Cement Silo - Walking platform West side - Outlet has incorrect faceplate and two grounds broken off inside. Please repair/replace. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
12	19012	Q3&Q4 Snapshot Finding - Vending machine PPE - please ensure employees have access to required PPE in the vending machine(s). (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
241	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-PU	STACK CEMS SAMPLE PUMP UNIT 1	Complete
242	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 1	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
243	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 1	Complete
244	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 1	Complete
245	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4732	STACK HCL ANALYZER UNIT 1	Complete
246	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-PU	STACK CEMS SAMPLE PUMP UNIT 2	Complete
247	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 2	Complete
248	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-LN	STACK CEMS SAMPLE LINES UNIT 2	Complete
249	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-CHR	STACK CEMS CHILLER UNIT 2	Complete
250	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 2	Complete
251	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4789	STACK MOISTURE ANALYZER UNIT 2	Complete
252	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 2	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
253	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 2	Complete
254	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4739	STACK AMMONIA ANALYZER UNIT 2	Complete
255	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4738	STACK NOX ANALYZER UNIT 2	Complete
256	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4737	STACK OXYGEN ANALYZER UNIT 2	Complete
257	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 2	Complete
258	18947	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4732	STACK HCL ANALYZER UNIT 2	Complete
266	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-PU	INLET CEMS SAMPLE PUMP UNIT 2	Complete
267	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-PRB	INLET CEMS SAMPLE PROBE UNIT 2	Complete
268	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-LN	INLET CEMS SAMPLE LINES UNIT 2	Complete
269	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-CHR	INLET CEMS CHILLER UNIT 2	Complete
270	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4790	INLET OXYGEN ANALYZER UNIT 2	Complete
271	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4744	INLET THC ANALYZER UNIT 2	Complete
272	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4733	INLET SULFUR DIOXIDE ANALYZER UNIT 2	Complete
273	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4731	INLET HCL ANALYZER UNIT 2	Complete
274	18938	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 2	Complete
275	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-PU	INLET CEMS SAMPLE PUMP UNIT 1	Complete
276	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-PRB	INLET CEMS SAMPLE PROBE UNIT 1	Complete
277	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-LN	INLET CEMS SAMPLE LINES UNIT 1	Complete
278	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-CHR	INLET CEMS CHILLER UNIT 1	Complete
279	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4790	INLET OXYGEN ANALYZER UNIT 1	Complete
280	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
281	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4733	INLET SULFUR DIOXIDE ANALYZER UNIT 1	Complete
282	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4731	INLET HCL ANALYZER UNIT 1	Complete
283	18937	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 1	Complete
284	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 1	Complete
285	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-LN	STACK CEMS SAMPLE LINES UNIT 1	Complete
286	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-CHR	STACK CEMS CHILLER UNIT 1	Complete
287	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4789	STACK MOISTURE ANALYZER UNIT 1	Complete
288	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4738	STACK NOX ANALYZER UNIT 1	Complete
289	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4737	STACK OXYGEN ANALYZER UNIT 1	Complete
290	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 1	Complete
297	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4739	STACK AMMONIA ANALYZER UNIT 1	Complete
298	18946	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4735	STACK HYDRO FLUORIDE ANALYZER UNIT 1	Complete
15	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-2011	BOILER BUILDING UNIT 2 EAST SAFETY SHOWER/EYEWASH STATION	Complete
16	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-2010	BOILER BUILDING UNIT 2 WEST SAFETY SHOWER/EYEWASH STATION	Complete
17	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-1009	APC LIME INJECTION POINTS UNIT 1 SAFETY SHOWER/EYEWASH STATION	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
18	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0001	AQUEOUS AMMONIA STORAGE TANK AREA SAFETY SHOWER/EYEWASH STATION	Complete
26	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-2009	APC LIME INJECTION POINTS UNIT 2 SAFETY SHOWER/EYEWASH STATION	Complete
27	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-2008	APC REACTION CHAMBER CONDITIONING ROTOR AREA UNIT 2 SAFETY SHOWER/EYEWASH STATION	Complete
28	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-1010	BOILER BUILDING UNIT 1 WEST SAFETY SHOWER/EYEWASH STATION	Complete
29	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-1008	APC REACTION CHAMBER CONDITIONING ROTOR AREA UNIT 1 SAFETY SHOWER/EYEWASH STATION	Complete
30	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0007	LIME SILO TRUCK UNLOADING AREA SAFETY SHOWER/EYEWASH STATION	Complete
31	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0006	LIME SILO SAFETY SHOWER/EYEWASH STATION	Complete
32	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0005	BOILER MAKE-UP TREATMENT CHEMICAL STORAGE AREA SAFETY SHOWER/EYEWASH STATION	Complete
33	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0004	BOILER CHEM FEED AREA SAFETY SHOWER/EYEWASH STATION	Complete
34	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0002	AQUEOUS AMMONIA UNLOADING AREA SAFETY SHOWER/EYEWASH STATION	Complete
41	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-1011	BOILER BUILDING UNIT 1 EAST SAFETY SHOWER/EYEWASH STATION	Complete
42	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0014	PORTLAND CEMENT/POZZOLAN UNLOADING AREA SAFETY SHOWER/EYEWASH STATION	Complete
43	18932	MONTHLY EMERGENCY EYEWASH/SHOWER STATION INSPECT	PMSAF	PW-SS-0012	PORTLAND CEMENT/POZZOLAN SILOS SAFETY SHOWER/EYEWASH STATION	Complete
176	18976	MONTHLY T/G DC LO PUMP AUTO START VERFICATION	PMSAF	TGS-LO-P103	TURBINE LUBE OIL DC EMERGENCY PUMP	Complete
181	18972	MONTHLY FIRE EXTINGUISHER INSPECT	PMSAF	SAF-EXTING	FIRE EXTINGUISHERS	Complete
182	18943	MONTHLY REFUSE CRANE UPPER LIMIT SWITCH TEST	PMSAF	RF-RC-001A	REFUSE CRANE EAST	Complete
184	18966	MONTHLY REFUSE PIT WATER CANNON INSPECT AND ROTATE	PMSAF	FP-PIT-CAN	REFUSE PIT FIRE CANNONS	Complete
188	18961	MONTHLY STANDBY DIESEL GENERATOR OPERATIONAL TEST	PMSAF	DG-1	STANDBY DIESEL ELECTRICAL GENERATOR	Complete
192	18943	MONTHLY REFUSE CRANE UPPER LIMIT SWITCH TEST	PMSAF	RF-RC-001B	REFUSE CRANE WEST	Complete
240	18956	MONTHLY FAC EMERGENCY LIGHTING OPERATIONAL INSPECT	PMSAF	120-EM	EMERGENCY LIGHTS	Complete
260	18958	MONTHLY BURNER INTERLOCK/TRIP VERIFICATION	PMSAF	AB-BR-201	AUXILIARY BURNER UNIT 2	Complete
261	18957	MONTHLY BURNER INTERLOCK/TRIP VERIFICATION	PMSAF	AB-BR-101	AUXILIARY BURNER UNIT 1	Complete
262	18930	QUARTERLY DC SYSTEM BATTERY INSPECT AND MAINT	PMSAF	BAT-STA-001	STATION BATTERY BANK 1	Complete
263	18930	QUARTERLY DC SYSTEM BATTERY INSPECT AND MAINT	PMSAF	125-BACH-002	STATION BATTERY CHARGER 2	Complete
264	18930	QUARTERLY DC SYSTEM BATTERY INSPECT AND MAINT	PMSAF	125-BACH-001	STATION BATTERY CHARGER 1	Complete
265	18930	QUARTERLY DC SYSTEM BATTERY INSPECT AND MAINT	PMSAF	120-UPS-1	UNINTERRUPTABLE POWER SUPPLY	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
296	18970	MONTHLY BOILER INTERLOCK/TRIP VERIFICATION	PMSAF	RF-BO-201	BOILER UNIT 2	Complete
299	18927	MONTHLY CONDENSATE PUMP AUTO START VERIFICATION	PMSAF	CD-PU-001B	CONDENSATE PUMP B	Complete
300	18927	MONTHLY CONDENSATE PUMP AUTO START VERIFICATION	PMSAF	CD-PU-001A	CONDENSATE PUMP A	Complete

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Select	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	19120	Repair #1 discharger rear wall middle between zone 1 and 2 Plate crack and can see into ash discharger from water level control for discharger (RB:FTROTTIE)	CM	SR-DC-101	ASH DISCHARGER UNIT 1	Complete
2	19107	Housekeeping Audit Finding - D Crew - APC - Inlet Chamber Conveyor AH-CV-101 - tools, cover with large accumulation of ash laying in walkway. Please remove. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
3	19108	Housekeeping Audit Finding - C Crew - Ash buildup at #2 hopper plattco's on El.18. Please clean up. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
4	19109	Housekeeping Audit Finding - EO's - #101 Conveyor plattco area has large pieces of debris laying near blower, creating a potential trip hazard. Please remove. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
5	19110	Housekeeping Audit Finding - Maintenance - Inadequate / Missing Guarding at #101 conveyor gearbox. Please re-affix. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
6	19111	Housekeeping Audit Finding - Maintenance - Hinge broken on panel door (door hanging off) on wetting mixer control panel. Please repair or replace (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
7	19123	Housekeeping Audit Finding - Economizer Areas - (EO's) - materials, tools, etc, laying around and in walkways creating a potential trip/fall hazard. Please store accordingly (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
8	19124	Housekeeping Audit Finding - Under AD's- (Crew B) - danger tape laying around various areas partially attached. Please re-affix or remove. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
9	19125	Housekeeping Audit Finding - Under AD's and Vibrating Pan - (Crew B) - Water/ash/debris accumulated on floor and under pan. Please clean up. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
10	19131	Housekeeping Audit Finding- Crew B - #2 Riddling Hatches west side. Safety chains were not re-affixed. Please secure. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
11	19132	Housekeeping Audit Finding - Outside Control Room (ALL) - Tools, bottles of water, rodding PPE laying on floor near cabinets. Please remove and store accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
12	19141	Housekeeping Walkdown Finding - C crew. El.20 #2 west side. Poke poles, shovels not store properly after rodding task complete, creating a potential trip/fall hazard. Please store accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
13	19142	Housekeeping Walkdown Finding - C crew. #1 plattco area under/near scaffolding. Large pieces of debris, ash, tools, etc., laying in walking/working area, creating a potential trip hazard. Please remove/discard and store appropriately. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete

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Select	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
14	19143	Housekeeping Walkdown Finding - C crew. #1 Air Cannon Scaffolding Platform. Large buildup of ash and debris (post outage) laying on scaffolding platform. Please clean up. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
15	19166	Q3&Q4 Snapshot Finding - #1 Ash Discharger - Cover hole cut in the deck of platform to access level probe (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
16	19167	Q3&Q4 Snapshot Finding - Housekeeping - Residue Building top of Incline Conveyor. Gaitronics speaker not secured. Please repair/secure accordingly. (RB:DPICKETT)	CMSAF	SAF-GEN	SAFETY GENERAL EQUIPMENT	Complete
17	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	TGS-LO-F100A	TURBINE LUBE OIL FILTER A	Complete
18	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	SA-AC-001B	SERVICE AIR COMPRESSOR B	Complete
19	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	FP-PU-001A	FIRE WATER DIESEL PUMP A	Complete
20	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	CF-PU-403A	CAUSTIC DOSING PUMP A	Complete
21	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	CF-PU-402A	SODIUM BISULFITE DOSING PUMP A	Complete
22	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	CF-PU-202B	OXYGEN SCAVENGER FEED PUMP B	Complete
23	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	CF-PU-002B	OXYGEN SCAVENGER METERING PUMP B	Complete
24	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	CF-PU-002A	OXYGEN SCAVENGER METERING PUMP A	Complete
25	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	CF-PU-001A	MIXED CHEMICAL METERING PUMP A	Complete
26	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	AQ-PU-001B	AQUEOUS AMMONIA FEED PUMP B	Complete
27	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	AH-RV-002A	POZZOLAN ROTARY FEEDER A	Complete
28	19037	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	AH-MIX-001B	FLYASH PUGMILL B	Complete
29	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-LO-P104	TURBINE LUBE OIL DIRECT DRIVEN PUMP	Complete
30	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-LO-P103	TURBINE LUBE OIL DC EMERGENCY PUMP	Complete
31	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-LO-P101	TURBINE LUBE OIL STANDBY PUMP	Complete
32	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-HO-P203C	TURBINE OIL CONDITIONING PUMP C	Complete
33	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-HO-P203B	TURBINE OIL CONDITIONING PUMP B	Complete
34	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-HO-P203A	TURBINE OIL CONDITIONING PUMP A	Complete
35	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-HO-P115B	TURBINE JACKING OIL PUMP B	Complete
36	19038	MONTHLY REDUNDANT TG EQUIPMENT TEST RUN (8 HR)	PM	TGS-HO-P115A	TURBINE JACKING OIL PUMP A	Complete
37	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-127	ECONOMIZER ROTARY SOOTBLOWER 27 UNIT 1	Complete
38	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-126	ECONOMIZER ROTARY SOOTBLOWER 26 UNIT 1	Complete
39	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-125	ECONOMIZER ROTARY SOOTBLOWER 25 UNIT 1	Complete
40	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-124	ECONOMIZER ROTARY SOOTBLOWER 24 UNIT 1	Complete

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41	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-123	ECONOMIZER ROTARY SOOTBLOWER 23 UNIT 1	Complete
42	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-122	ECONOMIZER ROTARY SOOTBLOWER 22 UNIT 1	Complete
43	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-121	ECONOMIZER ROTARY SOOTBLOWER 21 UNIT 1	Complete
44	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-120	ECONOMIZER ROTARY SOOTBLOWER 20 UNIT 1	Complete
45	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-119	ECONOMIZER ROTARY SOOTBLOWER 19 UNIT 1	Complete
46	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-118	ECONOMIZER ROTARY SOOTBLOWER 18 UNIT 1	Complete
47	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-117	ECONOMIZER ROTARY SOOTBLOWER 17 UNIT 1	Complete
48	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-116	ECONOMIZER ROTARY SOOTBLOWER 16 UNIT 1	Complete
49	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-115	ECONOMIZER ROTARY SOOTBLOWER 15 UNIT 1	Complete
50	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-114	ECONOMIZER ROTARY SOOTBLOWER 14 UNIT 1	Complete
51	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-113	ECONOMIZER ROTARY SOOTBLOWER 13 UNIT 1	Complete
52	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-112	ECONOMIZER ROTARY SOOTBLOWER 12 UNIT 1	Complete
53	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-111	ECONOMIZER ROTARY SOOTBLOWER 11 UNIT 1	Complete
54	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-110	ECONOMIZER ROTARY SOOTBLOWER 10 UNIT 1	Complete
55	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-109	ECONOMIZER ROTARY SOOTBLOWER 9 UNIT 1	Complete
56	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-108	SUPERHEATER 1.1 ROTARY SOOTBLOWER 8 UNIT 1	Complete
57	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-107	SUPERHEATER 1.1 ROTARY SOOTBLOWER 7 UNIT 1	Complete
58	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-106	SUPERHEATER 1.2 ROTARY SOOTBLOWER 6 UNIT 1	Complete
59	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-105	SUPERHEATER 1.2 ROTARY SOOTBLOWER 5 UNIT 1	Complete
60	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-104	SUPERHEATER 1.3 ROTARY SOOTBLOWER 4 UNIT 1	Complete
61	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-103	SUPERHEATER 1.3 ROTARY SOOTBLOWER 3 UNIT 1	Complete
62	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-102	SUPERHEATER 2 ROTARY SOOTBLOWER 2 UNIT 1	Complete
63	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-101	SUPERHEATER 2 ROTARY SOOTBLOWER 1 UNIT 1	Complete
64	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-107	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 7 UNIT 1	Complete
65	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-106	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 6 UNIT 1	Complete
66	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-105	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 5 UNIT 1	Complete

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Select	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
67	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-104	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 4 UNIT 1	Complete
68	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
69	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-102	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 1	Complete
70	19041	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-101	EVAPORATOR RETRACTABLE SOOTBLOWER 1 UNIT 1	Complete
71	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-227	ECONOMIZER ROTARY SOOTBLOWER 27 UNIT 2	Complete
72	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-226	ECONOMIZER ROTARY SOOTBLOWER 26 UNIT 2	Complete
73	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-225	ECONOMIZER ROTARY SOOTBLOWER 25 UNIT 2	Complete
74	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-224	ECONOMIZER ROTARY SOOTBLOWER 24 UNIT 2	Complete
75	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-223	ECONOMIZER ROTARY SOOTBLOWER 23 UNIT 2	Complete
76	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-222	ECONOMIZER ROTARY SOOTBLOWER 22 UNIT 2	Complete
77	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-221	ECONOMIZER ROTARY SOOTBLOWER 21 UNIT 2	Complete
78	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-220	ECONOMIZER ROTARY SOOTBLOWER 20 UNIT 2	Complete
79	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-219	ECONOMIZER ROTARY SOOTBLOWER 19 UNIT 2	Complete
80	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-218	ECONOMIZER ROTARY SOOTBLOWER 18 UNIT 2	Complete
81	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-217	ECONOMIZER ROTARY SOOTBLOWER 17 UNIT 2	Complete
82	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-216	ECONOMIZER ROTARY SOOTBLOWER 16 UNIT 2	Complete
83	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-215	ECONOMIZER ROTARY SOOTBLOWER 15 UNIT 2	Complete
84	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-214	ECONOMIZER ROTARY SOOTBLOWER 14 UNIT 2	Complete
85	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-213	ECONOMIZER ROTARY SOOTBLOWER 13 UNIT 2	Complete
86	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-212	ECONOMIZER ROTARY SOOTBLOWER 12 UNIT 2	Complete
87	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-211	ECONOMIZER ROTARY SOOTBLOWER 11 UNIT 2	Complete
88	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-210	ECONOMIZER ROTARY SOOTBLOWER 10 UNIT 2	Complete
89	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-209	ECONOMIZER ROTARY SOOTBLOWER 9 UNIT 2	Complete
90	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-208	SUPERHEATER 1.1 ROTARY SOOTBLOWER 8 UNIT 2	Complete
91	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-207	SUPERHEATER 1.1 ROTARY SOOTBLOWER 7 UNIT 2	Complete
92	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-206	SUPERHEATER 1.2 ROTARY SOOTBLOWER 6 UNIT 2	Complete

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Select	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
93	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-205	SUPERHEATER 1.2 ROTARY SOOTBLOWER 5 UNIT 2	Complete
94	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-204	SUPERHEATER 1.3 ROTARY SOOTBLOWER 4 UNIT 2	Complete
95	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-203	SUPERHEATER 1.3 ROTARY SOOTBLOWER 3 UNIT 2	Complete
96	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-202	SUPERHEATER 2 ROTARY SOOTBLOWER 2 UNIT 2	Complete
97	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-ROT-201	SUPERHEATER 2 ROTARY SOOTBLOWER 1 UNIT 2	Complete
98	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-207	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 7 UNIT 2	Complete
99	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-206	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 6 UNIT 2	Complete
100	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-205	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 5 UNIT 2	Complete
101	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-204	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 4 UNIT 2	Complete
102	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-203	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 2	Complete
103	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-202	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 2	Complete
104	19042	MONTHLY SOOTBLOWER OPERATIONAL INSPECT	PM	SB-RET-201	EVAPORATOR RETRACTABLE SOOTBLOWER 1 UNIT 2	Complete
105	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	BLD-TIP	TIPPING FLOOR	Complete
106	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	BLD-RES	RESIDUE BUILDING	Complete
107	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	BLD-PIT	REFUSE PIT	Complete
108	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	BLD-GRIZ	GRIZZLY BUILDING	Complete
109	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-7	CONDITIONED FLYASH BAY 7	Complete
110	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-6	CONDITIONED FLYASH BAY 6	Complete
111	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-5	CONDITIONED FLYASH BAY 5	Complete
112	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-4	CONDITIONED FLYASH BAY 4	Complete
113	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-3	CONDITIONED FLYASH BAY 3	Complete
114	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-2	CONDITIONED FLYASH BAY 2	Complete
115	19058	QUARTERLY RESIDUE/GRIZZLY/TIPPING FLOOR INSPECT	PM	AH-BAY-1	CONDITIONED FLYASH BAY 1	Complete
116	19062	SEMI-ANNUAL TRUCK SCALE CLEAN/INSPECT/CALIBRATE	PM	SCL-TK-OUT	TRUCK SCALE OUTBOUND	Complete
117	19062	SEMI-ANNUAL TRUCK SCALE CLEAN/INSPECT/CALIBRATE	PM	SCL-TK-IN	TRUCK SCALE INBOUND	Complete

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Select	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
118	19083	MONTHLY GLAND SEAL STEAM CONTINUOUS DRNS FLOW TEST	PM	TG-PIP-GS	GLAND STEAM PIPING, VALVES AND ATTACHMENTS	Complete
119	19088	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-101	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 1	Complete
120	19089	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-201	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 2	Complete
121	19091	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-101	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 1	Complete
122	19092	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-201	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 2	Complete
123	19093	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-101	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 1	Complete
124	19094	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-201	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 2	Complete
125	19102	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-101	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 1	Complete
126	19103	JOB/TASK TEMPLATE PLACE HOLDER	PM	FG-LAN-201	EVAPORATIVE COOLER ATOMIZING LANCE UNIT 2	Complete
127	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 1	Complete
128	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4789	STACK MOISTURE ANALYZER UNIT 1	Complete
129	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 1	Complete
130	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 1	Complete
131	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4739	STACK AMMONIA ANALYZER UNIT 1	Complete
132	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4738	STACK NOX ANALYZER UNIT 1	Complete
133	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4737	STACK OXYGEN ANALYZER UNIT 1	Complete
134	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4735	STACK HYDRO FLUORIDE ANALYZER UNIT 1	Complete
135	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 1	Complete
136	19043	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4732	STACK HCL ANALYZER UNIT 1	Complete
137	19040	MONTHLY REFUSE CRANE UPPER LIMIT SWITCH TEST	PMSAF	RF-RC-001B	REFUSE CRANE WEST	Complete
138	19040	MONTHLY REFUSE CRANE UPPER LIMIT SWITCH TEST	PMSAF	RF-RC-001A	REFUSE CRANE EAST	Complete
139	19069	MONTHLY STANDBY DIESEL GENERATOR OPERATIONAL TEST	PMSAF	DG-1	STANDBY DIESEL ELECTRICAL GENERATOR	Complete
140	19074	MONTHLY REFUSE PIT WATER CANNON INSPECT AND ROTATE	PMSAF	FP-PIT-CAN	REFUSE PIT FIRE CANNONS	Complete
141	19080	MONTHLY FIRE EXTINGUISHER INSPECT	PMSAF	SAF-EXTING	FIRE EXTINGUISHERS	Complete
142	19084	MONTHLY T/G DC LO PUMP AUTO START VERFICATION	PMSAF	TGS-LO-P103	TURBINE LUBE OIL DC EMERGENCY PUMP	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	19228	MONTHLY BOILER FILL PUMP/MOTOR CLEAN AND INSPECT	PM	WW-PU-009	BOILER FILL PUMP	Complete
2	19224	MONTHLY T/G GROUND BRUSH TEST	PM	TG-EX-100	DC EXCITER	Complete
3	19223	TURBINE CRANE FREQUENT INSPECT AND MAINT	PM	TG-CRN-100	TURBINE CRANE	Complete
4	19221	MONTHLY INSTRUMENT AIR DRYER AND FILTER INSPECT	PM	SA-AD-001	INSTRUMENT AIR DRYER	Complete
5	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-105	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 5 UNIT 1	Complete
6	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-101	EVAPORATOR RETRACTABLE SOOTBLOWER 1 UNIT 1	Complete
7	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
8	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-104	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 4 UNIT 1	Complete
9	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-102	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 1	Complete
10	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-106	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 6 UNIT 1	Complete
11	19203	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-107	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 7 UNIT 1	Complete
12	19202	MONTHLY STOKER HYD SKID INSPECT	PM	RF-GR-101	STOKER UNIT 1	Complete
13	19202	MONTHLY STOKER HYD SKID INSPECT	PM	RF-GR-201	STOKER UNIT 2	Complete
14	19199	MONTHLY STOKER CLINKER WEIR INSPECT AND LUBE	PM	RF-GR-101	STOKER UNIT 1	Complete
15	19199	MONTHLY STOKER CLINKER WEIR INSPECT AND LUBE	PM	RF-GR-201	STOKER UNIT 2	Complete
16	19192	MONTHLY REFUSE CRANE INSPECT AND MAINT	PM	RF-RC-001A	REFUSE CRANE EAST	Complete
17	19192	MONTHLY REFUSE CRANE INSPECT AND MAINT	PM	RF-RC-001B	REFUSE CRANE WEST	Complete
18	19190	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	FW-PU-001A	ELECTRIC BFW PUMP A	Complete
19	19190	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	TGS-HO-P300A	TURBINE HIGH PRESSURE OIL PUMP A	Complete
20	19190	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	TGS-HO-P203B	TURBINE OIL CONDITIONING PUMP B	Complete
21	19190	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	TGS-LO-F100B	TURBINE LUBE OIL FILTER B	Complete
22	19190	MONTHLY REDUNDANT EQUIPMENT RUN TIME ROTATION	PM	TGS-HO-P203A	TURBINE OIL CONDITIONING PUMP A	Complete
23	19184	MONTHLY ID FAN INSPECT AND LUBE	PM	FG-FN-101	ID FAN UNIT 1	Complete
24	19184	MONTHLY ID FAN INSPECT AND LUBE	PM	FG-FN-201	ID FAN UNIT 2	Complete
25	19183	MONTHLY FACILITY SYSTEM CLOCKS SYNCHRONIZATION	PM	CEM-GAS	CEM SAMPLE GASES	Complete
26	19183	MONTHLY FACILITY SYSTEM CLOCKS SYNCHRONIZATION	PM	CEM-SERV	CEM FILE SERVER	Complete
27	19183	MONTHLY FACILITY SYSTEM CLOCKS SYNCHRONIZATION	PM	CEM-STAT	CEM ALARM WORK STATION	Complete
28	19183	MONTHLY FACILITY SYSTEM CLOCKS SYNCHRONIZATION	PM	DCS-CAB	DCS PCU CABINETS	Complete
29	19181	MONTHLY ELECTRIC BFW PUMPS CLEAN AND INSPECT	PM	FW-PU-001B	ELECTRIC BFW PUMP B	Complete
30	19181	MONTHLY ELECTRIC BFW PUMPS CLEAN AND INSPECT	PM	FW-PU-001A	ELECTRIC BFW PUMP A	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
31	19179	MONTHLY CONDENSATE PUMP/MOTOR INSPECT AND LUBE	PM	CD-PU-001B	CONDENSATE PUMP B	Complete
32	19179	MONTHLY CONDENSATE PUMP/MOTOR INSPECT AND LUBE	PM	CD-PU-001A	CONDENSATE PUMP A	Complete
33	19176	MONTHLY COMBUSTION AIR FAN AND MOTOR INSPECT/LUBE	PM	CA-FN-201	COMBUSTION AIR FAN UNIT 2	Complete
34	19176	MONTHLY COMBUSTION AIR FAN AND MOTOR INSPECT/LUBE	PM	CA-FN-101	COMBUSTION AIR FAN UNIT 1	Complete
35	19175	MONTHLY CCW PUMP AND MOTOR INSPECT	PM	CC-PU-001B	CLOSED COOLING WATER PUMP B	Complete
36	19175	MONTHLY CCW PUMP AND MOTOR INSPECT	PM	CC-PU-001A	CLOSED COOLING WATER PUMP A	Complete
37	19174	MONTHLY CCW HEAT EXCHANGER FAN INSPECT	PM	CC-FN-001B	CLOSED COOLING WATER HEAT EXCHANGER FAN B	Complete
38	19174	MONTHLY CCW HEAT EXCHANGER FAN INSPECT	PM	CC-FN-001A	CLOSED COOLING WATER HEAT EXCHANGER FAN A	Complete
39	19174	MONTHLY CCW HEAT EXCHANGER FAN INSPECT	PM	CC-FN-001C	CLOSED COOLING WATER HEAT EXCHANGER FAN C	Complete
40	19173	MONTHLY DEMIN WATER PUMP/MOTOR CLEAN AND INSPECT	PM	DW-PU-001B	BOILER MAKE-UP WATER TRANSFER PUMP B	Complete
41	19173	MONTHLY DEMIN WATER PUMP/MOTOR CLEAN AND INSPECT	PM	DW-PU-001A	BOILER MAKE-UP WATER TRANSFER PUMP A	Complete
42	19170	MONTHLY AUX BURNER PURGE AIR FAN/MOTOR INSPECT	PM	AB-BR-101	AUXILIARY BURNER UNIT 1	Complete
43	19170	MONTHLY AUX BURNER PURGE AIR FAN/MOTOR INSPECT	PM	AB-BR-201	AUXILIARY BURNER UNIT 2	Complete
44	19169	MONTHLY AIR COMPRESSOR INSPECT	PM	SA-AC-001B	SERVICE AIR COMPRESSOR B	Complete
45	19169	MONTHLY AIR COMPRESSOR INSPECT	PM	SA-AC-001A	SERVICE AIR COMPRESSOR A	Complete
46	19168	MONTHLY ACC FAN/GEARBOX CLEAN AND INSPECT	PM	CD-FN-004	ACC CELL 4 FAN	Complete
47	19168	MONTHLY ACC FAN/GEARBOX CLEAN AND INSPECT	PM	CD-FN-003	ACC CELL 3 FAN	Complete
48	19168	MONTHLY ACC FAN/GEARBOX CLEAN AND INSPECT	PM	CD-FN-001	ACC CELL 1 FAN	Complete
49	19168	MONTHLY ACC FAN/GEARBOX CLEAN AND INSPECT	PM	CD-FN-002	ACC CELL 2 FAN	Complete
50	19318	OUT OF CONTROL (RB:FTROTTIE)	PMENV	2-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 2	Complete
51	19317	OUT OF CONTROL (RB:FTROTTIE)	PMENV	2-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 2	Complete
52	19316	OUT OF CONTROL (RB:FTROTTIE)	PMENV	2-AE-4790	INLET OXYGEN ANALYZER UNIT 2	Complete
53	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4739	STACK AMMONIA ANALYZER UNIT 2	Complete
54	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4735	STACK HYDRO FLUORIDE ANALYZER UNIT 2	Complete
55	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-LN	STACK CEMS SAMPLE LINES UNIT 2	Complete
56	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4737	STACK OXYGEN ANALYZER UNIT 2	Complete
57	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-PU	STACK CEMS SAMPLE PUMP UNIT 2	Complete
58	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 2	Complete
59	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 2	Complete
60	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4789	STACK MOISTURE ANALYZER UNIT 2	Complete
61	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 2	Complete
62	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-CHR	STACK CEMS CHILLER UNIT 2	Complete
63	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4732	STACK HCL ANALYZER UNIT 2	Complete
64	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4738	STACK NOX ANALYZER UNIT 2	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
65	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 2	Complete
66	19197	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 2	Complete
67	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4732	STACK HCL ANALYZER UNIT 1	Complete
68	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 1	Complete
69	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 1	Complete
70	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-CHR	STACK CEMS CHILLER UNIT 1	Complete
71	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4738	STACK NOX ANALYZER UNIT 1	Complete
72	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-LN	STACK CEMS SAMPLE LINES UNIT 1	Complete
73	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4737	STACK OXYGEN ANALYZER UNIT 1	Complete

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	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
74	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-PU	STACK CEMS SAMPLE PUMP UNIT 1	Complete
75	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4739	STACK AMMONIA ANALYZER UNIT 1	Complete
76	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 1	Complete
77	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4789	STACK MOISTURE ANALYZER UNIT 1	Complete
78	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 1	Complete
79	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 1	Complete
80	19196	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4735	STACK HYDRO FLUORIDE ANALYZER UNIT 1	Complete
81	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-CHR	INLET CEMS CHILLER UNIT 2	Complete
82	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4731	INLET HCL ANALYZER UNIT 2	Complete
83	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 2	Complete
84	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-LN	INLET CEMS SAMPLE LINES UNIT 2	Complete
85	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-PU	INLET CEMS SAMPLE PUMP UNIT 2	Complete
86	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4744	INLET THC ANALYZER UNIT 2	Complete
87	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4790	INLET OXYGEN ANALYZER UNIT 2	Complete
88	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-PRB	INLET CEMS SAMPLE PROBE UNIT 2	Complete
89	19188	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4733	INLET SULFUR DIOXIDE ANALYZER UNIT 2	Complete
90	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4733	INLET SULFUR DIOXIDE ANALYZER UNIT 1	Complete
91	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4790	INLET OXYGEN ANALYZER UNIT 1	Complete
92	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-PRB	INLET CEMS SAMPLE PROBE UNIT 1	Complete
93	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4731	INLET HCL ANALYZER UNIT 1	Complete
94	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-LN	INLET CEMS SAMPLE LINES UNIT 1	Complete
95	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-CHR	INLET CEMS CHILLER UNIT 1	Complete
96	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-IN-PU	INLET CEMS SAMPLE PUMP UNIT 1	Complete
97	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4744	INLET THC ANALYZER UNIT 1	Complete
98	19187	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 1	Complete
99	19198	MONTHLY STANDBY BFW PUMP START VERIFICATION	PMSAF	FW-PU-001C	STEAM DRIVEN BFW PUMP C	Complete
100	19198	MONTHLY STANDBY BFW PUMP START VERIFICATION	PMSAF	FW-PU-001B	ELECTRIC BFW PUMP B	Complete
101	19198	MONTHLY STANDBY BFW PUMP START VERIFICATION	PMSAF	FW-PU-001A	ELECTRIC BFW PUMP A	Complete
102	19180	MONTHLY DC BATTERY SYSTEM INSPECT AND MAINT	PMSAF	120-UPS-1	UNINTERRUPTABLE POWER SUPPLY	Complete
103	19180	MONTHLY DC BATTERY SYSTEM INSPECT AND MAINT	PMSAF	125-BACH-002	STATION BATTERY CHARGER 2	Complete
104	19180	MONTHLY DC BATTERY SYSTEM INSPECT AND MAINT	PMSAF	125-BACH-001	STATION BATTERY CHARGER 1	Complete
105	19180	MONTHLY DC BATTERY SYSTEM INSPECT AND MAINT	PMSAF	BAT-STA-001	STATION BATTERY BANK 1	Complete
106	19177	MONTHLY CONDENSATE PUMP AUTO START VERIFICATION	PMSAF	CD-PU-001A	CONDENSATE PUMP A	Complete
107	19177	MONTHLY CONDENSATE PUMP AUTO START VERIFICATION	PMSAF	CD-PU-001B	CONDENSATE PUMP B	Complete
108	19171	MONTHLY LOW-LOW DEAERATOR LEVEL TRIP VERIFICATION	PMSAF	FW-PU-001C	STEAM DRIVEN BFW PUMP C	Complete
109	19171	MONTHLY LOW-LOW DEAERATOR LEVEL TRIP VERIFICATION	PMSAF	FW-PU-001A	ELECTRIC BFW PUMP A	Complete
110	19171	MONTHLY LOW-LOW DEAERATOR LEVEL TRIP VERIFICATION	PMSAF	FW-PU-001B	ELECTRIC BFW PUMP B	Complete

DECEMBER 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
1	19430	Probe failure needs replacing	CM	1-TT-4763-3	EVAPORATIVE COOLER OUTLET FLUE GAS TEMPERATURE TRANSMITTER 3 UNIT 1	Complete
2	19440	AMESA exchange - Unit 2	CM	2-AE-4712	STACK CEM SYSTEM UNIT 2	Complete
3	19441	AMESA exchange - U1	CM	1-AE-4712	STACK CEM SYSTEM UNIT 1	Complete
4	19387	BLR OUT FURNACE IR CAMERA MAINT	PM	CM-FN-IR-2	FURNACE IR CAMERA UNIT 2	Complete
5	19385	MONTHLY BOILER FILL PUMP/MOTOR CLEAN AND INSPECT	PM	WW-PU-009	BOILER FILL PUMP	Complete
6	19381	MONTHLY T/G GROUND BRUSH TEST	PM	TG-EX-100	DC EXCITER	Complete
7	19380	TURBINE CRANE FREQUENT INSPECT AND MAINT	PM	TG-CRN-100	TURBINE CRANE	Complete
8	19378	BI-ANNUAL INSTRUMENT AIR DRYER AND FILTER MAINT	PM	SA-AD-001	INSTRUMENT AIR DRYER	Complete
9	19377	MONTHLY BOILER INTERLOCK/TRIP VERIFICATION	PMSAF	RF-BO-201	BOILER UNIT 2	Complete
10	19376	MONTHLY BOILER INTERLOCK/TRIP VERIFICATION	PMSAF	RF-BO-101	BOILER UNIT 1	Complete
11	19374	MONTHLY STEAM DRIVEN BFW PUMP CLEAN AND INSPECT	PM	FW-PU-001C	STEAM DRIVEN BFW PUMP C	Complete
12	19369	MONTHLY STANDBY DIESEL GENERATOR INSPECT AND MAINT	PM	DG-1	STANDBY DIESEL ELECTRICAL GENERATOR	Complete
13	19367	MONTHLY PCS CABINETS VENTILATION FILTER CLEANING	PM	DCS-CAB	DCS PCU CABINETS	Complete
14	19365	MONTHLY BURNER INTERLOCK/TRIP VERIFICATION	PMSAF	AB-BR-201	AUXILIARY BURNER UNIT 2	Complete
15	19364	MONTHLY BURNER INTERLOCK/TRIP VERIFICATION	PMSAF	AB-BR-101	AUXILIARY BURNER UNIT 1	Complete
16	19363	MONTHLY FAC EMERGENCY LIGHTING OPERATIONAL INSPECT	PMSAF	120-EM	EMERGENCY LIGHTS	Complete
17	19362	SEMI-ANNUAL WASTE WATER PUMP AND MOTOR INSPECT	PM	WW-PU-002B	WASTE WATER SETTLING BASIN SUMP PUMP B	Complete
18	19362	SEMI-ANNUAL WASTE WATER PUMP AND MOTOR INSPECT	PM	WW-PU-002A	WASTE WATER SETTLING BASIN SUMP PUMP A	Complete
19	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	C-FV-0240	LP FEEDWATER HEATER 2 EXTRACTION NON-RETURN VALVE	Complete
20	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	SM-V-0001	MEDIUM PRESSURE EXTRACTION CHECK VALVE	Complete
21	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	C-FV-0241	LP FEEDWATER HEATER 1 EXTRACTION NON-RETURN VALVE	Complete
22	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	C-FV-0239	LOW PRESSURE EXTRACTION NON-RETURN VALVE	Complete

DECEMBER 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
23	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	C-FV-0238	MEDIUM PRESSURE EXTRACTION NON-RETURN VALVE	Complete
24	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	C-FV-0246	LOW LOW PRESSURE EXTRACTION AUTOMATIC ISOLATION VALVE	Complete
25	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	C-FV-0245	MEDIUM PRESSURE EXTRACTION AUTOMATIC ISOLATION VALVE	Complete
26	19361	MONTHLY TURBINE EXTRACT VALVE/NRV/GOV VALVE LUBE	PM	SL-V-0001	LOW LOW PRESSURE EXTRACTION CHECK VALVE	Complete
27	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-105	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 5 UNIT 1	Complete
28	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-103	EVAPORATOR RETRACTABLE SOOTBLOWER 3 UNIT 1	Complete
29	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-104	SUPERHEATER 3 RETRACTABLE SOOTBLOWER 4 UNIT 1	Complete
30	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-101	EVAPORATOR RETRACTABLE SOOTBLOWER 1 UNIT 1	Complete
31	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-107	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 7 UNIT 1	Complete
32	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-102	EVAPORATOR RETRACTABLE SOOTBLOWER 2 UNIT 1	Complete
33	19360	MONTHLY STOKER SIFTING DISCHARGE SYSTEM INSPECT	PM	SB-RET-106	SUPERHEATER 2 RETRACTABLE SOOTBLOWER 6 UNIT 1	Complete
34	19359	MONTHLY STOKER HYD SKID INSPECT	PM	RF-GR-201	STOKER UNIT 2	Complete
35	19359	MONTHLY STOKER HYD SKID INSPECT	PM	RF-GR-101	STOKER UNIT 1	Complete
36	19358	MONTHLY STOKER GRATE CYLINDERS INSPECT/BRG LUBE	PM	RF-GR-201	STOKER UNIT 2	Complete
37	19358	MONTHLY STOKER GRATE CYLINDERS INSPECT/BRG LUBE	PM	RF-GR-101	STOKER UNIT 1	Complete
38	19357	MONTHLY STOKER FEEDTABLE AND RAM INSPECT AND LUBE	PM	RF-GR-101	STOKER UNIT 1	Complete
39	19357	MONTHLY STOKER FEEDTABLE AND RAM INSPECT AND LUBE	PM	RF-GR-201	STOKER UNIT 2	Complete
40	19356	MONTHLY STOKER CLINKER WEIR INSPECT AND LUBE	PM	RF-GR-201	STOKER UNIT 2	Complete
41	19356	MONTHLY STOKER CLINKER WEIR INSPECT AND LUBE	PM	RF-GR-101	STOKER UNIT 1	Complete
42	19355	MONTHLY STANDBY BFW PUMP START VERIFICATION	PMSAF	FW-PU-001B	ELECTRIC BFW PUMP B	Complete

DECEMBER 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
43	19355	MONTHLY STANDBY BFW PUMP START VERIFICATION	PMSAF	FW-PU-001C	STEAM DRIVEN BFW PUMP C	Complete
44	19355	MONTHLY STANDBY BFW PUMP START VERIFICATION	PMSAF	FW-PU-001A	ELECTRIC BFW PUMP A	Complete
45	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 2	Complete
46	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4735	STACK HYDRO FLUORIDE ANALYZER UNIT 2	Complete
47	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-LN	STACK CEMS SAMPLE LINES UNIT 2	Complete
48	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4739	STACK AMMONIA ANALYZER UNIT 2	Complete
49	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 2	Complete
50	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-PU	STACK CEMS SAMPLE PUMP UNIT 2	Complete
51	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4732	STACK HCL ANALYZER UNIT 2	Complete
52	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4789	STACK MOISTURE ANALYZER UNIT 2	Complete
53	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 2	Complete
54	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4737	STACK OXYGEN ANALYZER UNIT 2	Complete
55	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4738	STACK NOX ANALYZER UNIT 2	Complete
56	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 2	Complete
57	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 2	Complete
58	19354	MONTHLY CEM SYSTEM MAINT	PMENV	2-STK-CHR	STACK CEMS CHILLER UNIT 2	Complete
59	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-CHR	STACK CEMS CHILLER UNIT 1	Complete
60	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4789	STACK MOISTURE ANALYZER UNIT 1	Complete
61	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4745	STACK CARBON MONOXIDE ANALYZER UNIT 1	Complete
62	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-LN	STACK CEMS SAMPLE LINES UNIT 1	Complete
63	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-FIT-4710	STACK FLUE GAS FLOW TRANSMITTER UNIT 1	Complete
64	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4739	STACK AMMONIA ANALYZER UNIT 1	Complete
65	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4735	STACK HYDRO FLUORIDE ANALYZER UNIT 1	Complete
66	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4734	STACK SULFUR DIOXIDE ANALYZER UNIT 1	Complete

DECEMBER 2022 CORRECTIVE MAINTENANCE

	Work Order ID	Task Description	WO Type	Tag Number	Asset Description	Status
67	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4738	STACK NOX ANALYZER UNIT 1	Complete
68	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4732	STACK HCL ANALYZER UNIT 1	Complete
69	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-PU	STACK CEMS SAMPLE PUMP UNIT 1	Complete
70	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4748	STACK CARBON DIOXIDE ANALYZER UNIT 1	Complete
71	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-STK-PRB	STACK CEMS SAMPLE PROBE UNIT 1	Complete
72	19353	MONTHLY CEM SYSTEM MAINT	PMENV	1-AE-4737	STACK OXYGEN ANALYZER UNIT 1	Complete
73	19349	MONTHLY REFUSE CRANE INSPECT AND MAINT	PM	RF-RC-001A	REFUSE CRANE EAST	Complete
74	19349	MONTHLY REFUSE CRANE INSPECT AND MAINT	PM	RF-RC-001B	REFUSE CRANE WEST	Complete
75	19345	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-PRB	INLET CEMS SAMPLE PROBE UNIT 2	Complete
76	19345	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-CHR	INLET CEMS CHILLER UNIT 2	Complete
77	19345	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4790	INLET OXYGEN ANALYZER UNIT 2	Complete
78	19345	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4730	INLET CARBON MONOXIDE ANALYZER UNIT 2	Complete
79	19345	MONTHLY CEM SYSTEM MAINT	PMENV	2-IN-LN	INLET CEMS SAMPLE LINES UNIT 2	Complete
80	19345	MONTHLY CEM SYSTEM MAINT	PMENV	2-AE-4744	INLET THC ANALYZER UNIT 2	Complete

If you require this information in an accessible format, please contact 1-800-372-1102 ext. 3560.

Energy from Waste Advisory Committee (EFWAC) Meeting #19

Date: Tuesday, December 20, 2022

Location: Virtual from 2 p.m. to 4 p.m.

Facilitator: Bruce Withrow, Meeting Facilitators International

Archive: Available at: https://www.eventstream.ca/events/durham-region

Attendees: Please see page 6

The meeting of the EFWAC will meet the obligations as detailed under Section 8 of the Notice of Approval to proceed with the Undertaking. This meeting objective is to review the 2021 Durham York Energy Centre (DYEC) Annual Report as submitted in accordance with Condition 15(1) of the Environmental Compliance Approval (ECA) #7306-8FDKNX, which states the following:

> By March 31st following the end of each operating year, the Owner shall prepare and submit to the District Manager and to the Advisory Committee, an Annual Report summarizing the operation of the Site covering the previous calendar year.

Durham York Energy Centre Environmental Compliance Approval Annual Report – 2021

1. In follow up to the Ministry of the Environment, Conservation and Parks (MECP) decision to suspend surface water monitoring in 2016 with monitoring requirements to be re-evaluated in 2022, and no testing completed year 2021. Status update was requested regarding this program.

   Staff advised that a meeting was held with MECP's Central Region in November, and with consideration to several ongoing construction projects, the request to continue the suspension of surface water monitoring in 2022 was approved by the MECP, with continued evaluation on an annual basis during the review of the groundwater and surface water monitoring. Construction activities related to the 401 Courtice Road interchange will continue into 2023.

   Staff advised that it is the intent of the Regions to reinstate the surface water monitoring but need to investigate new locations as there is potential for new developments in the vicinity. Also, with future construction plans, the monitoring plan will need to be re-evaluated as the parameter will results in limitations due to testing restrictions and measurement points.

2. Staff were asked about the Long-term Dioxin and Furan Sampling System with reference to Section 5.6 (Annual ECA Report), and the AMESA results in comparison to the reference method – what parts of the AMESA sampling train are being collected during the monthly sampling and testing, with same question asked for stack testing, as it relates to what parts are being recovered and included for dioxins and furans.

   The AMESA trap/cartridge is analysed for sampling. In the initial trials for AMESA testing, it was determined that dioxin and furans were adhering to the metal probe. Upon these findings it was switched to a glass probe to ensure further accuracy in sampling. The collection and sampling of the trap/cartridge is consistent with the manufacturer's recommendation and the development of the procedures was made in consultation with the manufacturer.

   The source test dioxins and furans sampling is undertaken following the applicable guidelines and regulations established for source testing and listed in the source testing reports. Dioxins and furans for source testing follow Method 23.

3. Staff was asked about invalidated AMESA results. An investigation is completed prior to the data being invalidated. Investigation Results are reported in the Quarterly Reports to Council and the public. An established protocol is followed regarding investigation of every data point and it is reviewed by the Regions and Covanta. Sampling must be done during isokinetic conditions and in accordance with manufacturer recommendations to ensure valid results.

4. It was questioned why the Annual Report does not contain AMESA monthly data. It was mentioned that the AMESA quarterly report to Council includes monthly values in this public report. AMESA is reported in the Annual Report as a rolling average as detailed in the AMESA Plan.

5. Staff were asked about results for the Fall 2022 Source Testing. Staff informed committee that Fall 2022 source testing was completed the week of November 28th. Results to be published on DYEC website once received.

6. DYEC was approved for 142,000 tonnes in 2021 and they were not used at capacity limits, what is the reason – Staff responded that this was an estimate to optimize the boiler efficiency. The amount of waste processed is subject to a number of factors including energy content and boiler availability, and the Regions continue to seek to optimize the overall usage of the facility.

7. Question was asked if Regions were aware of new NOx ambient air limits – Regions will report against the new ambient air NOx standards when they are implemented.

8. Committee member requested AMESA work plan meeting dates between the MECP and Regional staff. Staff responded that a number of discussions occurred between the MECP between 2016 – 2018.

9. Member requested answers to questions in next three weeks. Member also requested minutes to be circulated in short order, asked for minutes within two months. Next Meeting requested to be scheduled for the summer months.

DYEC Streamlined Environmental Assessment
(increase from 140,000 to 160,000 tonnes per year (TPY) capacity)

The Streamlined EA to request an increase from 140,000 to 160,000 TPY, with no impact to the infrastructure, only permitting requirements to allow the increase to incoming waste at the site, is in its final review of the comments received by the MECP, including clarification of comments, distribution to and review of agencies' comments, so it may be posted for public comment.

10. Staff was asked how much waste was bypassed in 2021. Tonnage report indicated 16,727.13 tonnes were bypassed. Question regarding anticipated bypass for 2022. Staff predicted similar to previous year and this amount will be posted in the 2022 Annual Report.

11. Staff were asked to comment on consultation with stakeholders regarding the Environmental Assessment Screening Report. Staff responded to questions that came in during the 60-day comment period and met with Clarington for further discussions on the report. Staff advised that they completed the requirements established in the EA screening Report Guidelines in correspondence with the MECP.

12. Staff advised on Screening Report status. Submission was completed in March 2022 for MECP review and are still awaiting a response. The MECP has not made decisions in regard to elevation requests and has not identified a requirement for any additional studies.

13. Question regarding request for additional studies. Staff confirmed Regions will continue to follow the MECP guidance.

Extended Producer Responsibility

Extended Producer Responsibility (EPR) is the approach Ontario is using to make companies doing business in Ontario fully financially and operationally responsible for the environmental impact of the products and packaging they produce or import in Ontario. Companies will design collection systems for designated products and manage end-of-life recycling or disposal. Currently, tires, electronics, batteries and household hazardous waste have transitioned over, leaving blue box paper and packaging materials remaining. Due to the size of this program, the blue box programs will gradually transition to EPR over three years, beginning in 2023 for selected Regions. Durham Region has been selected to transition over as of 2024.

14. Durham Region staff reported on the transition strategies for contract management and communication with residents. In the meantime, all executed contracts are to remain the same with a scheduled maintenance review of equipment to occur prior to the management transitions; this is scheduled to occur six months prior to the changeover. All contracts are scheduled to change over as of July 1, 2024, at which point the current contractor will lease the equipment and building from Durham Region. Staff will be working on a communication strategy early in 2023 to help residents with the transition and provide instructions as to who they will contact if a collection is missed. The new program operator for the province is called: Circular Materials Ontario (CMO), who have hired Reverse Logistics as a managing contractor.

15. Staff are working with the Association of Municipalities of Ontario (AMO) and CMO, with the aid of legal consultant, who will develop tools (i.e., agreements, reports) that could be utilized during the transitions to ensure that there are no discrepancies in the blue box and garbage materials or if there are any issues with CMO's performance.

16. Staff responded to inquiries regarding the continuation of the battery recycling program. Durham Region Waste Management Facilities, Regional Headquarters and Local Area Municipalities will continue with battery collection after blue box transition.

17. Staff were questioned about the implementation of a clear bag policy to ensure Residential compliance. Staff advised that in 2023 there will be a report on the clear bag pilot study. Results from the pilot study will provide insight on how to proceed.

18. Staff were asked about the communication strategy with residents regarding this transition. Staff is developing a communication plan for residents and Council in 2023 as well as the school curriculum program to prepare for the transition.

Updates on Durham Region Organics Management

Durham Region Council has made the decision to pause the Mixed Waste Pre-sort and Anaerobic Digestion (AD) Facility procurement process. The project was approved and is a key component of the Region's long-term waste management plan. Due to the rapid rise in material, shipping and labour costs being experienced in the marketplace, Regional Council has agreed to revisit the short and long-term organics strategy with a report to Council in early 2023.

19. Staff were asked to confirm the amount of organics generated and who is in charge of the contract. Staff responded that Durham Region generated approximately 35,000 tonnes in 2021 and the contracting company is Miller Composting. York Region provided an update on their RFP process for AD Capacity. The public announcement of the outcome of the RFP will be reported in quarter one of 2023.

20. It was questioned as to why the organics plan is to expand to include sanitary products, pet waste, diapers and if staff will evaluate proponents that do not take these

materials. Staff informed that moving to an AD method was the preferred option due to guidance from the MECP and removing organics from the garbage stream which keeps in line with the management of waste sent to the DYEC.

21. Staff answered questions concerning organics collection from multi-residential buildings. Staff acknowledges that there is currently no program for these materials. The development of a program is under development as part of the long-term waste management plan and organics management strategy for consideration by Regional Council.

22. In procurement of AD, question was asked if “dirty organics” will be included. Staff responded that RFQ development is in process and the preference is for the inclusion of enhanced green bin materials.

Consideration to scheduling the next annual meeting in July/August.

Meeting adjourned at 4 p.m.

Meeting attendees:

B. Kester, Director, Public Works, Township of Uxbridge (member)

C. Jones, Director, Planning Regulation, Central Lake Ontario Conservation Authority (member)

G. Anello, Director, Waste Management Services, The Regional Municipality of Durham (member)

L. Akeson, Manager, Waste Services, Town of Whitby (alternate)

L. Gasser, Zero Waste 4 Zero Burning (member)

M. Fareed, Contract Management Engineer, Waste Services, The Regional Municipality of York (alternate)

M. Molinari, General Manager, Community Infrastructure and Environmental Services, Town of East Gwillimbury (member)

M. Whitbread, Manager, Policy and Research, Operations Services, City of Oshawa (alternate)

W. Bracken, Durham Environment Watch (alternate)

B. Withrow, Facilitator, Meeting Facilitators International

B. Parayankuzhiyil, DYEC Facility Manager, Covanta

J. Presta, Commissioner, Works, The Regional Municipality of Durham

P. Veiga, Manager, Waste Operations, The Regional Municipality of Durham

A. Evans, Manager, Waste Planning and Technical Services, The Regional Municipality of Durham

L. Saha, Project Manager, Waste Planning and Technical Services, The Regional Municipality of Durham

L. Waller, Works Operations Technician, Waste Management Services, The Regional Municipality of Durham

R. McCormick, Works Operations Technician, Waste Management Services, The Regional Municipality of Durham

E. Hobe, Clerk, Waste Management Services, The Regional Municipality of Durham

M. Smart, Administrative Assistant, Works Department, The Regional Municipality of Durham

R. Inacio, Corporate Services – Information Technology, The Regional Municipality of Durham