DRAFT MINUTES Waste-to-Energy Facility Monitoring Group MEETING

February 14, 2024 Covanta Alexandria/Arlington Waste-to-Energy Facility – Eisenhower Avenue 8:30 a.m. – 11:00 a.m. Virtual Meeting

The Facility Monitoring Group, City and County Staff, and HDR representatives present for the meeting included William Skrabak, Erik Grabowsky, Alaeedin Mohamed, Emily Hughes, Morgan Routt, Tarrence Moorer, Adriana Castañeda, Dan Domato, and Abby Fleming. Don Cammarata and Peter Mayer attended the meeting from Covanta. This FMG Meeting was held as a virtual meeting.

I. Comments on Agenda

Domato requested to add two new business items to the agenda: timeline for reagent rate increases and facility housekeeping.

II. Approval of Final Minutes from the November 15th, 2023, Facility Monitoring Group Meeting.

There were no comments or changes on the last meeting minutes. Grabowsky motioned to approve the final minutes. Hughes seconded. All in favor of approval.

III. Requisitions for Payment

The requisitions for payment that were submitted for approval totaled \$15,092.77. The sole invoice was the invoice for HDR Engineering, Inc. for the period November 5, 2023, to January 27, 2024, in the amount of \$15,092.77. Grabowsky motioned. Hughes seconded. All in favor of approval.

IV. Operations and Facility Status

A. Summary of Plant Operations (by Covanta)

Mayer provided a brief update on the Plant Operations. There were no unscheduled outages in Q2FY24. Stack lights had been added and they are improving light throughout the building and pit area. Throughout the facility, the company promoted critical life rules for contractor operations. There were two minor fires that were in the boiler house. One fire caused minor damage, but overall, nothing major, there were no disruptions in production, output, or health and safety. Mayer stated that there is a low tolerance for any fire activity. One fire was due to grease that is used on the hydraulic system was exposed to elevated temperature under the feeder system on Unit 2. Grabowsky asked if they have performed a closer inspection on Units 1 and 3 to ensure a similar situation does not reoccur. Mayer listed some corrective actions including removing plates that obstructed the views of the feeder system and changing out the absorbent pads if there is any grease. Neither fires were due to batteries or in the pit area. The Facility is doing proactive activities with the fire department to best prepare in case if there is a fire onsite. Domato asked if the fire department called onsite for the in-building fire. Mayer stated they were not called, and it was responded by their protocol for minor fires. Skrabak stated that the fire department would rather come out even if not needed to save time in the future in case any changes occur quickly. Grabowsky stated that if there was visible smoke from the outside, to call the City to prepare for any public comments or concerns.

They exceeded the target of 350,200 tons by 5 tons for the entire year, there is a buffer of 200 tons, which shows excellent control of production by the Facility. Mayer stated that the Facility is in a net energy position, consuming energy generated and selling remaining material to a power purchase agreement. The Facility was awarded the Covanta Management Award in the South Region as the number 1 plant. This award is KPI driven based on performance in cost, production, outage scheduling, and maintenance. Grabowsky requested that Mayer send the notice of award/certificate to him so that he can provide to the leadership team. Mayer stated they will receive a trophy to be able to display in the lobby of the facility.

Mayer discussed the Facility's Environmental and Safety Highlights: There were no environmental exceedances. There were no injuries or incidents during the previous quarter. Mayer stated that there are no open positions at the moment. Mayer stated that throughout the full year of the low NOx system, they Facility maintained a performance of 90ppm versus the daily requirement of 110ppm. The Facility reduced their site chemical register, they eliminated sodium bisulfite, a water treatment material. Mayer stated that the facility is also receiving an award from VWEA for good performance in the environment. Cammarata stated that there will be press release about the

award in the first week of March. Grabowsky congratulated Covanta on both awards.

B. Discussion of Quarterly Report and Facility Performance to Date (by HDR)

Domato discussed the Quarterly Report and Performance Trends. Domato reviewed the downtime over the quarter previously mentioned by Mayer; Unit 2 for wire damages caused by the external stoker fire in November, and crane outage on Unit 3 in December. For schedule outages, cleaning outage on Unit 2 in October, and scheduled minor outage on Unit 1 in October which was the biggest contributor to total boiler downtime. Outside the two scheduled outages, there was only 40.2 hours of unscheduled downtime, and 59.7 hours of standby due to permit compliance in October, which was less than 10% of total downtime. Overall, a good operational quarter, outside of the outages.

In Q2FY24, the average boiler availability was 95.6%, with 92.2% on Unit 1, 94.8% on Unit 2 and 99.8% on Unit 3. The decrease in availability is due to the scheduled outages. There was minimal T-G downtime, the majority was due to unscheduled condenser cleaning in November and standby time for TG No. 2 when Boiler No. 2 was offline due to the scheduled outage. There was 26.3 hours of unscheduled downtime and 220.5 hours of standby time for the turbine generators for an average availability of 99.4% during the quarter.

In Q2FY24, the Facility processed 84,502 tons of waste. See in Chart 1, the monthly MSW processing rate was in line with previous fiscal years. Total Waste Deliveries shown in Chart 9, was similar to the previous two fiscal years. In Q2FY24, the ash generation rate was 19.9% which is down 0.4 percentage points from Q2FY23, shown in Chart 2, and is very good compared to industry standard. Current metals recovery decreased by 0.2 percentage points compared to last year (Chart 3 Page 19. In Q2FY24, ferrous recovery averaged 3.3% (as a percentage of waste processed), this is more in line with historical data with the new magnet in place of the temporary magnet that was running with lower efficiency of the temporary magnet. Domato asked Mayer if there was any downtime or maintenance on the magnet which is resulting in lower recovery rates. Mayer stated that there has been no change in recover or separation ability, it seems that it is a waste content problem driving lower metal recovery rates.

In Q2FY24, there was a decrease in steam production (Chart 4 Page 10) about 3.1% decrease compared to Q2FY23. The decrease in boiler capacity utilization shown on Chart 7 would lead to adjustments in the boiler performance (in Q2FY24 a BCU of 105% compared to Q2FY23 a BCU of 115%) for a reduced steam production. Domato asked Covanta if there were any adjustments made to boiler operations that could have impacted boiler performance during the quarter. Mayer

stated that BCU and moisture content can affect the decrease in steam production. Domato stated that HHV remained consistent compared to Q2FY23, and that steam production seems to be from a boiler operating standpoint. Domato asked Covanta if there is any advantage for the Facility to run the boilers at an MCR closer to its maximum continuous rating rather than the previous 115% and higher? Mayer stated that they want the highest value BTU per unit ton to make as much steam as possible as they are not limited on electricity potential. Domato further asked how the waste processed tonnage is calculated; the data is showing a decrease in the value, but the waste processed actual tonnage comes partially from the steam production value. Mayer stated it comes from the scale and actual tonnages, and not back calculated from the steam. Cammarata also answered that the scaled in inventory change results in the processing number. The 350,000 tons per year limit is based on a maximum steam production with a fictitious steam to MSW processing number so they never hit their steam limit, they are always 10% below due to the ratio that was used in the permit is 10% too high. Cammarata has stated they have approached the FMG about getting the permit changed, they would need support from the City. Grabowsky stated that the main opposition is the additional tonnage equates to additional truck traffic and emissions dealing with heavy trucks running through the city streets, which is generally why the City has not supported the increase throughput of tonnage.

In Q2FY24, gross and net electric have returned to consistent with previous years prior to the turbine overhaul in Q2FY23. See Chart 13 (Page 18), Net Electric Recovery is about 14.1% higher where the Facility averaged 413 net kWh/ton. Chart 14 Page 18 shows improvement in turbine performance due to the less downtime, where lower rates indicate better performance. Steaming rate shows how many Kilowatts are produced per pound of steam, showing the performance of the turbine; comparing to previous quarters prior to the turbine overhaul, Q2FY22, this quarter is back in expected range.

Domato discussed the utilities and reagent consumption shown in Table 4 Page 19. Fuel oil usage is nearly half as much as it was in Q2FY23 despite similar number of shutdowns compared to Q2FY23. From Mayer's knowledge, he is uncertain about moisture content of the waste last year compared to this year which is the major factor in fuel oil usage. Skrabak asked if with the LN system is it possible to manage temperatures better to not have to rely on oil as much. Mayer is uncertain about the relationship between the LN system and temperature. Ammonia shows a 9.2% increase compared to Q2FY23. Domato stated that there were jumps in ammonia in the last fiscal year due to adjustments with the LN system being installed. When comparing ammonia usage to the previous quarter, Q1FY24, the Facility is slightly less but still approximately 2 lbs/ton for the

facility.

Domato to set up a meeting with Mayer to discuss the deficiency list on Page 7. There are some older items and see if there are any corrective actions that can be taken to update the status.

V. Covanta Items

A. New Facility Manager

Peter Mayer was introduced as the new Covanta Facility Manager. Mayer started November 13, 2023. Peter has experience working with power plants.

B. Supplemental Waste

There have been no major changes, and operations have continued as expected.

VI. Old Business

A. Stack Lights

Mayer previously stated that the stack lights have been installed.

VII. New Business

A. Update on City of Alexandria FMG Members

Skrabak stated that Helen Lee has left the City, and that he will be the interim representative for the City on the FMG. Skrabak introduced themself as the deputy director for infrastructure and the environment for the City of Alexandria. They have worked for the City for over 30 years and have been involved with the Waste-to-Energy facility since the initial group began. Castañeda introduced themselves as the Director of Transportation and Environmental Services for the City of Alexandria for the past five months with over 20 years of prior experience. Moorer introduced themselves as the Assistant Director for Transportation and Environmental Services for over 10 years. Introductions for the rest of the FMG were discussed. Morgan Routt introduced themselves as the director of management and budget for the City of Alexandria.

B. Proposed MACT Rules

Skrabak asked for Covanta's perspective on the new proposed MACT rules. Cammarata stated that the company overall is still assessing the impact of the rules. Covanta has asked for an extension to the period of time the EPA has given for comments. Comments are currently due March 25, 2024. Covanta amongst other industry members at the recent EPA hearing had requested an extension between 60-90 days. The rules were posted at the end of January and had a very quick hearing schedule a week later. From an industry perspective, they are looking

for more time to assess. Covanta would like to invite the City and County to provide written comments on the rules. Cammarata stated they are developing a list of talking points and invited the FMG to provide comments as well. Cammarata to inform Skrabak if they do extend the deadline and are willing to look at comments and provide their feedback. Skrabak stated that assuming the MACT goes into effect and DEQ amends the permit, the City will be looking for a PM 2.5 limit in that permit to be aware of. Mayer asked their environmental experts if they are capable of achieving the new standards and the response was yes and would not cost the facility anymore, any changes could be implemented relatively quickly. Grabowsky asked Mayer how spikes in Cadmium and Lead can happen to know from an understanding perspective for the next meeting.

C. Reagent Rate Increase Timeline

Domato stated that the FMG is looking for the timeline that provides the expected cost increase for reagents. Grabowsky clarified the letter is the tip fee adjustment because of the use of the reagents. For FY24 it was sent in early July 2023. Cammarata stated that the change in law fee is sent out in July. Grabowsky stated that inflation has somewhat stabilized around 3.1% to be able to provide an estimate. Skrabak recommended that Cammarata provide a non-binding placeholder number for the upcoming year.

D. Facility Housekeeping

Skrabak provided two observations. The City received a complaint about trash on the street around the facility and a day or two after the snow, there was more trash than expected along the front of the building. Mayer responded that there is a daily routine for an operator to check the waste around the facility but stay within their bounds on their side of the street. Skrabak suggested to expand the radius of checking for loose trash to help their public perspective.

E. Public Initiatives

Cammarata sent the list of initiatives a week ago for this past quarter. Cammarata stated that Lee helped prepare the upcoming April Earth Day event to have the paper shredding and battery collection event and mentioned the City could help promote the event. Skrabak stated that they will take lead and asked Cammarata to provide the details of the event to be incorporated into their webpage. Cammarata stated that Carolyn Cruse is their outreach coordinator and will reach out to Skrabak about the event. Cammarata stated they are doing their best to try and engage the community. They have ongoing commitments to volunteer at

Alexandria Alive Food Pantry and also participating in various other activities to develop relationship with the local American Legion. Grabowsky thanked Cammarata for their continued support for Wreaths Across America. Cammarata stated they processed approximately 130 tons of wreaths.

Cammarata mentioned that in the hearing, there were two residents that spoke very negatively about waste to energy, Covanta, and the Alexandria facility. Melody Reis from the City of Alexandria and Cynthia Palmer from Arlington County who is part of Mom's Clean Air Force. Both were reading the talking points from the Energy Justice Network. Cammarata is unsure how to address these residents and wanted to make the FMG aware. He does plan to reach out to their specific association and provide information. Skrabak informed Cammarata about new residential buildings being constructed to be aware of and provide information on the facility initially. Skrabak stated that in the disclosure, new homeowners have information about the industrial uses in the neighborhood.

Covanta's Public Outreach Initiatives:

9-Nov	NOVA CC - Enviro Sci - II
15-Nov	American Society of Civil Engineers
5-Dec	Howard Gardner School
13-Dec	Westfield HS
14-Dec	Local Residents
Events/Sponsorship)S
7-Oct	Covanta Sustainability Collection Event
4-Oct	United Way-Project Community Event
25-Oct	Legal Services of VA- Courthouse Outreach
4-Oct	United Way Packing
7-Oct	Sustainability Event (Shredding and Battery Collection)
25-Oct	Alexandria Court Assistance
11-Nov	AL Post 24 VFW 609 Alexandria
14-Nov	Carlyse Tower Resident Talk
14-Dec	Alexandria Alive-Food Hub
7-Dec	Holiday Gifts To support local Salvation Army for their Angel Tree program
16-Dec	Wreaths for Placement Ceremony

F. Open Discussion

No items discussed.

On a motion by Grabowsky, seconded by Skrabak the meeting

adjourned at 10:18 a.m.

The next Facility Monitoring Group Meeting is scheduled for Wednesday, May 8, 2024, and will be held as an in-person meeting with a brief tour afterwards.