FINAL MINUTES Waste-to-Energy Facility Monitoring Group MEETING

May 10, 2023 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 Helen Lee, Erik Grabowsky, Vijetha Huffman, Alaeedin Mohamed, William Skrabak, Emily Hughes, Morgan Routt, Philip Pugh, Abigail Fleming, Kyle Perring, and Dan Domato. Don Cammarata and Kelly McLaughlin attended the meeting from Covanta. This FMG Meeting was held as a virtual meeting.

I. Comments on Agenda

With the addition of LN Costs, Grabowsky made a motion to approve, Hughes seconded. All in favor of approval.

II. Approval of Final Minutes from the February 8th, 2022, Facility Monitoring Group Meeting.

Domato requested to add public initiative items sent by Cammarata for Q3FY23. Grabowsky requested in Section 6.B, to add in the word "not" before "yet". Grabowsky also stated in Section 6.C following "forced unscheduled outages" update personnel to Cammarata not Grabowsky for communicating with neighbors. Lastly, there are three (3) times where Grabowsky's name is spelled incorrectly. Lee stated regarding the eRINs discussion in section 7.A that the FMG attempted to develop comments and were able to submit. With the identified revisions to be addressed, Grabowsky made a motion to approve, Routt seconded. All in favor of approval.

III. Requisitions for Payment

The requisitions for payment that were submitted for approval totaled \$14,893.71. The sole invoice was the invoice for HDR Engineering, Inc. for the period January 29, 2023, to April 29, 2023, in the amount of \$14,893.71. Lee stated with Mohamed's confirmation that this includes the CPI adjustment. Lee made the motion for approval. Grabowsky seconded. All in favor of approval.

IV. Operations and Facility Status

A. Summary of Plant Operations (by Covanta)

McLaughlin provided a brief update on the Plant Operations. McLaughlin discussed Facility Operations and Maintenance: There were two major outages and one minor outage successfully completed on all three units for routine maintenance with no major findings. Stack testing was successfully completed the last week of March and submitted to VADEQ. The residence box has been moved, with new signage that has been posted and positive feedback from residents above the flow of traffic. If requested, McLaughlin can provide a map to the team to upload to the website. There was a cooling tower fan failure during the month of April; the coupling failed catastrophically, the shaft on the cooling tower fan popped up damaging the fan blades requiring a full replacement of the fan assembly, the pedestal (holding the fan, motor, gear box and shaft), as well as structural repair work in the cooling tower to return to service. There was a coupling replacement/alignment and other structural repairs completed on the opposite cell. There was no downtime or any significant impact to processed tons, only a slight decrease in generation. No information was sent out about the cooling tower due to no impact to anyone external. Lee asked in previous instances for any large components of the plant, if the FMG has been notified previously. Grabowsky stated that traditionally if the failure does not impact the ability to deliver, they have not been notified, unless there are long term effects that would affect deliveries. Notification typically involves if there is something on the air pollution control side or something that would impact the neighborhoods. They completed a cleaning event in the store room where obsolete inventory was removed.

McLaughlin discussed the Facility's Staffing: There are two open positions; one which has an internal candidate that will fill, and one that will start next week. There is one mechanic position and one auxiliary operator position. There was a promotion from a mechanic to planner position which opened the mechanic position.

McLaughlin discussed the Facility's Environmental and Safety Highlights: There were no environmental exceedances during the previous quarter. There were no injuries or incidents during the previous quarter.

McLaughlin reported on the Battery Take-Back event: There was a battery, mercury-filled, and general electronics take back day for residents. The weather was very unfavorable. Less than ten residents came but brought a large quantity of electronics/batteries. There was positive feedback from the residents and suggested more communication/advertisement on the event. Covanta has been talking about scheduling the shredding event for the fall and hopefully hosting this event annually. Domato asked how the event was set up. McLaughlin answered that they had residents

pull out front where they typically take profiled waste and unloaded the waste on pallets after receiving hours to be able to use a modified flow path in the parking lot.

B. <u>Discussion of Quarterly Report and Facility Performance to Date (by HDR)</u>

Domato discussed the Quarterly Report and Performance Trends. Domato reviewed the downtime over the quarter due to the outages previously mentioned by McLaughlin; Unit 3 in January, Unit 2 in February, and Unit 1 in March. Otherwise, there was minimal downtime other than an ID Fan issue that caused 20 hours of downtime. Outside the three major outages, there was only 37.5 hours of unscheduled downtime, which was less than 10% of total downtime. Overall, a good operational quarter, outside of the outages.

In Q3FY23, the average boiler availability was 92.2%, with 94% on Unit 1, 92% on Unit 2 and 91% on Unit 3. There was no T-G downtime for either unit for an availability of 100% during the quarter In Q3FY23, the Facility processed 84,806 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 8, was slightly higher than the previous two fiscal years, but is still tracking with the previous tonnages.

In Q1FY23, the ash generation rate was 20.8% which is down 0.2 percentage points from Q3FY22; this is partially due to the new magnet installed in February 2022, as compared to running with a temporary drum magnet for part of Q3FY22. Current metals recovery increased by 0.5 percentage points compared to last year (Chart 3 Page 10). In Q3FY23, ferrous recovery averaged 3.5% (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. With the new magnet, there is still 0.5% more ferrous recovered compared to the old magnet that had failed.

In Q3FY23, the steam production was consistent to the previous Q3s. The boiler steaming rate was 2.85 lbs. steam per ref. ton during the quarter. See Chart 6 (Page 13) the boiler steaming rate shows how much steam is created per reference ton of waste which accounts for HHV/design. FY23 has been tracking much higher, discussed last quarter that this was potentially due to operating at higher boiler rates and set points; Domato asked Covanta if there are different operations or better performance from the boiler that is causing the additional steam production. McLaughlin answered that the Facility continues to operate at 92k which is considered elevated, based on tons processed recovery, post the turbine failure last year, the Facility has caught up operations, and should see the boiler steaming rate lower back to typical range in the upcoming summer months. Domato stated

that when operating at a higher rate, combustion controls typically push more waste onto the grates, expecting the steam reference to keep up. Domato then asked if there was anything else different other than operating at higher loads? McLaughlin answered with no additional operational difference.

In Q3FY23, the gross and net electric generation were consistent to the previous Q3s. See Chart 12 (Page 19), Net Electric Recovery is about 3% higher where the Facility averaged 436 net kWh/ton, with the main driver being the additional steam being produced from the waste. Q3FY23 was the first quarter where T-G no. 2 returned to normal operations following the major overhaul and the repairs made after the failure with a Turbine Steaming Rate at 12.1 lbs/kWh. See in Chart 13 (Page 19) this rate is higher (higher means less efficient) compared to the previous quarters. Typically, after an outage/major overhaul, there is usually 1-3% improvement change. In Q3FY23, there was a 1% decrease following the outages, Domato asked if there is anything Covanta is tracking that is watching this rate, and if they are concerned that there was no improvement. McLaughlin stated there was no concern and Covanta is tracking the stations megawatts daily. McLaughlin stated that one thing that might have impacted the performance was the cooling tower being out of service for two weeks in early March which leads to decreased performance from the T-Gs with reduced vacuum. Covanta will continue to track, with their water rates tracked daily.

Domato discussed the deficiency list on Page 8 and 9: One item to remove is item 17, which is the leak on Unit 1 mud drum drainpipe; did not see an active leak while onsite. There are a few new items to add; the exhaust fan above gen bank of Unit 1 was out of service. Current item 10 will be modified to remove Unit 3, as Unit 3 feed chute was repaired during the major outage in February, but Unit 1 and Unit 2 both have empty water level boxes. Another item to add for the building, there is a small section of building siding missing on the East side where the trucks round the bend into the turbine hall. The drop-off area and new signage will be talked about later in the meeting. There was a painting program throughout the facility with different identification numbers on pieces of equipment which was good to see for the Facility. Unit 3 auxiliary burner controls were installed this past quarter, completing all three units. A new concrete pad was added on the backside of the Facility near the ash trailers, where a spare circ water pump for the cooling water towers will officially sit on a pedestal.

Grabowsky commented on Table 3 (Page 16) the totals for City and County waste in FY22, there is a calculation error. HDR will address this error. McLaughlin stated that the cooling tower nozzle was repaired yesterday and will provide photos. Grabowsky stated that the ash toxicity looks higher than normal, in Chart 14 (Page 28), and asked McLaughlin if there is more lime being added

although lime utilization is down. McLaughlin stated that ash characterization was just completed this past week and all numbers have been in range. Grabowsky stated that although the numbers are in range, the numbers appear higher compared to all quarters last fiscal year, the numbers seem higher than normal. McLaughlin to follow up on lime usage.

V. Covanta Items

A. Miami-Dade WTE Facility and Alex-Arl Facility Improvements

Domato asked Cammarata if there was any industry update concerning that the fire that occurred was a Covanta facility, and if there were any items for the Alex-Arlington facility that would be improved on the fire suppression and fire identification side. Cammarata has nothing to report on Miami-Dade as investigation is ongoing. They know the area of the facility where the fire started but no additional information. Cammarata stated that for Alex-Arlington facility cameras were installed. McLaughlin said Covanta is working with AIG, their insurance company, who was on site a few weeks ago to complete their audit, there were no major finds, and the audit went well. Temporary solution for fire protection, the Facility has three new fire carts with a wetting agent that will be on each section of the charging deck which just showed up Friday last week. The carts have 1,200 gallons each, 8-10 minutes of use time. There will be training for the team to be in service this month. Long term fire solutions, Alexandria has been reprioritized based on the location in the community to have the fire rover monitoring program set up to have new water cannons installed in the tipping hall and refuse bunker which will be monitored 24/7 by a remote team; moved up from phase 3 into phase 2 in the program, potentially next year.

B. Power Purchase Agreement

Domato brought up the next steps and scheduling on the Power Purchase Agreement. Cammarata stated that there is a Power Purchase Agreement in place, effective January 29, 2023, that will continue with Dominion until such time as the load can be registered at the PJM system, which because of their backlog, is expected in 2026 or 2027 where they will be selling directly wholesale into PJM. Opposed to today, where they are selling wholesale to Dominion. Grabowsky asked if there was any way that localities could have a direct power purchase agreement for a portion of the loan. Cammarata stated that they have looked at that several different ways, and the retail restrictions in power supply is pretty tight, and there may be an avenue from a municipality perspective but would need to check due to tight laws not allowing a direct sale of power to anyone other than into Dominion/the system. Grabowsky said from a

municipality perspective they are looking to do a power purchase agreement for renewable energy and if Covanta could stay considered renewable it would be beneficial to purchase locally generated power. Cammarata will check in with their power sector to see if it is possible. Huffman asked if there would have to be any interconnection points between the plant and the city. Cammarata answered that they have an interconnection agreement with Dominion now, so the city would continue to use that, it would just be scheduled, more of a virtual type of arrangement.

C. LN System Adjustment

Grabowsky stated that this time of year is typically when Covanta calculates the adjustments on the tip fee based on the LN cost share, and asked Cammarata if that is currently being calculated. Cammarata confirmed and estimated the first week of July to be notified.

D. Supplemental Waste

There is no update on this matter.

VI. Old Business

A. <u>Battery Education</u>

Lee thanked Cammarata, McLaughlin and Team for their sponsorship of the battery take-back event on Earth Day and the partnership with COG. The was the event with the fire department which was timely due to the battery fire at the Republic Services MRF not too long after the event. Grabowsky mentioned that they never saw anything on social media advertising the events. Lee stated that they saw many posts and it may be based on where their phone is geolocated. Lee commented that most comments on posts were questions about car batteries. There will be a final report from COG with final engagement numbers on advertisements in a summary report and will send that to Cammarata.

B. Residential Drop-off Procedures

McLaughlin provided photos of the added signs for residential drop-off and labeled specific containers. Signs were added to check in with scale house, metals roll-off labeled with signs, out front. Signage was updated for citizens to not enter parking area and go to drop-off. Last piece of signage added was a one-way sign on scales as issues were experienced with residents coming back towards truck traffic. Grabowsky asked how residents communicate with the scale house operator. McLaughlin stated that the scale house operator gets out of the scale house to complete a quick inspection of waste to ensure there are no hazardous materials and the residents stay in their vehicle.

C. Communication following Forced/Unscheduled Outages

Lee stated that the orange sheet has been updated with accurate contacts and phone numbers. The sequence has not changed, there is an email list that McLaughlin can use to communicate with the FMG all at once, the sequence list is for confirmation of receipt of notification for urgent matter. Domato will send out cleaned up Orange Sheet to entire FMG meeting attendance.

D. eRIN Program Update

Lee provided letter to Cammarata for eRINs and asked for any update. Cammarata stated that they sent in the letter and there were multiple other letters that were sent in from the area they were able to provide to the EPA. Cammarata's understanding is that the EPA will be finalizing rulemaking in June, government lobbyists are currently following the rules to advocate for correct rule making including WTE in the eRIN program. The program is one of Covanta's corporate top initiatives and their CEO is following very closely.

VII. New Business

A. Hauler Cell Phone Usage Discussion

Lee received Covanta's message, regarding cell phone usage, and have spoken to all of their drivers and are seriously working on distracted driving. Truck numbers were very helpful in identifying drivers to have follow-up discussions. McLaughlin thanked Lee for the response due to the serious nature of the issues and stated that they are not currently tracking this matter at this time, Covanta had conversations with haulers hoping for resolution with the issue and hoping it does not continue to be an issue. McLaughlin also stated on the matter of safety, they have seen City and County trucks with drivers on the back of tailgates where they have had to stop and make corrections. Tipping hall safety is very important in general. Covanta has scheduled their hauler safety day for June 5, 2023, and distracted driving will be a major topic at the event. There will be food and drinks provided at the event, a safety card with stickers that have core rules, like an appreciation day but safety focused.

B. Public Initiatives

Cammarata sent the list of initiatives a week ago for this past quarter. Top events included the sustainability event that was held at the facility; that was their first and are looking into scheduling a shredding event for the fall. There was a record number of students that came through in March, the entire AP science class at Alexandria High School and a high school from DC; overall about 120 students in one week. Lee said there was interest from the fire department and hazmat staff that are interested in a tour. Once the schedule tour dates are open, new city council members will be able to join. Grabowsky stated that there are two new Arlington County Board Members starting next year and to expect Arlington to ask about the facility at some point.

Covanta's Public Outreach Initiatives:

3-Mar	Catholic University Environmental Science
14-Mar	Alexandria High School - AP Environmental Class
15-Mar	Alexandria High School - AP Environmental Class
16-Mar	Washington Latin PCS - AP Science Class
13-Apr	Northern Virginia Community College - Environmental Science
24-Apr	Junior Girl Scout Troop 60134
2-May	DC International School - AP Physics
9-May	AIHA Potomac
Events/Sponsorships	
6-Apr-23	COG Battery Disposal Campaign
6-Apr-23	Alexandria ACT Sponsorship
22-Apr-23	Earth Day - Sustainability - E-Waste and Battery Collections
6-May-23	Accotink Creek Clean Up

C. Open Discussion

Grabowsky asked if Cammarata could provide the County waste generation summary by month to validate against the County's data. Cammarata does not receive that spreadsheet and will send it to Grabowsky.

Previously there was a potential conflict with the August meeting date, but due to the availability of the majority of the all participants, the meeting with remain August 9th.

On a motion by Hughes, seconded by Grabowsky the meeting adjourned at 9:52 a.m.

The next Facility Monitoring Group Meeting is scheduled for Wednesday, August 9, 2023, and will be held as a virtual meeting.