FINAL MINUTES Waste-to-Energy Facility Monitoring Group MEETING

June 5, 2024 Reworld 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, Vijetha Huffman, Morgan Routt, Tarrence Moorer, Adriana Castañeda, Dan Domato, Kyle Perrin, and Abby Fleming. Don Cammarata and Peter Mayer attended the meeting from Reworld. This FMG Meeting was held as a virtual meeting.

I. Comments on Agenda

Domato requested to added new business items to the agenda: Reworld rebrand and housekeeping/siding cleaning. Removed update on update for Alexandria members from Old Business.

II. Approval of Final Minutes from the February 14th, 2024, Facility Monitoring Group Meeting.

Skrabak stated that under "new business" their name was pluralized and needed to be changed. Cammarata requested a change in the phrasing of processing approximately 130 wreaths under public initiatives. With these changes, Grabowsky motioned to approve the final minutes. Routt seconded. All in favor of approval.

III. Requisitions for Payment

The requisitions for payment that were submitted for approval totaled \$16,602.60. The sole invoice was the invoice for HDR Engineering, Inc. for the period January 28, 2024, to May 4, 2024, in the amount of \$16,602.60. Routt motioned. Grabowsky seconded. All in favor of approval.

IV. Operations and Facility Status

A. Summary of Plant Operations (by Reworld)

Mayer provided a brief update on the Plant Operations. They stated there was a large staff turnover, 6 people were hired, and there were 2 internal promotions. There was an event for Earth Day that Cammarata helped coordinate in April. There was electronics collection and the shredding truck available at the event.

Mayer discussed onsite safety, they continue to follow the approach of conducting audits and writing up "near misses". There were several minor first aid incidents in the quarter, all records were documented and there was no lost time.

Mayer stated there were no environmental exceedances for the quarter, continuing a great record. Stack testing scheduled and completed in March and in compliance. There was one slight change in process, otherwise all parameters were acceptable for the stack test. Grabowsky asked if HDR has received the results for the stack test yet. Mayer can provide if needed.

In term of operations and performance, the boilers are ranging from 91.4-93.8% availability year to date. The turbine availability year to date increased from 98.6% to 99%. Boiler No. 2 had its major outage in February where the feed chute and water jacket were replaced. Boiler No. 1 had a minor cleaning outage in March, per its regular cadence.

Skrabak asked about shredding event, if there were any traffic issues. Mayer stated that this was the second year doing the shredding event; last year there was little advertising, so it was not very well attended. This year there was more advertising and connecting with others in the community prior to the event. The attendance was still very low, less than 10 people showed up. Cammarata suggested working with an external group to help promote the shredding event next year. Skrabak stated about the office of climate change had an eco-festival, may be rebooting the event next year and will keep Reworld in the loop to partner with.

Huffman asked about the toxicity and replacement parts given the plant is over 30 years old and that corrosion is a concern. Mayer stated that there are several markets for original parts for manufacturing replacement equipment. Huffman asked if there are spares on site for critical items. Mayer stated that depending on the equipment, there are replacements quickly available inhouse.

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; two major scheduled outages during Quarter 3, Boiler No. 2 and Boiler No. 3, and a minor scheduled outage on Boiler No. 1. There was

a total of 631 hours of total downtime, and more than two-thirds was scheduled. Another large event was a black plant event in February, the report stated a switchgear outage and was unclear if it was planned or unscheduled. Mayer stated in the system there is redundant equipment, there is a two-transformer system to supply power to the plant. One of the transformers started to have issues, the facility switched to the other transformer. Mayer used the black plant for the day to be able to complete repairs on the transformer before returning back to normal operations. Reworld informed Dominion to service their onsite system and Reworld looked into their relays and other electrical equipment and general cleaning and maintenance. Mayer confirmed these were unscheduled outages. Dominion previously asked Reworld to go down into "island operations" where the facility only supplies facility's needs, Mayer stated that Dominion would need to do something on their transformer station. Huffman asked to confirm that these are step down transformers at the facility; Mayer confirmed they are step down and they are Reworld owned transformers. This outage accounted for about 100 hours of the 200 hours of unscheduled hours for the month because all three boilers were offline. The other 2 unscheduled outages included as tube leak on Boiler No. 2 ahead of the major outage, and a grate bar replacement on Boiler No. 1. Domato stated there was the turbine trip/switch gear switch over that brought both turbines down. Turbine 1 was put on standby during the Boiler No. 2 major outage. Overall, in Q3FY24, the average boiler availability was 90.2%. The decrease in availability is due to the scheduled outages and the black plant outage. There was minimal T-G downtime, the majority was due to unscheduled the switchgear outage. With the outages, the turbine availability was still as high as 99%.

In Q3FY24, the Facility processed 84,820 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 Q3FY24, the ash generation rate was 19.6% which is down 1.2 percentage points from Q3FY23, shown in Chart 2, and is very good compared to industry standard. Current metals recovery decreased by 0.4 percentage points compared to last year (Chart 3 Page 19). In Q3FY24, ferrous recovery averaged 3.1% (as a percentage of waste processed), we are seeing less solid product being produced from the combustion. Domato asked Mayer if they are seeing anything onsite that would fluctuate that? 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 and ash rates. Domato stated that typically with lower ash rates, there is generally a better energy content of the waste stream, however in this case, there isn't too much of a trend that follows that for an extended period of time. Mayer stated that it was a "wetter" winter and spring, it is difficult as there are many factors that affects production. Grabowsky stated that sometimes in the past, there has been a magnet performance issue, they asked if there is a way to

measure the effectiveness of the magnet that could be part of the challenge? Mayer stated that it is a natural magnet so the magnetism should not change other than the material being presented to it. Domato agreed with Grabowsky that there is a decrease overtime, however, the magnet was replaced very recently. Domato stated that the decrease is almost a half percent for ferrous recovery, but when the recovery is only 3%, the difference is equivalent to around 1,700 tons of ferrous per year. Domato stated that this is something to monitor and look more into the waste stream itself. Cammarata and Mayer stated that there aren't any major new large customers that would drive such a change. Mayer said if anything, they have been pushing for higher BTU to produce more steam and electricity. Skrabak mentioned the City stopped its spring household cleanup program, where they would have collected more metals, even though they would try to separate it out.

In Q3FY24, there was a decrease in steam production (Chart 4 Page 10) about 5.0% decrease compared to Q3FY23, likely due to the outages this year compared to last year. See Chart 13 (Page 18), Net Electric Recovery is about 7.6% lower where the Facility averaged 403 net kWh/ton which coincides with the boiler outages and the turbine standby time. Chart 14 Page 19 shows the turbine performance, where lower rates indicate better performance. For Q3FY24, a main driver was capacity, in general due to outages it is expected to be similar to Q2FY23. Huffman asked about the major maintenance on Turbine No. 2, it does not appear that there are any efficiency improvements since the overhaul. Mayer responded that they changed the media out of the cooling tower which can result in small pieces plugging the condenser. Reworld has recently cleaned out the condensers on both units, so there should be better performance in future data. Domato responded to Huffman's concern that we will continue to track the efficiencies of the turbine.

Domato discussed the utilities and reagent consumption shown in Table 4 Page 20. Fuel oil usage is over double as it was in Q3FY23 due to an increased number of shutdowns compared to Q3FY23. Skrabak asked if natural gas would be feasible to use rather than fuel oil to maintain temperature for start-up? Mayer is unsure about the surrounding gas lines and what the capacity would be needed. Skrabak stated that the nearby paving plant shifted to natural gas, and they saved a lot of money due to the decrease in the price of natural gas and might be something Reworld could look into. From Mayer's knowledge, he is uncertain about moisture content of the waste last year compared to Q3FY23. 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, Q2FY24, the Facility is slightly less but still approximately 2 lbs/ton for the facility.

Fleming discussed their site visit in May, focusing primarily on the punch list items. There are a few items on the punch list from 2016 that are still open, these are going on 8 years old, including the pavement cracking at the tipping floor entrance, deterioration in the SDA penthouse, and the siding deterioration on the baghouse. Domato will reach out to Mayer soon to set up a meeting to go over next steps with old punch list items. Last year the exterior walls were power washed, Fleming noted that the exterior walls of the Facility were looking dirty and asked if there was a plan to have routine power washing of the exterior walls. Mayer responded that the street side and one side washed prior to this meeting, the remaining looked in good shape before washing. One key driver is to have the facility look good to the public side. It is expensive to do the entire building at once, so it is planned to do the back walls. Fleming stated that the exterior entrance fencing looked damaged, Mayer is aware of the issue and stated that the fence still works properly and the main focus with fencing is in the back where an ash truck pushed the fence over. There is an area near Boiler No. 1 on the stairs that's caution taped off due to a hole, Mayer stated that there is a plan to repair. Fleming noted water boxes on Boiler Nos. 2 and 3 were full, there are new feed chutes installed during the past respective major outages. Boiler No.1 feed chute is scheduled to be replaced during the next major outage. The punch list item was updated to only Boiler No. 1 water boxes being empty. It appeared Boiler No. 2 auxiliary gas burner control panel appeared to be out of service, Fleming asked Mayer for an update on operation. Mayer stated that Reworld is updating the control panels to electronic controllers. Mayer lastly stated that there are concrete repairs planned in the budget, so the area of concern and an area into the pit is planned to be repaired soon.

V. Reworld Items

A. Supplemental Waste

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

B. Reworld Rebrand

Cammarata provided a background on the new name. The purpose of the rebrand was to consolidate all the services, former Covanta, provided under different trade names and different advertisements. Reworld was chosen because it illustrates the need to reimagine how waste is used and managed in society. All product lines now start with the prefix of "Re". Waste to energy is now a thermomechanical treatment facility which is a "redirect", redirecting waste from landfills. All jurisdictions had notification when the change occurred, a formal letter was sent. There is no change in structure. The changeover was rather quick, and all facilities are working diligently to remove old Covanta signage. One item, some clients reached out saying they were not receiving Cammarata's emails, due to all emails have converted to

reworldwaste.com, so emails may be in peoples' junk folders. Mayer stated all compliance documentation in the state of Virginia DEQ is being handled, there is a slight chance Reworld is asked to provide some type of counter signed acknowledgment from the City and County that they are aware of the name change. Cammarata has been in contact with the finance department, the business licenses have been changed and took effect. Skrabak stated that they have a special use permit, that may need to be updated with the name change, through the Office of Planning and Zoning, specifically Tony LaColla the Division Chief.

VI. Old Business

A. <u>Proposed MACT Rules</u>

Cammarata stated that the comment period did not get extended, and their last understanding was that final rules would be published towards the end of the year. Grabowsky asked Cammarata if there are any anticipated changes needed to the facility with current proposed considerations. Mayer agreed that the current system will be able to meet the new requirements, especially with the LN system installed.

VII. New Business

A. Public Initiatives

Cammarata sent the list of initiatives for this past quarter. They have ongoing commitments to volunteer at Alexandria Alive Food Pantry. There were a number of tours at the facility over the quarter including schools and colleges, Eisenhower National Defense School toured with approximately 10 students who are high ranking officers throughout NATO. The Facility continues to develop their relationship with the local American Legion #24 in Alexandria, and they also toured the Facility. In May, the outreach team was able to develop a relationship with the leadership at Samuel Tucker school and had four different sponsorships and participation in events at the elementary, including a 5k and a carnival. Cammarata wanted to point out concerns over the facility and what it meant to the kids on the playground, and that these will be addressed. Skrabak stated we can share the models of no exceedances in the air quality standards and most emissions would come out at the high elevation and sites at ground level close to the facility would not be affected anyways. The schools asked about if there is a need for emergency plans. Cammarata requested some involvement from the City to not counter any health department dictations.

Grabowsky asked if the Facility was recognizing Global Garbage Man Day. Mayer stated that they recognize the haulers on Hauler Appreciation Day and is unsure if those are the same day. Mayer also stated that there were a few visits from the fire department to be able to get the staff better acquainted, both meetings went well, and there is a continued good relationship.

Covanta's Public Outreach Initiatives:

Tours

2/22/2024	American Legion Local Post 24
3/22/2024	Eisenhower National Defense School -
4/4/2024	Northern Virginia Community College - Environmental Studies
4/18/2024	Northern Virginia Community College - Environmental Studies
4/24/2024	Latin High School - Washington DC

Community Service and Sponsorships

1/11/2024	Scholarship Fund of Alexandria
1/15/2024	MLK Day of service
1/17/2024	Legal Service of VA- Outreach
1/20/2024	WAA wreath disposal
1/30/2024	Alive Alexandria- Monthly Support
2/19/2024	Americana Drive Clean-Up
2/21/2024	Alive Alexandria- Monthly Support
2/24/2024	Black History Month- Gala
3/19/2024	Alexandria City's Manager Breakfast
3/26/2024	Alive Alexandria- Monthly Support
3/29/2024	National Vietnam War Veterans Day
4/2/2024	Alive Alexandria- Monthly Support
4/4/2024	Alive Alexandria Resource Fair
4/20/2024	Electronic Collections Drive

B. Open Discussion

Skrabak suggested the next meeting to be in person. Due to scheduling, the next meeting will be the third week in August, starting at 10am with the pre-meeting at 9:30.

Mayer stated a potential issue with the drop off in the variances in quantities per day. The scale house staff and signage work generally most of the time, but sometime there are materials in the wrong bin or small-time contractors that dump that dump their construction waste. Their question is, is there an entity to call to potentially track residents to be able to send information to. Skrabak said there is guidance on what is acceptable and what isn't, but as a private property there are not any city codes against policies/guidance on what's acceptable and if someone is documented not following the policy, we can collectively come up with future actions; is there a way to document the customers? Mayer stated they asked the scale house to provide information on loads, they don't want confrontation with the scale house and customers. Skrabak asked if there is a camera focused on the drop off area or any record keeping log of

who drops off the waste. Mayer responded that there is not at the moment. Skrabak stated that they are open to working with Reworld on how to better manage drop-off and can be an agenda item for the next meeting. It was suggested to incorporate a log to fill out before using the facility, other ideas are welcomed to be brought up at the next meeting.

On a motion by Grabowsky, seconded by Huffman the meeting adjourned at 10:23 a.m.

The next Facility Monitoring Group Meeting is scheduled for Wednesday, August 21, 2024, and will be held as an in-person meeting with a brief tour afterwards.