

FINAL MINUTES
Waste-to-Energy Facility Monitoring Group
MEETING

May 20, 2026

Reworld Alexandria/Arlington Waste-to-Energy Facility – Eisenhower Avenue
9:30 a.m. – 10:30 a.m.

Reworld Arlington/Alexandria Conference Room

The Facility Monitoring Group, City and County Staff, and HDR representatives present for the meeting included Flavio Goncalves, Adam Riedel, Morgan Routt, Howard Lee, Shani Kruljac, Emily Hughes, Vijetha Huffman, Alaeedin Mohamed, Dan Domato, Kyle Perrin, and Abby Secor (previously Fleming). Thomas DeMaio and Peter Mayer attended the meeting from Reworld. This FMG Meeting was held in-person at the Reworld facility with a virtual meeting option.

I. Comments on Agenda

No comments were added to the agenda. Goncalves motioned to approve the agenda. Kruljac seconded. All in favor of approval.

II. Approval of the Draft Minutes from the February 11, 2026, Facility Monitoring Group Meeting.

There were no changes to the draft minutes. Goncalves motioned to approve the draft minutes. Kruljac seconded. All in favor of approval.

III. Requisitions for Payment

The requisitions for payment that were submitted for approval totaled \$16,686.68. The sole invoice was the invoice for HDR Engineering, Inc. for the period January 25, 2026, to May 2, 2026, for \$16,686.68. Goncalves motioned to approve payment. Kruljac seconded. All in favor of approval.

IV. Operations and Facility Status

A. Summary of Plant Operations (by Reworld)

Mayer stated that this will be his last FMG meeting, as he is moving to another Reworld facility in Florida. A new facility manager has already been hired, James Richardson, whose first day will be June 1, 2026. He is a former Covanta/Reworld employee and previously worked at the Alexandria facility. There will be a few weeks of overlap to facilitate the transition.

Mayer provided the Facility safety update. There were no OSHA-recordable or first-aid incidents during the quarter. Companywide, Reworld is shifting from a rules-based organization to a behavior-based organization with respect to safety. Safety topics covered during the quarter included access to medical records, machine guarding, and confined space safety. Facility staff met

with the neighboring fire department regarding first aid and CPR training. The fire department requested an email from the City of Alexandria to support the training effort. Goncalves stated he will coordinate with the safety officers to help support this initiative. Mayer also stated that the Facility has continued upgrading to LED lighting to improve illumination and conserve energy.

Mayer discussed the Facility's environmental performance. There were three permit deviations during the quarter, all related to carbon monoxide (CO). A permit deviation occurs when a four-hour block exceeds 100 ppm. In each case, the Facility was only slightly above the limit, with four-hour averages of 117 ppm, 109 ppm, and 115 ppm. Typically, a permit deviation occurs when an event causes CO concentrations to exceed 2,000 ppm during a one-hour period, making it difficult to reduce the four-hour average quickly. The deviations were primarily attributed to wet waste, which created combustion issues. There was also one malfunction of an auxiliary gas burner during this period. When waste is excessively wet, supplemental heat is required to control CO levels. The final deviation occurred when a new boiler operator overfired a boiler. There was one CEMS sample line failure associated with the Unit No. 3 economizer. Although this monitoring line is not required by permit, Reworld utilizes it for operational monitoring. Repairs are ongoing and are expected to be completed this month. Reworld recently installed new CEMS equipment; however, without the sample line, the equipment cannot be operated. Mayer stated that stack testing was completed in March, and the Facility was found to be in compliance.

Mayer reported that the Facility received the Platinum Award from the Virginia Water Environment Association in recognition of nine years of good standing in water treatment operations. There were no violations identified by AlexRenew during solids inspections or water-quality monitoring. Reworld also submitted a sample to support the Chesapeake Bay Action Plan through the Virginia DEQ. This relates to a topic discussed at the previous meeting regarding nitrate and phosphate runoff, where measured levels appeared to be lower than those found in rainwater. Reworld has not yet received a response from the Virginia DEQ. In the meantime, Reworld is collecting rainwater samples around the site for comparison purposes, as there are no known phosphate sources on-site.

Mayer acknowledged that the long-standing silencer project for the ERVs has been completed. Two recent events occurred, and Reworld did not receive any complaints.

Mayer reviewed Facility operations for the previous quarter. There were two major outages and one minor outage during the reporting period. All four original transformers have been replaced, and there are no longer any rental transformers on-site. One turbine trip occurred during the replacement of a transformer. Otherwise, operations were normal for the quarter, with turbine availability at 99.7% and boiler availability at 90.8%, including scheduled outages. Mayer noted that major outages include additional work scope beyond typical maintenance activities. During

the outage on Boiler No. 3, Reworld replaced the ash discharger, which collects bottom ash and fly ash and directs the combined ash and metals to the ferrous magnet system. If the ash discharger is not functioning properly, poor housekeeping conditions can result. Ash dischargers on all three boilers are scheduled for replacement, with Boiler No. 2 planned for July or August and Boiler No. 1 scheduled for replacement in 2027. Mayer also stated that a full bag replacement was completed in the Unit No. 2 baghouse in February. Bag replacement cycles typically occur every four years and involve approximately 1,600 bags.

Mayer stated that the plant is operating well; however, since January there have been five explosions in the boilers that have caused operational issues. Although it is difficult to identify the source within the municipal solid waste stream, it appears that oxygen cylinders, NOx cylinders, and propane tanks may be entering the waste stream. Crane operators can usually identify and remove propane tanks before the waste enters a boiler. Waste from hospitals can be more difficult to identify because medical waste is often disposed of in standard trash bags. The Facility is currently returning Boiler No. 3 to service after replacing 36 grate bars that were damaged in an explosion. Reworld is working to better understand changes associated with new customers acquired since January. While the company has not been able to directly correlate the damage to specific deliveries, it would like to reinforce messaging regarding acceptable waste materials.

Goncalves stated that, through the Northern Virginia Regional Commission (NVRC), a battery awareness and recycling campaign is being developed to help reduce fires. He suggested collaborating with Reworld to obtain facility-level data on contaminants beyond batteries. Reworld indicated that companywide data may be available to support additional public education efforts. Secor asked for clarification regarding the outages associated with transformer installation activities. Mayer stated that the turbine trip and Boiler No. 3 outage occurred during installation activities, while the trip involving Boilers Nos. 2 and 3 was self-inflicted. Huffman asked about the configuration of the new transformers. Mayer explained that the four new transformers are step-down transformers used to support power generation equipment, including the two induced draft (ID) fans and the circulating water pump, which are major electrical consumers. Electricity exported from the Facility to the grid is provided through a direct connection, with no transformer located on Reworld's side.

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

Secor discussed the Quarterly Report and Performance Trends for the second quarter of fiscal year 2026, as well as data through March. Cumulative waste deliveries were comparable at 256,536 tons, as shown in Chart 9, for this quarter compared to the previous two years. There was a 4.5% increase in City waste, a 6.8% decrease in County waste, and a 15.8% increase in supplemental waste compared to the last fiscal year through March. As shown in Chart 1, there

were 84,780 tons processed in the quarter; 84,464 tons were MSW and 1,715 tons were special-handling waste, which was comparable to the third quarter of the last fiscal year (less than a 0.1% difference). For Q3 FY26, ash generation decreased by 0.1 percentage points compared to Q3 FY25 (20.0% compared to 20.1%). Secor stated that the metal quantity increased by 6%, and the recovery rate per ton processed for the quarter also increased by 0.2 percentage points to 3.1% compared to Q3 FY25. As shown in Chart 4, steam production was 1.4% lower this quarter compared to Q3 FY25 due to more boiler downtime and a lower HHV. The facility remains under the 12-month rolling steam production limit (at 99.9%).

Secor discussed turbine performance for Q3 FY26. The net electric recovery rate per processed ton was 409 kWh per ton and was 4.1% higher compared to Q3 FY25 due to more turbine downtime. As shown in Chart 14, the steaming rate was 12.4 lbs. of steam per kWh, which was 1.7% higher and is considered less efficient based on the lower steam temperatures during the quarter. Mayer stated that the TG-1 major overhaul is scheduled for October 2027 and the TG-2 major overhaul is scheduled for 2029. There will be a minor overhaul for TG-2 in October 2026. Major overhauls are completed every seven years and take approximately 25 days.

In Table 4, the utilities and reagent consumption data show that fuel oil usage was 89% higher than in Q3 FY25. Fuel oil accounted for 0.49% of the total heat input, which remains below the industry recommendation of less than 1.0%. There were fewer startup and shutdown events, which would typically affect usage; there were eight events in Q3 FY26 compared to nine events in Q3 FY25. Mayer stated that the increased fuel oil usage was due to significantly wetter incoming waste, which required additional fuel to maintain proper combustion. Boiler makeup water also increased by 21%. Secor asked if there was a reason for the increase; typically, major outages contribute to increased usage, but there were major outages during the comparable quarter. Mayer did not have a specific reason other than filling the boilers after outages.

Secor reviewed availability for the quarter; boiler availability was 91% and turbine availability was approximately 99%. There were a total of eight outages and a total of 593.4 hours of boiler downtime, with no standby time. Scheduled downtime totaled 546 hours, representing 92% of the downtime, and was associated with the major outages on Boiler Nos. 2 and 3 in February and January, respectively, as well as the cleaning outage on Boiler No. 1 in March. Secor stated that the major work for Boiler No. 3 included replacement of the baghouse troughs and screws, replacement of the primary and last-pass superheater terminal tubes, and replacement of the ash discharger and discharger vibrator. Secor stated that the major work for Boiler No. 2 included a complete baghouse bag change-out (1,596 bags, no cages), replacement of the primary and last-pass superheater terminal tubes, and replacement of two waterwall panels. Mayer stated that, during

the Boiler No. 1 cleaning outage, the feed table was replaced. Secor stated that unscheduled downtime totaled approximately 139 hours, representing 8% of the downtime. Boiler Nos. 1 and 3 were affected by the switchgear failure in February. Boiler No. 3 also experienced downtime due to a trip associated with the transformer replacement. Boiler No. 2 had two events due to grate bar failures in January and February. Mayer stated that grate bar failures resulting from internal explosions have become more frequent. The turbines experienced two unscheduled outages totaling 15 hours, including condenser cleaning and the switchgear failure during the transformer installation.

Secor moved the punch list to Smartsheet and will share it with FMG and key Reworld staff. Reworld staff will be able to add comments to individual items regarding expected repair/completion dates or indicate whether items have been addressed. Secor discussed the March site visit and the deficiency table. Four items were closed:

- 0521-01: Feed Chute Cooling Jacket Water Level Reservoirs (typical of 2) empty on Boiler No. 1
- 1224-01: Boiler No. 1 side wall of feed chute corroded/deteriorated
- 0126-02 and 0126-03: Unit 2 and 3 Transition Chutes damaged/deteriorated

Four items were added:

- 0326-1: Settling basin pump out of service
- 0326-2: Side bar of truck scale damaged
- 0326-3: Missing window in tipping hall
- 0326-4: Floor grating needs repair near Boiler No. 1 auxiliary burner

Huffman asked if the feed chute on Boiler No. 3 was replaced in 2024, how it could already be in its current condition. Mayer stated that there are many possible causes, including fire backup or material being dropped into the chute, which can cause distortion. DeMaio asked how often the punch list would be reviewed. Secor stated that HDR will now be attending the site monthly and will update the punch list, as needed, during each monthly site visit.

V. Reworld Items

A. Supplemental Waste

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

VI. Old Business

A. Virginia Clean Economy Act

DeMaio is working with several MBA students from the University of Virginia. They do

not anticipate any immediate impacts at the Alexandria facility but are exploring opportunities at the Fairfax facility to research and model anaerobic digestion and evaluate what implementation of such a system could look like.

B. AlexRenew Biomass Material

Reworld has been in discussions with AlexRenew regarding a long-term opportunity. AlexRenew would like to move away from Synagro and eliminate land application. Reworld has held multiple meetings with AlexRenew and will be testing some of their non-dried materials at the Fairfax facility next month. Goncalves asked whether there is an intention for AlexRenew to enter into a long-term agreement to dispose of solids at the Alexandria facility. DeMaio confirmed that there is, noting that the timeframe would likely be around 2028 or 2029. In the interim, disposal at Fairfax is more imminent due to the wet nature of the material, compared to the future plan of drying the material before it is delivered to the Alexandria facility.

Mayer stated that Reworld is also exploring another opportunity involving the use of recycled water from AlexRenew's digestion process. They are considering piping the water to the Alexandria facility, which is approximately five miles away. Reworld would likely consume about half of the water produced, while the remaining half is being considered for distribution for community irrigation. The concept involves utilizing approximately 500,000 gallons per day. Reworld would need support from local stakeholders to install a pipeline along Eisenhower Avenue. Mayer noted that this is a long-term project that will require extensive water sampling to determine whether the water is suitable for use in the cooling tower.

VII. New Business

A. MACT Update

Secor stated the Waste to Energy Associations has published the updated MACT regulations. Mayer stated the facility just renewed their air permits for another five years, so the new MACT rules should not affect the facility for at least another five years.

B. Public Initiatives

Reworld's Public Outreach Initiatives:

Community Service and Sponsorships

2/17/26	Local Little League Meeting
2/11/26	Arlington Community Meeting
2/12/26	Sponsored Sam Tucker Elementary School Sweetheart Dance
2/25/26	Alexandria Alive Food Hub

2/28/26	Black History Month Gala
3/13/26	Virginia Virtual Academy
3/17/26	Potomac Green Adventure Club Tour
3/31/26	Alexandria Alive Food Hub

C. Open Discussion

DeMaio stated that Reworld was contacted by a battery recycling organization, COG (Council of Governments), primarily regarding the Fairfax facility, as Fairfax County had previously contributed to the organization. COG is conducting a campaign focused on battery fire prevention. DeMaio asked whether Arlington or Alexandria would be interested in contributing to the effort. Lee stated that the campaign is primarily social media-based, with a focus on Facebook. COG's messaging is centered on removing batteries from recyclable materials, which is an area where Reworld may be able to provide guidance and support. Goncalves stated that the role of the jurisdictions is to provide guidance on their own programs and identify available battery drop-off locations. He noted that vape pens are becoming more prevalent but present a challenge because nicotine is considered a hazardous substance. If vape pens are collected as waste at a commercial site, the site would require a TSD permit, which vape shops are unlikely to obtain.

Last year, shredding events were discussed by the group. Alexandria began holding shredding events twice a year and has seen increased participation. If Reworld would like to host a shredding event at the facility, it would be beneficial to collaborate with Alexandria.

Lee stated that the City has several summer interns and would like to arrange tours of the facility. The executive team, including the Mayor, remains interested in a tour that was postponed due to the snow event in February. Goncalves will coordinate with the City Council members regarding scheduling. DeMaio stated that tour dates should be coordinated with him and noted that the maximum tour size is 20 people.

On a motion by Goncalves, seconded by Kruljac the meeting adjourned at 10:40 a.m. The next Facility Monitoring Group Meeting is scheduled for Wednesday, August 12, 2026, and will be held virtually.