

FINAL MINUTES
Waste-to-Energy Facility Monitoring Group
MEETING

November 21, 2025
Reworld Alexandria/Arlington Waste-to-Energy Facility – Eisenhower Avenue
9:30 a.m. – 11:00 a.m.
Virtual

The Facility Monitoring Group, City and County Staff, and HDR representatives present for the meeting included Flavio Goncalves, Morgan Routt, Alicia Saracina, Howard Lee, Shani Kruljac, Emily Hughes, Alaeedin Mohamed, Kyle Perrin, and Abby Fleming. Thomas DeMaio and Peter Mayer attended the meeting from Reworld. This FMG Meeting was held as a virtual meeting.

I. Comments on Agenda

No comments were added to the agenda.

II. Approval of Draft Minutes from the August 13, 2025, Facility Monitoring Group Meeting.

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

III. Requisitions for Payment

The requisitions for payment that were submitted for approval totaled \$19,766.88. The sole invoice was the invoice for HDR Engineering, Inc. for the period July 27, 2025, to November 1, 2025, for \$19,766.88. Kruljac motioned to approve payment. Routt seconded. All in favor of approval.

IV. Operations and Facility Status

A. Summary of Plant Operations (by Reworld)

Mayer introduced Tom DeMaio who will take over for Don Cammarata as the asset manager.

Mayer discussed the Facility safety update. There was one OSHA recordable incident, related to a slip/trip. The employee stepped on a grate which tipped up, and their leg went under the grate. The employee came back to work with no lost time. This resulted in the Facility repairing some concrete and replacing several grates where there is heavy forklift traffic. Safety topics covered in the quarter included emergency action plan, hearing conservation, and portable fire extinguishers. There were several employees who went to the Montgomery Facility to complete confined space rescue training. The Facility continues to improve/replace lighting from mercury vapor to incandescent lighting.

Mayer discussed the environmental update for the Facility. There were no NOVs for the quarter and a number of permit renewals. The Title V permit from Virginia DEQ was validated and continues now until 2030. The Facility passed the Virginia DEQ solids inspection and water inspection with Alexandria ReNew. The Facility received from Virginia DEQ failure to reduce stormwater nitrogen phosphorous in 2024 by the Chesapeake Bay Action Plan. Reworld collects and submits stormwater samples; DEQ responded stating that levels have not been reduced; Reworld responded stating they are not a point source of either material. Reworld is conducting a study where they are measuring the rainfall in their parking lot and across the street and comparing it to the levels onsite. If the nitrogen and phosphorus levels are similar, they cannot reduce the levels anymore unless a water treatment process is installed to comply. Kruljac asked if this is something Reworld has had to deal with in the past. Mayer responded saying the testing and submitting results has been ongoing, but was unaware that in 2024, there was a focus on reducing their nitrogen and phosphorous containing constituents by 10%. Mayer stated they received a letter saying they did not achieve their 2024 goal and are at risk of not achieving the 2025 goal which is further reduction. Mayer said they responded saying the facility does not have any point sources on site that would contribute to the nitrogen/phosphorous content, so they are currently in discussion with the DEQ on how they are expected to resolve this issue. Mayer stated they are not exceeding any water quality standards, Kevin McGunnigle, Reworld's Area Environmental Manager, stated the limits the DEQ is requesting is better than the water quality requirements.

Mayer discussed the operations from the previous quarter. There was a steady performance with a boiler performance of 93.3% and turbine performance of 98.7%. The summer was very wet which resulted in a higher than normal fuel consumption to maintain boiler temperatures. There were a few cleaning outages in July (Units 1 and 2) and September (Unit 3). The stainless steel make up tank had a crack at the bottom which started leaking (15,000 gallons a day). Reworld had to implement a third rental transformer due to end of life condition of the current transformers. A new transformer has been delivered, and it is currently in their warehouse. The other two transformers will be delivered in December and January. Installation of the transformers will take place in January. There was a storm in June that ripped up a section of the roof and window in the tipping hall; these items have been repaired. The annual concrete repair on the tipping floor has been completed. The stack lining is currently finishing up with final painting and insulation work and will be completed by the end of the year.

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

Fleming brought up the draft 2025 Annual Executive Report and asked Reworld representatives if there were any questions or comments on the report. Mayer stated they had no comments. DeMaio has not had a chance to review the report and will respond via email. The FMG group will vote to approve the draft via email.

Fleming discussed the Quarterly Report and Performance Trends for the first quarter of fiscal year 2026. Cumulative waste deliveries were slightly lower, 85,705 tons seen on Chart 9, for this quarter than the previous two years, but City and County waste deliveries were comparable and may be a change in supplemental waste. See in Chart 1, there was 88,794 tons processed in the quarter, 85,705 tons were MSW and 1,486 was special handling waste which was comparable to the first quarter of last fiscal year (less than 0.1% difference). For Q1FY26, the ash generation decreased by 0.9 percentage points compared to Q1FY25, however, July had a historic low ash generation rate (16.4%). This historic number was also seen in steam production in July despite an identical amount of waste processed to July 2024. Fleming asked Reworld if this was an entry error or if there was anything significant at the facility to cause this. Mayer mentioned that July was the wet month, when trucks go across the scale, water was not taken into account to the incoming waste so they were making more steam not in the boiler but out the stack. If there is 10% moisture, there will be a reduction of ash and heat input. Fleming also stated ferrous was affected, overall the quantity increased by 2.1% and recovery rate for the quarter was the same as Q1FY25 at 3.2%. In Chart 3, July shows a very low ferrous recovery rate. Mayer stated this continues to be the result of less physical waste processed in the month. There was a magnet check earlier this year and the tip of the conveyor replaced, any ferrous on the belt is being captured. As seen on Chart 4, steam production was significantly low in July due to the wet waste, and overall 4% lower in the quarter compared to Q1FY25. Also attributable was the lower HHV (2.5%) and more boiler downtime in this past quarter due to the cleaning outages. The facility remains under the 12-month rolling steam production limit (at 99.9%). All months have remained below the limit.

Fleming discussed the turbine performance for Q1FY26. The net electric recovery rate per processed ton was 403 kWh per ton and 0.8% higher compared to Q1FY25 due to less turbine downtime. Seen on chart 14, the steaming rate was 12.7 lbs. of steam per kWh was 0.9% lower, which is considered an improvement, based on the minimal turbine downtime.

On Table 4, the utilities and reagent consumption show fuel oil usage is 61% higher than Q1FY25, this is due to the number of outages and the significantly wet waste in July. The fuel oil was 0.32% of the total heat input which is still less than the industry recommended of less than 1.0%. The number of start up and shut downs also affected the usage, there were 14 events in

Q1FY26 compared to the 7 events in Q1FY25.

Fleming reviewed the boiler availability which does not consider standby time. For the quarter, boiler availability was 95% and turbine availability was 99%. There was a total of 14 outages, a total of 478.7 hours. There were two instances of standby, 145.5 hours, due to permit compliance, Reworld responded via email that Boilers 1 and 2 were taken offline as to not exceed their permitted monthly limit. Rather than operating all units at a lower steaming rate (low efficiency), Reworld took two units offline to keep the other unit running efficiently. Scheduled downtime, 243 hours, was 50% of the downtime, for the cleaning outages and the minor outage for Unit 3 in September; Fleming asked Reworld if there were any major repairs or discoveries during this outage. Mayer stated no major maintenance was required, the feed chute replacement for Boiler No. 3 is planned for its next major outage. Unscheduled downtime was about 90 hours, 19% of the downtime, for various reasons; there were two black plant events due to transformer failures. As previously stated, new transformers will be installed in late January. There is a fourth transformer that is also reaching end of life, the new transformer has gone through procurement. The turbines had four outages for a total of 71.4 hours, one of which was standby due to no steam during the Unit 1 outage in July which was 67% of the turbine downtime (48 hours). Unscheduled downtime was caused by condenser tube failure/pluggage and the switchgear failures. Mayer expanded on the condenser tube pluggage stating that the media was replaced last year, when the efficiency goes down, the media is typically plugged 5-10% so Reworld takes the turbine offline to clean the media. Mayer stated the dump condenser is scheduled for replacement in 2026, there is a six month lead time due to procurement.

Fleming discussed their site visit in October and the deficiency table. HDR met with Reworld staff and their new maintenance manager, Michael Huggins, and discussed long term items on the deficiency table. HDR plans to shift the punchlist to SmartSheet, a web application which will allow for more transparency of the punchlist between HDR, Reworld, and the FMG. There were eleven items that were closed either through conversation with Reworld or through visual observations during the site visit. One new item was added to the deficiency table on this visit, the lower lime silo floor showed significant corrosion. Mayer stated there was a structural engineer to observe what the repairs would look like; it is on plan to be completed in 2026. The stainless-steel tank has not been inspected in some time. Drainage and repairs will take approximately a week, planning for operations of the lime slurry system for the week is ongoing. Fleming stated they will likely come back to the facility the week of December 15th.

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 will have an update at the next FMG Meeting.

B. AlexRenew Biomass Material

Goncalves stated there is an internal meeting on December 4th to understand the next steps with AlexRenew and will provide Reworld with necessary information.

VII. New Business

A. MACT Update

Fleming stated SWANA's update on the MACT rules is that they should be published sometime in December. DeMaio stated there is no further update from Reworld but can inquire with their sustainability team.

B. Public Initiatives

DeMaio stated Carolyn Cruz, Reworld's community affairs personnel, is no longer with Reworld. Once there is a replacement, DeMaio will have them involved in future FMG meetings.

Goncalves stated that there is a desire to host a facility tour for City Council members to better understand the facility. Mayer stated that there should be a maximum of 20 people. The February outage should be complete mid-February and suggested availability during the week of February 16th or 23rd.

Reworld's Public Outreach Initiatives:

Community Service and Sponsorships

7/2/25	Alexandria Food Hub Support
7/16/25	Alexandria Police Department Meeting
7/28/25	ACPS Sponsor
8/5/25	National Night Out in Alexandria
8/6/25	ACPS Back 2 School Drive
8/12/25	Alexandria Alive Grocery Distribution
8/14/25	Ecology Field Trip Volunteer Training
9/11/25	Alexandria Gravesite Clean Up
9/12/25	Alexandria Food Hub Support

C. Open Discussion

Mayer stated there was a question if AlexRenew could send Reworld their gray water instead of using potable water to meet their cooling tower needs. The issue would be how to transport the water from the facilities. There may be a very high-level engineering study to evaluate a pipeline to supply Reworld directly. AlexRenew offered to fund this study themselves.

Goncalves asked about excessive heat that the facility generates, based on other plants in Europe that were brought up in the NVRC. Mayer stated that there isn't typically excess steam, they try to convert all the steam, they are at 85-90% at capacity almost all year. They have 10-15% capacity to make more steam, but they are held back by permits.

Kruljac asked if Reworld has any plans to increase their steam rate or any plans to accommodate the loss of income from zero tip fee that started last month. Mayer stated they are looking into high profiled waste; in the DC area, many people are looking for assured destruction of their waste.

Fleming stated due to the planned outage, the next FMG meeting is best to stay as a virtual meeting.

On a motion by Goncalves, seconded by Kruljac the meeting adjourned at 9:56 a.m. The next Facility Monitoring Group Meeting is scheduled for Wednesday, February 11, 2026, and will be held as a virtual meeting.