

Montgomery County
Integrated Waste System Strategic Plan Task Force¹
Meeting Notes
May 29, 2019

Attending: Chaz Miller, Lauren Greenberger, Ken Lavish, Keith Levchenko, Sara Bixby (phone)

Montgomery County Department of Environmental Protection (DEP)- Division of Solid Waste Services (SWS): Patty Bubar, Marilu Enciso, Willie Wainer

- Montgomery County Staff
 - Adriana Hochberg, County Executive Office
- Laura Van Etten, sitting in for Caroline Taylor
- SWAC: Kelly Doordan
- Northeast Maryland Waste Disposal Authority: Kitty McIlroy (phone)
- Speaker: Jeff Martirano, HDR (phone)

1. Called to order by Chairman Miller at 5:30 p.m.

Miller amended the agenda to allow Martirano to speak first.

2. Discuss Task Eight Report – Jeff Martirano, HDR

Presenter Jeff Martirano served as the task lead for Task 8 – assessment of the physical and operating condition of the County’s four primary facilities. The HDR team’s site observations led to recommendations and cost estimates for capital refurbishment to keep facilities operating as late as 2040. He said he wouldn’t go into detail on the RRF or yard trim facility due to the ongoing negotiations. Key observations and recommendations cited during the presentation are:

Shady Grove Processing Facility and Transfer Station (TS)

Observations

- Covanta and County run a very good operation
- A lot of processes and functions going on given quantity of material handled. The Transfer Station is crowded with commercial and residential vehicles commingling throughout the site
- Work is ongoing to increase site safety (e.g. striping lanes for different types of customers, etc.)

Recommendations

- A long term safety recommendation is to relocate some of the TS operations over to the MRF site (if it’s operations are moved) or another off-site location.
- Given the age of the equipment, recommend scales, scale house, and all ancillary equipment be upgraded

¹ May 30, 2018 Memorandum from Isiah Leggett, County Executive, to Hans Riemer, President, Montgomery County Council

- Need to replace all four waste compactors over the next five to six years. Standard life expectancy is 15 to 20 years, and the existing units exceed that.
- Capital investment is needed for floor and roof repairs; sewer and HVAC upgrades
- Rail car and container inventory are replaced on a recurring cycle that will need to continue

Materials Recovery Facility (MRF)

Observations

- Runs well, but the equipment is old, and the components are obsolete. Lack of redundancy in various processing components affects the processing line causing downtime in a single unit to shut down the entire line.
- Limited storage space on site and so with downtime, the operation is rapidly forced into a bypass situation. Also need more storage space to store materials that does not accumulate quickly (e.g., black PET) until a full truckload is ready to ship
- Sized to process 80 TPD; currently receiving 120 to 130 TPD
- Currently bypassing 13,000 tons of material to the much newer Penn Waste MRF (recycling facility) in York, PA

Recommendations

- First: update and upgrade processing equipment. Install a modern MRF processing line, automated sorting equipment to sort a variety of plastics; remove glass at the front end. The facility needs an infusion of capital.
- Long-term recommendation: find a new site to build a new site. Larger footprint, larger building, designed to meet current and future needs
- Scale systems and ancillaries need to be replaced and expanded
- Stormwater, sewer and fire protection systems need to be upgraded

Montgomery County Resource Recovery Facility (RRF)

Observations

- In reasonable condition given its age. During the past 2 to 3 years, it has received a significant injection of capital to improve reliability and performance
- The County is currently in negotiation with Covanta for additional improvements to cover the duration of the service contract

Montgomery County Yard Trim Composting Facility

Observations

- Scales and ancillary systems need replacement; data lines need to be improved
- Storage tank replacement project
- The current stormwater permit expires this month, and a new permit may raise the effluent runoff standards, which could also add capital requirements
- Structure in good condition

Discussion:

Q – Greenberger: What happens to the 13,000 tons sent to the MRF that have to be bypassed to PA? A – Wainer: It goes to Penn Waste, York, PA, for processing as recyclables. That’s a newer facility with a lot of capacity.

Q – Greenberger: What is black PET? A: Colored PET (same plastic as water bottles) but not much used. Found in very limited quantities and there’s no market for it currently.

Q – Greenberger: Is the RRF operating as best in class per the HDR report? Is it on a par with Palm Beach County A – Martirano: It’s absolutely under the permit emissions limit, but he doesn’t know the permit levels for the Palm Beach facility. He searched the report for wording and found a phrase that says “*a refurbishment project was needed to return the RRF to best in class condition.*” He said the operator is working toward that standard.

Q – Greenberger asked when ownership of the RRF would shift to the County? She thought it was when the County paid off the bonds, which has now occurred. A – Wainer: The RRF is still owned by Authority, per the contract, but at any time, it could be transferred to the County for \$1 purchase price. He needs to review the language. The Authority, rather than the County, has the operations contract with Covanta.

Q – Miller: MRF needs – As I was reading the report, it screamed at me. Why are we refurbishing the old facility? Wouldn’t it make more sense to build a new facility immediately? A – Martirano: Finding and purchasing land; siting, designing and building a new facility and permitting afterward requires a minimum of seven to 10 years to get an operating facility. If it’s that long, refurbishing the current facility with equipment that has a 10-year life makes some sense. A- Wainer: Making some smaller investments into processing glass at the beginning of the system rather than the end could improve capacity/throughput of the current MRF from the current 8 – 10 TPH up to 15 or 16 TPH, which means fewer recyclables that are bypassed, thus saving money while waiting for the new facility to be operational.

Q – Miller: Does the facility need to be closed temporarily to refurbish? A – Wainer: Yes, though it’s possible to do the work in stages (bypass material to other entrances) to minimize total shutdown to an estimated 3 to 4 months. The County is currently looking at manufacturers who can make these improvements.

Q – Lavish: Do we have any projections of additional material flows to the MRF and will the current facility be able to handle the growth? A – Wainer: The new facility will be able to handle it and the County is calculating the equipment/space needed for increased tonnages in the future due to population growth, more participation, etc.. The new facility will be built to 230 to 250 TPD. The current facility can’t expand that much.

Q – Levchenko: What’s the payback on the investment for the current MRF? A – Wainer: 2 to 3 years; \$6 to \$7 million improvement costs by taking care of glass at the beginning of the process (e.g. like Penn Waste), improving processing speed and accuracy and not bypassing commingled material that includes 50 to 55% of glass by weight. Additional discussion regarding glass processing and policy alternatives to the need to process glass.

Q – Greenberger: Underground storage tanks (UST)? A – Martirano: It used to be common to bury tanks; now it’s common to keep them above ground.

AQ – Greenberger: Are there problems with effluent runoff, leaving the site, affecting local streams or groundwater from the UST? A – Martirano: My point was that the new permit might set more stringent limits I didn't mean to imply there were problems with water leaving the site. An HDR subcontractor noted iron and phosphorous levels were a bit higher than typical but not above current limits. More stringent emission standards in a new permit may create a need to add controls to comply with new limits, which would have a cost. That's all speculative at this point.

Q – Greenberger: The report says Covanta's housekeeping issues in the RRF haven't been resolved. A – Martirano: Covanta installed a semi-dry ash system that can at times let the ash become dry and airborne within the facility, allowing it to settle on surfaces, the floor, etc. HDR recommends cleaning that up more expeditiously through industrial vacuuming or hosing off the floor. Housekeeping is an improvement area.

Q – Lavish: About the flow of plastic bags and non-compostable material as residue from the Yard Trim facility. A – Wainer: There's a minimal quantity, and he will check, but he believes it is sent back to the Transfer Station rather than directly to the RRF.

Q – Bixby: Could we increase MRF capacity (to avoid bypassing waste) by running 1 ½ or 2 shifts per day rather than just 1? A – Wainer: The County has considered it already. The downtime is needed for proper maintenance every day so that equipment is operational and safe for the next day. Some parts have to be made/welded in-house because you can't buy them anymore. More maintenance staff and practices have already been implemented to keep things running.

Q – Greenberger: Is there a great MRF operating somewhere in the country or the world? A – Martirano: MRF technology is constantly evolving. About every two years, MRFs or their equipment become outdated, since manufacturers are constantly putting out new equipment and MRFs are constantly updating themselves. Look at new facilities across the country and in Europe (which has strong dual-stream MRF systems). CT has a strong MRF that is used as a showcase facility, with not a lot of manual labor. Penn Waste in PA is also a good example, although 2 years from now it may not be considered so. A lot of MRFs are on the same timeline as Montgomery County's MRF, where they are all aging out, meaning that 10 years from now a lot of facilities will be brand new or heavily retrofitted. The bigger problem is the need to develop markets for the materials on the back end. It doesn't do any good to sort material if you don't have buyers. Look for technology to develop that allows certain materials to be turned on or off in the processing system depending on market availability. It's not possible to do that in a retrofit, but could be in a new County MRF.

Q – Miller for Levchenko: How does the schedule in the report fit with County timing. A – Levchenko: We don't even have a project yet. A - Martirano: I put the schedule (Table 2-2 page 9 in the report) together assuming a start six months out, without checking County schedules. Levchenko – doesn't seem to be a particularly difficult project. The timing allowances are probably ballpark if you don't run into any problems along the way.

Martirano signed off at 6:35 p.m.

3. Approve minutes from the May 8 meeting.

No comments or corrections were received. Lavish moved, and Miller seconded to approve the minutes from the May 29 meeting. It was carried unanimously.

4. Update on status of Task Force priorities

The latest update of Task 9 will be delivered to County staff by the end of July. This means that it might be available to Task Force members around August 10 with the final plan expected sometime in September or October.

Miller reviewed the proposed presentations, schedules, and arrangements:

- Update on Jeff Morris availability for a GHG modeling presentation: Greenberger wants the presentation to a broader group than just the Task Force – County Council, etc. Levchenko made the case that a presentation to the Task Force doesn't preclude a formal Council briefing later when the issue is timely for the Council. Bubar clarified that Greenberger wanted an evaluation of models other than WARM, the model used by the EPA nationally. Levchenko said that if Morris had a particular point of view, the Task Force would also need to hear from a defender of the WARM model. Miller said he would work on getting somebody from EPA and we will pursue scheduling an in-person presentation on June 10th or 12th.
- Possibly have presentations on anaerobic digestion and the Prince Georges aerobic facility on July 10th.
- August 14th – too soon for a meeting if receiving Task 9 report on August 10th. Miller will **ask people to check availability and vacation calendars for the latter half of August – 21st or 28th. Respond directly to Chaz.**

5. Public Comment

Kelly Doordan – SWAC has been trying to organize a presentation on life cycle analysis. It is not yet set up so SWAC members will be interested in the GHG modeling discussion. She also asked about the residue rate at Penn Waste? A – Wainer: at any facility, 8-16%. Bixby – recent report, 15 to 25% tops, most MRFs (80%) currently running under 20% contamination.

- **6. Call adjourned** - Greenberger, Lavish to adjourn at 6:57 p.m.