

The present Federal regulation is established to regulate non-methane-organic-compounds (NMOCs). However, MDE has designed a regulation, that MDE intends to submit to EPA as the “State Plan” which will supersede the Federal Regulations (that is by design) and are significantly stricter.

The new MDE regulation regulates methane specifically. This is not required by the EPA, but in the larger scheme of things is the correct approach for climate change. The issue is that it regulates landfills at a significant cost, and yet no program has been designed to offset those costs. In addition- there is not sufficient research on these measures to demonstrate they will functionally reduce methane emissions. There is significant research to demonstrate that alternative destruction of waste (re: burning) is far worse for the environment, and to demonstrate the best way to reduce methane emissions is to keep food waste and other methane producing waste items out of the landfill.

The regulation as written impacts both our open(BSRSL) and closed (SHCDP) landfill. Overall, these regulations will have significant impact for the County – in potential capital costs, monitoring costs, and time- we can expect the annual costs of operating the landfill to increase by at least 20% and there to be numerous capital projects required to meet these standards. **We estimate the costs of these regulations as written to be at least \$300-million dollars.**

### Flaring

- Gas that is not used by our capture system is currently flared. These proposed regulations phase out open (candlestick) flares, which directly impacts SHCDP. While there is language that operation of a candlestick flare may be considered, it is not guaranteed and the County very well may have to invest in an enclosed flare by 2025. A ballpark estimate for installing a new enclosed flare is about \$2M, not including design and permitting.
- Moreover, it requires that the control devices achieve a methane destruction efficiency of at least 99% by weight—this might even be an issue for the enclosed flares and other control devices at BSRSL, we are working to figure out this impact. Our flares have an NMOC destruction rate of 99% while their methane destruction rate is 98%. Additionally, the open flares at Sandy Hill will likely need to be replaced by 1/1/2025, 05(2)(f), unless it gets an exemption outlined in 05(2)(i-g).
- Presently, control devices (e.g., flares) are stack tested upon installation; i.e., only once in their lifetime. This change requires stack testing every year. A ballpark estimate for stack testing is \$10-20k per device.

### Monitoring

Both SHCDP and BSRSL will be significantly impacted by additional monitoring requirements.

- All LFG components under positive pressure, including pressure piping, boilers, flares, compressors, and potentially even engines and boilers, will need to be monitored quarterly for leaks.
- The SEM monitoring routes at both sites will need to be reconstructed and the walking patterns will increase from every 100-ft to every 25-ft. As you can imagine, this requirement would unnecessarily quadruple the time it will take for our staff to do their monthly monitoring. As an

example, it presently takes our technician about 1 week to perform an SEM monitoring event at BSRSL. This changes could easily require 1 month to complete a monitoring event each quarter, or 4 months of walking each year.

- The regulations will require hiring of personnel, putting in place additional record keeping and monitoring wells and systems, every 25-ft instead of every 100-ft, which is very costly. Currently, the cost of constructing a well is about \$10-\$15k per acre for about 1 well per acre. Assuming a requirement of 1 well every 25 feet, it will be 72 wells per acre or \$720K per acre (at \$10k per well). This translates to \$205 million in additional costs for BSRSL and \$93 million for Sandy Hill. On the other hand, the cost of maintaining so many additional wells and systems will impact the County's budget significantly at a cost of \$120,000 yearly.

### **Gas Collection and Control System Phase Out**

- For removal of the gas collection and control system, the proposed MDE limit is set to 732 tons per year of methane generation. This proposed change is substantial (maybe an order of magnitude less) compared to the present Federal regulations. In effect, it will be decades before either SHCDP or BSRSL could get to this point, if ever.

DoE recommends:

- MDE failed to include stakeholders (re: government operators of landfills) in the development of the regulations, these regulations cannot be issued without a new working group- to develop regulations that actually work for emitters. The choice of the present administration to exclude operators from the process was a willful action, not an oversight, and renders the regulatory development process improper.
- MDE, US Department of Commerce, US EPA, University of Maryland, Prince George's County and US NOAA are scoping a study for BSRSL that will identify the best methods for landfill monitoring and determine the impact of cover on landfill emissions. These regulations should remain in draft format until that study is complete and its outcomes can be included in the regulations.
- Alternative Compliance: specifically permit a waste diversion program as an alternative compliance mechanism and defined how it applies. For example, our program, designed to reduce food waste entering the landfill will have a much more significant impact, than improving the LFG system in areas of the landfill already complete.
- Application: These regulations should apply only to landfills constructed or reconstructed after January 1, 2025.
- Open Flare: Operators with a current open flare system be permitted to operate the open flare for the remaining lifetime of the device for a closed landfill, or at least until January 1, 2030. (currently January 1, 2025)
- Stack Testing: Stack testing should occur every 5 years, not annually.
- LFG Systems: For existing LFG systems, monitoring should remain at 100 ft.
- We seek a permit to install solar panels on SHCDP before July 2024 (based on this excluding the site from the regulation).
- Gas System Phase Out: Should be permitted at current federal levels for closed landfills.