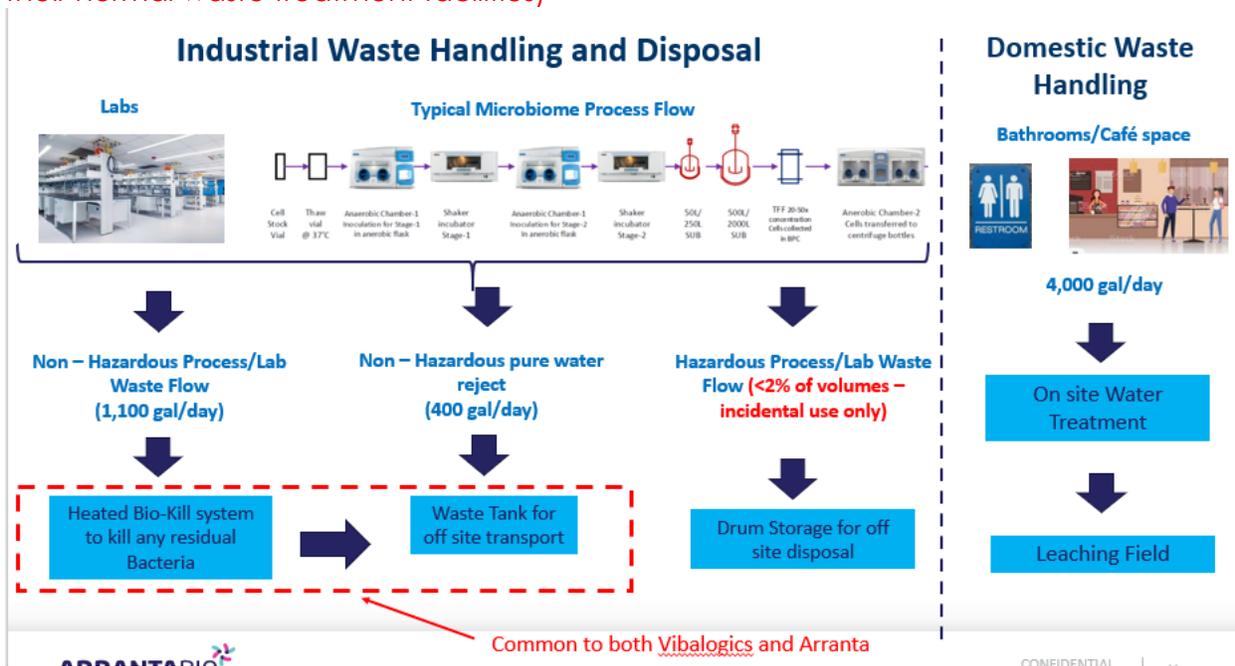


- To improve clarity, the term “waste” may generate confusion in the review of the documents and plans. Haley Ward recommends clearly delineating the different types of waste streams to assist in reducing the mixing of terms or misunderstanding of the comprehensive waste planning that is being proposed. Example useful terms include:
 - On-site treated process or biohazardous waste for offsite shipment
 - Hazardous waste for offsite shipment
 - Domestic wastewater for treatment at the on-site wastewater treatment plant.

Please see Pictorial view below (and as a point of clarification, the waste we are shipping off site in bulk is non-hazardous, as it is accepted by most municipalities for their normal waste treatment facilities)



- Is there information on where waste stream sources such as laboratory sinks, emergency shower/eyewash drains (if supplied/planned) and/or floor drains (if existing or planned) will be disposed? Will these be domestic wastewater to the onsite wastewater treatment facility or part of the on-site biological treatment system with effluent collected and removed from the site for disposal at another wastewater treatment facility?

Lab sinks are included in the Lab waste flows indicated in the diagram above and are directed to the waste tank for offsite transport. There are no floor drains

in the building to comply with Good Manufacturing Practices. This eliminates the possibility of an errant discharge of any kind. In the event of a discharge of eyewash/safety shower, the discharge would be cleaned up locally.

- Does the proposed process wastewater treatment and shipment joint utility service take independent ownership of the wastewater and any unlikely issues such as contamination with hazardous wastes or treatment failure? In other words, if the disposal of the process wastewater will occur at an off-site wastewater treatment facility by delivery, how would refusal of shipment, due to contamination or not meeting parameters, be handled by the joint utility entity?

The entity will have full responsibilities for these items and would take care of any issues.

- How will accountability be established for the treated industrial waste by the three parties involved (Arrant Bio, Vibrologics, and the joint utility)?

As indicated in the memo there will be flow devices/indicators on the lines leading into the waste treatment from each company's areas, each company's waste flows into the third-party waste system will be fully tracked and documented.

- Will the new joint process waste utility be responsible for all the biological treatment systems, output verification, documentation, and treatment system maintenance and testing?

Yes – Any items that are listed in the "CUB" on the diagram in the memo (and as highlighted in the diagram below) will be owned by the entity

- Will the new joint process waste utility be limited to the onsite treated process waste, or is there consideration of having the utility manage other generated wastes requiring shipment offsite such as hazardous waste, biohazardous waste, or other wastes?

Each company will manage the hazardous/biohazardous waste streams independently

- Clarify the limits of the joint utility's control on the process diagram shown in the July 14, 2021 letter from Arrant Bio intended to clarify the waste handling system. In a situation where the utility must shut down the treatment process, where is the utility's shut off point? Is the utility able to shut down the manufacturing process? During a shutdown, is there a situation where the in-process flow could drain to any point other than the biowaste treatment system as designed?

Please see the diagram below to clarify the limits.

The manufacturing process will need to receive permission from the waste system in order to transfer waste. In the event of an issue, the waste system can deny the

manufacturing process permission to transfer. The manufacturing process has the ability to hold any material until the waste system is ready. There are no alternative routes for the waste. Everything will be contained in the manufacturing area.

There are no floor drains in the building, so there is not a chance for a situation where the waste can go anywhere other than the waste handling system

