



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

FORMERLY:  CES INC

July 15, 2021

Town of Boxborough Planning Board
Mr. Simon Corson, Town Planner
29 Middle Road
Boxborough, MA 01719
scorson@boxborough-ma.gov

Re: Peer Review Services | 1414 Massachusetts Avenue Arranta Bio

Dear Simon:

Haley Ward, Inc (Haley Ward) has reviewed the Site Plan Approval Application and correspondence from Arranta Bio dated June 22 and July 1, 2021. Based on the review, Haley Ward offers the following questions and/or comments to assist in clarifying and communicating Arranta Bio's proposed plans of establishing operations at 1414 Massachusetts Avenue (Site).

- 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.
- 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

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system with effluent collected and removed from the site for disposal at another wastewater treatment facility?

- 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?
- How will accountability be established for the treated industrial waste by the three parties involved (Arrant Bio, Vibrologics, and the joint utility)?
- Will the new joint process waste utility be responsible for all the biological treatment systems, output verification, documentation, and treatment system maintenance and testing?
- 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?
- Clarify the limits of the joint utility's control on the process diagram shown in the July 14, 2021 letter from Arranta 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?

Haley Ward appreciates the opportunity to support the Town of Boxborough and Planning Board in the evaluation of the Site Plan Approval Application. If you have any questions or require further information, please contact either of the undersigned.

Sincerely,

Haley Ward, Inc.

Michael D. Sauda, MPH, CSP
Senior Project Scientist

Bethany J. Ordnung, PE
Project Manager, Vice President



HALEY WARD

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FORMERLY:  CES INC

August 26, 2021

Town of Boxborough Planning Board
Mr. Simon Corson, Town Planner
29 Middle Road
Boxborough, MA 01719
scorson@boxborough-ma.gov

Re: Peer Review Services | 1414 Massachusetts Avenue – Arranta Bio

Dear Simon:

Haley Ward, Inc (Haley Ward) has reviewed recently submitted written responses and information presented by Arranta Bio at both the July 19, 2021, and August 9, 2021 Planning Board meetings with respect to the site plan approval for the resumption of discontinued use and/or expansion of an existing use facility located at 1414 Massachusetts Avenue, Boxborough, MA (Site).

In response to Haley Ward's letter to the Planning Board dated July 15, 2021, Arranta Bio's written responses dated July 19, 2021, satisfactorily clarified the different types of wastes (e.g., sanitary, process, hazardous) expected in their proposed operations and provided additional insight into the control and management of those wastes.

Haley Ward also reviewed Arranta Bio's responses to Planning Board questions received on August 23, 2021, and offers the following comments:

Process Waste Treatment and Disposal

As discussed during both the July 19 and August 9 public hearings, Haley Ward's understanding is Arranta Bio and the other tenant, Vibalogics, have agreed to contract with an independent third party who will take responsibility for the receiving, treatment, and transport off-site of the combined process waste streams. The third

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party will have responsibility for maintenance and operation of the process treatment (Bio Kill) and containment systems (tanks). The third party will be a single point of contact for the disposal of process waste and act as a supplier to the tenants of the building for process waste. Arranta Bio has indicated the treated process waste would be eligible for disposal at a wastewater treatment facility which is not permitted at the Site.

Haley Ward agrees with prior suggestions of applying similar wastewater conditions found in the recent *Decision and Certificate of Conditional Approval Vibalogics Us, Inc., Site Plan Approval* dated May 12, 2021, and incorporating the following into those conditions:

- Prior to the issuance of an Occupancy Permit, shall provide in writing to the Fire Department and the Board of Health, with notification to the Planning Board via the Town Planner, the name and contact information of the independent third party which will operate and manage the on-site process waste treatment system which includes the hauling and disposal of treated process waste.
- Include in any Hazardous Material Operations and Emergency Response Plan the current name and contact information of the independent third party which will operate and manage the on-site process waste treatment and containment system.
- Provide annual notification in writing to the Fire Department and the Board of Health, with a copy to the Planning Board, to include the following information:
 - updated contact information for all parties involved with utilizing, maintenance, transport, or disposal related to the process waste treatment and disposal system;
 - statement detailing any changes in the agreement terms, responsible parties, or contact information, and
 - updates to any emergency response procedures.

Haley Ward also suggests establishing a mechanism within the agreements between owner, tenants, and third-party entity, requiring notification to the Board of Health if there are changes in the third-party contractor, tenants, and/or ownership, or if any of these ceases doing business at the Site.

Hazardous Waste

In the August 3, 2021, Alphen & Santos, P.C. (Alphen) letter to the Planning Board, Alphen noted Section V.A. 7 of a proposed Board of Health, Groundwater Protection Regulation dated March 3, 2021, prohibits facilities that generate, treat, store, or



dispose of hazardous waste subject to MGL. c. 21C and 310 CMR 30.000, except for very small quantity generators (VSQGs).

In the responses to Board Member questions, Arranta Bio noted it currently holds VSQG status for a Watertown, MA facility and is anticipating the same at the Site. However, Arranta Bio is exploring the need to upgrade to Small Quantity Generator (SQG) status to better reflect the capacity and flexibility needed to operate its facility safely and has no plans to go beyond SQG.

Notwithstanding any prohibition of SQG status in Board of Health proposed regulations, either generator status is applicable in the incidental generation of hazardous waste for light manufacturing operations. SQG status has increased Federal and State regulatory requirements for a generator of hazardous wastes. VSQG status provides exemptions from some of the SQG regulatory requirements. Haley Ward does not recommend establishing a condition that limits hazardous waste generation to VSQG. A condition limiting the applicant to SQG status is appropriate and consistent with the Vibalogics decision.

Emergency Response and Planning

Arranta Bio submitted an Emergency Action Plan (EAP) for its Watertown, MA facility as an example of how they intend on approaching emergency planning at the Site. The EAP provided is a standard approach to planning and managing emergencies. Any developed EAP for the Site will need to consider the intersection between the third-party entity responsible for the process waste treatment operation, the building owner, and any other tenants in the building (Vibalogics).

Haley Ward appreciates the opportunity to support the Town of Boxborough and Planning Board in the evaluation of the Site Plan Approval Application. If you have any questions or require further information, please contact either of the undersigned.

Sincerely,
Haley Ward, Inc.

Michael D. Sauda, MPH, CSP
Senior Project Scientist

BJO/MDS

Bethany J. Ordnung, PE
Project Manager, Vice President



HALEY WARD

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FORMERLY:
CES INC

October 7, 2021

Town of Box borough Planning Board
Mr. Simon Corson, Town Planner
29 Middle Road
Boxborough, MA 01719
scorson@boxborough-ma.gov

Re: Certificate of Conditional Approval | 1414 Massachusetts Avenue – Arranta Bio

Dear Simon:

Haley Ward, Inc (Haley Ward) has reviewed the Planning Board's draft Decision and Certificate of Conditional Approval document dated September 21, 2021, and we offer the following comments and suggestions.

Section 7, Page 6 of 15

Remove the adjective "highly" before the word "regulated". This term is subjective and does not distinguish any additional regulatory requirements.

Section 7, Page 7 of 15

Paragraph 1, Second to last sentence

Add "holding" before the word "tank" as in "above ground holding tank" to improve clarity.

Conditions of Approval Section, Page 8 of 15

Item c.

The term "sign off" should be clarified. Does the Board of Health have an approval

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process or is the BOH being asked to approve, acknowledge, and/or certify whether there are suitable sanitary facilities? Is there a more specific term or phrase which would clearly define the requirement and when it is achieved or reference another process such as issuance of a Building Permit or Certificate of Occupancy?

Item f. After the phrase “safety measures” add: “, including measures for spill prevention, containment, and control of process waste, during the connection and disconnection from the above ground Industrial Wastewater holding tank by waste haulers.” Delete the remainder.

Conditions of Approval Section, Page 9 of 15

Comment: The draft approval is silent on whether Vibrologics has a separate 45,000 gallon per month threshold for notification to the Planning Board. We suspect 45,000 gallons as a single process value, regardless of the source tenant, since Vibrologics and Arranta Bio plan on jointly managing their individual process wastes through a third-party shared system. Clarifying that Arranta Bio is required to notify the Planning Board of any excess over the joint amount may provide clarity if this is the intent of the requirement.

Haley Ward appreciates the opportunity to support the Town of Boxborough and Planning Board in this Site Plan Approval Application. If you have any questions or require further information, please contact either of the undersigned.

Sincerely,
Haley Ward, Inc.

Michael D. Sauda, MPH, CSP
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