ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL SCOTT
Director

NORTH CAROLINA
Environmental Quality

May 26, 2023

R. Craig Coslett, Project Coordinator
Seaboard Remedial Action Trust
c/o de maximis, Inc.
1550 Pond Road, Suite 120
Allentown, PA 18103

Re: Comments on the First Five-Year Review Report
Seaboard Remedial Action Trust c/o de maximis, Inc., dated February 27, 2023
Former Seaboard Chemical and Riverdale Drive Landfill Site
Jamestown, Guilford County, North Carolina
EPA ID# NCD071574164

Dear Mr. Coslett,

The Division of Waste Management (DWM) has reviewed the referenced document submitted to the Department of Environmental Quality (DEQ) on February 27, 2023. Based on review of the report, the DWM provides the following comments:

1. Section I (Page 3), *Site Background* and other sections. Property lines should be displayed on a figure, either the Site Feature Map (Figure 2) or an additional figure. At a minimum, reference the figure with property lines in the *Site Background* section, *Site Related* portion of Section II (page 6) and *Treatment System* portion of Section II (page 7).

2. Section I (Page 4), second full paragraph. The text indicates "…the parties then entered into an Administrative Order on Consent (AOC) dated January 30,1996 with the State to perform the Remedial Investigation (RI)." Please clarify which parties completed the RI - due to limited staffing and economic resources the DEQ rarely completes assessment activities for regulated responsible parties. Instead, DEQ reviews workplans, provides guidance when applicable and reviews reports.

3. Section II (Page 6), *Site Related* section. Add "locked gates" after fencing. Please clarify if security cameras are in use by the Materials Recycling Facility (MRF) or in the area of the mechanical treatment system controls.

4. Several acronyms used in the report are not defined when first used or included on the acronyms list. These include "SCADA" in *Treatment Systems* (Section II, page 7) and AOP+ in *Status of Implementation* (Section II, page 9). Please revise the report.

5. Section II (Page 8), *Natural Treatment System* section and Figure 2, *Site Features Map*. The text refers to tree stands but not "phytoremediation" which would tie the discussion with Figure 2 more effectively. We suggest adding "phytoremediation" in the sentence: "an irrigation system for the tree stand is divided into 16 approximately two-acre *phytoremediation* zones". In addition, add "West Lobe" and "East Lobe" to Figure 2.

6. Section II (Page 9) fourth bullet. A short discussion of the AOP+ system and why it was determined to not be effective should be included in the revised report.

7. Section IV (Page 12), *Five-Year Review Process*. The Soil Residue Mound is mentioned in the third paragraph. Mention in the text when the synthetic liner and overlying soil were installed over the mound.

8. Section IV (Page 12), *Five-Year Review Process* and Figure 5, *1,4-Dioxane Trend Graphs*. Monitoring well MW-15A near the Soil Residue Mound is stated elsewhere in the report as outside the radius of influence for the remedy. The graph for 1,4-dioxane indicates that the concentration has reduced over time; however, it is about 1,000 ug/L – several orders of magnitude greater than the North Carolina Groundwater Quality Standard of 3 ug/L. The remediating parties should consider an alternative remedial approach to reduce the 1,4-dioxane concentrations in groundwater more quickly.

9. Section IV (Pages 14 and 15), *Surface Water 1,4-Dioxane Data*. The table on pages 14-15 and the related text on page 15 indicates that the increased 1,4-dioxane concentrations at SW-2 is related to above average rainfall and runoff from the phytoremediation zone at the time of sample collection. Describe the rainfall amounts as measured at an onsite or local rainfall gauge associated with the sampling dates. Include evidence of erosion or seep(s) on the slope in the phytoremediation zone above the SW-2 location. Finally, determine if there are other sources for 1,4-dioxane near the SW-2 location.

10. Section IV (Page 15), *Surface Water 1,4-Dioxane Data*. In the third paragraph, a sentence notes that "…at least two known sources of 1,4-dioxane in surface water are located on Richland Creek upstream of this confluence." Identify these known sources by name and when 1,4-dioxane was determined to be associated with the sources. This information should also be included in the text below the "Monitoring" issue category box (Section VI) on Page 28.

11. Section IV (Page 19), *Operational Data*. On the Flow Comparison Chart, change the "Phyto Disch" curve legend text to "Discharge to Phyto". This change will clarify that the curve represents the total discharge of water to the natural (phytoremediation) system.

12. Section IV (Page 21), *Operational Data*. The two Y axes on the graph are confusing, especially because the scales differ so widely. To aid the reader, change the left-hand Y axis title to "Influent, VOCs" and the right-hand Y axis to "Effluent, VOCs".

13. Section IV (Pages 23 and 24), *Operational Data*. In the paragraph below the bullets, restate that the increase in VOC removal and 1,4-dioxane removal in the natural system as shown in the graphs is due to the additional recovery wells brought online in the Summer of 2022 (i.e. use similar words to the text on Page 22).

14. Section IV (Page 25), Site Inspection, *Operational Data*. Correct the paragraph listing the parties present at the inspection. Use semi-colons instead of commas after each affiliation and replace the

commas with “of” and “from” between the last name and the affiliated group.

15. Section V (Pages 26-27), *Technical Assessment*, Question B which reads “Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?”

    For the Comparison of Surface Water Standards table, mention the applicable surface water classification for Deep River/Randleman Lake for the section abutting the facility. The link to the classification map is here: https://www.deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/classifications. In the current standard column, note that the values for 1,1-DCE, 1,2-DCA and trans-1,2-DCE are from the EPA National Recommended Water Quality Criteria List and are not established North Carolina Surface Water Quality Standards. Finally, there is a typographical error in the third row of the compound name column for 1,1-DCE.

    The EPA guidance in the Five-Year Review Recommended Template, OLEM Directive 9200.0-89 indicates that TBC (“to be considered”) items should be mentioned if they may call into question the protectiveness of the remedy. On March 13, 2023, the Solid Waste Section (SWS) of the DWM issued a memorandum to operators and owners of active and former landfills advising them that PFAS testing would be required by the SWS starting on July 1, 2023. After PFAS testing is implemented at the site, the results might require augmenting the mechanical treatment system or remedy in general. This section should mention the SWS memorandum and the possibility that the remedy may require augmentation.

16. Appendix A – Reference List. Update the reference list as needed in support of changes made for the Five-Year report revision.

The Seaboard Remedial Action Trust should address these questions and comments and provide a revised First Five-Year Review Report. Please contact us if you have any questions or comments about this letter.

Eric B. Aufderhaar, Project Manager
Facilities Management Branch, Hazardous Waste Section
Division of Waste Management, NC DEQ

ec: Craig Coslett, de maximis, inc. [*sic*]
Jackie Drummond, Solid Waste Section
Kim T. Caulk, Facilities Management Branch Head, Hazardous Waste Section