December 6, 2023
File No. 01204123.21-13

Mr. Baitong Chen
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Subject: Monthly DMS Committee Determination on Reaction Area Boundary
Chiquita Canyon Landfill – Castaic, California

Dear Mr. Chen:

In accordance with Condition Nos. 9a and 9b of the Stipulated Order of Abatement (SOFA) pertaining to the Chiquita Canyon Landfill (Landfill or Facility) (Case No. 6177-4), the DMS Committee has reviewed newly acquired applicable data recorded during the month of November 2023, considered revisions of the estimated extent of elevated temperature landfill (ETLF) conditions exhibited at the subject Facility (referred to as the "Reaction Area" limits), and has prepared this determination on potentially revising the Reaction Area map.

Attachment A presents the Drawing, titled "Reaction Area Map", prepared by SCS Engineers (SCS) and dated 12/6/23. The Drawing depicts the Reaction Area boundary as prescribed in Condition No. 9a, which corresponds to the limits of Cells 1/2A, 2B/3, 4, and Module 2B/3/4 P2 as a solid black line. The Drawing also depicts the estimated extent of ETLF conditions being experienced at the site based on the DMS Committee's review of scientific data as a dashed magenta line. As presented on the Drawing, the estimated extent of ETLF conditions (dashed magenta line) is fully contained within the Reaction Area boundary decreed in the SOFA (solid black line). Although the dashed magenta line has been modified since the DMS Committee's prior monthly review to incorporate one additional landfill gas well, because these ETLF conditions are fully contained within the Reaction Area boundary and have not expanded into a new cell, the DMS Committee finds no basis to modify the Reaction Area boundary at this time. Please note the following:

- The rationale serving as the basis for considering adjustments and modifications to the Reaction Area boundary (or the determination to maintain the decreed boundary), include:
  - Landfill gas (LFG) wellhead temperatures in excess of approximately 160 degrees Fahrenheit.
  - Poor gas quality (defined as methane levels of less than 30 percent) in conjunction with methane-to-carbon dioxide (CH_4:CO_2) ratios less than 1.0.
  - The concentration of hydrogen (H_2) in the LFG measured greater than 2 percent by volume.
  - Accelerated settlement of the landfill surface, defined as approximately 6 inches or greater within a 60-day period, and cracks in landfill cover.

- First-hand observations of Landfill and/or SCS engineering, construction, and operations and maintenance (O&M) field personnel who are on-site related to: 1) atypical excess leachate quantities (presence and quantity of liquids); 2) instances of pressurized liquids emitting from the landfill surface, from boreholes during drilling, and from LFG wells; and, 3) the characteristics of the odors originating from the select areas of the waste footprint (often described as "chemical-like" and distinctly different from typical LFG or landfill working face odors).

- There was no dissenting opinion among the DMS Committee members regarding this monthly determination.

- Supporting data is presented on the Drawing included as Attachment A.

Please contact either of the undersigned if you have questions or require additional information.

Sincerely,

Robert E. Dick, PE, BCEE
Senior Vice President
SCS Engineers

Patrick S. Sullivan, BCES, CCP
Senior Vice President
SCS Engineers

RED/PSS

cc: Nathaniel Dickel, SCAQMD
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Enclosure:
Attachment A – Reaction Area Map