Date _____ DRAFT

Kate Downey, Environmental Manager
Sunshine Canyon City/County Landfill
14747 San Fernando Road
Sylmar, CA 91342
kdowney@republicservices.com

APPROVAL OF PHASE CC-5A LINER SYSTEM ENGINEERING DESIGN REPORT - SUNSHINE CANYON CITY/COUNTY LANDFILL, SYLMAR, CA (FILE NO. 58-076, ORDER NO. R4-2008-0088, GEOTRACKER GLOBAL NO. L10006014618)

Dear Kate Downey:

The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) is in receipt of the *Engineering Design Report, Phase CC-5A Liner System, Sunshine Canyon Landfill* (Design Report) prepared by Geo-Logic Associates, dated December 2023, and submitted on behalf of Browning Ferris Industries of California, Inc. (Discharger), a wholly owned subsidiary of Republic Services, Inc. The Discharger owns and operates the Sunshine Canyon City/County Landfill (Landfill) in Sylmar, California, that is regulated under waste discharge requirements (WDRs) included in Order No. R4-2008-0088 adopted by the Los Angeles Water Board on October 2, 2008. The Design Report was submitted to meet relevant requirements of the WDRs and title 27 of the California Code of Regulations (Title 27) for the construction of Phase CC-5A liner system at the Landfill.

The proposed liner construction is within the permitted footprint of the Landfill and encompasses an area of approximately 15.5 acres, 13.9 acres of which will be constructed over slopes of the closed City South Landfill. The Design Report provides detailed design and construction information, including liner system configuration, landfill gas collection, subdrain system, geological conditions, and surface water management. In addition, the Design Report also includes a construction quality assurance (CQA) manual, slope stability and seismic deformation analyses, and leachate collection and removal system (LCRS) design calculations.

The base liner system will consist of the following materials, from top to bottom:

- A 24-inch (600-mm) thick protective cover operations soil layer;
- A 6-oz non-woven geotextile filter layer placed on top of the LCRS granular drainage layer;

- A 12-inch (300-mm) thick LCRS granular drainage layer with a minimum hydraulic conductivity of $1x10^{-1}$ cm/sec with perforated pipes situated along low points to collect and convey leachate to collection sumps;
- A 16-oz geotextile cushion layer placed on top of the 80-mil High Density Polyethylene (HDPE) geomembrane;
- An 80-mil (2.0-mm) thick HDPE geomembrane textured both sides;
- A geosynthetic clay liner (GCL) with bentonite encapsulated between two non-woven geotextiles;
- A 60-mil (1.5-mm) thick HDPE geomembrane textured both sides;
- A drainage leak detection layer consisting of a 12-inch thick layer of sand;
- A 60-mil (1.5-mm) thick HDPE geomembrane textured both sides;
- A minimum 24-inch (600-mm) thick low permeability soil layer with a hydraulic conductivity less than or equal to 1 x 10-7 cm/sec; and
- Prepared subgrade.

The side-slope liner system will consist of the following materials, from top to bottom:

- A 24-inch (600-mm) thick protective cover operations soil layer;
- A 16-oz geotextile cushion layer placed on top of the 80-mil HDPE geomembrane;
- An 80-mil (2.0-mm) thick HDPE geomembrane textured both sides;
- A geosynthetic clay liner with bentonite encapsulated between two non-woven geotextiles;
- A 60-mil (1.5-mm) thick HDPE geomembrane textured both sides;
- A geosynthetic clay liner with bentonite encapsulated between two non-woven geotextiles;
- A 30-mil (0.75-mm) thick HDPE geomembrane moisture barrier textured both sides; and
- Prepared subgrade.

Los Angeles Water Board staff has reviewed the Design Report and found that the proposed Phase CC-5A liner system meets the requirements of the WDRs and Title 27, section 20310 et. al (General Criteria for Containment Structures). The Design Report is therefore approved. During the proposed landfill construction, if any revision of the Design Report is necessary, the Discharger must submit an amendment to the Design Report, at least 90 days prior to the construction involved the revision, for the review and approval of Los Angeles Water Board staff.

In accordance with Requirement D.9 of the WDRs, prior to the start of construction of any containment structure, a geologic map of the final excavation grade shall be prepared for review, approval, and confirmation in the field by Los Angeles Water Board staff. A final CQA report, including drawings documenting “as-built” conditions, shall be submitted within 60 days after the completion of liner construction.

If you have any questions regarding this matter, please contact Project Manager, Enrique Casas at (213) 620-2299 or enrique.casas@waterboards.ca.gov.

Sincerely,

for Susana Arredondo
Executive Officer

Cc:

Dorcus Hanson-Lugo, Sunshine Canyon Landfill LEA (dlugo@ph.lacounty.gov)
David Thompson, Sunshine Canyon Landfill LEA (david.thompson@lacity.org)
Larry Israel, SCAQMD (lisrael@aqmd.gov)
Courtney Barrett, Geo-Logic Associates (cbarrett@geo-logic.com)
Wayde Hunter, North Valley Coalition, Granada Hills (WHunter01@aol.com)