January 19, 2020

Board of Directors
Ventura Regional Sanitation District
Ventura, California

PROPOSED BUDGET ADJUSTMENT TO FUND ONGOING POST-EASY FIRE EMERGENCY WORK AT THE TIERRA REJADA LANDFILL

RECOMMENDATIONS

A. Receive and File the Staff report regarding the ongoing Consortium response to the Easy Fire-caused damages at the Tierra Rejada Landfill; and

B. Approve a budget adjustment appropriating $2,194,215 and increasing revenue projections by $1,645,661 with the difference of $548,554 coming from VRSD's fund balance.

FISCAL IMPACT

Emergency expenditures to date at the Tierra Rejada Landfill in response to damages from the Easy Fire are approximately $767,005. The estimated cost to complete the emergency mitigation improvements is $1,427,210. VRSD is expected to be responsible for 25% of these costs, or approximately, $548,554. Each of the other three members of the Consortium are expected to provide funding of $548,554, for a total of $1,645,661 in order to complete the emergency mitigation improvements.

BACKGROUND/ANALYSIS

History

The Tierra Rejada Landfill (Landfill), located on a 66-acre site in the City of Simi Valley one mile west of Madera Road on Tierra Rejada Road, was operated by the County of Ventura (County) from December 1962 to May 1972. On July 1, 1972, the County transferred its entire refuse disposal program and all disposal related responsibilities, including the underlying property lease at the Tierra Rejada site, to the Ventura Regional Sanitation District (VRSD). VRSD completed closure of the Landfill by the termination date of that lease on November 30, 1972.

In 1975, land on which the Landfill is located was donated by the property owners to the Rancho Simi Recreation and Park District. An additional portion of the former Landfill area was subsequently acquired by the Simi Valley Sanitation District, a governmental entity which is now part of the City of Simi Valley. The underlying property of the Landfill is

currently owned by the Rancho Simi Recreation and Parks District and the City of Simi Valley.

On May 31, 1991, the Regional Water Quality Control Board-Los Angeles Region (Regional Board) issued Cleanup and Abatement Order 91-063 (Order) to the County, VRSD, Rancho Simi Recreation and Park District, and the Simi Valley Sanitation District, jointly, mandating corrective measures to be taken at the closed Landfill. (Hereinafter referred to as the "Consortium" or "Tierra Rejada Consortium") Although a Notice of Violation (NOV) from the Local Enforcement Agency (LEA) for CalRecycle, the Environmental Health Division of the Resource Management Agency of Ventura County, was issued contemporaneously with the Order, the Order is the operative regulatory enforcement citation in this case.

The Regional Board regulates closed landfills in the Los Angeles Region through enforcement of Title 27 of the California Code of Regulations ("CCR") and applicable Water Code provisions while the LEA regulates all closed landfills in the County of Ventura under other Title 27 CCR provisions and the Public Resource Code.

To address the requirements set forth in the Order and the NOV, VRSD and the three other parties of the Consortium entered into an agreement regarding cost-sharing for regulatory compliance, and this agreement was approved by the VRSD Board on July 18, 1991. VRSD, given its statutory charter and expertise, performs post-closure maintenance and reporting at the Landfill on behalf of the Consortium with costs shared equally by all members. Decisions are made by a Steering Committee comprised of one member from each of the four agencies.

The Easy Fire of October 30, 2019

On October 30, 2019, the Easy Fire, which started in the Simi Valley area near the Reagan Presidential Library, caused significant damage to the area and to the Landfill. During this wildfire event, the Landfill's gas collection system and mature, vegetated cover were severely impacted. Both are required in order to control landfill gas emissions; prevent old, buried waste from mobilizing during rain events; and to limit the amount of surface water that can infiltrate into the buried waste. The responsive actions taken since October 30, 2019 can categorized as follows: the initial fire response, repairs to the gas collection system, landfill cover assessment, and emergency repairs to the cover and drainage systems.

<u>INITIAL FIRE RESPONSE</u>

Following the Easy Fire, staff mobilized to the site, monitored conditions, and responded to several small surface fires that continued to burn on the site for a few days. These surface fires were confined to small areas approximately eight feet by eight feet and to the upper six inches of the surface. Their behavior was more of a slow, smoldering event right at the surface rather than the active flames that consumed the brush onsite on the

first day. Staff, through the help of contractors, dug out the shallow surface fires, extinguished them with water, and repaired the areas with moist, conditioned soil. Active monitoring continued around these hot spots for several days to verify that ground temperatures were normal. Environmental monitoring of the gas wells in the vicinity of these areas was conducted to verify that the fire had not entered the landfill's buried waste mass. Upon completion of the fire response period (approximately four to five days), staff turned its attention to mobilizing resources to repair the damaged gas collection system, and return it to normal operational condition.

REPAIRS TO THE GAS COLLECTION SYSTEM

The Landfill's gas collection system consists of several 2-inch PVC wells that were installed throughout the 26-acre waste footprint within the buried waste mass. These wells reach the surface and are connected to a series of aboveground pipes that transfer any landfill gas that is generated from the degrading waste to a small flare that destroys the methane. The site only produces relatively small amounts of landfill gas, but regulations still require that the landfill controls this gas and limits emissions through its permitted flare. During the fire, all of the aboveground connector pipe was destroyed, as well as many valves and fittings on the wells. The flare also incurred damage to its electrical control panel, as well as to pipes and fittings that connect to the flare inlet.

Staff brought in an experienced landfill gas construction firm to help bring the system back online in a timely manner. New pipes and fittings were procured and field construction staff worked quickly to fuse the pipe together, lay it out properly on the site and reconnect the wells to the system. Approximately 7,000 feet of pipe was replaced and reconnected to the flare. Work on the system was completed by early December 2019.

LANDFILL COVER ASSESSMENT

The Landfill is required to have a minimum of two feet of cover soil over the waste. As part of this cover system, vegetation is needed to protect the soil from eroding over time and potentially exposing the waste. Prior to the fire, the site had approximately 47 years of densely vegetated native growth that helped to protect this cover. While the vegetation helped to hold the cover system together, it also obscured the ability to determine if the landfill cover was becoming thinner over time. Once this cover vegetation was completely destroyed by the Easy Fire, it was apparent that several areas of the site were significantly thin and insufficient in providing the proper cover over the waste. Areas of settlement were also noted in key drainage benches along the slopes. The benches were no longer draining in the right direction toward down-drains, and the site was deemed to be at significant risk of scouring the thin cover and potentially exposing and mobilizing the old waste during heavy rain events.

In order to fully assess the extent of the thinning cover, landfill settlement, and the amount of work to address these issues, staff engaged the services of Cris Dragomir, a highly-experienced landfill, civil, and storm water engineer. Mr. Dragomir prepared a new

topographical survey of the Landfill to assess the level of settlement that has occurred over the last couple of decades since the last survey was completed. These new survey maps also provided the base to show the extent of the thinning cover and the drainage areas that required significant attention to protect the site. The survey provided the critical earthwork volumes that would be necessary to grade the site properly during Landfill repairs/Easy Fire response.

During this time, the District also procured the services of Pride Construction in order to assist in the site assessment by providing field excavations to determine the thickness of the cover. Mr. Dragomir completed his initial assessment by using the topographical survey and information obtained during the field investigation of the cover. He provided the cost estimate for repairing the drainage and bringing the cover back to the required two feet of soil.

EMERGENCY REPAIRS TO LANDFILL COVER AND DRAINAGE SYSTEMS

Upon completion of the site assessment, the focus was turned toward completing emergency repairs to the exposed drainage benches and using tracked, heavy equipment to break up the considerable ash deposited on the slope faces from the fire.

During the assessment phase, it was determined that many of the drainage benches were not properly directing water toward drainage conveyances on the site. It was critical to add soil berms on the edges of these benches as a temporary repair in order to prevent water from cascading over the slopes from bench to bench, potentially creating a sliding of the cover material and exposing trash. Pride construction used an existing stockpile of soil on the site to perform these emergency berm repairs. Their efforts have successfully held back water on the benches and directed it toward the drainage conveyances.

Following bench repairs, efforts were directed to begin track-walking of the site. In addition to breaking the hard crust of the fire ash and working it back into the cover soil, the tracked equipment was able to more fully assess the extent of areas of thin cover. This information allowed for a more detailed assessment and estimate of the effort needed to bring the thin cover to the required two feet of thickness.

During this rainy or wet season, Pride Construction has maintained equipment at the landfill and has performed emergency assessment and repairs of eroding cover soil. This effort will remain in effect throughout the rainy/wet season.

CONSORTIUM MEETINGS TO DISCUSS WORK AND RECOMMENDATIONS

Since the Easy Fire, the Consortium has been in close communication and held its most recent Steering Committee meeting on January 6, 2020. At this meeting the Consortium agreed to continue with the ongoing emergency repairs, including:

- Restore the thickness of soil cover to two feet across the 26-acre waste footprint

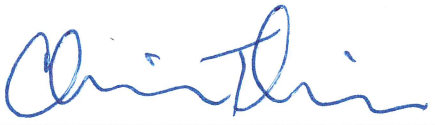
- Repair benches that have settled and/or eroded and no longer drain effectively
- Develop grading plans and obtain grading permit from the City of Simi Valley to use the onsite soil for these repair efforts, if required
- Improve existing drainage conveyances to more effectively manage and control storm water runoff
- Hydroseed the site cover soil upon completion of cover repairs
- Maintain a program to watch and repair the site during forecasted rain events in order to prevent erosion until new improvements are constructed

Post-Easy Fire expenditures to date are approximately $767,005, and the balance of the work is expected to cost $1,427,210 for a total cost of $2,194,215. Each Consortium member would be responsible for 25% of this total, or $548,554 each. That is the amount that the Board is requested to appropriate from fund balance in the recommendation to this report. The balance of the appropriation requested will be offset by the revenues from the other Consortium members.

This letter has been reviewed by Legal Counsel as to form.

If you should have any questions or need additional information, please contact me by phone at (805) 658-4600 or email at ChrisTheisen@vrsd.com.

CHRIS THEISEN, GENERAL MANAGER

APPROVED FOR AGENDA: 

Chris Theisen, General Manager

This page is intentionally blank