CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

In the matter of: **VISTA CORPORATION AND CLOVER FLAT LAND FILL INC., NAPA COUNTY** **Violations of Industrial Stormwater General Permit (NPDES Permit CAS 000001, Order 2014-0057-DWQ)**	)	**SETTLEMENT AGREEMENT AND STIPULATION FOR ENTRY OF ADMINISTRATIVE CIVIL LIABILITY ORDER** **PROPOSED ORDER**

Section I: INTRODUCTION

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Stipulated Order) is entered into by and between the California Regional Water Quality Control Board, San Francisco Bay Region Prosecution Team (Prosecution Team) and Vista Corporation doing business as Clover Flat Land Fill Inc. (Settling Respondent) (collectively, Parties), and is presented to the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), or its delegate, for adoption as an Order by settlement pursuant to California Water Code (Water Code) section 13323 and Government Code section 11415.60. This Stipulated Order resolves the violations alleged herein by the imposition of administrative civil liability against the Settling Respondent in the amount of **$619,400**.

Section II: RECITALS

1. The Settling Respondent owns the site which operates as the Clover Flat Landfill, a Class III municipal refuse disposal site located at 4380 Silverado Trail, Calistoga (Facility).

2. The Facility is located within the Napa River watershed, and two intermittent streams (Stream 1 and Stream 2) run adjacent to the Facility. These two streams are tributaries to the Napa River, a water of the United States.

3. At the time the alleged violations occurred, the Regional Water Board regulated the Facility under the National Pollutant Discharge Elimination

System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ as amended (Permit).

4. Prosecution staff alleges the following violations:

    a. On at least March 26 and 28 and on April 2 and 8, 2019, the Settling Respondent discharged leachate-laden stormwater into Stream 1 in violation of Permit Discharge Prohibition C.

    b. From at least March 26 through 28, 2019, the Settling Respondent discharged at least 40,000 gallons of leachate-laden stormwater into Stream 1 in violation of Permit Discharge Prohibition C.

    c. On at least 21 days between April 2 and December 17, 2019, the Settling Respondent discharged acidic stormwater into Stream 1 in violation of Permit Discharge Prohibition C.

    d. From at least April 2 through 8, 2019, the Settling Respondent either failed to observe outdoor equipment and systems to identify leaks or failed to implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system as required by Permit Provision X.H.1.

    e. From at least January 29 through June 4, 2019, the Settling Respondent failed to provide effective stabilization for finished slopes or other erodible areas as required by Permit Provision X.H.1.

5. The Prosecution Team identified the alleged Permit violations during a coordinated joint investigation with the Napa County District Attorney's Office and California Department of Fish and Wildlife of suspected unauthorized activities at the Facility. In addition to this Stipulated Order, the Settling Respondent has committed to resolving violations alleged by the Napa County District Attorney's Office and California Department of Fish and Wildlife, which will be documented in a separate Stipulated Judgment that is pending submission to the Napa County Superior Court for approval.

6. The Settling Respondent's violations of Permit Discharge Prohibition C and Provision X.H.1 subject the Settling Respondent to administrative civil liability pursuant to California Water Code (Water Code) section 13385, subdivisions (a)(2) and (c).

7. To resolve the alleged violations in Section II, paragraph 4, by consent and without further administrative proceedings, the Parties agree to the imposition of an administrative civil liability of $**619,400** against the Settling Respondent. The Prosecution Team calculated the proposed liability using Steps 1 through 10 of the State Water Resources Control Board's Water Quality Enforcement Policy (Enforcement Policy) (October 2017) as shown in Attachment A, which is incorporated herein by reference.

8. The Parties have engaged in settlement negotiations and agree to settle this matter without administrative or civil litigation, and to present this Stipulated Order to the Regional Water Board or its delegate for adoption as an Order by settlement, pursuant to Water Code section 13323 and Government Code section 11415.60.

9. The Prosecution Team contends that the resolution of the alleged violations is fair and reasonable, and fulfills all of its enforcement objectives; that no further action is warranted concerning these violations, except as provided in this Stipulated Order; and that this Stipulated Order is in the public's best interest.

Section III: STIPULATIONS

The Parties incorporate the foregoing Recitals and stipulate to the following:

1. **Administrative Civil Liability:** The Settling Respondent hereby agrees to the imposition of an administrative civil liability of **$619,400** to resolve the alleged violations set forth in Section II as follows:

   No later than 30 days after the Regional Water Board or its delegate signs this Stipulated Order, the Settling Respondent shall mail a check for **$619,400,** made payable to "State Water Pollution Cleanup and Abatement Account," referencing the Order number on page one of this Stipulated Order, to:

   State Water Resources Control Board Accounting Office
   Attn: ACL Payment
   P.O. Box 1888
   Sacramento, CA 95812-1888

   The Settling Respondent shall email a copy of the check to the State Water Resources Control Board, Office of Enforcement (to Paul Ciccarelli at Paul.Ciccarelli@waterboards.ca.gov), and to the Regional Water Board (to Demir Worthington at Demir.Worthington@waterboards.ca.gov).

2. **Compliance with Applicable Laws:** The Settling Respondent understands that payment of administrative civil liability in accordance with the terms of this Stipulated Order and/or compliance with the terms of this Stipulated Order is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged herein may subject it to further enforcement, including additional administrative civil liability.

3. **Party Contacts for Communications related to this Stipulated Order:**

For the Regional Water Board:	**For the Settling Respondent:**
Demir Worthington San Francisco Bay Regional Water Quality Control Board 1515 Clay Street, 14th Floor Oakland, CA 94612 Demir.Worthington@waterboards.ca.gov (510) 622-2437	Steve Peterson President and CEO Vista Corporation Clover Flat Land Fill Inc. P.O. Box 382 Saint Helena, CA 94574 Steve@uvds.com (707) 200-9323
Counsel: Paul Ciccarelli State Water Resources Control Board 801 K Street, Suite 2300 Sacramento, CA 95814 Paul.Ciccarelli@waterboards.ca.gov (916) 322-3227	Counsel: Michael V. Brady Brady & Vinding 445 Capitol Mall, Suite 220 Sacramento, CA 95814 mbrady@bradyvinding.com (916) 446-3400

4. **Attorney Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorney fees and costs incurred pursuant to this Stipulated Order.

5. **Matters Addressed by this Stipulated Order:** Upon the Regional Water Board's or its delegate's adoption, this Stipulated Order represents a final and binding resolution and settlement of the alleged violations listed in Section II, paragraph 4, as of the effective date of this Stipulated Order. The provisions of this paragraph are expressly conditioned on the full payment of the administrative civil liability by the deadline specified in Section III, paragraph 1.

6. **Public Notice:** The Settling Respondent understands that this Stipulated Order must be noticed for a 30-day public review and comment period prior to consideration by the Regional Water Board or its delegate. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the Regional Water Board or its delegate for adoption, the Prosecution Team may unilaterally declare this Stipulated Order void and decide not to present it to the Regional Water Board or its delegate. The Settling Respondent agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.

7. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for public review of this Stipulated Order and the Regional Water Board's or its delegate's adoption of this Stipulated Order is lawful and adequate. The Parties understand that the

Regional Water Board or its delegate has the authority to require a public hearing on this Stipulated Order. If procedural objections are raised and the Regional Water Board or its delegate requires a public hearing prior to the Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust this Stipulated Order as necessary or advisable under the circumstances.

8. **Interpretation:** This Stipulated Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party. The Parties are represented by counsel in this matter.

9. **Modification:** The Parties shall not modify this Stipulated Order by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties, and approved by the Regional Water Board or its delegate.

10. **If the Stipulated Order Does Not Take Effect:** If the Stipulated Order does not take effect because the Regional Water Board or its delegate does not approve it, or because the State Water Resources Control Board (State Water Board) or a court vacates it in whole or in part, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Regional Water Board to determine whether to assess administrative civil liability for the underlying alleged violations, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing, or in any other administrative or judicial proceeding. The Parties agree to waive any and all objections based on settlement communications in this matter, including but not limited to objections related to prejudice or bias of any of the Regional Water Board members or their advisors, or any other objections that are premised in whole or in part on the fact that the Regional Water Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing the Stipulated Order and, therefore, may have formed impressions or conclusions prior to any contested evidentiary hearing on the violations alleged herein in this matter. The Parties also agree to waive any and all objections based on laches, delay, or other equitable defenses related to the period for administrative or judicial review to the extent such period has been extended by these settlement proceedings.

11. **Waiver of Hearing:** The Settling Respondent has been informed of the rights Water Code section 13323, subdivision (b), provides and, if the settlement is adopted by the Regional Water Board or its delegate, hereby waives its right to a hearing before the Regional Water Board prior to the Stipulated Order's adoption. However, if the settlement is not adopted, or if the matter proceeds to the Regional Water Board or State Water Board for a hearing, the Settling Respondent does not waive its right to a hearing before an order is imposed.

12. **Waiver of Right to Petition or Appeal:** Except in the instance where the Stipulated Order is not adopted by the Regional Water Board or its delegate, the Settling Respondent hereby waives its right to petition the Regional Water Board's or it's delegate's adoption of the Stipulated Order for review by the State Water Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or any California appellate court. This explicit waiver of rights includes potential future decisions by the Regional Water Board or its delegate directly related to this Stipulated Order, including but not limited to time extensions.

13. **Covenant Not to Sue:** The Settling Respondent covenants not to sue or pursue any administrative or civil claims against the State of California, any State agency, or its officers, Board members, employees, representatives, agents, or attorneys arising out of or relating to any matter expressly addressed by this Stipulated Order.

14. **No Admission of Liability/No Waiver of Defenses:** In settling this matter, the Settling Respondent does not admit to any of the allegations stated herein or admit to any violations of the Water Code, or any other federal, State, or local law or ordinance, but recognizes that this Stipulated Order may be used as evidence of a prior "history of violations" consistent with Water Code sections 13327 and 13385, subdivision (e).

15. **Necessity for Written Approvals:** All approvals and decisions of the Regional Water Board or its delegate under the terms of this Stipulated Order shall be communicated to the Settling Respondent in writing. No oral advice, guidance, suggestions, or comments from Regional Water Board employees or officials regarding submissions or notices shall be construed to relieve the Settling Respondent of its obligation to obtain any final written approval this Stipulated Order requires.

16. **Authority to Bind:** Each person executing this Stipulated Order in a representative capacity represents and warrants that he or she is authorized to execute this Stipulated Order on behalf of, and to bind, the entity on whose behalf he or she executes the Stipulated Order.

17. **No Third-Party Beneficiaries:** This Stipulated Order is not intended to confer any right or obligation on any third party, and no third party shall have any right of action under this Stipulated Order for any cause whatsoever.

18. **Severability:** This Stipulated Order is severable; if any provision is be found to be invalid, the remainder shall remain in full force and effect.

19. **Counterpart Signatures; Facsimile and Electronic Signature:** This Stipulated Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

Further, this Stipulated Order may be executed by facsimile or electronic signature, and any such facsimile or electronic signature by any Party hereto shall be deemed to be an original signature and shall be binding on such Party to the same extent as if such facsimile or electronic signature were an original signature.

20. **Effective Date**: This Stipulated Order shall be effective and binding on the Parties upon the date the Regional Water Board or its delegate enters the Order incorporating the terms of this Stipulated Order.

IT IS SO STIPULATED.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION, PROSECUTION TEAM

Signed by Lisa Horowitz McCann on 11/28/2022
Original signature on file

Date: _____ By: _____

Lisa Horowitz McCann
Assistant Executive Officer

Vista Corporation and Clover Flat Land Fill Inc.

Signed by Steve Peterson on 11/23/2022
Original signature on file

Date: _____ By: _____

Steve Peterson, President and CEO, on behalf of Vista Corporation and Clover Flat Land Fill Inc.

ORDER OF THE REGIONAL WATER BOARD

1. This Order incorporates the foregoing Sections I through III by this reference as if set forth fully herein.

2. In accepting this Stipulated Order, the Regional Water Board or its delegate has considered, where applicable, each of the factors prescribed in Water Code section 13385, subdivision (e), and has applied the State Water Resource Control Board's Enforcement Policy, which is incorporated herein by reference. The consideration of these factors and application of the Enforcement Policy are based on information the Prosecution Team obtained in investigating the allegations set forth in the Stipulated Order or otherwise provided to the Regional Water Board.

3. This is an action to enforce the laws and regulations administered by the Regional Water Board. The Regional Water Board or its delegate finds that issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) in accordance with section 15321, subdivision (a)(2), Title 14, of the California Code of Regulations.

4. The Executive Officer of the Regional Water Board is authorized to refer this matter directly to the Attorney General for enforcement if the Settling Respondent fails to perform any of its obligations under this Stipulated Order.

IT IS HEREBY ORDERED pursuant to Water Code section 13323 and Government Code section 11415.60, on behalf of the California Regional Water Quality Control Board, San Francisco Bay Region.

_____ _____

Eileen White Date
Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region

ATTACHMENT A

FACTORS IN DETERMINING STIPULATED ADMINISTRATIVE CIVIL LIABILITY

VISTA CORPORATION AND
CLOVER FLAT LANDFILL, INC
STORMWATER GENERAL PERMIT VIOLATIONS
JANUARY – DECEMBER 2019
CALISTOGA, NAPA COUNTY

Violation 1: Unauthorized Discharges of Leachate-Laden Stormwater into Stream 1

Violation 2: Unauthorized Discharges of Leachate-Laden Stormwater into Stream 1

Violation 3: Unauthorized Discharges of Acidic Stormwater to Stream 1

Violation 4: Failure to Implement Best Management Practices for Preventative Maintenance

Violation 5: Failure to Implement Effective Erosion and Sediment Controls

The State Water Resources Control Board Water Quality Enforcement Policy (Enforcement Policy) establishes a methodology for assessing administrative civil liability. Use of the methodology addresses the factors required by Water Code section 13385, subdivision (e). Each factor in the Enforcement Policy and its corresponding category, adjustment, and amount for each of the four violations is presented below.

DISCHARGER INFORMATION

Vista Corporation doing business as Clover Flat Land Fill Inc. (Discharger), owns and operates the Clover Flat Landfill, a Class III municipal refuse disposal site located at 4380 Silverado Trail, Calistoga (Facility). At the time the alleged violations occurred, the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) regulated the Facility under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order 2014-0057-DWQ as amended (Industrial General Permit). The Industrial General Permit contains discharge prohibitions to protect water quality in, among others, two intermittent streams (Stream 1 and Stream 2) located adjacent to the Facility. The two streams are tributaries to the Napa River, a water of the United States (U.S.). The locations of Stream 1 and Stream 2 are shown in Figure 1 below.

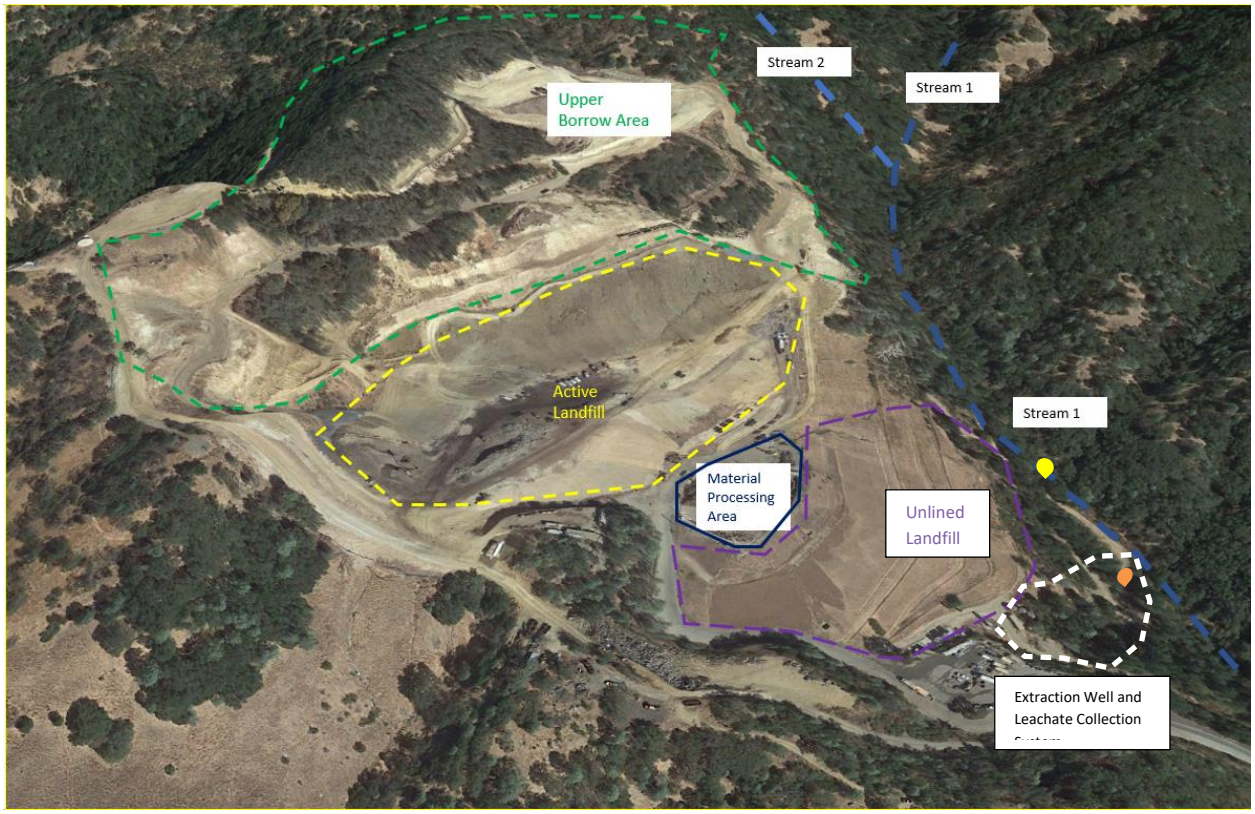

Figure 1: Streams and operational areas of the Clover Flat Landfill are mapped on this satellite image taken on September 19, 2018, which Regional Water Board staff downloaded from GoogleEarth Pro on July 15, 2019. Modifications to the image include the approximate locations of Stream 1 and 2 (blue) and the following landfill areas: Upper Borrow Area (green), Active Landfill (yellow), Material Processing Area (dark blue), Unlined Landfill (purple), and Extraction Well and Leachate Collection System (white). They also include the approximate discharge locations for Violations 1 (orange marker) and 2 (yellow marker).

The Industrial General Permit (Provision X.H.1) requires the Discharger to implement best management practices (BMPs) in accordance with a stormwater pollution prevention plan (SWPPP) to protect waters of the U.S. from industrial discharges. The Industrial General Permit (Discharge Prohibition C) prohibits, among other things, the discharge of liquids or materials other than stormwater, including leachate and leachate-laden stormwater, either directly or indirectly, to waters of the U.S. unless authorized by another NPDES permit.[1] For the purposes of this enforcement, leachate is the liquid generated from waste buried in the lined and active landfill cell (Active Landfill) and the capped and unlined inactive landfill cell (Unlined Landfill) at the Facility (Figure 1).

[1] At the time the alleged violations occurred, the Regional Water Board regulated the Facility under Waste Discharge Requirements Order R2-2008-0027 (WDR Order) and the Industrial General Permit. The WDR Order was not an NPDES permit and did not allow the discharge of leachate-laden stormwater or acidic stormwater into waters of the U.S. or waters of the state. Waste Discharge Requirements Order R2-2020-0016 superseded and rescinded the WDR Order, except for enforcement purposes. The Facility is currently regulated under Waste Discharge Requirements Order R2 2020-0016 and the Industrial General Permit.

The SWPPP must identify and evaluate sources of pollutants[2] associated with industrial activities and include plans to design, implement, and maintain BMPs to reduce or prevent stormwater pollution from Facility areas that include the Upper Borrow Area, Active Landfill, Material Processing Area, Unlined Landfill, and Extraction Well and Leachate Recovery System Area (Figure 1). The Upper Borrow Area is used to mine and stockpile soil for landfill operations and contains sulfur-rich rocks and generates sediment.[3] The Active Landfill is the current waste disposal area. The Material Processing Area is a paved concrete pad where construction and demolition material and bulky recyclables are accepted. The Unlined Landfill consists of the inactive benches on the southeast side of the Facility. The Extraction Well and Leachate Collection System area is the leachate collection and recovery system, which collects the leachate from the Active Landfill and Unlined Landfill. A leachate collection and recovery system controls leachate in the Active Landfill. A barrier at the toe of the landfill, leachate collection sump, and leachate extraction well control leachate in the Unlined Landfill.[4] The leachate extracted from the landfill cells was stored in three 10,000-gallon concrete tanks onsite at the time of the violations.

ALLEGED VIOLATIONS

Violation 1: Unauthorized Discharges of Leachate-Laden Stormwater into Stream 1

On at least four days, the Discharger allegedly violated Discharge Prohibition C of the Industrial General Permit by allowing leachate-laden stormwater to discharge into Stream 1. During each violation, Regional Water Board or California Department of Fish and Wildlife (Fish and Wildlife) staff observed leachate-laden stormwater to flow downhill from the Unlined Landfill, accumulate next to Stream 1 at the Extraction Well and Leachate Collection System, and discharge into Stream 1.

Fish and Wildlife and/or Regional Water Board staff inspected the Facility on March 26 and 28, and April 2 and 8, 2019. Regional Water Board staff observed the discharge on March 26, 2019, and on April 2 and 8, 2019.[5] Fish and Wildlife staff observed the discharge on March 28, 2019, and on April 2 and 8, 2019.[6]

Discharging leachate–laden stormwater into Stream 1, in violation of Discharge Prohibition C of the Industrial General Permit, subjects the Discharger to

[2] "Pollutant" means "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." (33 U.S.C. § 1362(6).) All references to "waste" in this document include one or more pollutants.
[3] Waste Discharge Requirements Order R2-2020-0016 Stormwater and Surface Water Management (pg. 9).
[4] Waste Discharge Requirements Order R2-2008-0027 Landfill Design, Construction and Operation (pg. 6).
[5] Regional Water Board, Notice of Violation, dated March 29, 2019; Clover Flat Landfill Inspections on April 2 and 8, 2019, reports dated April 4 and 10, 2019.
[6] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, dated May 10, 2019.

administrative civil liability pursuant to Water Code section 13385, subdivisions (a)(2) and (c). The proposed administrative civil liability for Violation 1 is $16,000.

Violation 2: Unauthorized Discharges of Leachate-Laden Stormwater into Stream 1

On at least three days, the Discharger allegedly violated Discharge Prohibition C of the Industrial General Permit by discharging at least 40,000 gallons of leachate-laden stormwater into Stream 1. On March 26, 2019, Regional Water Board staff observed leachate-laden stormwater flow from the Active Landfill and Material Processing Area (Figure 1) to a plastic pipe that discharged collected stormwater directly into Stream 1. The discharge continued during a storm that took place on March 27 and March 28, 2019.[7] During those days, approximately 0.32 and 0.78 inches of rain[8] fell on the Facility over a minimum area of 3.73 acres[9] generating at least 40,000 gallons of leachate-laden stormwater discharge into Stream 1.

Discharging leachate-laden stormwater into Stream 1, in violation of Discharge Prohibition C of the Industrial General Permit, subjects the Discharger to administrative civil liability pursuant to Water Code section 13385, subdivisions (a)(2) and (c). The proposed administrative civil liability for Violation 2 is $168,200.

Violation 3: Unauthorized Discharges of Acidic Stormwater to Stream 1

On at least 21 days, the Discharger allegedly violated Discharge Prohibition C of the Industrial General Permit by discharging acidic stormwater from the Facility into Stream 1. From April 2 through December 17, 2019, acidic stormwater discharges lowered the surface water pH in Streams 1 and 2 to acidic levels toxic to aquatic life (the pH in the streams ranged from 3.41 to 6.22).[10] On April 2, 2019, Fish and Wildlife measured the low pH in Stream 1. The acidic discharges are assumed to have occurred on each day with at least 0.05 inches of rain from April 2 until December 17, 2019, when BMPs were in place to control the acidic discharges.[11]

Discharging acidic stormwater into Stream 1, in violation of Discharge Prohibition C of the Industrial General Permit, subjects the Discharger to

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[7] About 0.75 inches of rain also occurred on March 25. To be conservative, this rain event was not included when estimating the volume discharged. The volume discharged before March 26 is unknown.
[8] Clover Flat Landfill 2018-2019 Monthly Meteorological Data, received April 29, 2019.
[9] The size of the area was estimated based on a GoogleEarth Pro image (retrieved April 11, 2020) of the hillside slope of the Active Landfill using Measure Distance Tool and SWPPP information regarding the size of the Material Processing Area.
[10] Natural Resource Damage Assessment Clover Flat Landfill Waste Discharges (Riparian Destruction, Leachate, Sediment, and Low pH), Duke, B. M., Ph.D., May 15, 2020; Regional Water Board Clover Flat Landfill Inspection on May 21, dated May 23, 2019.
[11] Daily precipitation data provided by Clover Flat Landfill Monthly Meteorological Data and University of California Weather. (http://cenapa.ucanr.edu/about/weather/?weather=station&station=77). The 0.05-inch rain threshold was chosen based on observations during inspections that stormwater flows across the site when that amount of precipitation takes place.

administrative civil liability pursuant to Water Code section 13385, subdivisions (a)(2) and (c). The proposed administrative civil liability for Violation 3 is $210,000.

Violation 4: Failure to Implement Best Management Practices for Preventative Maintenance

On at least seven days, the Discharger allegedly violated Provision X.H.1 of the Industrial General Permit (the minimum BMP requirements) by either failing to observe outdoor equipment and systems to identify leaks or failing to implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system.[12] Regional Water Board staff observed the same leaks from the leachate collection tanks at the Extraction Well and Leachate Recovery area during April 2 and 8, 2019, inspections.[13]

The violation of Industrial General Permit Provision X.H.1 subjects the Discharger to administrative civil liability pursuant to Water Code section 13385, subdivisions (a)(2) and (c). The proposed administrative civil liability for Violation 4 is $32,300.

Violation 5: Failure to Implement Effective Erosion and Sediment Controls

On at least 127 days, the Discharger allegedly violated Provision X.H.1 of the Industrial General Permit (the minimum BMP requirements) by failing to provide effective stabilization for finished slopes or other erodible areas.[14] Napa County Environmental Health and Regional Water Board staff observed missing or ineffective erosion and sediment controls from January 29, 2019, through June 4, 2019.[15] Regional Water Board staff observed large rills on several benches at the Unlined Landfill without BMPs or with ineffective BMPs.[16]

The violation of Industrial General Permit Provision X.H.1 subjects the Discharger to administrative civil liability pursuant to Water Code section 13385, subdivisions (a)(2) and (c). The proposed administrative civil liability for Violation 5 is $175,600.

[12] Industrial General Permit Provisions X.H.1.b.ii and X.H.1.c.ii.
[13] Regional Water Board, Clover Flat Landfill Inspections on April 2 and 8, 2019, reports dated April 4 and 10, 2019.
[14] Industrial General Permit Provision X.H.1.e.ii; Napa County Environmental Health January 27, 2019 Inspection Report, dated February 6, 2019; Regional Water Board Clover Flat Landfill Inspections on June 4, 2019, dated June 6, 2019.
[15] Napa County Environmental Health January 27, 2019 Inspection Report, dated February 6, 2019; Regional Water Board Clover Flat Landfill Inspections on June 4, 2019, dated June 6, 2019.
[16] Regional Water Board Notice of Violation, dated March 29, 2019; Clover Flat Landfill Inspections on April 2 and June 4, 2019, reports dated April 4 and June 6, 2019.

ADMINISTRATIVE CIVIL LIABILITY
CALCULATION STEPS

Step 1 – ACTUAL OR POTENTIAL FOR HARM FOR DISCHARGE VIOLATIONS

This step applies to Violations 1, 2, and 3 because they are discharge violations. This step does not apply to Violations 4 and 5 because they are non-discharge violations.

The "potential harm" factor considers the harm to beneficial uses that resulted or that may result from exposure to the pollutants in the discharge, while evaluating the nature, circumstances, extent, and gravity of the violations. A three-factor scoring system is used for each violation or group of violations: (1) the degree of toxicity of the discharge; (2) the harm or potential harm to beneficial uses; and (3) whether the discharge is susceptible to cleanup or abatement.

Factor 1: The Physical, Chemical, Biological and/or Thermal Characteristics for the Discharge

The Enforcement Policy specifies that a score between 0 and 4 be assigned based on a determination of the risk or threat of the discharged material to potential receptors. It defines "potential receptors" as those identified considering human, environmental, and ecosystem health exposure pathways.

As a Class III landfill, the Facility receives nonhazardous solid waste from residential, commercial, and industrial sources. Landfill leachate generated by waste degradation may pollute surface waters if not contained. Leachate at Class III landfills typically contains metals (including iron, zinc, chromium, nickel, copper, cadmium and lead) and nutrients (including phosphates and nitrogen in the form of ammonium and ammonia).[17]

- Metals from leachate have many biological effects on aquatic life (e.g., gill and fin damage and aquatic life mortality).[18] Heavy metals generated by domestic waste can damage cellular DNA in fish, causing mutations.[19]

- Excess nutrients, including nitrogen and phosphorous, in surface waters can cause algae to grow faster than an ecosystem can handle and degrade water quality, food resources, and habitats. Algal blooms cause fluctuations in oxygen and pH levels that can kill fish and other aquatic life.[20] Nitrogen in the

[17] "Physico-Chemical and Toxicological Characteristics of Leachates from MSW Landfills." Słomczyńska, B., and Słomczyński, T. Polish Journal of Environmental Studies, vol. 13, 2004, pp. 627–637.
[18] Damage includes mucous streaming from gills and blackened tails. US EPA. *Metals | US EPA*. [online] Available at https://www.epa.gov/caddis-vol2/metals [Accessed June 13, 2019].
[19] First evidence of fish genotoxicity induced by heavy metals from landfill leachates: The advantage of using the RAPD-PCR technique. Ecotoxicology and Environmental Safety, Ben Salem, Z., Capelli, N., Grisey, E., Baurand, P., Ayadi, H., & Aleya, L. (2014). 101, 90-96. Doi: 10.1016/j.ecoenv.2013.12.014.
[20] The Issue. EPA, Environmental Protection Agency, 4 Feb. 2019, www.epa.gov/nutrientpollution/issue.

form of ammonium and ammonia can be toxic to fish and other aquatic life, and the toxicity of these pollutants increases as pH decreases.[21] Nitrogen in the form of nitrate may migrate to groundwater and degrade sources of drinking water to levels unsafe for human consumption.[22]

Violation 1: The risk or threat of the discharge is moderate (2). "Moderate" is assigned when the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of threat to potential receptors.

Four landfill leachate samples collected at the Facility from March 25 through April 1, 2019, contained the metals and ammonia contaminants typically detected at Class III landfills. Metals detected in the leachate included antimony, arsenic, barium, beryllium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, tin, thallium, vanadium, and zinc. As shown in Table 1 below, arsenic, copper, nickel, and zinc were detected at concentrations exceeding California Toxics Rule criteria.[23] On April 2, 2019, Fish and Wildlife collected a sample of leachate-laden stormwater before it entered Stream 1 showing exceedances of the zinc criterion. The concentration of leachate contaminants decreased upon mixing with the stormwater; therefore, the toxicity of the discharged material is "moderate."

[21] "Ammonia Toxicity to Fishes. Effect of pH on the Toxicity of the Unionized Ammonia Species." Thurston, Robert V., et al. Environmental Science and Technology, vol. 15, no. 7, 1981, pp. 837–840.
[22] Central Coast Regional Water Quality Control Board 2013. Fact Sheet: Nitrate/Nitrite in Drinking Water. Central Coast Ambient Monitoring Program Groundwater Assessment and Protection.
[23] The California Toxics Rule establishes criteria as an estimate of the highest concentration of a substance in water that does not present a significant risk to the aquatic organisms in the water and their uses. The criteria used were calculated with 110 mg/L hardness based on data from the Surface Water Ambient Monitoring Program for the Napa River.

Table 1
Landfill Leachate Sampling Results[24]
(water quality criterion exceedances shown in red, bold text)

Analyte	Units[25]	Leachate in Collection Tank, March 25 (total)	Leachate Seepage, April 1 (total)	Leachate in Collection Tank, April 1 (total)	Leachate in Condensate Tank, April 1 (total)	Leachate-Laden Storm-water, April 2 (dissolved)[26]	Freshwater Chronic Criterion (total)[27]
Arsenic	mg/L	**0.18**	0.062	0.085	**0.35**	0.022	0.15
Copper	mg/L	0.0034	**0.049**	**0.041**	**0.011**	<0.10	0.010
Lead	mg/L	<0.0035	**0.046**	<0.0035	<0.0035	<0.050	0.0036
Nickel	mg/L	0.0089	0.053	0.012	**0.10**	<0.10	0.056
Zinc	mg/L	<0.009.5	**0.56**	0.085	**0.26**	**0.23**	0.13

- Acute effects of arsenic include being poisonous to some microorganisms and aquatic life, and lethal to some invertebrates (arsenic is used as a pesticide and as a preservative in wood stains and paints). Chronic effects from long-term exposure may limit development, growth, reproduction, metabolism, or other physiologic processes in aquatic life.[28]

- Copper is lethal to some aquatic organisms at elevated concentrations. Chronic exposure can alter brain function, enzyme activity, blood chemistry, and metabolism, and it can have adverse effects on survival, growth, and reproduction.[29]

- Nickel has additive (synergistic) effects with copper and zinc, and it is a development toxicant in animals. Nickel may upset the hormonal balance of fish or other aquatic organisms during pregnancy and impair the development of the embryo.[30]

[24] Samples collected on April 1 and 2, 2019, were of the leachate seepage next to Stream 1. Samples collected on March 25, April 1, and April 2, 2019, were of the leachate in the collection tanks. The laboratory analytical reports with these sample results are available at Geotracker: March 25 Samples Lab Report #1909373, April 1 Samples Lab Report #1910200, April 9 Samples Lab Report #1911413, April 23 Sample Lab Report #1913355.
[25] Mg/L = milligrams per liter.
[26] These sample results represent the concentrations of dissolved metal. The total concentrations of these metals could be higher.
[27] The California Toxics Rule establishes 1-hour and 4-day water quality criteria for freshwater. The four-day criteria are presented here because Facility discharges likely affected receiving water conditions for more than 1 hour. These criteria were calculated based on an assumed hardness of 110 mg/L based on SWAMP data for the Napa River in the CEDEN Database https://ceden.waterboards.ca.gov.
[28] "Toxicological Profile for Arsenic." EPA, Environmental Protection Agency, 1989.
[29] An Exposure and Risk Assessment for Copper. Perwak, J., Bysshe, S., & Goyer, M. (1980). Environmental Protection Agency.
[30]. Embryotoxicity and genotoxicity of nickel. Leonard A, Jacquet P IARC Sci Publ. 1984;(53):277-291.

- Zinc accumulates in aquatic species living in zinc-contaminated waterways and biomagnifies up the food chain. Zinc primarily damages the gill epithelium in fish and kills fish by destroying gill tissues.[31]

The total ammonia nitrogen (TAN) concentration in the leachate samples collected on April 1, 2019, was 0.18 mg/L (next to Stream 1) and 310 mg/L (in the collection tank). This concentration posed a threat to Stream 1. The U.S. Environmental Protection Agency (EPA) water quality criteria for TAN to protect aquatic life are 17 mg/L (one-hour average) and 1.9 mg/L (four-day average), assuming a pH of 7.0 and temperature of 20ºC.[32] The actual TAN concentrations in Stream 1 were likely lower than the 310 mg/L concentration measured in the leachate samples, but the low pH in Stream 1 would also have served to elevate the in-stream TAN concentration. The exceedance indicates risks to aquatic life.

Fish and Wildlife conducted acute toxicity tests on leachate-laden stormwater samples collected adjacent to the Facility on April 2, 2019. The bioassays were performed using fathead minnows. The mean survival was 100%, meaning at that moment in time, the leachate samples had no significant effect on test organisms.

Violation 2: The risk or threat of the discharge is moderate (2). "Moderate" is assigned when the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of threat to potential receptors.

The Discharger installed a 12-inch plastic pipe to route stormwater from the Active Landfill area directly to Stream 1. Regional Water Board staff observed leachate mixing with stormwater runoff before it entered into the 12-inch plastic pipe and discharged into Stream 1.[33] Although the Discharger did not characterize the discharge as the Industrial General Permit requires,[34] the concentration of leachate contaminants likely decreased upon mixing with the stormwater, reducing the toxicity of the discharged material to "moderate."

Data from stormwater sampled at other areas of the Facility on April 25, 2019, may not represent the discharge from the 12-inch plastic pipe. It is unknown if leachate polluted those stormwater samples. They were collected approximately 2,000 and 2,500 feet away from the 12-inch plastic pipe and were analyzed for Industrial General Permit constituents (aluminum, iron, lead zinc, total suspended solids, and chemical oxygen demand), not leachate. Nonetheless, these

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[31] "Zinc Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review." Eisler, R. Biological Report, vol. 10, Apr. 1993, and. "Toxicity of Zinc Compounds to Aquatic Animals, with Special Reference to Fish." Skidmore, J. F The Quarterly Review of Biology, vol. 39, no. 3, 1964, pp. 227–248., doi:10.1086/404229.
[32] 2013 Freshwater Aquatic Life Ambient Water Quality https://www.epa.gov/sites/production/files/2015-08/documents/aquatic-life-ambient-water-quality-criteria-for-ammonia-freshwater-2013.pdf.
[33] Regional Water Board Notice of Violation for Clover Flat Landfill dated March 29, 2019.
[34] Industrial General Permit Provision XI.B.4.b requires the Discharger to collect samples "from each drainage area at all discharge locations. The samples must be … associated with the discharge of contained storm water."

stormwater samples contained pollutant concentrations[35] above the California Toxic Rule criterion for zinc, as discussed further below. Zinc concentrations in the discharge may have been higher with the addition of leachate. High total suspended solids and chemical oxygen demand levels may indicate that there were more pollutants in stormwater. The sampling results reveal that the discharge posed at least a moderate threat to aquatic life.

- Zinc accumulates in aquatic species living in zinc-contaminated waterways and biomagnifies up the food chain. Zinc primarily damages fish gills and kills fish by destroying gill tissues.[36] The total recoverable zinc level in the stormwater sample was 0.42 mg/L, which is higher than the California Toxics Rule criterion for zinc (see Table 1).

- Total suspended solids inhibit photosynthesis by blocking sunlight and halting or reducing photosynthesis, decreasing aquatic plant survival and dissolved oxygen output for other aquatic life.[37] The Industrial General Permit uses total suspended solids as a broad indicator of performance of management practices and pollutants in stormwater runoff that are not directly measured. Other pollutants—such as metals and nutrients (nitrogen and phosphate)—can attach to sediment in runoff or be discharged in stormwater to surface waters.[38]

- High chemical oxygen demand or low dissolved oxygen causes reduced cell function, disrupts circulatory fluid balance in aquatic species, and can result in mortality of individual organisms and even large hypoxic or "dead" zones. Hypoxic waters can also release pollutants stored in sediment into the water.[39]

Violation 3: The risk or threat of the discharge is major (4). "Major" is assigned when chemical and/or physical characteristics of the discharged material far exceed risk factors and pose a significant threat to potential receptor uses.

The pH of the acidic stormwater discharged from the Upper Borrow Area into Stream 1 ranged from 2.96[40] to 3.78.[41] The Water Quality Control Plan for the

[35] Sample data uploaded to California Stormwater Application and Report Tracking System (SMARTS) as Lab Analysis Data 03-27-19.
[36] "Zinc Hazards to Fish, Wildlife, and Invertebrates: A Synoptic Review." Eisler, R. Biological Report, vol. 10, Apr. 1993, and Skidmore, J. F. "Toxicity of Zinc Compounds to Aquatic Animals, with Special Reference to Fish." The Quarterly Review of Biology, vol. 39, no. 3, 1964, pp. 227–248).
[37] "Turbidity, Total Suspended Solids and Water Clarity." Fondriest Environmental, Inc. Fundamentals of Environmental Measurements. June 13, 2014. Web. < https://www.fondriest.com/environmental-measurements/parameters/water-quality/turbidity-total-suspended-solids-water-clarity/ >.
[38] "Comparability of Suspended-Sediment Concentration and Total Suspended Solids Data." USGS Water-Resources Investigations Report 00-4191. Gray, J. R., Gylsson, G. D., Turcios, L. M., & Schwarz, G. E. (2000, August). Reston, VA: U S Geological Survey.
[39] "Chemical Oxygen Demand (COD) Stormwater Treatment." StormwateRx, July 24, 2019, stormwaterx.com/resources/industrialpollutants/chemical-oxygen-demand-cod/.
[40] "Natural Resource Damage Assessment Clover Flat Landfill Waste Discharges (Riparian Destruction, Leachate, Sediment, and Low pH)", Duke, B. M., Ph.D. May 15, 2020.
[41] Regional Water Board Inspection of Clover Flat Landfill on May 21, 2019, report dated May 23, 2019.

San Francisco Bay Region (Basin Plan) water quality objective for pH is between 6.5 and 8.5, which is the optimal pH range for most aquatic organisms.[42] The pH in the stormwater runoff from the Upper Borrow Area far exceeded the acceptable pH range.

A clear link exists between low pH water and fish mortality. The pH of water affects most chemical and biological processes in aquatic habitats. Acidic water causes acidic conditions that pose a significant threat to potential receptors such as amphibians and fish. Acidic water can cause damage to gill epithelium, decreased growth, reproductive failure, respiratory inhibition, ionoregulatory inhibition, and mortality. It also contributes to declines in abundance of zooplankton, macroinvertebrates, and fish by eliminating acid-sensitive species.[43] *Experiments* that measured the acute effects of low-pH stream chemistry on fish mortality have shown that even acid-tolerant species, such as brook trout, are killed in water at or around a pH of 5 and that streams with moderate to severe acidic episodes have significantly higher fish mortality than nonacidic streams.[44] Episodic acidification can be particularly harmful in streams and rivers because these ecosystems can experience abrupt changes in water chemistry that disrupt limited refuge areas for fish. Acidification can also have long-term negative impacts on fish communities in small streams due to mortality emigration and reproductive failure.[45]

Factor 2: Harm or Potential Harm to Beneficial Uses

The Enforcement Policy specifies that a score between 0 and 5 be assigned based on a determination of whether direct or indirect harm, or potential for harm, from a violation is negligible (0) to major (5).

Stream 1 and Stream 2 are intermittent streams and tributaries to the perennially flowing Napa River. Stream 1 and Stream 2 flow during the wet season; they were flowing during Violations 1 through 3. The Basin Plan lists the following beneficial uses for the Napa River and its tributaries: agriculture, cold freshwater habitat, warm freshwater habitat, fish migration, preservation of rare and endangered species, fish spawning, and wildlife habitat and recreation. The Napa River is also suitable or potentially suitable for municipal or domestic supply.[46]

Discharges associated with Violations 1 through 3 may all have contributed to adverse impacts to a variety of fish and wildlife species as documented in a Fish

[42] U.S. EPA National Recommended Water Quality Criteria for pH.
[43] "Long-Term Ecosystem Stress: The Effects of Years of Experimental Acidification on a Small Lake." Schindler, D. W., et al. Science, vol. 228, no. 4706, 1985, pp. 1395–1401.
[44] "Episodic acidification of small streams in northeastern United States: Fish Mortality in Field Bioassys" Van Sickle, J. et al. Ecological Applications 6408-421, 1996.
[45] "Episodic acidification of small streams in northeastern United States: Effects on Fish Populations", Baker, JP, Ecological Applications 6422-437, 1996.
[46] State Water Board Resolution No. 88-63,

and Wildlife resource impact assessment[47] that concluded that the Facility adversely affected aquatic life in Stream 1.[48] During inspections, Fish and Wildlife staff did not observe any aquatic life in Stream 1 adjacent to the Facility. In fact, Fish and Wildlife staff observed no aquatic life within approximately 1 mile downstream of the Facility, where an unaffected tributary joins Stream 1.

Water quality impacts and threats to the beneficial uses of Stream 1 from the alleged discharges are discussed further below.

Violation 1: The harm or potential harm to beneficial uses from leachate-laden stormwater to Stream 1 is moderate (3). "Moderate" is assigned when there is moderate harm or potential harm to beneficial uses. The score is typified by observed or reasonably expected potential impacts, but harm or potential harm to beneficial uses is moderate and likely to attenuate without appreciable medium or long term acute or chronic effects.

Leachate-laden stormwater discharged directly into Stream 1, degraded water quality, and threatened aquatic life and habitat. As explained with respect to Factor 1, above, the leachate discharge had the potential to harm Stream 1 water quality. Specifically, leachate discharged into Stream 1 had the potential to harm its freshwater habitat, fish spawning and migration, and wildlife habitat beneficial uses.

The Discharger did not assess the harm to the receiving waters until after it controlled the leachate-laden stormwater. After Regional Water Board staff observed the discharge into Stream 1 on March 26, 2019, the Discharger started corrective measures on March 28, 2019, to berm and capture the leachate-laden stormwater. The Discharger started pumping the leachate-laden stormwater into 20,000-gallon frack tanks by April 2, 2019.[49] The Discharger did not collect samples to characterize impacts until April 1, 2019, and never fully characterized the harm to Stream 1.

While the impacts to Stream 1 were never fully characterized, sampling data still detected toxic levels of metals in Stream 1 associated with the discharge. As shown in Figure 2 below, three instream samples were collected near the Facility at Points A through C.[50] No metals were detected in a sample collected from Stream 1 upstream of the Facility (Point A). However, the metals found in leachate (as discussed with respect to Factor 1) were detected in the Stream 1 samples collected adjacent to the Facility (Points B and C). These metals

[47] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.
[48] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.
[49] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019; Regional Water Board Inspections of Clover Flat Landfill on April 2, 2019, report dated April 4, 2019.
[50] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.

included antimony, barium, beryllium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, and zinc. Therefore, the leachate discharged from the Facility may have degraded the water quality in Stream 1 to levels toxic to aquatic life.[51]

Figure 2: Sample locations collected by Fish and Wildlife staff and the Discharger near the Facility are mapped on this satellite image taken on September 19, 2018, which Regional Water Board staff accessed via GoogleEarth Pro on June 11 and July 15, 2019. Modifications to the image include Streams 1 and 2 (blue lines) and the three sample points (orange markers). The Discharger collected a sample at Point C on April 1, 2019. Fish and Wildlife staff collected samples at Points A and B on April 2, 2019.

[51] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.

Table 2
Receiving Water Sampling Results
(water quality criterion exceedances shown in red, bold text)

Analyte	Units[52]	Point A April 2 (dissolved)[53]	Point B April 2 (dissolved)[59]	Point C April 1 (total)	Freshwater Chronic Criterion (total)[54]
Arsenic	mg/L	<0.010	0.020	0.12	0.15
Copper	mg/L	<0.10	<0.10	**0.019**	0.010
Lead	mg/L	<0.050	<0.050	**0.0073**	0.0036
Nickel	mg/L	<0.10	<0.10	**0.062**	0.056
Zinc	mg/L	<0.10	**0.25**	**0.34**	0.13

Violation 2: The potential harm to beneficial uses from the unauthorized leachate discharge to Stream 1 is moderate (3). "Moderate" is assigned when there is moderate harm or potential harm to beneficial uses. The score is typified by observed or reasonably expected potential impacts, but harm or potential harm to beneficial uses is moderate and likely to attenuate without appreciable medium or long term acute or chronic effects.

Leachate-laden stormwater was discharged directly into Stream 1 and potentially harmed beneficial uses of Stream 1, a tributary to the Napa River.[55] During a storm from March 27 and 28, 2019, the Discharger discharged at least 40,000 gallons of leachate-laden stormwater discharged from the Facility into Stream 1. As discussed with respect to Factor 1, the polluted stormwater may have contained solids and metals at toxic levels. The actual harm of this unauthorized discharge, however, is unknown because the Discharger failed to characterize the discharge as required by the Industrial General Permit. The March 27 to 28, 2019, storm was a mid-week qualifying storm event, but the Discharger did not sample receiving waters to evaluate potential impacts from leachate-laden stormwater until April 1, 2019, four days after the storm.[56] Nonetheless, as indicated in Table 2, the instream sample taken on April 1, 2019, indicates that water quality in Stream 1 exceeded the California Toxics Rule criteria for lead, copper, nickel, and zinc. Although most pollutants discharged during the storm likely flowed downstream by April 1, 2019, residual impacts were still evident. Moreover, the leachate-laden stormwater discharge may have contributed to the

[52] Mg/L = milligrams per liter.
[53] These sample results represent the concentrations of dissolved metal. The total concentrations of these metals could be higher.
[54] The California Toxics Rule establishes 1-hour and 4-day water quality criteria for freshwater. The four-day criteria are presented here because Facility discharges likely affected receiving water conditions for more than 1 hour. These criteria were calculated based on an assumed hardness of 110 mg/L based on SWAMP data for the Napa River in the CEDEN Database https://ceden.waterboards.ca.gov.
[55] Regional Water Board Notice of Violation, dated March 29, 2019.
[56] Geotracker Environmental Data EDF 1910200.

lack of aquatic life Fish and Wildlife staff observed in Stream 1 adjacent to the Facility on April 2, 2019.[57]

Violation 3: The potential harm to beneficial uses from the unauthorized acidic stormwater discharge to Stream 1 is major (5). "Major" is assigned when there is a high harm or threat of harm to beneficial uses. The score is typified by observed or reasonably expected potential significant impacts, and involves potential for or actual acute, and/or chronic restrictions on, or impairment of, beneficial uses, aquatic life, and/or human health.

Low pH stormwater discharged from the Facility from April 2 through December 17, 2019, lowered the ambient pH of Stream 1 to at least 3.35,[58] well below the optimal pH for most aquatic organisms and the Basin Plan water quality objective (pH between pH 6.5 and 8.5).[59] The ambient pH of Stream 1 above the Facility at Point A was 7.87, well within the acceptable range.[60] During a December 17, 2019, inspection, the Discharger measured the pH in Stream 1 between Points B and C to be within the range of 3.0 to 5.0.[61]

The Facility degraded water quality in Stream 1 to the point that it was inhabitable for fish. Fish and Wildlife staff conducted acute toxicity tests on receiving water samples collected adjacent to the Facility. The bioassays were performed using fathead minnows. The mean survival of the fathead minnows in the undiluted sample water collected at Point B was 0 percent within 72 hours (all the fish died). Fish and Wildlife staff concluded that the pH of the sample caused the observed mortality.[62] Water quality upstream of the Facility was habitable to fish. An acute toxicity test conducted on a sample Fish and Wildlife staff collected upstream of the Facility (Point A) had 100 percent survival. No fathead minnows died during the 96-hour test.[63]

Factor 3: Susceptibility to Cleanup or Abatement

The Enforcement Policy specifies that if 50 percent or more of the discharge is susceptible to cleanup or abatement, then a score of 0 is assigned. A score of 1 is assigned if less than 50 percent of the discharge is susceptible to cleanup or

[57] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.
[58] Duke, B. M., Ph.D. Natural Resource Damage Assessment Clover Flat Landfill Waste Discharges (Riparian Destruction, Leachate, Sediment, and Low pH), May 15, 2020.
[59] US EPA National Recommended Water Quality Criteria is 6.5 to 8.5, and Basin Plan section 3-3 contains a pH water quality objective of 6.5 to 8.5 in surface water.
[60] "Natural Resource Damage Assessment Clover Flat Landfill Waste Discharges (Riparian Destruction, Leachate, Sediment, and Low pH)", Duke, B. M., Ph.D., May 15, 2020.
[61] Regional Water Board Inspection of Clover Flat Landfill on December 17, 2019, report dated December 21, 2019.
[62] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.
[63] Fish and Wildlife performed one other toxicity bioassay using water collected farther downstream within Stream 1 before the confluence with the Napa River. The test found 97.5% survival.

abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated.

Violations 1 through 3: The unauthorized discharges were not susceptible to cleanup or abatement, and are assigned a score of 1. In each instance, the discharged material flowed into and commingled with ambient receiving waters and could not be effectively cleaned up or abated.

Step 2 – ASSESSMENTS FOR DISCHARGE VIOLATIONS

This step applies to Violations 1, 2, and 3 because they are discharge violations. This step does not apply to Violations 4 and 5 because they are non-discharge violations.

The Enforcement Policy specifies that when there is a discharge, an initial liability amount based on a per-gallon and/or a per-day basis is determined using the sum of the Potential for Harm scores from Step 1 and a determination of Deviation from Requirement. The Deviation from Requirement reflects the extent to which a violation deviates from the specific requirement violated.

Violations 1 through 3: The **Deviation from Requirement** is **major.** A "major" Deviation from Requirement is assigned when the requirement was rendered ineffective.

The Industrial General Permit prohibited all the unauthorized discharges associated with Violations 1 through 3. Discharge Prohibition C of the Industrial General Permit prohibits, among other things, the discharge of liquids or materials other than stormwater, either directly or indirectly, to waters of the U.S. unless authorized by another NPDES permit.

The essential function of the discharge prohibition, to prohibit discharges, was rendered ineffective. The Discharger allowed leachate to seep and leachate-laden stormwater to discharge directly into Stream 1 at several locations on multiple occasions.

Per-Day Factor for Violation 1: The sum of the three factors from Step 1 is 6 (2 + 3 + 1). Based on the Potential for Harm score and the Deviation from Requirement described above, the per-day multiplier from the matrix in Table 2 of the Enforcement Policy is 0.28.

Per-Day and Per-Gallon Factor for Violation 2: The sum of the three factors from Step 1 is 6 (2 + 3 + 1). Based on the Potential for Harm score and the Deviation from Requirement described above, the per-day and per-gallon multipliers from the matrices in Tables 1 and 2 of the Enforcement Policy are both 0.28.

Per-Day Factor for Violation 3: The sum of the three factors from Step 1 is 10 (4 + 5 + 1). Based on the Potential for Harm score and the Deviation from

Requirement described above, the per-day multiplier from the matrix in Table 2 of the Enforcement Policy is 1.0.

Step 3 – Assessment for Non-Discharge Violations

This step applies to Violations 4 and 5 because they are non-discharge violations. This step does not apply to Violations 1, 2, and 3 because they are discharge violations.

For non-discharge violations, the Enforcement Policy specifies that an initial liability be determined from the maximum per-day liability multiplied by the number of days of violation and a per-day factor ranging from 0.1 to 1 corresponding to the Potential for Harm and Deviation from Requirement. The Potential for Harm reflects the characteristics and/or the circumstances of the violation and its threat to beneficial uses. The Deviation from Requirement reflects the extent to which a violation deviates from the specific requirement violated.

Potential for Harm

Violations 4 and 5: The Potential for Harm is **moderate**. A "moderate" Potential for Harm applies when characteristics of the violation present a substantial threat to beneficial uses and/or indicate a substantial potential for harm. Most non-discharge violations are considered to present a moderate potential for harm.

Violation 4
By not implementing minimum BMPs to identify and cleanup leaks, the Discharger exposed leachate to rain and increased the potential for stormwater to convey pollutants to groundwater and Stream 1. The leachate that leaked from the collection tanks presented a substantial threat to Stream 1 beneficial uses, including aquatic habitat, because the leaks lasted for over one week and the leachate contained metals at concentrations that may have exceeded toxic levels based on California Toxic Rule criteria (see Tables 1 and 2) as shown below:

- Total arsenic levels at concentrations up to 0.35 mg/L exceeded the criterion (0.15 mg/L).
- Total copper levels at concentrations up to 0.041 mg/L exceeded the criterion (0.01 mg/L).
- Total nickel levels at concentrations up to 0.12 mg/L exceeded the criterion (0.056 mg/L).
- Total zinc levels at concentrations up to 0.56 mg/L exceeded the criterion (0.13 mg/L).

Violation 5
By not implementing minimum BMPs to provide effective stabilization for inactive areas or finished slopes, the Discharger exposed erodible material to rain and increased the potential for discharges of erodible materials to Stream 1. Based

on observations of large rills on several benches on the Unlined Landfill with no BMPs or ineffective BMPs, sediment and other erodible material posed a substantial potential for harm. Uncontained sediment and erosion discharged from the Facility into the downstream receiving waters presented a substantial threat to beneficial uses relating to aquatic species and aquatic habitat. [64] If and when discharged, the sediment and other erodible material could reduce the sunlight reaching aquatic plants, clog fish gills, and smother aquatic habitat and spawning areas. Sediment also provides attachment places for other pollutants, most notably metals. Excess fine sediment in the stream could increase its turbidity, an indicator of potential pollution in a water body.[65] Many fish species are sight feeders that require water clarity for foraging success. Turbid waters can cause fish to expend energy to rid sediment in their gills through coughing, which erodes sensitive gill tissues, leading to growth inhibition or fish mortality. Moreover, the discharge of sediment can fill in the habitats of amphibians and other aquatic species, reducing water depth and increasing water temperature.[66]

Deviation from Requirement

Violations 4-5: The Deviation from Requirement is **moderate**. A "moderate" Deviation from Requirement is assigned when the intended effectiveness of the requirement was partially compromised.

Violation 4

Industrial General Permit Provision X.H.1 contains minimum BMP requirements and requires, among other things, the Discharger to observe outdoor equipment and systems to identify leaks (Provision X.H.1.b.ii) and to develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system (Provision X.H.1.c.ii).

Although the Discharger prepared a SWPPP and implemented some BMPs, the minimum BMP requirements were partially compromised because, on at least seven occasions, the Discharger did not implement procedures to identify and repair leaks. The Discharger's SWPPP includes procedures to inspect outdoor equipment daily for evidence of leaks and to promptly clean discovered leaks.[67] The SWPPP also contains procedures to conduct visual observations of outdoor equipment prior to forecasted rain. The leaks continued from at least April 2 through 8, 2019, during which time rain occurred every day at the Facility.[68] On or before April 2, 2019, the Discharger did not follow the SWPPP procedures. The Discharger failed to observe leaks from tanks and pipes at the Leachate

[64] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.
[65] "Turbidity and Water." Turbidity and Water, retrieved from: www.usgs.gov/special-topic/water-science-school/science/turbidity-and-water.
[66] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, Dated May 10, 2019.
[67] Clover Flat Landfill Stormwater Pollution Prevention Plan, dated June 2015.
[68] Daily precipitation data provided by Clover Flat Landfill Monthly Meteorological Data.

Collection System, and failed to fix the leaks.[69] By April 8, 2019, the tank leaks had stopped, but the pipes continued to leak.[70] The Discharger either failed to observe the equipment to detect the leaks or failed to implement spill and leak response procedures to fix the leaks, or both. The Discharger repaired the leaks by or before April 16, 2019.[71]

Based on the above Potential for Harm and Deviation from Requirement and the matrix in Table 3 of the Enforcement Policy, the per-day factor is 0.35.

Violation 5

Industrial General Permit Provision X.H.1.e.ii requires the Discharger to provide effective stabilization for inactive areas, finished slopes, or other erodible areas. The requirement was partially compromised because controls were only partially installed and were ineffective. Napa County Environmental Health cited the Discharger for lack of erosion and sediment controls on January 29, 2019.[72] The Discharger failed to maintain erosion control BMPs (e.g., geotextile mats and slope drains), which caused erosion in several areas around the Facility.[73] To address the erosion, the Discharger constructed berms on the benches at the Unlined Landfill to prevent runoff. The berms, however, proved to be ineffective when rain caused significant erosion and deeper and wider gullies formed.[74] As identified in the Facility's SWPPP, the Discharger also used fiber socks as a sediment control measure to reduce sediment discharges from actively disturbed areas. The fiber socks were installed on access roads but were mostly ineffective because they were worn or crushed by large machinery, rendering the requirement partially compromised.[75] The Discharger provided effective stabilization by or before July 2, 2019.[76]

Based on the above Potential for Harm and Deviation from Requirement and the matrix in Table 3 of the Enforcement Policy, the resulting per-day factor is 0.35.

Initial Liability Amount

Water Code section 13385, subdivision (c), authorizes the Regional Water Board to impose an administrative civil liability of up to $10,000 for each day of violation and $10 for each gallon discharged but not cleaned up in excess of 1,000 gallons.

[69] Regional Water Board Inspection of Clover Flat Landfill on April 2, 2019, report dated April 4, 2019.
[70] Regional Water Board Inspection of Clover Flat Landfill on April 8, 2019, report dated April 10, 2019.
[71] Regional Water Board Inspection of Clover Flat Landfill on April 16, 2019, report dated April 17, 2019.
[72] Napa County Environmental Health January 27, 2019 Inspection Report, report dated February 6.
[73] Regional Water Board Clover Flat Landfill Notice of Violation, dated March 29; Regional Water Board Inspection of Clover Flat Landfill on April 8, May 21, June 6, July 2, 2019, reports dated April 10, May 23, June 6, July 3, 2019.
[74] Regional Water Board Inspection of Clover Flat Landfill on May 21, 2019, report dated May 23, 2019.
[75] Regional Water Board Inspection of Clover Flat Landfill on May 21, 2019, report dated May 23, 2019.
[76] Regional Water Board Inspection of Clover Flat Landfill on July 2, 2019, report dated July 3, 2019.

Violation 1: The violation occurred for at least 4 days. The initial liability amount calculated on a per-day basis is as follows:

Per-Day Liability: ($10,000/day) x (0.28) x (4 days) = $11,200

Initial Liability = $11,200

Violation 2: The violation occurred for at least 3 days and involved at least 40,000 gallons. The initial liability amount calculated on a per-gallon basis and per-day basis is as follows:

Per-Day Liability:

($10,000/day) x (0.28) x (3 days) = $8,400

Per-Gallon Liability:

(40,000 gallons – 1,000 gallons) x (0.28) x ($10/gallon) = $109,200

Initial Liability = $8,400 + $109,200 = $117,600

Violation 3: The violation occurred for a least 21 days. The initial liability amount calculated on a per-day basis is as follows:

Per-Day Liability: ($10,000/day) x (1.0) x (21 days) = $210,000

Initial Liability = $210,000

Violation 4: The violation occurred for at least 7 days. The initial liability amount calculated on a per-day basis is as follows:

Per-Day Liability: ($10,000/day) x (0.35) x (7 days) = $24,500

Initial Liability = $24,500

Violation 5: The violation occurred for at least 127 days. In accordance with the Enforcement Policy, the 127 days of violation were collapsed to 38 days. This includes the first 30 days of the 127-day period, plus 1 day for each 5 days of violation until the 60th day, plus 1 day for each 30 days of violation thereafter. The Enforcement Policy permits this adjustment because daily detrimental impacts to the environment did not occur during this period. The potential for sediment runoff is elevated only during the winter season when rain is more prevalent. Runoff does not occur on a daily basis. The initial liability amount calculated on a per-day basis is as follows:

Per-Day Liability: ($10,000/day) x (0.35) x (38 days) = $133,000

Initial Liability = $133,000

Step 4 – Adjustments to Initial Liabilities

The Enforcement Policy specifies that three additional factors be considered for modification of the amount of initial liability: the discharger's culpability, efforts to clean up and cooperate with regulatory authorities, and the discharger's compliance history.

Culpability

The Enforcement Policy specifies that higher liabilities should result from intentional or negligent violations as opposed to accidental violations. It specifies use of a multiplier between 0.75 and 1.5, with a higher multiplier for intentional or negligent behavior.

Violations 1-3: The culpability multiplier is 1.3. The Discharger has been regulated under Waste Discharge Requirements since 1991 and the Industrial General Permit since 1992, both of which contained prohibitions against the discharge of leachate and leachate-laden stormwater. When the alleged violations occurred, the Discharger, through the actions or inactions of former management, did not take reasonable and prudent steps to prevent or control leachate and low-pH discharges; it failed to address known active leachate seeps at the Facility, and failed to investigate and take appropriate actions to address the low pH samples it collected from Stream 1.

Violations 4 and 5: The culpability multiplier is 1.2. As discussed above, the Discharger has been enrolled under the Industrial General Permit, which contains requirements for spill and leak prevention and response (Violation 4) and erosion and sediment control (Violation 5), for approximately 30 years. The Discharger, through the actions or inactions of former management, did not take prudent and reasonable steps to upkeep the Facility and maintain adequate erosion and sediment controls. Fish and Wildlife staff observations of rust and cracking outside the leachate storage tanks suggest long-term leaking and lack of maintenance.[77] On March 26, 2019, Regional Water Board staff also observed that the pump that conveys leachate from the Unlined Landfill was not working properly and was in disrepair, further indicating the lack of maintenance for the leachate collection system.[78] The failure to install or maintain adequate erosion and sediment controls allowed stormwater to erode slopes and run through exposed landfill areas.[79]

History of Violations

The Enforcement Policy provides that, where there is a history of repeat violations, a minimum multiplier of 1.1 should be used. For Violations 1

[77] Fish and Wildlife, Resource Impact Assessment and Violations of Fish and Game Code sections 1602, 5650 and 5652, Clover Flat Landfill, Calistoga, Napa County, dated May 10, 2019.
[78] Regional Water Board Notice of Violation, dated March 29, 2019.
[79] Napa County Environmental Health January 27, 2019 Inspection Report, dated February 6, 2019; Regional Water Board Notice of Violation, dated March 29, 2019.

through 5, the history of violations multiplier is 1 because the Discharger does not have a history of violations.

Cleanup and Cooperation

The Enforcement Policy provides for an adjustment to reflect the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. The adjustment is a multiplier between 0.75 and 1.5, with a higher multiplier where there is a lack of cooperation.

Violations 1-5: The cleanup and cooperation multiplier is 1.1. The Discharger, through its former management, was initially uncooperative in returning to compliance and inadequately responded to Regional Water Board staff's directions during and after inspections. However, after becoming aware of the alleged violations, a new management team took timely legal action and assumed control over the Discharger's operations on May 16, 2019. The Discharger's new management team has been, and continues to be, responsive to and cooperative with Regional Water Board staff, and has expended significant resources in bringing the Facility into compliance.

Step 5 – Determination of Total Base Liability

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amounts determined in Step 2.

Violation 1:

Total Base Liability = $11,200 (Initial Liability) x 1.3 (Culpability Multiplier) x 1.0 (History of Violations Multiplier) x 1.1 (Cleanup and Cooperation Multiplier)

Total Base Liability = **$16,000 (rounded)**

Violation 2:

Total Base Liability = $117,600 (Initial Liability) x 1.3 (Culpability Multiplier) x 1.0 (History of Violations Multiplier) x 1.1 (Cleanup and Cooperation Multiplier)

Total Base Liability = **$168,200 (rounded)**

Violation 3:

Total Base Liability = $210,000 (Initial Liability) x 1.3 (Culpability Multiplier) x 1.0 (History of Violations Multiplier) x 1.1 (Cleanup and Cooperation Multiplier)

The statutory maximum penalty under Water Code section 13385 is $1,000 per day. Because the calculated base liability exceeds the statutory maximum, the Prosecution Team adjusted the Total Base Liability for Violation 3 to be the statutory maximum of $210,000.

Total Base Liability = $210,000

Violation 4:

Total Base Liability = $24,500 (Initial Liability) x 1.2 (Culpability Multiplier) x 1.0 (History of Violations Multiplier) x 1.1 (Cleanup and Cooperation Multiplier)

Total Base Liability = **$32,300 (rounded)**

Violation 5:

Total Base Liability = $133,000 (Initial Liability) x 1.2 (Culpability Multiplier) x 1.0 (History of Violations Multiplier) x 1.1 (Cleanup and Cooperation Multiplier)

Total Base Liability = **$175,600 (rounded)**

COMBINED TOTAL BASE LIABILITY

The combined Total Base Liability amount for all violations is $16,000 + $168,200 + $210,000 + $32,300 + $175,600 = **$602,100**.

Step 6 – Ability to Pay and to Continue in Business

The Enforcement Policy provides that if there is sufficient financial information to assess the discharger's ability to pay the Total Base Liability or to assess the effect of the Total Base Liability on the discharger's ability to continue in business, then the Total Base Liability amount may be adjusted downward if warranted. The ability of a discharger to pay a civil liability is determined by its income (revenues minus expenses) and net worth (assets minus liabilities).

In most cases, it is in the public interest for a discharger to continue in business and bring its operations into compliance. The Water Code requires the Regional Water Board to consider ability to pay when imposing civil liability but does not require the Regional Water Board to set civil liabilities at levels that allow dischargers to continue in business. However, civil liabilities should be imposed at levels that do not allow dischargers to obtain a competitive economic advantage over dischargers that voluntarily incur the costs of regulatory compliance, whether or not a discharger is able to continue in business after incurring the liability.

In this case, Regional Water Board staff has sufficient information to suggest that the Discharger has the ability to pay the proposed liability. According to information provided by the Discharger, Clover Flat Land Fill Inc. and Vista Corporation are wholly owned subsidiaries of Whitehall Corporation. Whitehall Corporation has two additional wholly owned subsidiaries, Upper Valley Disposal Service, Inc. (which provides waste and recycling services for residential and commercial customers) and Upper Valley Recycling, Inc (which processes, sorts, and sells recyclable material and compost). Additionally, Whitehall Corporation is

affiliated with the following companies through common ownership: Pestoni Brothers, LLC; Pestoni Leasing, Inc.; Pestoni Ranch, LLC; Quackenbush Mountain Resource and Recovery Compost Facility, LLC; Pestoni Family Estate Winery (formerly Rutherford Grove Winery), South Lake Refuse and Recycling, LLC; Deerpond, Inc.; and Pestoni Enterprises LLC. The principal stockholders of Whitehall Corporation are Robert Pestoni (90%) and Linda Pestoni-Sereni (10%).

Clover Flat Land Fill Inc. generates up to $4.3 million in revenue annually, which excludes revenue from fire debris related to wildfires near Napa County. Under a franchise agreement, Clover Flat Land Fill Inc. receives and processes waste and recyclable products generated in the Upper Valley Disposal Services, Inc. service area. The agreement restricts inbound disposal and recycling tonnage into the landfill at 600 tons per day (up to 30 tons per day may come from outside Napa County). The gate rates to dispose of waste at the landfill are subject to an annual increase set at 90 percent of the annual Consumer Price Index. Clover Flat Land Fill Inc. has a predictable and secure revenue stream, at least through the agreement term, which ends on July 1, 2047. In Clover Flat Land Fill Inc.'s 2019 financial review, it reports a net loss of $3,365,534. It acknowledges, however, that the loss resulted from unique expenses (approximately $7.5 million) to comply with regulatory requirements. As of December 31, 2019, the Clover Flat Land Fill Inc. stockholders' equity was $5,187,235.

Vista Corporation owns and leases 180 acres to Clover Flat Land Fill Inc., including the 78 acres of permitted landfill area. Vista Corporation also owns landfill equipment that converts landfill gas to electricity delivered and sold into the PG&E power grid.

In 2019, Whitehall Corporation provided Clover Flat Land Fill Inc. with cash resources to improve Clover Flat Land Fill Inc. operations and comply with regulatory requirements, including a Cleanup and Abatement Order the Regional Water Board issued. Whitehall Corporation remains committed to ensuring that Clover Flat Land Fill Inc. has cash resources to comply with the Industrial General Permit and Waste Discharge Requirements Order R2-2020-0016. In addition to Whitehall Corporation and its wholly owned subsidiaries, additional capital advances have been exchanged between Clover Flat Land Fill Inc. and affiliated companies, including South Lake Refuse, LLC; Quackenbush Mountain Resource Recovery & Compost Facility LLC; and Deerpond Inc.

Based on the above, the Discharger has sufficient income and net worth to pay the proposed liability.

Step 7 – Other Factors as Justice May Require

The Enforcement Policy provides that if the Regional Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require." The

Enforcement Policy includes the costs of investigation and enforcement as "other factors as justice may require" that should be added to the liability amount.

The Regional Water Board incurred at least $17,300 in staff costs to investigate this case, propose this penalty, and prepare supporting documentation. This includes time spent by prosecution staff, excluding legal counsel, at an hourly rate based on the middle of the salary range for their positions (State classifications). Increasing the total base liability by $17,300 in consideration of investigation and enforcement costs is warranted given the totality of the circumstances, and is intended to serve as a general and specific deterrent against future violations.

Staff costs were calculated as follows:

$12,775.78 = 117.50 hours x $108.73/hourly burdened rate (Water Resource Control Engineer)

$3,529.70 = 23.5 hours x $150.20/hourly burdened rate (Senior Engineering Geologist)

$492.63 = 3.0 hours x $164.21/hourly burdened rate (Environmental Program Manager I)

$507.75 = 3.0 hours x $169.25/hourly burdened rate (Assistant Executive Officer)

$17,300 = total staff costs (rounded)

The Total Base Liability after adjusting for staff costs is **$619,400**.

Step 8 – Economic Benefit

The Enforcement Policy requires recovery of the economic benefit gained associated with the violations, plus 10 percent. Economic benefit is any savings or monetary gain derived from the act or omission that constitutes the violation.

As discussed below, the adjusted total base liability from Step 7 is more than ten percent higher than the total estimated economic benefit for the violations. Economic benefit was calculated using U.S. EPA's Economic Benefit Model (BEN) penalty and financial modeling program, version 2019.0.0. BEN calculates the present value of a discharger's economic benefit derived from delaying or avoiding compliance with environmental statutes using standard discount rates applicable to specific entity types.

Violations 1, 2, and 4: The Discharger realized an economic benefit by delaying and avoiding costs associated with containing and controlling leachate and leachate-laden stormwater at the Facility. At a minimum, the Discharger could have provided equipment to capture and store leachate seepage. This savings is based on costs to control leachate seepage and discharge from March 26, 2019, when Regional Water Board staff first observed leachate seepages into Stream 1, until April 30, 2019, the day that the bermed area, used to capture

leachate, was observed to be dry. The Discharger delayed the costs of improving leachate collection and management, including replacing pumps and leaking pipes and valves, adding drains, and increasing capacity. Using BEN, the estimated economic benefit was $13,682.

The economic benefit plus ten percent is $15,050.

Violation 3: The Discharger realized an economic benefit by delaying costs associated with preventing acidic stormwater from discharging into Stream 1. The Discharger could have installed additional BMPs to increase the pH of stormwater discharges. This savings is based on costs to control the acidic stormwater discharge from April 24, 2019, when Regional Water Board staff first confirmed the low pH in Stream 1, until December 17, 2019, when the Discharger added limestone to raise the stormwater pH. Using BEN, the estimated economic benefit was $4,733.

The economic benefit plus ten percent is $5,206.

Violation 5: The Discharger realized an economic benefit by delaying and avoiding costs associated with preparing the Facility for the wet season. The Discharger did not implement effective erosion and sediment controls to prevent erosion. The Discharger improved erosion and sediment controls and came into compliance within 127 days. Using BEN, the estimated economic benefit was $58,687.

The economic benefit plus ten percent is $64,558.

The combined economic benefits, plus ten percent, for all five violations is about $84,800 (rounded). Therefore, the adjusted Total Base Liability from Step 7 is unchanged because it is more than $84,800.

Step 9 – Maximum and Minimum Liability

a) ***Minimum Liability***

The statutory minimum liability that may be assessed is the economic benefit: $77,102. To comply with the Enforcement Policy, the minimum liability is the economic benefit plus ten percent: $84,800.

b) ***Maximum Liability***

The maximum liability that may be assessed is $2,010,000. This is based on the maximum allowed by Water Code section 13385, which allows up to $10,000 for each day in which each violation occurs and $10 for each gallon exceeding 1,000 gallons discharged and not cleaned up. The maximum liability for Violation 1 is $40,000 ($10,000/day of violation x 4 days of violation). The maximum liability for Violation 2 is $420,000 (39,000 gallons x $10/gallon discharged plus 3 days x $10,000/day). The maximum liability for Violation 3 is $210,000 ($10,000/day of

violation x 21 days of violation). The maximum liability for Violation 4 is $70,000 ($10,000/day of violation x 7 days of violation). The maximum liability for Violation 5 is $1,270,000 ($10,000/day of violation x 127 days of violation).

Step 10 – Final Liability

The final liability proposed is **$619,400** (rounded) for Violations 1 through 5, based on consideration of the penalty factors discussed above. It is within the minimum and maximum liabilities.