FINALIZED ADMINISTRATIVE CIVIL LIABILITY R5-2017-0519, CITY OF GRASS VALLEY, WASTEWATER TREATMENT FACILITY, WASTEWATER SPILLS, NEVADA COUNTY

Enclosed is a signed copy of Central Valley Water Board (Board) Order R5-2017-0519. As described below, this Order memorializes the settlement reached between the Board and the City of Grass Valley (Discharger) for violations of the Waste Discharge Requirements (WDRs) Order R5-2016-0012 (NPDES CA0079898) for wastewater spills from the Wastewater Treatment Facility (Facility), which occurred on 10 December 2016 and 5 February 2017. As the owner and operator of the Facility, the Discharger is responsible for complying with all elements of the WDRs and is liable for penalties associated with non-compliance. This letter serves as an invoice for payment of the agreed-upon administrative civil liability.

On 28 March 2017, the Discharger accepted the Settlement Offer in the amount of $119,064 and waived its right to hearing before the Central Valley Water Board by signing the Acceptance of Settlement Offer and Waiver of Right to Hearing (Acceptance and Waiver) document. On 5 April 2017, the Prosecution Team posted the Settlement Offer and Signed Acceptance and Waiver on the Water Board’s Website for a 30-day public comment period as required by the Federal regulations. The comment period ended on 5 May 2017 and no comments were received. The Prosecution Team subsequently presented the Acceptance and Waiver to the Central Valley Water Board’s Executive Officer, acting as head of the Advisory Team, for formal endorsement of the Order on behalf of the Central Valley Water Board. On 31 July 2017, the Central Valley Water Board’s Executive Officer, Pamela C. Creedon, signed and finalized the Order. A copy of the endorsed Acceptance and Waiver, Order R5-2017-0519, is enclosed.

As a condition of the Acceptance and Waiver, the Discharger agreed to full payment of the $119,064 administrative civil liability within 30 days of the date of an invoice from the Water Board. This letter is your invoice as described in the Acceptance and Waiver.
Please remit payment of **one hundred nineteen thousand, sixty-four dollars ($119,064)** by check that references **ACL Order R5-2017-0519**, made payable to the **State Water Resources Control Board Cleanup and Abatement Account**. Please send the payment to:

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

The payment must be received by **1 September 2017**.

In addition, a copy of the check must be mailed to:

Howard Hold, Acting Supervisor
Compliance and Enforcement Section
Central Valley Water Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Late payment will result in this matter being referred to a collection agency or to the Attorney General’s office for prosecution resulting in a judgment to collect from the appropriate superior court. Alternatively, the Central Valley Water Board may obtain a judgment directly from the superior court pursuant to Water Code section 13328.

If you have any questions, please contact me at (916) 464-4679 or howard.hold@waterboards.ca.gov.

HOWARD HOLD, Acting Supervisor
Compliance and Enforcement Section

Enclosures:
- Order R5-2017-0519
- Acceptance of Settlement Offer and Waiver of Right to a Hearing
- Attachment B: Grass Valley Spill Report dated 9 February 2017
- Attachment C: Penalty Calculation Methodology
- Attachment D: SEP Project Funding and Description

cc: David Boyers, Assistant Chief Counsel, State Water Board Office of Enforcement
Julie Macedo, Senior Staff Counsel, State Water Board Office of Enforcement
Pamela Creedon, Executive Officer, Central Valley Water Board, Rancho Cordova
Patrick E. Pulupa, Office of Chief Counsel, State Water Board, Sacramento
Mike Busse, City of Grass Valley
Gorman Lau, Larry Walker Associates
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

SETTLEMENT AGREEMENT AND STIPULATION FOR ENTRY OF
ADMINISTRATIVE CIVIL LIABILITY ORDER R5-2017-0519
IN THE MATTER OF

CITY OF GRASS VALLEY
WASTEWATER TREATMENT FACILITY
NEVADA COUNTY

This Settlement Agreement and Stipulation for Entry of Administrative Civil Liability Order (Stipulated Order or Order) is entered into by and between the Assistant Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), on behalf of the Central Valley Water Board Prosecution Team (Prosecution Team), and the City of Grass Valley (Discharger)(collectively known as the Parties) and is presented to the Central Valley Water Board, or its delegee, for adoption as an order by settlement, pursuant to Government Code section 11415.60.

Recitals

1. The Prosecution Team alleges that the City of Grass Valley violated Waste Discharge Requirements (WDRs) Order R5-2016-0012 (NPDES CA0079898) when wastewater spills occurred at the Discharger’s Wastewater Treatment Facility (Facility), on 10 December 2016 and 5 February 2017. The first alleged violation is described in a 2 February 2017 revised spill report from the Discharger and a 10 December 2016 Office of Emergency Services Hazardous Materials Spill Report. The second alleged violation is described in a 9 February 2017 report from the Discharger. These documents are attached hereto as Attachments A and B.

2. The Central Valley Water Board may assess an administrative civil liability pursuant to Water Code section 13385, subdivisions (a)(2) and (a)(5) for the alleged violations in an amount not to exceed $10,000 per violation for each day in which the violation occurs and $10 per gallon discharged in excess of the first 1,000 gallons.

3. Pursuant to Water Code section 13385(e), in determining the amount of civil liability, the Central Valley Water Board is required to take into consideration the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require.

4. The State Water Resources Control Board’s Water Quality Enforcement Policy
establishes a methodology for assessing administrative civil liability in consideration of the factors as outlined in Water Code section 13385(e). The administrative civil liability amount imposed pursuant to this Stipulated Order was derived from the use of the penalty methodology in the Enforcement Policy, as explained in detail in Attachment C.

**Settlement**

5. The Parties have engaged in confidential settlement negotiations and agree to settle the matter without administrative or civil litigation and by presenting this Stipulated Order to the Central Valley Water Board, or its delegate, for adoption as an order by settlement pursuant to Government Code section 11415.60. The Central Valley Water Board Prosecution Team believes that the resolution of the alleged violations is fair and reasonable and fulfills its enforcement objectives, that no further action is warranted concerning the violations alleged herein and that this Stipulated Order is in the best interest of the public.

**Stipulations**

The Parties stipulate to the following:

6. Administrative Civil Liability: The Discharger hereby agrees to the imposition of administrative civil liability totaling **one hundred nineteen thousand and sixty four dollars ($119,064)** to the Central Valley Water Board to resolve the alleged violations. The Discharger agrees to pay the following amounts:

   a. **Fifty nine thousand five hundred thirty two dollars ($59,532)** shall be paid to the State Water Board *Cleanup and Abatement Account*. Payment shall be made no later than thirty (30) days after the entry of an Order approving this Settlement Agreement by the Central Valley Water Board, by check payable to the State Water Board *Cleanup and Abatement Account*. The Discharger shall indicate on the check the number of this Order. The Discharger shall send the original signed check to the State Water Resources Control Board Accounting Office, Attn: ACL Payment, P.O. Box 1888, Sacramento, CA 95812-1888. A copy of the check shall be sent to Wendy Wyels, Central Valley Water Quality Control Board, 11020 Sun Center Drive, Suite 200, Rancho Cordova, CA, 95670.

   b. **Fifty nine thousand five hundred thirty two dollars ($59,532)** shall be permanently suspended upon completion of the Supplemental Environmental Project (SEP) described in Attachment D of this Order. The SEP consists of purchasing a combination jet/vacuum trailer in order to improve the Discharger’s ability to respond to, and clean up, sanitary sewer overflows (SSOs). This additional SSO response equipment would provide the following benefits to water quality: (a) will provide a better option to reach remote manholes; (b) will allow the Discharger more flexibility in dealing with SSOs (i.e. use the vacuum trailer at the upstream manhole to
reduce/stop overflow while jetting at manhole below to clear blockage with the combination truck); and (c) will provide redundancy if the existing truck breaks down or if the Discharger has two spills at once. The cost of this unit will be between $75,000 and $120,000.

7. Supplemental Environmental Project: The Discharger and the Central Valley Water Board agree that the payment specified in Section 6.b of the Stipulation is a SEP, and that the amount specified (hereafter SEP amount) will be treated as a Suspended Administrative Civil Liability for purposes of this Stipulated Order. Upon the Discharger's payment of its SEP obligations under this Stipulation, Central Valley Water Board staff shall send the Discharger a letter recognizing the satisfactory completion of its SEP obligations. This letter shall terminate any further SEP obligations of Discharger and result in the permanent waiver of the SEP suspended liability.

8. Compliance with Applicable Laws and Regulatory Changes: The Discharger 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 in the Settlement Offer may subject it to further enforcement, including additional ACLs. Nothing in this Stipulated Order shall excuse Discharger from meeting any more stringent requirements that may be imposed hereafter by changes in applicable and legally binding legislation or regulations.

9. Party Contacts for Communications Related to Stipulated Order:

For the Central Valley Water Board:
Wendy Wyels- Supervisor, Compliance and Enforcement Section
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
(916) 464-4656
Wendy.Wyels@waterboards.ca.gov

Julie Macedo
Office of Enforcement, State Water Resources Control Board
801 K Street, 23rd Floor
Sacramento, CA 95814
(916) 323-6847
Julie.Macedo@waterboards.ca.gov

For the Discharger:
Timothy M. Kiser, Public Works Director/City Engineer
City of Grass Valley
125 East Main Street
Grass Valley, CA 94945
Tel: (530) 274-4351; Fax: (530) 274-4399
e-mail: timk@cityofgrassvalley.com
10. **Attorney's Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorneys’ fees and costs arising from the Party’s own counsel in connection with the matters set forth herein.

11. **Matters Addressed by Stipulation:** Upon adoption by the Central Valley Water Board, or its delegee, this Stipulated Order represents a final and binding resolution and settlement of all claims, violations, or causes of action alleged in this Order or which could have been asserted based on the specific facts alleged in this Stipulated Order against Dischargers as of the effective date of this Stipulated Order. The provisions of this Paragraph are expressly conditioned on Discharger's full payment of the ACL by the deadline specified herein.

12. **Public Notice:** The Discharger understands that this Stipulated Order will be noticed for a 30-day public review and comment period prior to consideration by the Central Valley Water Board, or its delegee. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the Central Valley Water Board, or its delegee, for adoption, the Assistant Executive Officer may unilaterally declare this Stipulated Order void and decide not to present it to the Central Valley Water Board, or its delegee. The Discharger agrees that it may not rescind or otherwise withdraw their approval of this proposed Stipulated Order.

13. **Procedure:** The Parties agree that the procedure that has been adopted for the approval of the settlement by the Parties and review by the public, as reflected in this Order, will be adequate. In the event procedural objections are raised prior to this Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.

14. **No Waiver of Right to Enforce:** The failure of the Prosecution Team or Central Valley Water Board to enforce any provision of this Stipulated Order shall in no way be deemed a waiver of such provision, or in any way affect the validity of this Stipulated Order. The failure of the Prosecution Team or Central Valley Water Board to enforce any such provision shall not preclude it from later enforcing the same or any other provision of this Stipulated Order. No oral advice, guidance, suggestions or comments by employees or officials of any Party regarding matters covered under this Stipulated Order shall be construed to relieve any Party regarding matters covered in this Stipulated Order. The Central Valley Water Board reserves all rights to take additional enforcement actions, including without limitation the issuance of ACL complaints or orders, for violations other than those addressed by this Order.

15. **Interpretation:** This Stipulated Order shall not be construed against the party preparing it, but shall be construed as if the Parties jointly prepared it and any uncertainty and ambiguity shall not be interpreted against any one party.

16. **Modification:** This Order shall not be modified by any of the Parties by oral representation whether made before or after the execution of this Order. All modifications must be made in writing and approved by the Central Valley Water Board or its delegee.
17. **If Order Does Not Take Effect:** In the event that this Stipulated Order does not take effect because it is not approved by the Central Valley Water Board, or its delegatee, or is vacated in whole or in part by the State Water Resources Control Board or a court, the Parties acknowledge that the Prosecution Team may proceed to a contested evidentiary hearing before the Central Valley Water Board to determine whether to assess an ACL for the underlying alleged violations, or may continue to pursue settlement. 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 any subsequent administrative or judicial proceeding or hearing and will be fully protected by California Evidence Code sections 1152 and 1154; California Government Code section 11415.60; Rule 408, Federal Rules of Evidence; and any other applicable privilege under federal and/or state law. The Parties also agree to waive any and all objections related to their efforts to settle this matter, including, but not limited to:

a. Objections related to prejudice or bias of any of the Central Valley Water Board members or their advisors and any other objections to the extent that they are premised in whole or in part on the fact that the Central Valley Water Board members or their advisors were exposed to some of the material facts and the Parties’ settlement positions, and therefore may have formed impressions or conclusions, prior to conducting any contested evidentiary hearing in this matter; or

b. Laches or delay or other equitable defenses based on the time period that the order or decision by settlement may be subject to administrative or judicial review.

18. **No Admission of Liability:** Neither this Stipulated Order, nor any payment pursuant to the Order, shall constitute evidence of, or be construed as, a finding, adjudication, or acknowledgement of any fact, law, or liability, nor shall it be construed as an admission of violation of any law, rule, or regulation. However, this Order and/or any actions of payment pursuant to the Order may constitute evidence in actions seeking compliance with this Order. This Order may be used as evidence of a prior enforcement action in future actions by the Central Valley Water Board.

19. **Waiver or Hearing:** The Discharger has been informed of the rights provided by Water Code section 13323 (b), and hereby waives its right to a hearing before the Central Valley Water Board.

20. **Waiver of Right to Petition:** The Discharger hereby waives the right to petition the Central Valley Water Board’s adoption of the Stipulated Order as written for review by the State Water Board, and further waives the rights, if any, to appeal the same to a California Superior Court and/or any California appellate level court.

21. **Covenant not to Sue:** Upon the effective date of this Stipulated Order, Discharger shall and does release, discharge, and covenant not to sue or pursue any civil or administrative claims against any State Agency or the State of California, its officers, agents, directors, employees, attorneys, representatives, for any and all claims or causes of action, which arise out of or are related to this action.

22. **Water Boards not Liable:** Neither the Central Valley Water Board members nor the
Central Valley Water Board staff, attorneys, or representatives shall be liable for any injury or damage to persons or property resulting from the negligent or intentional acts or omissions by Discharger or its respective directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Order, nor shall the Central Valley Water Board, its members or staff be held as parties to or guarantors of any contract entered into by Discharger, or its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Order.

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

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

25. **Effective Date:** This Stipulated Order shall be effective and binding on the Parties upon the date the Central Valley Water Board, or its delegee, enters the Order.

26. **Counterpart Signatures:** This Order may be executed and delivered in any number of counterparts, each of which executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

**IT IS SO STIPULATED.**

Andrew Altevogt
Assistant Executive Officer, For the Central Valley Water Board Prosecution Team

Tim Kiser,
Public Works Director/City Engineer, For the City of Sutter Creek

**HAVING CONSIDERED THE PARTIES STIPULATIONS, THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD, BY AND THROUGH ITS EXECUTIVE OFFICER, FINDS THAT:**

1. This is an action to enforce the laws and regulations administered by the Central Valley Water Board. The method of compliance with this enforcement action consists entirely of payment of amounts for administrative civil liability. As such, the Central Valley Water Board finds that issuance of this Order is not considered subject to the provisions of the California Environmental Quality Act (CEQA) as it will not result in a direct or reasonably
foreseeable indirect physical change in the environment and is not considered a “project” (Public Resources Code 21065, 21080(a); 15060(c)(2),(3); 150378(a), Title 14, of the California Code of Regulations). In addition, issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.), in accordance with sections 15061(b)(3) and 15321(a)(2), of Title 14 of the California Code of Regulations.

2. The foregoing Stipulation is fully incorporated herein and made part of this Order.

3. In adopting this Stipulated Order, the Central Valley Water Board, or its delegee, has considered, where applicable, each of the factors prescribed in Water Code sections 13327, 13351, and 13385(e). The consideration of these factors is based upon information and comments obtained by the Central Valley Water Board’s staff in investigating the allegations concerning the Discharger discussed herein or otherwise provided to the Central Valley Water Board or its delegee by the Parties and members of the public.

Pursuant to Water Code section 13323 and Government Code section 11415.60, IT IS HEREBY ORDERED on behalf of the California Regional Water Quality Control Board, Central Valley Region that the Stipulated Order is approved.

ORIGINAL SIGNED BY 7/31/2017

_________________________________________________________

Pamela Creedon Date
Executive Officer
Central Valley Regional Water Quality Control Board

Attachment B: Grass Valley Spill Report dated 9 February 2017
Attachment C: Penalty Calculation Methodology
Attachment D: SEP Project Funding and Description
February 2, 2017

Ms. Kari Holmes  
Senior Water Resource Control Engineer  
NPDES Compliance and Enforcement Unit  
California Regional Water Quality Control Board  
Central Valley Region  
11020 Sun Center Drive – Suite 200  
Rancho Cordova, CA 95670-6114

Subject: City of Grass Valley Wastewater Treatment Plant December 10, 2016 Revised Spill Report

Dear Ms. Holmes:

This written submission is in response to a spill that occurred at the City of Grass Valley (City) Wastewater Treatment Plant (Plant) on the morning of Saturday, 10 December 2016.

Description of Spill

Between 0606 and 0722 on Saturday, 10 December 2016, wastewater spilled from the Plant headworks and primary clarifier due to a significant precipitation event that occurred during the overnight hours and operator error. From approximately 2300 on 9 December 2016 to 0300 on 10 December 2016, the City received approximately 1.34 inches of rainfall with periods of significant rainfall. This period was followed by an additional 2.32 inches of rainfall between 0300 and 0700. The hourly rainfall totals are presented in the table below:

<table>
<thead>
<tr>
<th>Date/Time Period</th>
<th>Hourly Rainfall (inches)</th>
<th>Cumulative Rainfall Total (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/9 23:00-12/10 00:00</td>
<td>0.24</td>
<td>0.24</td>
</tr>
<tr>
<td>12/10 00:00-01:00</td>
<td>0.51</td>
<td>0.75</td>
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<tr>
<td>12/10 01:00-02:00</td>
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<tr>
<td>12/10 02:00-03:00</td>
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<tr>
<td>12/10 03:00-04:00</td>
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<td>1.76</td>
</tr>
<tr>
<td>12/10 04:00-05:00</td>
<td>0.64</td>
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</tr>
<tr>
<td>12/10 05:00-06:00</td>
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<tr>
<td>12/10 06:00-07:00</td>
<td>0.59</td>
<td>3.66</td>
</tr>
<tr>
<td>12/10 07:00-08:00</td>
<td>0.31</td>
<td>3.97</td>
</tr>
</tbody>
</table>

The precipitation event resulted in a flood warning from the National Weather Service.
The geography of the City and the Plant makes it susceptible during high flow events. The City is located on shallow granite formations with typically clay to loam soils, which have poor infiltration rates, and there are quick changes in elevation. During high intensity storm events, little precipitation has the ability to infiltrate, which results in higher potential volumes of stormwater runoff. The Plant is located downhill from the City, and can result in potential flooding conditions.

Plant staff initially estimated that a total volume of 5,000 gallons was spilled from the headworks and primary clarifier, and entered Wolf Creek. Because the influent flow meter was offline at the time of the spill, the City contracted with Larry Walker Associates Inc. to conduct additional evaluation of SCADA data and Plant drawings to refine the calculation of the volume that was spilled. Based on a hydraulic analysis, it was estimated that 64,000 gallons spilled from both the headworks and primary clarifier over a period between 0606 and 0722 on 10 December 2016 and entered Wolf Creek. The estimated spill volume is based on the conservative assumption that the flow rate was constant during the spill period. At the time of the spill, the effluent flow rate was approximately 5.0 million gallons per day (mgd) and the flow rate in Wolf Creek was approximately 71 mgd. This indicates a dilution of 14:1 for the combined effluent and spilled wastewater.

Steps Taken to Minimize Effect of Spill

The Plant is typically not staffed between 1600 and 0730 every night, but a standby Plant operator is on-call to respond to issues that arise. In this situation, the standby Plant operator worked remotely to manage the Plant. Because the influent flow meter was offline during this event, the alarm set point indicating high flows was not triggered to alert the operator of high flows to the Plant. Several alarms between midnight and 0330 on 10 December 2016 were missed by the standby Plant operator that would have indicated a need to be on-site at the Plant to address high flow volumes.

The on-duty Plant operator arrived at the Plant at 0640 for a normal shift and found that the grit channel, located between the bar screens and grit chamber, and primary clarifier were both overtopping. The on-duty Plant operator opened the valve between the primary clarifiers to relieve the downstream restriction for the headworks and to draw down the wastewater level in the full primary clarifier that was in operation. The on-duty Plant operator also opened the slide gate in the back-up aeration basin to further relieve the wastewater volume in the primary clarifier in operation. The standby Plant operator arrived at the Plant at 0645. The operators also brought in contractors to help pump wastewater from the operational primary clarifier into the back-up primary clarifier to alleviate the high flow condition. At 0732, the high flow alarm for the headworks was cleared.

In responding to the Plant spill, Plant staff implemented its Sewer Overflow Emergency Response Plan, which includes clean-up of the spill area and notification of appropriate agencies.
Notifications

- The City notified the Nevada County Department of Environmental Health (Zander Karim) of the spill at 0910 on 10 December 2016.
- The City notified the California Office of Emergency Services (CAL-OES) of the spill at 0904 on 10 December 2016.
- The City notified Central Valley Regional Water Quality Control Board staff (Karl Holmes) of the spill at 1150 on 10 December 2016.

Corrective Steps

In response to this spill, the City conducted disciplinary action for the standby Plant operator for failure to implement Standard Operating Procedures and address conditions that resulted in the spill. Based on the hydraulic analysis, response from the on-duty operator, and subsequent storm events, the City believes that the spill would not have occurred if the standby operator implemented the proper Standard Operating Procedures for addressing high flow events. The Plant had additional capacity to pump up to 116,000 gallons of primary effluent into the secondary treatment system and a standby primary clarifier with a capacity of 150,000 gallons that could have been used to alleviate high level conditions in the primary clarifier that spilled and the grit channel.

The City plans to implement the following corrective steps to prevent and/or minimize the potential for future spills:

- Provide additional training for Plant operators in preparing for and responding to high flow events.
- Modify the automatic Plant staff contact process if Plant alarms are unacknowledged by the standby Plant operator.

The City is committed to making investments in its infrastructure to ensure that its system operates in a safe and reliable manner, in accordance with industry standards, to protect the environment and public health. If you have any questions, or need further information, please contact me at (530) 274-4351.

Sincerely,

Timothy M. Kiser, P.E.
Public Works Director/City Engineer
City of Grass Valley

cc: Mike Busse, City of Grass Valley
    Gorman Lau, Larry Walker Associates
**Hazardous Materials Spill Report**

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<th>TIME:</th>
<th>0904</th>
</tr>
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<tbody>
<tr>
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<td>Cal OES - 16-7431</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL#:</td>
<td>NRC -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. **PERSON NOTIFYING Cal OES:**
   1. NAME: 
   2. AGENCY: City of Grass Valley
   3. PHONE#: 
   4. Ext: 
   5. PAG/CELL: 

2. **PERSON REPORTING SPILL (If different from above):**
   1. NAME: 
   2. AGENCY: 
   3. PHONE#: 
   4. Ext: 
   5. PAG/CELL: 

3. **SUBSTANCE TYPE:**
   2. a. **SUBSTANCE:** 
   3. **TYPE:** 
   4. **OTHER:** 
   5. **PIPELINE** 
   6. **VESSEL** 
   7. **Amount Measure** 
   8. **>= 300 Tons**
   1. Sewage = 5000 Gal(s) SEWAGE No No
   2. = No No
   3. = No No
   4. = No No

4. **DESCRIPTION:**
   Caller stated that they have a release of 5000 Gal(s) of Sewage due to storm water causing the release to impact Wolf Creek, Caller stated that the release is mostly Rain Water, no cleanup actions have been implemented. Release is no longer ongoing.

5. **CONTAINED:**
   i. **WATER** 
   j. **WATERWAY:**
   k. **DRINKING WATER IMPACTED**
   1. Yes Yes Wolf Creek No

6. **NOTIFIED:**
   a. **ON SCENE:**
   b. **OTHER ON SCENE:**
   c. **OTHER NOTIFIED:**
   1. Nevada Co EH
   2. RWQCB Unit: 5B
   3. AA/CUPA, DFG-OSPR, DTSC, RWQCB, US EPA, USFWS, LANDS, PARKS & REC, Co/Hlth, Co/E-Hlth

**Control No: 16-7431**

Created by: Warning Center on: 12/10/2016 09:04:16 AM Last Modified by: Warning Center on: 12/10/2016 09:10:26 AM
February 9, 2017

Ms. Ayda Soltani  
Project Manager- NPDES Compliance and Enforcement Unit  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Drive-Suite 200  
Rancho Cordova, CA 95670-6114

Subject: City of Grass Valley Wastewater Treatment Plant February 5, 2017 Digester Spill Report

Dear Ms. Soltani:

This written submission is in response to a spill that occurred at the City of Grass Valley (City) Wastewater Treatment Plant (Plant) on the afternoon of Sunday, 5 February 2017.

Description of Spill

At 1252 hours, a primary sludge 20 minute pumping cycle began. The standby operator witnessed digested sludge flowing from the top of the digester to Wolf Creek though a drainage swale. He shut the pump off, which stopped flow to the digester, at 1307 hours (15 minutes into the pumping cycle). The pumping rate is 50 gpm, which equates to 750 gallons of total flow to the digester. A clogged discharge pipe led to the digester filling up and then overflowing. This would require several hundred gallons of flow, but we will assume 150 gallons to be conservative. The total volume leaving the digester was approximately 600 gallons.

Immediately after shutting off the primary sludge pump, the operator created a dam with sandbags to stop the overflow from continuing to spill into the creek. He then started the vacuum trailer to begin cleanup of the spill. The trailer was filled once with no dilution which is 350 gallons removed. 600 - 350 = 250 gallons spill volume.

At that point the City’s vacuum truck was staged and began to vacuum the rest of the spill. The area covered from the digester to the creek would account for more than 100 gallons, but is conservatively assumed to be 50 gallons. 250 - 50 = 200 gallons spill volume to the creek. The viscous nature of digested sludge prevented a larger volume from being spilled into Wolf Creek. All areas that were contacted at the plant were cleaned up and disinfected.

Corrective Steps

Prior standard operating procedures developed and still actively followed to avoid an incident like this included:

- Modifying pump cycles to only pump during the day when operators can be present
- Visually checking and maintaining discharge box and pipe every other day

The City identified additional steps to avoid a similar incident that include:
• Constructing overflow piping from the tops of both inlet and outlet boxes on top of digester, piped to manhole adjacent to digester
• Installing level sensors in both boxes that will initiate SCADA alarm as well as disable pumps to remove the threat of over-topping the inlet and outlet boxes.

The City is committed to making investments in its infrastructure to ensure that its system operates in a safe and reliable manner, in accordance with industry standards, to protect the environment and public health. If you have any questions, or need further information, please contact me at (530) 477-4626.

Sincerely,

Michael S. Busse
CTPO/ Utilities Superintendent
City of Grass Valley

Cc: Tim Kiser, City of Grass Valley
    Trever Van Noort, City of Grass Valley
    Gorman Lau, Larry Walker Associates
The State Water Board’s *Water Quality Enforcement Policy* (Enforcement Policy) establishes a methodology for determining administrative civil liability by addressing the factors that are required to be considered under California Water Code section 13385(e). Each factor of the nine-step approach is discussed below, as is the basis for assessing the corresponding score. The Enforcement Policy can be found at:


**Violation 1 – Discharge of Partially-Treated Sewage to Surface Waters**

The City of Grass Valley (Discharger) discharges treated wastewater from its Wastewater Treatment Facility (Facility), which is regulated by Waste Discharge Requirements (WDRs) Order R5-2016-0012 (NPDES CA0079898). This permit prohibits the discharge of wastewater not fully treated in accordance with the requirements of the WDRs to waters of the U.S. On 10 December 2016, an estimated 64,000 gallons of partially-treated wastewater spilled from the Facility’s headworks and primary clarifier into Wolf Creek.

### PENALTY FACTOR

<table>
<thead>
<tr>
<th>PENALTY FACTOR</th>
<th>VALUE</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm or potential for harm to beneficial uses</td>
<td>2</td>
<td>The partially-treated sewage entered Wolf Creek, tributary to Bear River, during a storm event. The beneficial uses of the Bear River include water supply, agricultural supply, hydropower generation, water contact recreation, non-contact water recreation, warm freshwater habitat, cold and warm freshwater habitat, and wildlife habitat. The discharge was expected to have a below moderate impact to beneficial uses because it was partially-treated wastewater. The Prosecution Team reserves the right to reconsider this factor should this matter proceed to hearing.</td>
</tr>
<tr>
<td>Physical, chemical, biological, or thermal characteristics of the discharge</td>
<td>3</td>
<td>Partially-treated sewage contains elevated concentrations of coliform organisms and other substances which are known to cause disease to humans. Because the discharged material possessed “an above moderate risk or a direct threat to potential receptors”, a score of 3 was assigned for this factor.</td>
</tr>
<tr>
<td>Susceptibility to cleanup or abatement</td>
<td>1</td>
<td>None of the spill was recovered because the spill entered surface waters during a rain event. Less than 50% of the discharge was susceptible to cleanup or abatement, so a factor of 1 is used.</td>
</tr>
<tr>
<td>Per gallon and per day factor for discharge violations</td>
<td>0.15</td>
<td>The “Deviation from Requirement” is moderate because the Discharger’s response and corrective actions to the spill appeared appropriate.</td>
</tr>
<tr>
<td>Volume discharged minus 1,000 gallons per event</td>
<td>63,000 gallons</td>
<td>According to the Discharger, 64,000 gallons was discharged to surface water and not recovered. The total volume, minus 1,000 gallons per event, is used in the calculation.</td>
</tr>
<tr>
<td>Adjustment for high volume discharges</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Per gallon penalty</td>
<td>$94,500</td>
<td>The liability is calculated as per day factor multiplied by the number of</td>
</tr>
</tbody>
</table>
City of Grass Valley

**Penalty Calculation**

<table>
<thead>
<tr>
<th>PENALTY FACTOR</th>
<th>VALUE</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Days of discharge</strong></td>
<td>1 day</td>
<td>Partially-treated sewage was discharged to Wolf Creek on 10 December 2016.</td>
</tr>
<tr>
<td><strong>Per day penalty</strong></td>
<td>$1,500</td>
<td>The liability is calculated as per day factor multiplied by the number of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>days multiplied by the statutory maximum per day ($10,000).</td>
</tr>
<tr>
<td><strong>Initial Liability for</strong></td>
<td>$96,000</td>
<td>Sum of the per-gallon and per-day penalties.</td>
</tr>
<tr>
<td><strong>Violation #1</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Adjustments for Discharger Conduct**

| Culpability                  | 1.1    | The spill occurred during evening hours when the Facility was not staffed;  |
|                              |        | however, there was a standby operator who was on call and working remotely.|
|                              |        | The standby operator did not respond to the alarms and therefore the spill  |
|                              |        | was not discovered until the following morning. Further, based on          |
|                              |        | statements from Grass Valley in a 2 February 2017 correspondence, the      |
|                              |        | spill would not have occurred if the standby operator had implemented      |
|                              |        | proper Standard Operating Procedures. This serves to increase the culpability|
|                              |        | factor above a neutral multiplier.                                        |

| Cleanup and Cooperation      | 1.0    | The Discharger appears to have adequately responded to the spill event      |
|                              |        | once discovered. In addition, the Discharger has taken steps to ensure     |
|                              |        | that its operators appropriately respond to alarms.                      |
| History of Violations        | 1.1    | On 25 February 2015, the Discharger was issued ACL Order R5-2015-0505,     |
|                              |        | which imposed an administrative civil liability for WDRs violations at the  |
| Total Base Liability for      | $116,160| Facility including four spills of partially-treated wastewater and two     |
| Violation #1                  |        | spills of digested sludge.                                                |

**Violation 2 – Discharge of Digester Sludge to Surface Waters**

At 1252 hours on 5 February 2017, the standby operator at the Facility noticed digested sludge flowing from the top of the digester to Wolf Creek. He then shut off the pump, which stopped flow to the digester, at 1307 hours (15 minutes into the pumping cycle). A clogged discharge pipe led to the digester filling up and then overflowing. The total volume leaving the digester was approximately 600 gallons, the Discharger was able to clean up approximately 400 gallons, and therefore an estimated 200 gallons of digester sludge spilled to Wolf Creek.

<table>
<thead>
<tr>
<th>PENALTY FACTOR</th>
<th>VALUE</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm or potential for harm to beneficial</td>
<td>3</td>
<td>The digester sludge entered Wolf Creek, tributary to Bear River, during a</td>
</tr>
<tr>
<td>uses</td>
<td></td>
<td>storm event. The beneficial uses of the Bear River include water supply,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>agricultural supply, hydropower generation, water contact recreation,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>non-contact water recreation, warm freshwater habitat, cold and warm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>freshwater habitat, and wildlife habitat. The discharge was reasonably</td>
</tr>
<tr>
<td></td>
<td></td>
<td>expected to have a moderate impact to beneficial uses because it was</td>
</tr>
<tr>
<td></td>
<td></td>
<td>digester sludge.</td>
</tr>
<tr>
<td>Physical, chemical, biological, or thermal</td>
<td>3</td>
<td>Digester sludge contains elevated concentrations of coliform organisms and</td>
</tr>
<tr>
<td>characteristics of the discharge</td>
<td></td>
<td>concentrated amounts of heavy metals that can pose a serious risk to human</td>
</tr>
<tr>
<td></td>
<td></td>
<td>health and aquatic life. Because the discharged material possessed “an above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>moderate risk or a direct</td>
</tr>
</tbody>
</table>
### PENALTY FACTOR

<table>
<thead>
<tr>
<th>PENALTY FACTOR</th>
<th>VALUE</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat to potential receptors”</td>
<td></td>
<td>a score of 3 was assigned for this factor.</td>
</tr>
<tr>
<td>Susceptibility to cleanup or abatement</td>
<td>0</td>
<td>More than 50% of the discharge was susceptible to cleanup or abatement due to the viscous nature, so a factor of 0 is used.</td>
</tr>
<tr>
<td>Per gallon and per day factor for discharge violations</td>
<td>0.22</td>
<td>The “Deviation from Requirement” is major because the Discharger was unable to provide any treatment to the sludge prior to reaching the creek.</td>
</tr>
<tr>
<td>Volume discharged minus 1,000 gallons per event</td>
<td>0 gallons</td>
<td>According to the Discharger, 600 gallons of digester sludge flowed from the top of the digester, a trailer hauled off 350 gallons, and 50 gallons was vacuumed; therefore, approximately 200 gallons of digester sludge spilled to the creek. Because the total volume is less than 1,000 gallons for this violation, only the per-day penalty applies.</td>
</tr>
<tr>
<td>Adjustment for high volume discharges</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Per gallon penalty</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Days of discharge</td>
<td>1 day</td>
<td>Digester sludge was discharged to Wolf Creek on 5 February 2017.</td>
</tr>
<tr>
<td>Per day penalty</td>
<td>$2,200</td>
<td>The liability is calculated as per day factor multiplied by the number of days multiplied by the statutory maximum per day ($10,000).</td>
</tr>
<tr>
<td>Initial Liability for Violation #2</td>
<td>$2,200</td>
<td>Sum of the per-gallon (which does not apply for this violation) and per-day penalties.</td>
</tr>
</tbody>
</table>

### Adjustments for Discharger Conduct

| Culpability                                          | 1.1   | The Facility continues to experience spills of partially-treated wastewater and digester sludge to Wolf Creek. According to the Discharger, inflow and infiltration is a major contributing factor to these spills. The Discharger has failed to make investments in its infrastructure to ensure that its systems operate in accordance with the WDRs and are protective of the environment and public health. The Prosecution Team reserves the right to reconsider this factor should this matter proceed to hearing. |
| Cleanup and Cooperation                              | 1.0   | The Discharger appears to have adequately responded to the spill event once discovered. The operator created a dam with sandbags to contain the overflow from continuing to spill into the creek and vacuumed most of the spill, which allowed less than half of the digester sludge to reach the creek. |
| History of Violations                                | 1.2   | On 25 February 2015, the Discharger was issued ACL Order R5-2015-0505, which imposed an administrative civil liability for WDRs violations at the Facility including four spills of partially-treated wastewater and two spills of digested sludge. The Prosecution Team reserves the right to reconsider this factor should this matter proceed to hearing. |

### Total Base Liability for Violation #2

<table>
<thead>
<tr>
<th>Total Base Liability for Violation #2</th>
<th>$2,904</th>
</tr>
</thead>
<tbody>
<tr>
<td>The base liability is calculated as the initial liability multiplied by each of the above three factors.</td>
<td></td>
</tr>
</tbody>
</table>

The Enforcement Policy states that five other factors must be considered before obtaining the final liability amount.

**Total Base Liability for all violations: $119,064**

**Other Factor Considerations**
The City of Grass Valley is a public entity with the ability to raise funds.

The USEPA’s BEN Model was used to determine the economic benefit of the violations. As shown on the attachment, it is assumed that the Discharger received an economic benefit for not implementing high flow response training, not modifying the plant alarm notification procedure or digester pump cycle, not conducting visual observations of the digester box and pipe, or installing a level sensor.

The Central Valley Water Board has incurred over $3,000 in staff costs associated with the investigation and enforcement of the alleged violations. While this amount could be added to the penalty, it is not added at this time.

Based on California Water Code section 13385, civil liability must be at least the economic benefit of non-compliance. Per the Enforcement Policy, the minimum liability is to be the economic benefit plus 10%.

The final liability amount is the total base liability plus any adjustment for the ability to pay, economic benefit, and other factors. The final liability must be more than the minimum liability and less than the maximum liability.

**Attachment:** USEPA BEN Model results
#### Economic Benefit Analysis

<table>
<thead>
<tr>
<th>Compliance Action</th>
<th>Amount</th>
<th>Basis</th>
<th>Date</th>
<th>Delayed?</th>
<th>Non-Compliance Date</th>
<th>Compliance Date</th>
<th>Penalty Payment Date</th>
<th>Discount Rate</th>
<th>Benefit of Non Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Flow Spill Response Training</td>
<td>$ 1,642.14</td>
<td>ECI</td>
<td>12/31/2015</td>
<td>N</td>
<td>12/10/2016</td>
<td>2/2/2017</td>
<td>2/2/2017</td>
<td>3.40%</td>
<td>$ 1,673</td>
</tr>
<tr>
<td>Plant Alarm Notification Modification</td>
<td>$ 193.04</td>
<td>ECI</td>
<td>12/31/2015</td>
<td>Y</td>
<td>12/10/2016</td>
<td>2/2/2017</td>
<td>2/2/2017</td>
<td>3.40%</td>
<td>$ 1</td>
</tr>
<tr>
<td>Digester Overflow Pipe Construction</td>
<td>$ 458.41</td>
<td>ECI</td>
<td>12/31/2015</td>
<td>Y</td>
<td>2/5/2017</td>
<td>2/9/2017</td>
<td>2/9/2017</td>
<td>3.40%</td>
<td>$ 0</td>
</tr>
<tr>
<td>Level Sensor Installation</td>
<td>$ 229.20</td>
<td>ECI</td>
<td>12/31/2015</td>
<td>Y</td>
<td>2/5/2017</td>
<td>2/9/2017</td>
<td>2/9/2017</td>
<td>3.40%</td>
<td>$ 0</td>
</tr>
</tbody>
</table>

**Assumptions:**

1. High Flow Spill Response Training based on six wastewater operators’ salary identified on Transparent California website (based on 2015). Training assumes four hours labor and a base pay multiplier of 2.0. It is assumed that because this training was not provided prior to the discharge, it is considered avoided.

2. Plant Alarm Notification Modification based on Chief Plant Operator salary identified on Transparent California website (based on 2015). Modification assumes four hours labor and a base pay multiplier of 2.0. This cost is assumed to be delayed as the agency intends to implement the corrective action.

3. Pump Cycle Modification based on Chief Plant Operator salary identified on Transparent California website (based on 2015). Modification assumes 0.5 hour labor and a base pay multiplier of 2.0. This cost is assumed to be delayed as the agency intends to implement the corrective action.

4. Visual observations based on average of Plant Operator’s salaries identified on Transparent California website (based on 2015). Observations assume 0.25 hour labor every other day for 30 days preceeding spill. Also assumes a base pay multiplier of 2.0. It is assumed that because visual observations were not performed prior to the spill, these costs were avoided (for at least the period estimated).

5. Digester Overflow Pipe Construction based on average of Plant Operator’s salaries identified on Transparent California website (based on 2015). Construction assumes four hours labor and a base pay multiplier of 2.0. This cost is assumed to be delayed as the agency intends to implement the corrective action.

6. Level Sensor Installation based on average of Plant Operator’s salaries identified on Transparent California website (based on 2015). Installation assumes two hours of labor and a base pay multiplier of 2.0. This cost is assumed to be delayed as the agency intends to implement the corrective action.

7. Non-compliance date for each corrective action is based on spill occurrence that identified the need.

8. Compliance date for each corrective action is based on date agency provided technical response related to spill.

9. Penalty payment date for each corrective action is based on date agency provided technical response related to spill.

**Total Benefit:** $ 2,112
Supplemental Environmental Project ("SEP") Description

Project Title: Sanitary Sewer Overflow (SSO) Response Vacuum/Jet Trailer

Geographic Area of Interest: City of Grass Valley; Wolf Creek watershed

Name and Contact Information for Responsible Entity:

Timothy M. Kiser, Public Works Director/City Engineer
City of Grass Valley
125 East Main Street
Grass Valley, CA 94945
Tel: (530) 274-4351; Fax: (530) 274-4399
email: timk@cityofgrassvalley.com

Estimated Cost of Project: The City will spend at least $75,000 for the direct cost of purchasing a jettter/vacuum trailer. Of this amount, $59,532 will be considered the SEP amount.

Project Description: The City of Grass Valley (City) currently uses a combination jet/vacuum truck to respond to sanitary sewer overflows (SSOs). As part of this project, the City will purchase a combination vacuum/jet trailer to improve the City’s ability to respond to and clean-up SSOs. This additional SSO response equipment would provide the following benefits to the City: 1) will provide a better option to reach remote manholes than our large combination truck; 2) will allow the City more flexibility in dealing with SSOs working in conjunction with the City’s combination truck (e.g., use the vacuum trailer at the upstream manhole to reduce/stop overflow while jetting at manhole below to clear blockage with combination truck); and 3) will provide redundancy if the combination truck requires maintenance or if the City has two spills at once. The cost of this type of unit would be between $75,000 and $120,000.

Water Body, Beneficial Use, or Pollutant Addressed by the Project: The project will take place within the City of Grass Valley, which drains to Wolf Creek. The City of Grass Valley Wastewater Treatment Plant also discharges tertiary effluent to Wolf Creek. The project will enhance the ability of City staff to respond to SSOs, clean up more of the wastewater discharged during an SSO, and conduct preventative maintenance in the collection system to reduce the risk of SSOs and their potential to enter Wolf Creek.

Project Tasks, Budget, and Deliverables:

1. Formal Agreement. The City shall submit a resolution approving the purchase of the truck. The agreement will document that any Supplemental Environmental Project (SEP) funds will be spent in accordance with the terms of the Administrative Civil Liability (ACL) Order, and that the City agrees to an audit of its SEP expenditures, if requested by the Central Valley Regional Water Quality Control Board.

Deliverable: Formal Agreement
Due Date: July 31, 2017
2. Purchase Vacuum/Jet Trailer. The City shall review specific needs (e.g., size, type of vacuum, jet system) and for the system it intends to purchase. The City shall evaluate and test trailers meeting its specifications and needs. After the evaluation is complete, the City shall purchase the selected Vacuum/Jet Trailer.

   Estimated Cost: $75,000-120,000
   Deliverable: Purchase Order for Vacuum/Jet Trailer
   Due Date: **October 30, 2017**

3. Final Report. The City shall include a summary of all tasks completed, an analysis of the success of the project, and a post-project accounting of all expenditures. The accounting shall clearly show whether the final cost of the successfully completed SEP is less than, equal to, or more than the suspended liability of $59,532. The report shall be completed under penalty of perjury.

   Deliverable: Final Report including above information
   Due Date: **January 31, 2018**