

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

In the Matter of:

ORDER R5-2017-0538

**City of Lincoln
Wastewater Treatment and
Reclamation Facility
1245 Fiddymont Road, Lincoln
Placer County**

**SETTLEMENT AGREEMENT AND
STIPULATION FOR ENTRY OF
ADMINISTRATIVE CIVIL LIABILITY
ORDER**

INTRODUCTION

1. 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 or Regional Board), on behalf of the Central Valley Water Board Prosecution Team (Prosecution Team), and the City of Lincoln (City or 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

2. The City owns and operates the City of Lincoln Wastewater Treatment and Reclamation Facility (Facility), which provides sewerage service for the City of Lincoln and adjacent areas. Treated municipal wastewater is discharged from the Facility to a reclamation area and to Auburn Ravine Creek, tributary to the East Side Canal, Cross Canal, and the Sacramento River, a water of the United States.
3. The treatment system consists of screening, oxidation ditches with anoxic zones, secondary clarification, maturation ponds, dissolved air flotation (DAF) units, coagulation, flocculation, sand filtration, and ultraviolet light (UV) disinfection. In addition, the Facility includes a lined emergency storage basin and two tertiary storage basins.
4. On 7 June 2012, the Central Valley Water Board issued WDRs Order R5-2014-0007 which prescribes requirements for the discharge of treated wastewater from the Discharger's Facility. The WDRs contain, among other items, discharge

- prohibitions, effluent limitations, and monitoring and reporting requirements with which the Discharger must comply.
5. On 5 November 2016, the Discharger left a voicemail notifying Board staff and also notified the Governor's Office of Emergency Services of an intermittent spill of 5,000,000 gallons of advanced secondary treated wastewater that bypassed the plant's filtration and disinfection systems. The intermittent unfiltered and undisinfected wastewater discharge to Auburn Ravine Creek began on 26 October 2016 and was stopped after the discharge was discovered at 8:20 AM on 5 November 2016.
 6. On 11 November 2016, the Discharger submitted the *Noncompliance Incident Report* documenting the spill. According to the report, the spill was intermittent and began at 2:58 PM on 26 October 2016. The spill was first discovered the morning of 5 November 2016 and was stopped at 8:20 AM the same day. Water bypassed the filtration and disinfection system during seven of the eleven days during this period. In total, approximately 5.27 million gallons of secondary-treated wastewater bypassed the filtration and disinfection systems prior to blending with fully treated wastewater prior to discharge. The total flow during the bypass was 19,480,000 gallons. The spill was caused by failure to follow the standard operating procedure (SOP) that designates the valve positions depending on the DAF operating condition.
 7. On 22 December 2016, the Discharger submitted additional effluent and receiving water data from samples that were collected during and after the spill but were not available when preparing the 11 November 2016 *Noncompliance Incident Report*. During the spill, the combined partially treated effluent flow rates ranged from 0.37 million gallons per day (MGD) to 5.47 MGD. The upstream receiving water flow rate during this period ranged from 10 MGD to 51 MGD. Approximately 2.5-inches of rain fell during the period of the spill, influencing the receiving water's flow rate¹. The Discharger collected biochemical oxygen demand (BOD), total suspended solids (TSS), and total coliform samples from the DAF unit's effluent (similar to the water that was comingled and discharged during the spill) for six consecutive days after the spill

¹ Board staff queried data from the California Department of Water Resources CDEC database, Gauge (LCN) to verify the receiving water flow rate increases during this period.

- was stopped to estimate the concentrations of these parameters during the spill. All BOD samples were non-detect (ND) with a detection limit of 2 mg/L. TSS concentrations ranged from 4 mg/L to 9.4 mg/L which is below the WDR effluent limitation. Total coliform concentrations ranged from 31 MPN to 130 MPN, which exceeds the WDRs “7-day median” and “more than once in any 30-day period” effluent limitations.
8. The Prosecution Team alleges that the City violated the WDRs. The alleged violations are associated with the improper operation of the Facility. Specifically, the Prosecution Team alleges the following:
- 8.1 **Violation 1:** The Prosecution Team alleges that the City violated Discharge Prohibition III.A of WDRs R5-2014-0007 by discharging wastewater at a location or manner different from that described within the WDRs. This violation occurred when the City bypassed the filtration and UV disinfection portions of the Facility.
- 8.2 **Violation 2:** The Prosecution Team alleges that the City violated WDRs Order R5-2014-0007 Attachment D, Provision I.D by failing to properly operate and maintain all facilities and systems of treatment and control to achieve compliance with the conditions of the WDRs. This violation occurred when the City failed to follow the standard operating procedure related operating the DAF unit in a manner that would prevent the wastewater from bypassing the filtration and UV disinfection portions of the treatment system.
9. The Parties have engaged in confidential settlement negotiations and agree to settle the matter without administrative or civil litigation by presenting this Stipulated Order to the Central Valley Water Board, or its delegee, for adoption as an order by settlement pursuant to Government Code section 11415.60. To resolve the violations by consent and without further administrative proceedings, and in consideration of hearing and litigation risks, the Parties have agreed to the imposition of administrative civil liability in the amount of three hundred sixty thousand dollars (\$360,000) in administrative civil liability against the Discharger as explained in Exhibits A and B.

10. 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:

11. **Administrative Civil Liability:** The City hereby agrees to the imposition of an administrative civil liability totaling THREE HUNDRED SIXTY THOUSAND DOLLARS (\$360,000) to resolve the alleged violations. Specifically:
 - 11.1 Within thirty (30) days of issuance of the Order, the City agrees to remit, by check, THREE HUNDRED SIXTY THOUSAND DOLLARS (\$360,000) payable to the *State Water Resources Control Board Cleanup and Abatement Account*, and shall indicate on the check the number of this Order. The City 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. Copies of the check shall be sent to David Boyers, Assistant Chief Counsel, State Water Resources Control Board, Office of Enforcement, P.O. Box 100, Sacramento, CA 95812 and to Howard Hold, Acting Supervisor, Compliance/Enforcement Section, Regional Water Quality Control Board, Central Valley Region, 11020 Sun Center Drive, Suite 200, Rancho Cordova, CA 95670.
12. **Compliance with Applicable Laws:** The City 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.

13. **Party Contacts for Communications related to Stipulated Order:**

For the Central Valley Water Board:

Howard Hold, Acting Supervisor
Compliance and Enforcement Section
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
howard.hold@waterboards.ca.gov
(916) 464-4679

For the City of Lincoln:

Jennifer Hanson
Public Services Director
City of Lincoln
600 Sixth Street
Lincoln, CA 95648
jennifer.hanson@lincolnca.gov
(916) 434-3248

14. **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.
15. **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 the Complaint or which could have been asserted based on the specific facts alleged in the Complaint as of the effective date of this Stipulated Order ("Covered Matters"). The provisions of this Paragraph are expressly conditioned on the City's payment of the administrative civil liability by the deadline specified in Paragraph 11.1.
16. **Public Notice:** The City understands that this Stipulated Order must 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 Prosecution Team may

- unilaterally declare this Stipulated Order void and decide not to present it to the Central Valley Water Board, or its delegee. The City agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.
17. **Addressing Objections Raised During Public Comment Period:** The Parties agree that the procedure contemplated for the Central Valley Water Board's adoption of the settlement by the Parties and review by the public, as reflected in this Stipulated Order, will be adequate. In the event procedural objections are raised 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 the procedure as necessary or advisable under the circumstances.
 18. **No Waiver of Right to Enforce:** The failure of the Prosecution Team or of the 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 the Order. The failure of the Prosecution Team or of the 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.
 19. **Effect of Stipulated Order:** Except as expressly provided in this Stipulated Order, nothing in this Stipulated Order is intended nor shall it be construed to preclude the Prosecution Team or any state agency, department, board or entity or any local agency from exercising its authority under any law, statute, or regulation.
 20. **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.
 21. **Modification:** This Stipulated Order shall not be modified by any of the Parties by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties, and approved by the Central Valley Water Board.
 22. **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 delegee, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Central Valley Water Board to determine whether to assess administrative civil liabilities 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. The Parties agree to waive any and all objections based on settlement communications in 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 that 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 as a consequence of reviewing the Stipulation and/or the Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing on the Complaint in this matter; or
 - b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.
23. **No Admission of Liability:** In settling this matter, the City does not admit to any of the allegations herein, or that it has been or is in violation of the Water Code, or any other federal, state, or local law or ordinance. Further, the City agrees to this Order solely for the purposes of settling the matter and does not agree that the methodology employed to determine the Administrative Civil Liability in this matter is applicable to any other potential violation. The City agrees that in the event of any future enforcement actions by the Central Valley Water Board, the Order may be used as evidence of the existence of a prior enforcement action consistent with Water Code sections 13327 and 13385.
24. **Waiver of Hearing:** The City 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 prior to the adoption of the Stipulated Order.
25. **Waiver of Right to Petition:** The City hereby waives its right to petition the Central Valley Water Board's adoption of the Stipulated Order as written for review by the Regional Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or any California appellate level court.
26. **Covenant Not to Sue:** The City covenants not to sue or pursue any administrative or civil claim(s) against any State Agency or the State of California, their officers,

- Board Members, employees, representatives, agents, or attorneys arising out of or relating to any Covered Matter.
27. **Central Valley Water Board is 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 acts or omissions by the City, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated 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 the City, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order.
 28. **The City is Not Liable:** Neither the City, its directors, officers, employees, agents, representatives or contractors shall be liable for any injury or damage to persons or property resulting from acts or omissions by the Central Valley Water Board members, or the Central Valley Water Board staff, attorneys, or representatives in carrying out activities pursuant to this Stipulated Order, nor shall the City, its directors, officers, employees, agents, representatives or contractors be held as parties to or guarantors of any contract entered into by the Central Valley Water Board, its members or staff the City, in carrying out activities pursuant to this Stipulated Order.
 29. **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 Order.
 30. **No Third Party Beneficiaries:** This Stipulated Order is not intended to confer any rights or obligations 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.
 31. **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.
 32. **Counterpart Signatures:** 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.

33. **Incorporation of Exhibits:** Exhibits "A" and "B" are hereby incorporated by reference.

IT IS SO STIPULATED.

California Regional Water Quality Control Board Prosecution Team
Central Valley Region

By: 
Andrew Altevogt
Assistant Executive Officer

Date: 8/7/17

City of Lincoln

By: 
Matthew Brower
City Manager

Date: 2/3/17

Order of the Central Valley Water Board

1. In adopting this Stipulated Order, the Central Valley Water Board has considered, where applicable, each of the factors prescribed in Water Code sections 13327 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 described in the Complaint or otherwise provided to the Central Valley Water Board or its delegee by the Parties and members of the public.
2. 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 sections 21065, 21080(a); sections 15060(c)(2) and (3); 15378(a), Title 14, of the California Code of Regulations). In addition, the Central Valley Water Board finds that issuance of this Order is also exempt from the provisions of CEQA in accordance with section 15321(a)(2), Title 14, of the California Code of Regulations as an enforcement action by a regulatory agency and there are no exceptions that would preclude the use of this exemption.
3. The terms of the foregoing Stipulation are fully incorporated herein and made part of this Order of the Central Valley Water Board.

Pursuant to Water Code sections 13323 and 13385 and Government Code section 11415.60, **IT IS HEREBY ORDERED** on behalf of the California Regional Water Quality Control Board, Central Valley Region.



Pamela C. Creedon
Executive Officer



Date

Attachments:

- Exhibit A – Specific Factors Considered for Administrative Civil Liability
- Exhibit B – Receiving Water Sample Results

Exhibit A to Stipulated Order R5-2017-0538
Specific Factors Considered for Administrative Civil Liability
City of Lincoln Wastewater Treatment and Reclamation Facility

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:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf

Background

The City of Lincoln (Discharger) owns and operates the City of Lincoln Wastewater Treatment and Reclamation Facility (Facility). Discharge of treated wastewater to surface water from this Facility is regulated by Waste Discharge Requirements (WDRs) Order R5-2014-0007. An intermittent discharge of partially treated water occurred at the Facility between 1458 hours on 26 October 2016 and 0820 hours on 5 November 2016. The discharge occurred when valves were not properly operated due to operator error when bringing dissolved air flotation unit #1 (DAF #1) online and taking DAF #2 offline. The intermittent bypass occurred on seven of the 11 days during this period. Approximately 5,270,000 gallons of wastewater bypassed the filtration and disinfection processes prior to mixing with the remaining wastewater. A total of 19,480,000 gallons of partially treated wastewater was discharged to Auburn Ravine Creek during the spill event.

Step 1 – Potential for Harm for Discharge Violations

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

Factor 1: Harm or Potential Harm to Beneficial Uses.

This factor evaluates direct or indirect harm or potential for harm from the violation. A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm to beneficial uses ranges from negligible (0) to major (5). The designated beneficial uses of Auburn Ravine Creek that could be impacted by the unauthorized discharge include municipal and domestic supply; agricultural irrigation; agricultural stock watering; industrial process water supply; industrial service supply; water contact recreation; other non-contact water recreation; warm freshwater aquatic habitat; cold freshwater aquatic habitat; warm fish migration habitat; cold fish migration habitat; warm spawning habitat; wildlife habitat; and navigation.

Discharges to surface water typically must be treated to a high standard to prevent adverse impacts to public health and aquatic life. Toxicity is the degree to which a substance can damage a living or non-living organism. Toxicity can refer to the effect on a whole organism, such as an animal, bacterium, or plant, as well as the effect on a substructure of the organism, such as a cell or an organ. In this case, the discharge consisted of partially treated secondary wastewater mixed with tertiary treated water. A portion of the flow bypassed the tertiary filtration and UV disinfection systems. The tertiary filtration is critical to filter colloidal suspensions of fine solids and disinfection eliminates pathogenic bacteria. The main objective of the UV disinfection is to reduce the number of waterborne pathogens to safe levels, and thereby lowering the risk of exposing the public to infectious diseases.

The Discharger collected receiving water samples for fecal coliform, total suspended solids, and ammonia upstream and downstream of the discharge approximately 20 minutes after stopping the bypass. Concentrations of these parameters indicate that there are likely no long-term impacts to

beneficial uses in the downstream receiving water due to the spill; however, no samples were collected during the spill for these parameters. A table summarizing the receiving water sample results is included as Exhibit B.

The Discharger also monitors turbidity on a continuous basis. The turbidity measurements downstream of the discharge did not increase during the bypass and did not exceed the WDR's receiving water turbidity limits.

Given the nature of the treatment systems that were bypassed and the sample results submitted by the Discharger, it is appropriate to assign a "minor" potential harm to beneficial uses. "Minor" is defined as "low threat to beneficial uses (i.e., no observed impacts to beneficial uses but potential impacts to beneficial uses with no appreciable harm)". Therefore, a score of 1 is assigned for this factor.

Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge.

A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. "Potential receptors" are those identified considering human, environmental, and ecosystem exposure pathways. The effluent was partially treated wastewater and received only partial disinfection. The Discharger collected representative samples of the combined effluent in compliance with the Monitoring and Reporting Program contained in the WDRs for all parameters, with the exception of total coliform. These samples showed that the combined effluent was in compliance with the WDRs effluent limitations. Because the total coliform sample location is immediately downstream of the UV disinfection system and upstream of the point where the bypassed water comingled with the fully treated effluent, the Discharger was unable to provide combined effluent sample results for total coliform which are representative of the actual discharge. However, the Discharger did collect total coliform samples from the DAF effluent following the spill event to estimate the likely total coliform concentrations in the bypassed water during the event. Six samples were collected on six consecutive days and had total coliform concentrations ranging from 31 most probable number per 100 milliliters (MPN/100mL) to 130 MPN/100mL. When blended with fully treated effluent, the combined concentrations would be lower; however, it is reasonable to assume that the "7-day median" and "once in any 30-day period" total coliform effluent limitations of 2.2 MPN/100mL and 23 MPN/100mL, respectively, were exceeded during the spill event. It is unlikely that the instantaneous maximum total coliform effluent limitation (240 MPN/100 ml) was exceeded during the spill event based on the concentrations in the DAF effluent samples.

Total coliform organisms are used as an indicator organism to ensure that wastewater is adequately disinfected to remove the human pathogens contained in domestic sewage. Based on the estimated concentrations of total coliform that discharged during the spill event, it is appropriate to assign a "Minor" risk to this discharge and a score of 1 was assigned for this factor.

Factor 3: Susceptibility to Cleanup or Abatement.

A score of 0 is assigned for this factor if 50% or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the discharger. In this case, less than 50% of the discharge was susceptible to cleanup or abatement because all of the 5,270,000 gallons of wastewater bypassed the filtration and disinfection processes prior to mixing with the remaining fully treated wastewater. A total of 19,480,000 gallons of partially treated wastewater was discharged to Auburn Ravine Creek during the spill event during the incident which was unrecoverable. Therefore, a factor of 1 is assigned.

Final Score – “Potential for Harm”

The scores of the three factors are added to provide a Potential for Harm score for each violation or group of violations. In this case, a **final score of 3** was calculated. The total score is then used in Step 2, below.

Step 2 – Assessment for Discharge Violations

This step addresses administrative civil liabilities for the unauthorized discharge based on both a per-gallon and a per-day basis.

1. Per Gallon Assessments for Discharge Violations

When there is a discharge, the Central Valley Water Board is to determine an initial liability amount on a per gallon basis using the Potential for Harm score and the Extent of Deviation from Requirement of the violation.

The Potential for Harm Score was determined in Step 1, and is 3. The Extent of Deviation is considered “moderate” because the WDRs prohibit the discharge of wastewater at a location or in a manner different from that described in the WDRs. The permit also requires that the Discharger properly operate all portions of the treatment train to achieve compliance with the WDs. Table 1 of the Enforcement Policy (p. 14) is used to determine a “per gallon factor” based on the total score from Step 1 and the level of Deviation from Requirement. For this particular case, the factor is 0.013. This value is multiplied by the volume of discharge and the per gallon civil liability, as described below.

This Stipulated Order assesses penalties for a discharge of 19,480,000 gallons. Approximately 5,270,000 gallons of unfiltered, undisinfected wastewater was mixed with fully treated wastewater and then discharged into Auburn Creek. The WDRs do not allow mixing of a partially treated portion of the waste with the remainder of the fully treated water. Therefore, the entire 19,480,000 gallons was discharged in violation of the WDRs.

Water Code section 13385(c)(2) states that the civil liability amount is to be based on the number of gallons discharged—but not cleaned up—over 1,000 gallons, which for this Stipulated Order, is 19,479,000 gallons. The maximum civil liability allowed under Water Code section 13385 on a per gallon basis is \$10/gallon. However, the Enforcement Policy allows for a reduced per gallon penalty for high volume discharges. In this case, the discharge can be considered a high volume discharge and the reduced per volume factor of \$2/gallon applies.

<u>Initial Liability Per Gallon</u> (0.013 factor from Table 1) x (19,479,000 gallons) x (\$2/gallon) = \$506,454
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2. Per Day Assessments for Discharge Volumes

When there is a discharge, the Central Valley Water Board is to determine an initial liability amount on a per day basis using the same Potential for Harm and the Extent of Deviation from Requirement that were used in the per-gallon analysis. The “per day” factor (determined from Table 2 of the Enforcement Policy) is 0.013. There were seven days of violation.

<u>Initial Liability Per Day</u> (0.013 factor from Table 2) x (7 Days) x (\$10,000/Day) = \$910

Initial Liability Amount: The value is determined by adding together the per gallon assessment and the per day assessment.

<u>Total Initial Liability</u> \$506,454 (per gallon assessment) + \$910 (per day assessment) = \$507,364
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Step 3 – Per Day Assessment for Non-Discharge Violation

This step is not applicable.

Step 4 – Adjustment Factors

There are three additional factors to be considered for modification of the amount of initial liability: the violator’s culpability, efforts to clean-up or cooperate with regulatory authority, and the violator’s compliance history. After each of these factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is to be used, with a higher multiplier for negligent behavior. The Discharger was given a multiplier value of 1.4.

The 26 October through 5 November 2017 discharge was caused by the operator’s negligence when switching flow from one DAF unit to the other. This operator was also involved in a similar incident in March 2016 involving a discharge of partially treated effluent from the same DAF units. The Discharger had adequate standard operating procedures (SOPs) in place at the time of this second incident and had provided training on the SOPs after the first incident. However, the operator did not follow the SOPs. The Discharger is culpable for the unauthorized discharge because all wastewater treatment facility operators should fully understand their operational duties, be trained, and have sufficient oversight. In addition, procedures should be in place to ensure that the SOPs are followed.

Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperates in returning to compliance and correcting environmental damage. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation. Approximately 19,480,000 gallons of partially treated wastewater was discharged to Auburn Ravine Creek, a water of the United States. Because the wastewater was discharged to a surface water body, it was not possible to clean-up the unauthorized discharge. However, the Discharger did respond to the unauthorized discharge as soon as it had knowledge of the problem, took measures to minimize the potential for a greater discharge, and made the proper notifications. In addition, the Discharger terminated the operator, installed locks on the valves involved, and implemented sign-off forms requiring verification of proper valve positions by another operator. Therefore, the Discharger was given a multiplier value of 1.0.

History of Violation

When there is a history of repeat violations, the Enforcement Policy requires a minimum multiplier of 1.1 to be used. The Discharger had a nearly identical violation in March 2016, and was issued Administrative Civil Liability Order R5-2016-0568. Therefore, a multiplier value of 1.1 is appropriate.

Step 5 - Determination of Total Base Liability Amount

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

<u>Total Base Liability Amount</u> (\$507,364) x (1.4) x (1.0) x (1.1) = \$781,340

Step 6 - Ability to Pay and Ability to Continue in Business

The ability to pay and to continue in business factor must be considered when assessing administrative civil liabilities. The City of Lincoln is a public entity with the ability to raise funds. The City's 2016-2017 budget was \$79.9 million¹ with a wastewater fund of \$3.5 million as of 1 July 2016 and an expected wastewater fund balance of \$4.3 million as of 30 June 2017.

Step 7 – Other Factors as Justice May Require

The costs of investigation and enforcement are “other factors as justice may require,” and could be added to the liability amount. The Central Valley Water Board incurred over \$7,500 (50 hours at a statewide average of \$150/hour) in staff costs associated with the investigation and enforcement of the violations alleged herein. The Prosecution Team, in its discretion, is not recommending an increase in the Total Base Liability amount in consideration of these costs incurred as the proposed liability amount serves as a sufficient general and specific deterrent against future violations.

The 2010 Enforcement Policy allows penalties for high volume sewage discharges to be assessed at a maximum of \$2.00 per gallon. A draft revised Enforcement Policy, which was adopted by the State Water Board on 4 April 2017 but is awaiting approval by the Office of Administrative Law, includes a definition of high-volume discharges as discharges over 2,000,000 gallons and states that Regional Boards may elect to use a maximum of \$1.00 per gallon when assessing penalties for partially-treated spills. Based on the magnitude and type of this particular discharge, the Prosecution Team has elected to use \$1.00 per gallon in assessing the penalty associated with this case. A reduction in the maximum liability to \$1.00 per gallon results in an adjusted Total Base Liability of \$391,371, as shown in the table below. In consideration of the litigation risk and circumstances of this particular case, it is appropriate to reduce the liability from \$391,371 to **\$360,000** while still maintaining a sufficient deterrent against similar conduct in the future.

<u>Initial Liability Per Gallon</u> (0.013 factor from Table 1) x (19,479,000 gallons) x (\$1/gallon) = \$253,227
<u>Initial Liability Per Day</u> (0.013 factor from Table 2) x (7 Days) x (\$10,000/Day) = \$910
<u>Total Initial Liability</u> \$253,227 (adjusted per gallon assessment) + \$910 (per day assessment) = \$254,137
<u>Total Base Liability Amount</u> (\$254,137) x (1.4) x (1.0) x (1.1) = \$391,371
<u>Final Base Liability Amount</u> \$391,371 - \$31,371 (Litigation Risk Consideration) = \$360,000

¹ <http://lincolnca.gov/home/showdocument?id=4791>

Step 8 – Economic Benefit

Pursuant to Water Code section 13385(e), civil liability, at a minimum, must be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute a violation. As documented by the Discharger, corrective actions were implemented related to a prior spill incident, for which the economic benefit was recovered through an assessed civil liability. These actions included:

- Development and implementation of an SOP related to proper valve operation for the DAF unit,
- Development and implementation of a training program for operators, and
- Retrofitting the valves with valve stands that allow the operator to immediately determine the position of the valve.

In this case, the responsible operator failed to follow the SOP, resulting in a discharge of partially treated wastewater. Because the operator assisted in developing the SOP, training is not suspected to be the root cause. Instead, it appears the operator willfully disregarded procedure, and as a result, has been terminated by the Discharger. As a result of this incident, the Discharger has indicated that they have developed a lock-out/tag-out program that requires managerial oversight. Costs associated with this program are considered minimal. Therefore, based on the facts discussed above, the Prosecution Team has assessed the economic benefit on noncompliance to be negligible.

Final adjusted liability

The final adjusted liability is \$360,000.

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts for a discharge violation must be determined for comparison to the amounts being proposed.

Maximum Liability Amount: \$194,860,000

Minimum Liability Amount: the minimum liability is equal to the economic benefit plus 10%, which was estimated to be negligible.

Step 10 – Final liability Amount

The final liability amount consists of the added amounts for each violation, with any allowed adjustments, provided amounts are within the statutory minimum and maximum amounts. Without further investigation of the discharge, calculation of economic benefits, and additional staff time, the proposed Administrative Civil Liability is **\$360,000**.



Stantec Consulting Services Inc.
3875 Atherton Road, Rocklin CA 95765

November 11, 2016

Mike Fischer
Water Resources Control Engineer
NPDES Compliance and Enforcement Unit
California Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670-6114

**Re: City of Lincoln Wastewater Treatment and Reclamation 10/26 to 11/5, 2016
Noncompliance Incident Report, Facility WDR Report Order NO. R5-2014-
0007 (NPDES NO. CA0084476)**

Mr. Fischer:

This letter is in accordance with the required five-day written notification for a noncompliance incident.

Starting on October 26th at 1458 until November 5 at 0820 our advanced secondary wastewater from our DAF effluent was allowed to intermittently comeingle with our fully treated effluent. An estimated 5.27 MG of advanced secondary water bypassed the filters and UV disinfection. This spill then comeingled with the effluent that was fully treated and was discharged into our receiving water.

Spill volumes were calculated using a combination of hydraulic modeling and integration of minute level flow measurements. Due to the volume of this data (28 MB) only a small portion of daily totals are included in this report (Table 1.) but the full volume could be transferred to you at your request. There is not a flow meter that directly measured the spill volume. Unlike our previous spill in March of this year, this spill was intermittent due to the hydraulics associated with Tertiary Storage return. Tertiary Storage return, Filter Feed flows, Backwash flows, Plant water flows and sample meter flows were combined with analysis of Filter Feed and Effluent Pump Station wet well levels to determine the spill volume (see attached Chart).

Design with community in mind

**City of Lincoln Wastewater Treatment and Reclamation 10/26 to 11/5, 2016
Noncompliance Incident Report**

Table 1.

Dates with intermittent spill times	Total Effluent MGD	Compliant Not Co-mingled Effluent Pump Station Flow MGD	Co-mingled Effluent Pump Station Flow MGD	Tertiary Storage Return Flow MGD	Filter Feed PS Flow MGD	Advanced Secondary Spill Volume MGD
10/26/2016 spill start at 1458	3.964	2.334	1.63	1.102	3.7	0.36
10/27/2016	4.612	0.002	4.61	0.529	3.8	1.11
10/28/2016	8.259	6.969	1.29	0.531	5.3	0.33
10/29/2016	9.583	9.583	0.00	3.303	7.0	0.00
10/30/2016	9.545	9.545	0.00	3.462	7.0	0.00
10/31/2016	9.4	9.400	0.00	3.509	7.0	0.00
11/1/2016	9.585	9.585	0.00	0.000	7.0	0.00
11/2/2016	9.122	8.752	0.37	0.451	6.6	0.11
11/3/2016	7.16	2.750	4.41	0.229	5.8	1.33
11/4/2016	5.45	-0.020	5.47	0.111	4.6	1.58
11/5/2016 spill end at 0820	3.939	2.229	1.71	0.222	4.1	0.45
Gallons drained from Effluent Pump Station after spill was discovered:			-0.01			-0.005
Total (MG)	80.619	61.13	19.48	13.4	61.9	5.27

City of Lincoln Wastewater Treatment and Reclamation 10/26 to 11/5, 2016 Noncompliance Incident Report

Because the spill occurred through buried pipes, there was no direct instrument or visual indicator that showed when the spill was occurring. The fact that flow modeling is required to accurately determine the spill volume speaks to the difficulty operators had in determining there was a spill occurring. The spill wasn't readily apparent until after the Tertiary Storage flow had slowed on November 4th. When there is no Tertiary Storage return flow, Filter Feed flow would typically be a little higher than the Effluent Flow on the daily totals. Cody Smith found the Filter Feed total flow lower than the Effluent Flow when he entered flow numbers for November 4th on the morning of November 5th. On November 5th, Tertiary Storage return had slowed to a point where it became apparent that not all of the DAF effluent was going to the filters so he further investigated and discovered the incorrect valving. The following are the Senior Operators responsible for checking the treatment plant during the time period of the spill.

Table 2.

Date	Operator of the Day	Regional Board Certification
10/26/2016	Trey Cain	III-27803
10/27/2016	Trey Cain	III-27803
10/28/2016	John (Cody) Smith	V-28701
10/29/2016	John (Cody) Smith	V-28701
10/30/2016	Devon Morris	IV-10880
10/31/2016	Devon Morris	IV-10880
11/1/2016	Devon Morris	IV-10880
11/2/2016	Trey Cain	III-27803
11/3/2016	Trey Cain	III-27803
11/4/2016	John (Cody) Smith	V-28701
11/5/2016	John (Cody) Smith	V-28701
11/6/2016	John (Cody) Smith	V-28701

The cause of the spill was failure to follow the SOP that designated the required valve positions depending on the DAF operating condition. This same SOP was submitted to the Regional Board earlier this year following the spill that occurred on March 27th earlier this year. Grade IV Senior Operator Devon Morris (IV-10880) developed this SOP (and valve diagram) after being at least partially responsible for the spill that occurred last March. The following is an excerpt from the SOP that wasn't followed (the entire SOP and valve diagram is attached):

**City of Lincoln Wastewater Treatment and Reclamation 10/26 to 11/5, 2016
Noncompliance Incident Report**

Please ensure the valve positions for the following conditions noted:

1) DAF#1 online, running pump 1A, DAF#2 offline:

- 1.) BFV33201 (DAF#1 to Pump 1B) is **open**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **closed and locked out**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **open**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **closed and locked out**
- 5.) BFV33001 (DAF Splitter to FFPS or Effluent) is **closed and locked out**
- 6.) BFV33002 (DAF#2 to Effluent) is **open**

On October 25th Devon switched from the condition of having DAF # 2 online to bringing DAF# 1 back online according to the steps above. Devon only completed steps 1 through 4. When questioned concerning this he stated that the job could be finished the following day. He said he passed this responsibility on to Senior Operator Trey Cain (Ill-27803) who has no recollection of his statements nor does his Supervisor Justin Gregory (Ill-10142). Trey brought DAF # 2 on line on October 26th at 1458 with the understanding that Devon had completed his job. Trey should have only had to open BFV33002 to send Tertiary Storage water to the final effluent. When Trey opened BFV33002 a direct path was created for DAF effluent to flow to the Effluent Pump station through BFV33001 and BFV33002. Completing steps 5 and 6 above takes less than 5 minutes and Devon had about 3 hours left in his day to complete this task after switching the DAF's. In response to this error and two earlier this year that resulted in NOVs (March 27 spill and May 13th coliform lab accident), Devon was terminated from his Senior Operator position on November 10, 2016. Trey received a verbal reprimand for not checking on the position of BFV33001 prior to opening BFV33002. No further action was taken due to his outstanding performance over the past 10 years at this facility. It is unclear why operators did not recognize why BFV33001 was not locked out. This spill differs from the event in March of this year in that a different set of valves were left open to create the spill event.

In response to your request for SOP training records, I unfortunately could not locate any written documentation of training. However, since the March 27th incident, I have personally reviewed with all of our operations staff what went wrong and how it could be prevented in the future with review of valve diagrams, onsite demonstration and new SOP review. As stated above, the operator primarily responsible wrote the new SOP and developed the diagram

**City of Lincoln Wastewater Treatment and Reclamation 10/26 to 11/5, 2016
Noncompliance Incident Report**

that goes with it back in July. In response to this current event, we have instituted maintaining records of written SOP training with operator acknowledgement forms. In addition, combination locks have been added to the critical valves that require Supervisor or Manager approval to open (see attached photos). We are also developing double sign off forms for each valving permutation. Attached is a sample that will be utilized after training and further review.

Further spill prevention methods include electronic valve position indicators on every critical DAF transfer valve and flow metering for Maturation Pond Effluent which feeds the DAF (flow total in minus flow total out should always be close to zero).

The non-compliant flow to Auburn Ravine was stopped immediately at the time of discovery and all contaminated structures prior to the Final Effluent pumps were drained back to the head of the treatment plant and fully compliant flow was reestablished at 1346 on November 5th.

Due to the high quality of our DAF effluent, there was no instrumentation or lab result suggesting a spill had occurred. Our coliform sampling is routinely performed at the UV weirs which is upstream from the spill. However, we were able to obtain a total coliform grab sample of the co-mingled effluent prior to draining the Effluent Pump Station. The result was 50MPN which would meet the coliform limit once in a 30-day period. In addition, we did a coliform test on the effluent comp sample that covered the time period of 9am on November 4th to 9am on November 5th. The value for the comp sample was 170 MPN, which is likely higher than it actually was due to storage in unsanitary conditions. Other than elevated coliform, all other effluent limits were met. Effluent and Receiving water data are attached.

Daniel Orr with the department of Fish and Wildlife pulled representative samples of our effluent and receiving water samples on November 9th. Results are pending for his tests but he stated that he was not concerned about slightly elevated coliform levels as this would have no impact on the environment. There was likely no impact to the public either due to lack of direct contact recreation this time of year and the fact that most of the discharge occurred during storm events.

All notifications were made within the required notification period following discovery of the release. Office of Emergency Services was notified on 11-6-16 at 1300 after it was determined we had a spill at 1130. Effluent and receiving water samples were pulled within a half hour of shutting down our discharge at 0820. At the time of shut down we weren't sure if we had a spill but we pulled samples immediately just in case. It took several hours to determine if we actually had a

**City of Lincoln Wastewater Treatment and Reclamation 10/26 to 11/5, 2016
Noncompliance Incident Report**

spill and additional time to determine approximate volume. OES assigned the spill incident Case# 16-6726. Your office was also notified immediately after notifying OES at 1300 on the same day. In addition, we made positive contact with Placer County Environmental Health by 1320. Environmental Health did not recommend any action be taken to protect public health or the environment due to the benign nature of the release.

Should you have questions or need further clarification, please do not hesitate to contact me at 916-540-6591, Gary.Hengst@stantec.com or Justin Gregory, the Operations Supervisor, at 916-826-3203, Justin.Gregory@Stantec.com.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Sincerely,
Stantec Consulting



Gary Hengst
Chief Plant Operator
City of Lincoln WWTRF

cc: Jennifer Hanson, Public Services Director
File Copy

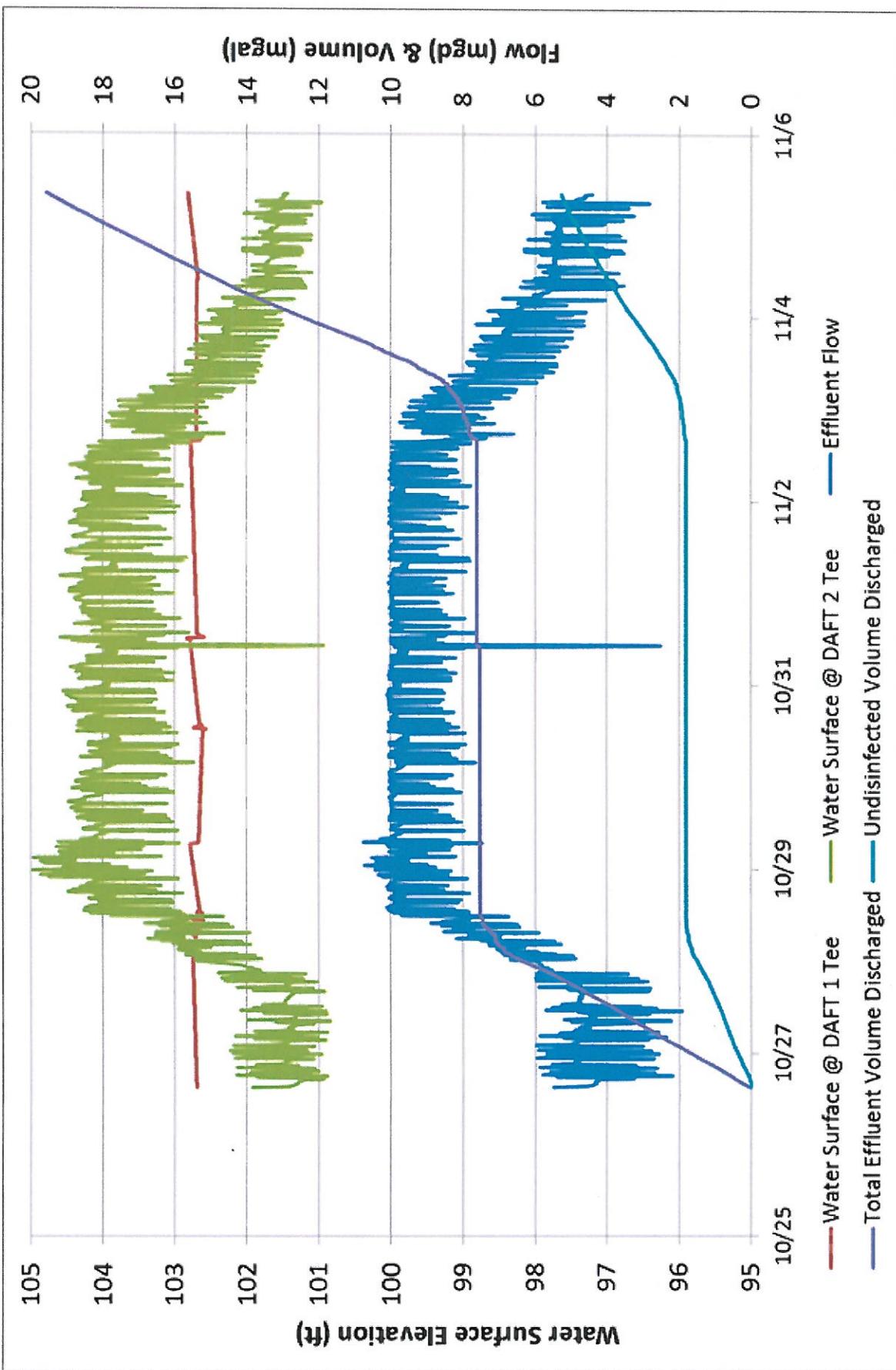
BFV33002



BFV33001

BFV 33201





DAF 1	Online
source:	Mat. Ponds
effluent to:	FFPS
Pressure pump in service:	1A

Operator 1: _____

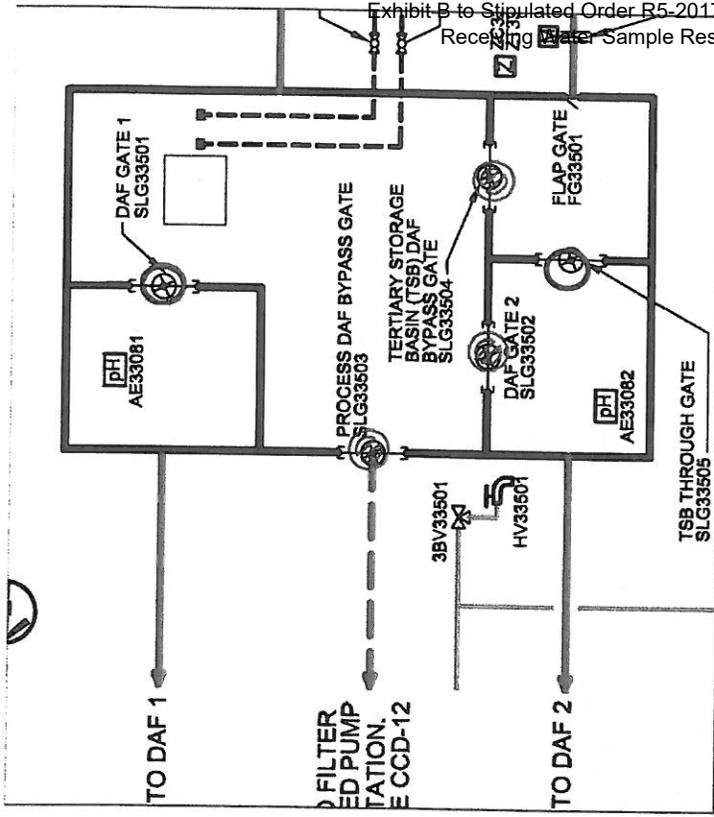
Operator 2: _____

DAF 2	Offline
source	drained
effluent to:	
Pressure pump in service	

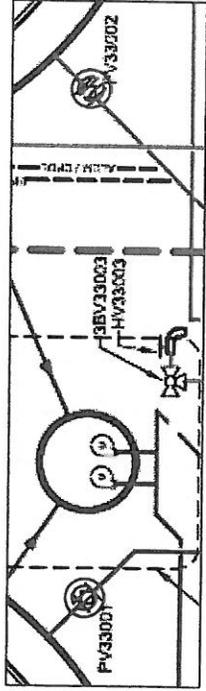
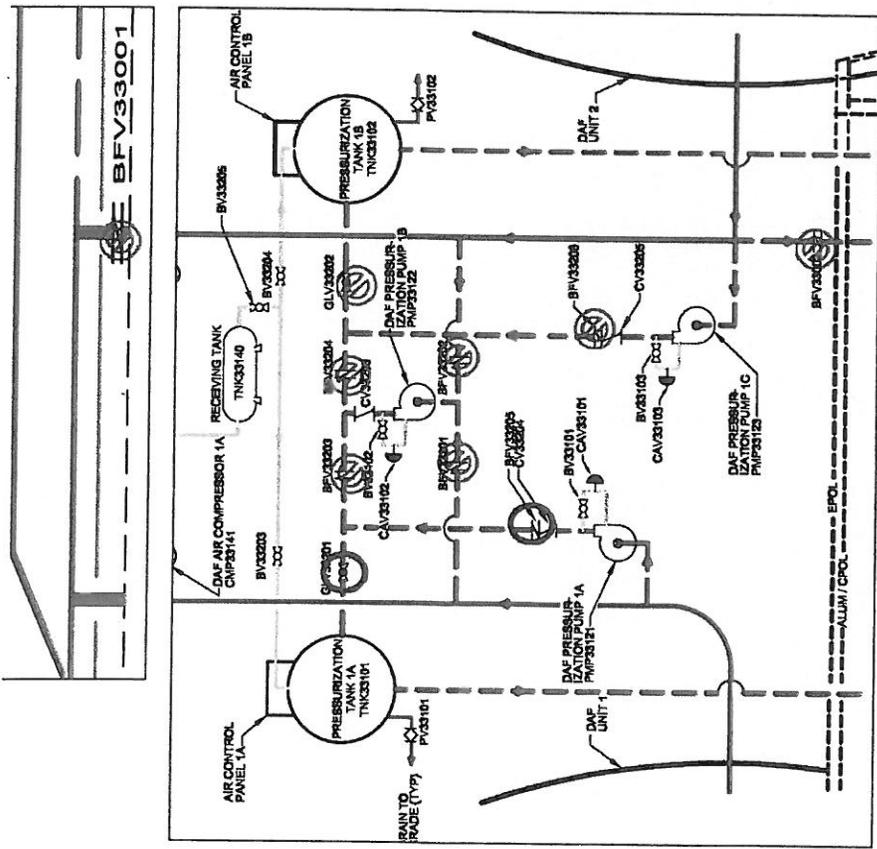
Date/ Time: _____ / _____

Name/ Location	Number	Position	Initials		Notes
			1	2	
DAF 1 drain	PV 33001	Closed			
DAF 2 drain	PV 33002	Closed			May be open to drain
to effluent pump station	BFV 33002	*Closed			
pressure pump 1A	BFV 33205	Open			
pressure pump 1C	BFV 33206	Closed			May remain open if DAF 2 will be used
pressure pump 1B (middle)	BFV 33201	*Closed			
	BFV 33202	*Closed			
	GLV 33202	Closed			May remain open if DAF 2 will be used
	BFV 33204	Closed			
	BFV 33203	Closed			
	GLV 33201	Open			
Behind compressors	BFV 33001	*Closed			
DAF Splitter box	SLG 33501	Open			
	SLG 33502	Closed			
	SLG 33503	Closed			
	SLG 33504	Closed			
	SLG 33505	Open			(if SLG 33504 is closed)

*** Critical valves are locked closed- risk of violation if opened**



DAF 1 ONLINE
 MAT POND TO FILTER FEED
 PRES. PUMP 1A
 DAF 2 OFFLINE



7 November 2016

DAF pressure pump operation, transfer, normal mode

DAF pressure pump operation, transfer, normal mode

CAUTIONS, WARNINGS, PPE REQUIRED—NONE

Note: refer to valve diagram for reference to specific piping and valving

Please ensure the valve positions for the following conditions noted:

1) DAF#1 online, running pump 1A, DAF#2 offline:

- 1.) BFV33201 (DAF#1 to Pump 1B) is **open**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **closed and locked out**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **open**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **closed and locked out**
- 5.) BFV33001 (DAF Splitter to FFPS or Effluent) is **closed and locked out**
- 6.) BFV33002 (DAF#2 to Effluent) is **open**

2) DAF #1 online, running pump 1B, DAF#2 offline:

- 1.) BFV33201 (DAF#1 to Pump 1B) is **open**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **closed and locked out**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **open**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **closed and locked out**
- 5.) BFV33001 (DAF Splitter to FFPS or Effluent) is **closed and locked out**
- 6.) BFV33002 (DAF#2 to Effluent) is **open**

3) DAF#1 online, running pump 1A or 1B, DAF#2 running 1C, sending to Effluent:

- 1.) BFV33201 (DAF#1 to Pump 1B) is **open**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **closed and locked out**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **open**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **closed and locked out**
- 5.) BFV33001 (DAF Splitter to FFPS or Effluent) is **closed and locked out**
- 6.) BFV33002 (DAF#2 to Effluent) is **open**

4) DAF#1 online, running pump 1A, DAF#2 running 1B, sending to Effluent:

- 1.) BFV33201 (DAF#1 to Pump 1B) is **closed and locked out**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **open**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **closed and locked out**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **open**
- 5.) BFV33001 (DAF Splitter to FFPS or Effluent) is **closed and locked out**
- 6.) BFV33002 (DAF#2 to Effluent) is **open**

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7 November 2016

**5) DAF#1 online, running pump 1A or 1B, DAF#2 running 1C,
sending to Filter Feed pump Station:**

- 1.) BFV33201 (DAF#1 to Pump 1B) is **open**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **closed and locked out**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **open**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **closed and locked out**
- 5.) BFV33002 (DAF#2 to Effluent) is **closed and locked out**
- 6.) BFV33001 (DAF Splitter to FFPS or Effluent) is **open**
- 7.) **Please ensure that BFV33002 is closed and locked out BEFORE BFV 33001 is open.**

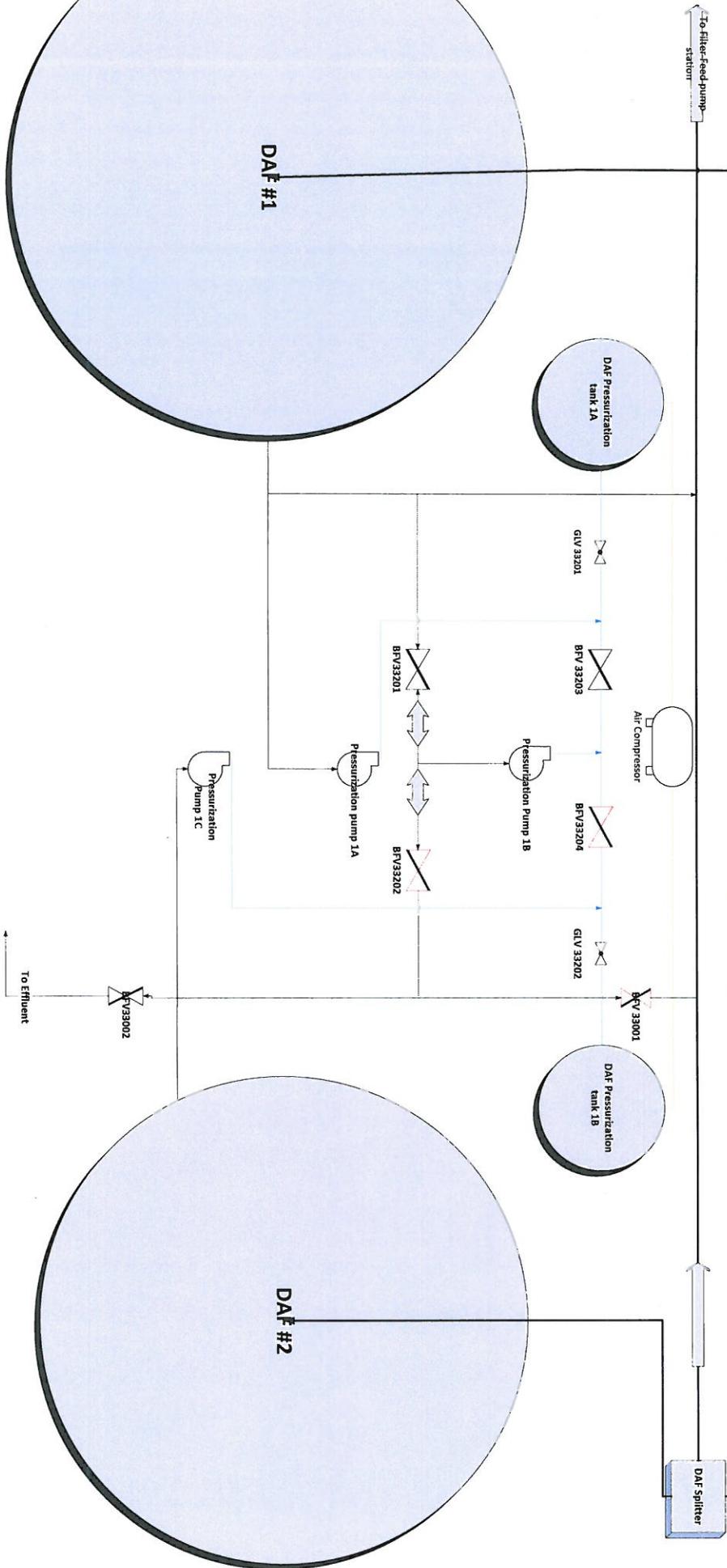
**6) DAF#1 online, running pump 1A, DAF#2 running 1B,
sending to Filter Feed pump Station:**

- 1.) BFV33201 (DAF#1 to Pump 1B) is **closed and locked out**
- 2.) BFV33202 (DAF#2 to Pump 1B) is **open**
- 3.) BFV33203 (Pump 1B to pressurization tank 1A) is **closed and locked out**
- 4.) BFV33204 (Pump 1B to pressurization tank 1B) is **open**
- 5.) BFV33002 (DAF#2 to Effluent) is **closed and locked out**
- 6.) BFV33001 (DAF Splitter to FFPS or Effluent) is **open**
- 7.) **Please ensure that BFV33002 is closed and locked out BEFORE BFV 33001 is open.**

Standard Operating Procedure Prepared for City of Lincoln WWTRF
Updated July 2016

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Exhibit B to Stipulated Order R5-2017-0538
 Receiving Water Sample Results



Red valve= normally closed

Exhibit B to Stipulated Order R5-2017-0538
Receiving Water Sample Results

Date	Final Effluent BOD mg/L Composite	Effluent TSS mg/L Composite	Final Effluent Ammonia mg/L	Final Effluent Ammonia Sample Time	Final Effluent pH SU	Effluent pH Sample Time	Effluent Coliform of UV (normal sample location)	Effluent Coliform at UV Sample Time	Final Effluent (sampled at Final Effluent) MPN	Effluent (sampled at Final Effluent) Sample Time	DAF Effluent BOD mg/L Composite	DAF Effluent TSS mg/L Composite	DAF Effluent Coliform MPN	DAF Effluent Coliform Sampling Time	Secondary Clarifier Coliform MPN
10/19/2016	3.5	1	<0.1	0933	7.8	0933	<2	0845	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/20/2016	<2	1	<0.1	0952	7.8	0952	<2	0835	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/21/2016	2	0.8	<0.1	0945	7.8	0945	<2	0805	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/22/2016	<2	1.6	<0.1	0810	8	0810	<2	0750	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/23/2016	<2	2	<0.1	0731	8	0731	<2	0726	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/24/2016	>2	1.4	<0.1	0938	8.1	0938	<2	0913	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/25/2016	<2	2	<0.1	0955	8	0955	<2	0900	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/26/2016	<2	2	<0.1	0940	7.9	0940	<2	0915	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/27/2016	<2	5.2	<0.1	0955	7.8	0955	<2	0830	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/28/2016	<2	5.6	<0.1	0945	7.8	0945	<2	0845	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/29/2016	<2	7.6	<0.1	0730	7.8	0730	<2	0715	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/30/2016	<2	6.8	<0.1	0801	7.9	0801	<2	0756	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/31/2016	<2	8	<0.1	0935	7.8	0935	<2	0911	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/1/2016	<2	4.8	<0.1	0935	7.7	0935	<2	0845	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/2/2016	<2	3	<0.1	0904	7.7	0904	<2	0840	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/3/2016	<2	4.4	<0.1	0947	7.6	0947	<2	0900	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/4/2016	<2	4.2	<0.1	0912	7.6	0912	<2	0805	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/5/2016 At time of spill	N/A	4.8	<0.1	0731	7.6	0731	<2	0715	50	0836	N/A	N/A	N/A	N/A	N/A
11/6/2016		1.8	<0.1	08:20	7.8	08:20	<2	08:14	N/A	N/A	result pending	9.4	110	8:03	N/A
11/7/2016		1.6	<0.1	09:53	7.7	09:53	<2	09:23	N/A	N/A	result pending	7.6	70	9:28	N/A
11/8/2016		1	<0.1	09:48	7.6	09:48	<2	09:03	N/A	N/A	result pending	6.4	result pending	12:50	N/A
11/9/2016		1	<0.1	09:09	7.7	09:09	<2	08:46	N/A	N/A	result pending	4	result pending	9:50	result pending

note: 11/4 coliform was taken from the effluent composite sample for that day

11/5 coliform sample

High lighted days designate days with advanced secondary spill

An additional coliform sample was taken at the Effluent Pump Station after compliant flow had resumed on 11/5/16 result was 4MPN.

Exhibit B to Stipulated Order R5-2017-0538
Receiving Water Sample Results

Date	RSW-001 Upstream Turbidity	RSW-002 Downstream Turbidity	RSW-001 Upstream Fecal Coliform	RSW-002 Downstream Fecal Coliform	RSW-001 Upstream Temperature °F	RSW-002 Downstream Temperature °F	RSW-001 Upstream TSS mg/L	RSW-002 Downstream TSS mg/L	RSW-001 Upstream Ammonia	RSW-002 Downstream Ammonia	RSW-001 Upstream Sample Time	RSW-002 Downstream Sample Time	RSW-001 Upstream Flow MGD
10/19/2016	18	10	N/A	N/A	57	57	N/A	N/A	N/A	N/A	7:37	7:47	13
10/20/2016	12	8	N/A	N/A	57	58	N/A	N/A	N/A	N/A	8:20	8:31	9
10/21/2016	12	7	N/A	N/A	57	59	N/A	N/A	N/A	N/A	7:43	8:07	10
10/22/2016	6	5	N/A	N/A	59	61	N/A	N/A	N/A	N/A	7:38	7:43	10
10/23/2016	16	11	N/A	N/A	59	61	N/A	N/A	N/A	N/A	8:07	8:12	10
10/24/2016	9	5	N/A	N/A	61	61	N/A	N/A	N/A	N/A	8:24	8:32	10
10/25/2016	9	6	N/A	N/A	63	62	N/A	N/A	N/A	N/A	8:00	8:12	12
10/26/2016	10	7	N/A	N/A	60	61	N/A	N/A	N/A	N/A	8:13	8:22	12
10/27/2016	7	6	N/A	N/A	61	62	N/A	N/A	N/A	N/A	7:45	7:58	10
10/28/2016	71	62	N/A	N/A	63	63	N/A	N/A	N/A	N/A	7:52	8:04	51
10/29/2016	30	23	N/A	N/A	63	63	N/A	N/A	N/A	N/A	7:43	7:49	31
10/30/2016	13	11	N/A	N/A	61	61	N/A	N/A	N/A	N/A	8:42	8:48	20
10/31/2016	34	28	N/A	N/A	59	59	N/A	N/A	N/A	N/A	8:07	8:14	47
11/1/2016	9	8	N/A	N/A	60	60	N/A	N/A	N/A	N/A	8:20	8:28	25
11/2/2016	15	14	N/A	N/A	56	58	N/A	N/A	N/A	N/A	7:50	8:04	25
11/3/2016	8	6	N/A	N/A	53	53	N/A	N/A	N/A	N/A	7:36	7:50	18
11/4/2016	9	5	N/A	N/A	54	54	N/A	N/A	N/A	N/A	7:52	8:06	16
11/5/2016	9	8	220	130	55	57	11.6	9.2	<0.1	<0.1	7:55	8:00	13
11/6/2016	16	8	240	220	57	59	27.4	11.6	<0.1	<0.1	7:24	7:29	12
11/7/2016	9	5	N/A	N/A	58	58	6.5	6.2	N/A	N/A	7:59	8:10	11
11/8/2016	7	6	N/A	N/A	60	58	N/A	N/A	N/A	N/A	7:48	7:56	11
11/9/2016	7	5	N/A	N/A	58	59	2.8	5	N/A	N/A	8:30	8:37	12

note: 11/5/2016 Ammonia, Fecal Coliform and TSS samples at RSW-001 and RSW-002 were collected immediately after spill was suspected at 0845 and 0851 respectively.
High lighted days designate days with advanced secondary spill

Exhibit B to Stipulated Order R5-2017-0538
Receiving Water Sample Results

Dates with intermittent spill times	Total Effluent MGD	Compliant Not Co-mingled Effluent Pump Station Flow MGD	Co-mingled Effluent Pump Station Flow MGD	Tertiary Storage Return Flow MGD	Filter Feed PS Flow MGD	Advanced Secondary Spill Volume MGD
10/26/2016 spill start at 1458	3.964	2.334	1.63	1.102	3.7	0.36
10/27/2016	4.612	0.002	4.61	0.529	3.8	1.11
10/28/2016	8.259	6.969	1.29	0.531	5.3	0.33
10/29/2016	9.583	9.583	0.00	3.303	7.0	0.00
10/30/2016	9.545	9.545	0.00	3.462	7.0	0.00
10/31/2016	9.4	9.400	0.00	3.509	7.0	0.00
11/1/2016	9.585	9.585	0.00	0.000	7.0	0.00
11/2/2016	9.122	8.752	0.37	0.451	6.6	0.11
11/3/2016	7.16	2.750	4.41	0.229	5.8	1.33
11/4/2016	5.45	-0.020	5.47	0.111	4.6	1.58
11/5/2016 spill end at 0820	3.939	2.229	1.71	0.222	4.1	0.45
Gallons drained from Effluent Pump Station after spill was discovered:			-0.01			-0.005
Total	80.619	61.13	19.48	13.4	61.9	5.27

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Date	Operator of the Day	Regional Board Certification
10/26/2016	Trey Cain	III-27803
10/27/2016	Trey Cain	III-27803
10/28/2016	John (Cody) Smith	V-28701
10/29/2016	John (Cody) Smith	V-28701
10/30/2016	Devon Morris	IV-10880
10/31/2016	Devon Morris	IV-10880
11/1/2016	Devon Morris	IV-10880
11/2/2016	Trey Cain	III-27803
11/3/2016	Trey Cain	III-27803
11/4/2016	John (Cody) Smith	V-28701
11/5/2016	John (Cody) Smith	V-28701
11/6/2016	John (Cody) Smith	V-28701

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Receiving Water Sample Results

Date	Final Effluent BOD mg/L Composite	Effluent TSS mg/L Composite	Final Effluent Ammonia mg/L	Final Effluent Ammonia Sample Time	Final Effluent pH SU	Effluent pH Sample Time	Effluent Colliform at UV (normal sample location)	Effluent Colliform at UV Sample Time	Final Effluent Coliform (sample of co-mingled Final Effluent) MPN	Effluent Coliform (sample of co-mingled Final Effluent) Sample Time	DAF Effluent BOD mg/L Composite	DAF Effluent TSS mg/L Composite	DAF Effluent Coliform MPN	DAF Effluent Coliform Sampling Time	Secondary Clarifier Coliform MPN
10/19/2016	3.5	1	<0.1	0933	7.8	0933	<2	0845	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/20/2016	<2	1	<0.1	0952	7.8	0952	<2	0835	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/21/2016	2	0.8	<0.1	0945	7.8	0945	<2	0805	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/22/2016	<2	1.6	<0.1	0810	8	0810	<2	0750	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/23/2016	<2	2	<0.1	0731	8	0731	<2	0726	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/24/2016	>2	1.4	<0.1	0938	8.1	0938	<2	0913	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/25/2016	<2	2	<0.1	0955	8	0955	<2	0900	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/26/2016	<2	2	<0.1	0940	7.9	0940	<2	0915	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/27/2016	<2	5.2	<0.1	0955	7.8	0955	<2	0830	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/28/2016	<2	5.6	<0.1	0945	7.8	0945	<2	0845	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/29/2016	<2	7.6	<0.1	0730	7.8	0730	<2	0715	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/30/2016	<2	6.8	<0.1	0801	7.9	0801	<2	0756	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10/31/2016	<2	8	<0.1	0935	7.8	0935	<2	0911	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/1/2016	<2	4.8	<0.1	0935	7.7	0935	<2	0845	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/2/2016	<2	3	<0.1	0904	7.7	0904	<2	0840	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/3/2016	<2	4.4	<0.1	0947	7.6	0947	<2	0900	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/4/2016	<2	4.2	<0.1	0912	7.6	0912	<2	0805	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/5/2016	N/A	4.8	<0.1	0731	7.6	0731	<2	0715	50	0836	N/A	N/A	N/A	N/A	N/A
11/6/2016	<2	1.8	<0.1	08:20	7.8	08:20	<2	08:14	N/A	N/A	<2	9.4	110	8:03	N/A
11/7/2016	<2	1.6	<0.1	09:53	7.7	09:53	<2	09:23	N/A	N/A	<2	7.6	70	9:28	N/A
11/8/2016	<2	1	<0.1	09:48	7.6	09:48	<2	09:03	N/A	N/A	<2	6.4	130	12:50	N/A
11/9/2016	<2	1	<0.1	09:09	7.7	09:09	<2	08:46	N/A	N/A	<2	4	33	9:50	160,000
11/10/2016	<2	1.2	<0.1	10:15	7.6	10:15	<2	07:27	N/A	N/A	<2	6.2	80	9:51	N/A
11/11/2016	<2	1	<0.1	09:50	7.7	09:50	<2	08:45	N/A	N/A	<2	7.8	31	9:40	54,000

note: 11/5 effluent composite coliform sample result was 170 MPN, taken from non-steril container but gives an indication of previous day coliform concentration.

11/5 Comp sample ran from 0912 on 11/4 to 0731 on 11/5.

High lighted days designate days with advanced secondary spill

An additional coliform sample was taken at the Effluent Pump Station after compliant flow had resumed on 11/5/16 result was 4MPN.

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Receiving Water Sample Results

Date	RSW-001 Upstream Turbidity	RSW-002 Downstream Turbidity	RSW-001 Upstream Fecal Coliform	RSW-002 Downstream Fecal Coliform	RSW-001 Upstream Temperature °F	RSW-002 Downstream Temperature °F	Non-permit RSW-001 Upstream TSS mg/L	Non-permit RSW-002 Downstream TSS mg/L	RSW-001 Upstream Ammonia	RSW-002 Downstream Ammonia	RSW-001 Upstream Sample Time	RSW-002 Downstream Sample Time	RSW-001 Upstream Flow MGD
10/19/2016	18	10	N/A	N/A	57	57	N/A	N/A	N/A	N/A	7:37	7:47	13
10/20/2016	12	8	N/A	N/A	57	58	N/A	N/A	N/A	N/A	8:20	8:31	9
10/21/2016	12	7	N/A	N/A	57	59	N/A	N/A	N/A	N/A	7:43	8:07	10
10/22/2016	6	5	N/A	N/A	59	61	N/A	N/A	N/A	N/A	7:38	7:43	10
10/23/2016	16	11	N/A	N/A	59	61	N/A	N/A	N/A	N/A	8:07	8:12	10
10/24/2016	9	5	N/A	N/A	61	61	N/A	N/A	N/A	N/A	8:24	8:32	10
10/25/2016	9	6	N/A	N/A	63	62	N/A	N/A	N/A	N/A	8:00	8:12	12
10/26/2016	10	7	N/A	N/A	60	61	N/A	N/A	N/A	N/A	8:13	8:22	12
10/27/2016	7	6	N/A	N/A	61	62	N/A	N/A	N/A	N/A	7:45	7:58	10
10/28/2016	71	62	N/A	N/A	63	63	N/A	N/A	N/A	N/A	7:52	8:04	51
10/29/2016	30	23	N/A	N/A	63	63	N/A	N/A	N/A	N/A	7:43	7:49	31
10/30/2016	13	11	N/A	N/A	61	61	N/A	N/A	N/A	N/A	8:42	8:48	20
10/31/2016	34	28	N/A	N/A	59	59	N/A	N/A	N/A	N/A	8:07	8:14	47
11/1/2016	9	8	N/A	N/A	60	60	N/A	N/A	N/A	N/A	8:20	8:28	25
11/2/2016	15	14	N/A	N/A	56	58	N/A	N/A	N/A	N/A	7:50	8:04	25
11/3/2016	8	6	N/A	N/A	53	53	N/A	N/A	N/A	N/A	7:36	7:50	18
11/4/2016	9	5	N/A	N/A	54	54	N/A	N/A	N/A	N/A	7:52	8:06	16
11/5/2016	9	8	220	130	55	57	11.6	9.2	<0.1	<0.1	7:55	8:00	13
11/6/2016	16	8	240	220	57	59	27.4	11.6	<0.1	<0.1	7:24	7:29	12
11/7/2016	9	5	N/A	N/A	58	58	6.6	6.2	N/A	N/A	7:59	8:10	11
11/8/2016	7	6	N/A	N/A	60	58	N/A	N/A	N/A	N/A	7:48	7:56	11
11/9/2016	7	5	540	79	58	59	2.8	5	N/A	N/A	8:30	8:37	12
11/10/2016	6	4	N/A	N/A	56	56	N/A	N/A	N/A	N/A	7:27	7:37	10
11/11/2016	10	6	540	220	57	57	4	1.8	N/A	N/A	6:57	7:09	11

note: 11/5/2016 Ammonia, Fecal Coliform and TSS samples at RSW-001 and RSW-002 were collected immediately after spill was suspected at 0845 and 0851 respectively .

High lighted days designate days with advanced secondary spill