

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT R5-2012-0558
IN THE MATTER OF
CITY OF IONE
WASTEWATER TREATMENT FACILITY
AMADOR COUNTY

This Administrative Civil Liability Complaint is issued to the City of Ione (hereafter “Discharger” or “City”) pursuant to California Water Code (CWC) Section 13350, which authorizes the imposition of Administrative Civil Liability, and CWC section 13323, which authorizes the Executive Officer to issue this Complaint. This Complaint is based on findings that the Discharger violated Cease and Desist Order R5-2011-0019.

The Executive Officer of the Central Valley Regional Water Quality Control Board (“Regional Water Board” or “Board”) alleges the following:

Background

1. On 26 May 1995, the Central Valley Water Board adopted Waste Discharge Requirements (WDRs) Order 95-125 for a wastewater treatment and disposal facility owned and operated by the Discharger.
2. On 11 July 2003, the Central Valley Water Board adopted Cease and Desist Order (CDO) R5-2003-0108 (the “2003 CDO”; found as Attachment A to this Complaint) for the City of Ione. On 8 April 2011, the Board rescinded the 2003 CDO except for purposes of enforcement, and adopted CDO R5-2011-0019 (the “2011 CDO”; found as Attachment B to this Order) for the City of Ione.
3. The Discharger’s wastewater treatment facility (“WWTF” or “facility”) is in Amador County in Section 26, T6N, R9E MDB&M. The WWTF accepts and treats domestic wastewater from the City of Ione, filter backwash water from a water treatment plant operated by Amador Water Agency, domestic wastewater from Preston Youth Authority’s administration buildings, and although not permitted, filter backwash water from the Castle Oaks wastewater treatment plant. In addition, the Discharger accepts secondary effluent from Preston Reservoir for disposal in the WWTF’s percolation/evaporation ponds.
4. The WWTF consists of seven unlined ponds covering approximately 28 acres. The first four ponds provide secondary treatment via aeration and settling and the remaining three ponds provide disposal of treated effluent via percolation and evaporation. Neither the sixth nor the seventh pond is permitted under the WDRs. The WWTP is adjacent to Sutter Creek, with the closest pond approximately 100 feet from the Creek.

Recurring Compliance Issues and/or Violations

5. Studies by Board staff and the City have confirmed that wastewater seeps from the disposal ponds into Sutter Creek, which constitutes an unpermitted discharge that violates CWC section 13385, the Clean Water Act and the WDRs.
6. Groundwater monitoring shows that the discharge of wastewater has polluted the groundwater underneath and downgradient of the facility. The main constituents of concern are iron and manganese. The background monitoring well contains iron at an average of 14 ug/l, while the downgradient wells contain iron at average of 3,600 ug/l. The secondary Maximum Contaminant Level for iron is 300 ug/l. A similar situation exists for manganese. The background well contains an average of 8 ug/l of manganese, while the downgradient well has an average of 5,800 ug/l as compared to the secondary maximum contaminant level of 50. This groundwater pollution is a violation of the WDRs.
7. Wastewater disposal Pond 7 was constructed in the early 2000's. The City did not submit a Report of Waste Discharge ("RWD") prior to the construction or use of this pond, which is considered a violation of WDRs Order 95-125 and the Water Code. Despite enforcement orders from the Board, the City has still not submitted an adequate RWD that would allow the pond to be permitted. However, the City continues to use Pond 7 for wastewater disposal.
8. At times of the year, the shallow groundwater is close to ground surface in the vicinity of the WWTF. Board staff has received complaints of surfacing effluent in the vicinity of Pond 7. The City's 2010 models showed that the facility expansion proposed at that time would cause the local water table to rise as much as two feet, and would result in seasonal surfacing of wastewater at the southern end of the WWTF. Surfacing wastewater would be a violation of WDRs Order 95-125.

2003 Cease and Desist Order

9. Board staff learned about the construction of Pond 7 during an inspection in 2001, and subsequently instructed the City to submit a RWD and not dispose of any wastewater into the pond until the Board had revised WDRs Order 95-125. However, the City chose not to submit the RWD and began using the pond, in violation of the WDRs.
10. Subsequently, on 9 October 2001, the Executive Officer issued a Water Code Section 13267 Order for technical reports, which required that the City install groundwater monitoring wells and submit a complete RWD by 15 April 2002. The City installed the monitoring wells but did not submit the RWD.
11. In 2003, the Board adopted Cease and Desist Order R5-2003-0108, which was intended to bring the facility into compliance with the WDRs. This CDO addressed the three underlying compliance issues known at that time: groundwater pollution due

to the disposal of wastewater, seepage of wastewater into Sutter Creek, and the construction and use of an unpermitted disposal pond.

12. The 2003 CDO required that the City complete its Wastewater Master Plan by November 2004 and then submit a RWD within 60 days of staff's approval of the Master Plan. The City submitted a Master Plan in November 2004, but then informed staff that it was only preliminary. In 2009, the City submitted a draft Master Plan. A final Master Plan was submitted in March 2010, over five years delinquent. However, the 2010 Master Plan still did not comply with the 2003 CDO because it did not demonstrate that the proposed facility improvements would prevent wastewater seepage into Sutter Creek, nor did it include measures to prevent continued groundwater pollution.
13. The City submitted its first RWD in November 2005, and submitted revisions in 2006, March 2010, and September 2010. However, the RWD submittals did not address the underlying compliance issues, and therefore did not comply with the CDO.
14. The City's March 2010 RWD proposed to increase the treatment and disposal capacity, to replace the existing secondary treatment facility with a tertiary treatment and UV disinfection system, to close the four existing treatment ponds, and to construct a fourth percolation disposal pond (referred to as Pond 8).
15. Board staff reviewed the March 2010 RWD and found that it was insufficient to remedy the continuing violations (polluted groundwater, wastewater seepage into the Creek, and surfacing groundwater). In a letter dated 28 June 2010, Water Board staff stated that the March 2010 RWD was incomplete due to the potential for leakage from Pond 7 into adjacent ditches, surfacing of effluent adjacent to the proposed Pond 8, and wastewater seepage from Ponds 5 and 6 to Sutter Creek. In addition, staff stated that the RWD did not demonstrate that the changes would result in any improvement to the groundwater. Staff's letter provided a list of additional information that was required to be submitted. The City did not submit the information, and Water Board staff issued a Notice of Violation on 17 August 2010 because the RWD was still incomplete, in violation of the 2003 CDO.
16. The City submitted a revised RWD in September 2010, which included the results of a groundwater flow model for the planned expansion. The report concluded that surfacing of groundwater may occur seasonally near the southern edge of proposed disposal Pond 8. Staff had some questions regarding the model, and requested additional information.
17. On 5 October 2010, the City submitted the results of a second numeric groundwater model for the planned expansion. This model included extraction of groundwater along the southern edge of the percolation ponds in order to control surfacing groundwater, and disposal of the extracted groundwater in the percolation ponds. Although the report stated that the City could mitigate surfacing groundwater by pumping groundwater to the percolation ponds, the RWD's capacity analysis did not account for the additional influent flows, and the seepage to the creek was not

addressed. The September 2010 RWD did not propose a system that would mitigate the continuing violations of the WDRs. On 5 November 2010, staff again informed the Discharger that the September 2010 RWD was incomplete, and the City remained in violation of the 2003 CDO.

2011 Cease and Desist Order

18. In early 2011, the Executive Officer and the Prosecution Team evaluated whether it would be more appropriate to issue an Administrative Civil Liability (“ACL”) Complaint for the City’s failure to comply with the 2003 CDO or to propose a new CDO with new timelines. The City had been in violation of its WDRs since 2001 and never complied with its 2003 CDO because it has been unable to commit to a course of action to prevent groundwater pollution, wastewater seepage to Sutter Creek, and surfacing of wastewater. In addition, the City continued to discharge wastewater to an unpermitted pond in violation of WDRs Order 95-125 during the entire eight year period.
19. If an ACL Complaint had been issued, the maximum penalty could have easily exceeded \$11 million. However the City asked for one more chance to comply, and proposed new timelines. The Prosecution Team determined that the timelines were reasonable, and that the goal of the enforcement action was to compel the City to upgrade its treatment plant to address the four main issues described in Findings 5-8, above. Therefore, the Prosecution Team prepared a new CDO for consideration at the Water Board’s April 2011 meeting.
20. On 8 April 2011, the Water Board adopted CDO R5-2011-0019, but only after questioning why an ACL Complaint hadn’t been prepared, and only after assurances by Ione’s City Manager and a City Council member that the City would comply with the new deadlines.
21. The CDO R5-2011-0019 requires that the City of Ione:
 - a. Submit a *Seepage Discharge Compliance Plan* by 30 January 2012;
 - b. Submit a complete Report of Waste Discharge by 30 May 2012; and
 - c. Document that the wastewater treatment plant improvements have been completed by 30 October 2013.
22. After the 2011 CDO was issued, the Ione City Council terminated the contract with the City Manager and hired an Interim City Manager. The City Council has also hired a new City Attorney and a new engineering consultant to complete the *Seepage Discharge Compliance Plan*. These new parties determined that the former consultant’s proposal (described in the March through September 2010 RWDs) was too expensive, and subsequently developed and submitted a new concept.
23. The City submitted the *Seepage Discharge Compliance Plan* on time. As required by the CDO, the Plan contains a conceptual design to address seepage to Sutter Creek, groundwater pollution, surfacing wastewater, and capacity. Board staff’s review of the *Plan* is found as Attachment C to this Complaint. In summary, staff determined that

the City may have outlined a mechanism to bring the treatment plant into compliance with the WDRs and CDO, but that additional information was needed. Staff required that an addendum be submitted by 16 March 2012, and that additional information be presented in the 30 May 2012 RWD.

24. The *Seepage Discharge Compliance Plan Addendum* was submitted on 28 February 2012 by the consultant who prepared the *Plan* but whose contract had not been renewed by the City. This consultant stated that, at times, there would not be enough capacity at the tertiary treatment plant to treat all of the secondary wastewater, and that another - yet to be hired - consultant would address Board staff's concerns and prepare a new schedule to complete the RWD.
25. In late January 2012, Board staff became aware that progress towards complying with the 2011 CDO had come to a halt. At recent City Council meetings, two agenda items were not approved; these items directly impacted the City's compliance with the CDO timeline. First, an extension of the wastewater engineering consultant's contract to prepare the RWD and to continue as the project manager was not approved, and secondly, a contract to prepare a preliminary design report and to seek funding through the State Revolving Fund process was not approved. In addition, the ratepayers stated at the public meetings that they did not want to pay for engineering consultants, and decided that they would form a "citizen's committee" to design the wastewater plant. Further, on 10 February 2012, Board staff was informed that the consultant had withdrawn its proposal to develop a RWD and provide project management services.
26. In February 2012, several City of Ione residents addressed the Board during the Public Forum section of the Water Board meeting. The residents expressed their concerns about wastewater issues and the CDO. In response, the Board asked that the Prosecution Team bring the matter to a future meeting for discussion.
27. In April 2012, the Water Board held a hearing to reconsider the timelines in the 2011 CDO. The City of Ione requested additional time to submit the RWD and complete the facility improvements, stating that it needed to hire a new consultant, garner public support for a Proposition 218 process to raise rates, and to address a recall campaign against several City Council members. However, the Board declined to consider the City's requested changes to the 2011 CDO.
28. The 2011 CDO requires that the City of Ione submit a Report of Waste Discharge by 30 May 2012. The City submitted a document on 30 July 2012, but staff's review (found as Attachment D to this Complaint) found that it does not meet the criteria of the CDO. Therefore, the City has failed to meet its obligation to submit the Report of Waste Discharge required by the 2011 CDO.

REGULATORY CONSIDERATIONS

29. As described in the above Findings, the Discharger has violated CDO R5-2011-0019 by failing to submit a Report of Waste Discharge. As of 3 September 2012, the RWD is 66 days late. The Regional Water Board may assess administrative civil liability based on CWC Section 13350 for violations of the CDO.
30. Water Code Section 13350(e) states: *“The state board or a regional board may impose civil liability administratively pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 either on a daily basis or on a per gallon basis, but not both.”*
31. Water Code Section 13350(e)(1) states: *“The civil liability on a daily basis may not exceed five thousand dollars (\$5,000) for each day the violation occurs.”*
32. Water Code Section 13350(e)(1)(B) states: *“When there is no discharge, but an order issued by the regional board is violated... the civil liability shall be not less than one hundred dollars (\$100) for each day in which the violation occurs.”*
33. Water Code Section 13350(f) states: *“A regional board may not administratively impose civil liability in accordance with paragraph (1) of subdivision (e) in an amount less than the minimum amount specified, unless the regional board makes express findings setting forth the reasons for its actions based upon the specific factors required to be considered pursuant to Section 13327.”*
34. Water Code Section 13327 states: *“In determining the amount of civil liability, the regional board...shall take into consideration the nature, circumstances, 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 violations, and other matters as justice may require.”*
35. For the 66 days of violation of the CDO cited in paragraph 29 above, the maximum administrative civil liability that can be imposed by the Central Valley Water Board under Water Code Section 13350 is \$5,000 per day. The minimum civil liability under Water Code Section 13350 is \$100 per day. As of 3 September 2012, the Discharger has violated the CDO for a total of 66 days. Therefore, the maximum administrative civil liability is \$330,000 and the minimum administrative civil liability is \$6,600.

PROPOSED ADMINISTRATIVE CIVIL LIABILITY

36. On 17 November 2010, the State Water Board adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (“Enforcement Policy”). The Enforcement Policy was approved by the Office of Administrative Law and became effective on 20 May 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability. The use of this methodology addresses the factors that are required to be considered when imposing a civil liability as outlined in CWC sections 13327. The entire Enforcement Policy can be found at:

http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final11179.pdf.

37. The proposed administrative civil liability in this Complaint has been derived from the use of the penalty methodology in the Enforcement Policy, as explained in detail in Attachment E. The proposed civil liability takes into account such factors as the potential for harm, deviation from requirements, and other factors as justice may require.
38. Based on consideration of the above facts, after applying the penalty methodology, and considering the Discharger's ability to pay, the Executive Officer of the Central Valley Water Board proposes that civil liability be imposed administratively on the Discharger in the amount of one hundred forty three thousand five hundred fifty two dollars (\$143,552). The specific factors considered in this penalty are detailed in Attachment E.
39. Notwithstanding the issuance of this Complaint, the Central Valley Water Board retains the authority to assess additional penalties for violations of the 2003 CDO or 2011 CDO for which penalties have not yet been assessed or for violations that may subsequently occur.
40. Issuance of this Complaint is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code section 21000, et. seq.), in accordance with California Code of Regulations, Title 14, section 15321 (a) (2).

THE CITY OF IONE IS HEREBY GIVEN NOTICE THAT:

1. The Executive Officer of the Central Valley Water Board proposes that the Discharger be assessed an Administrative Civil Liability in the amount of **one hundred forty three thousand five hundred fifty two dollars (\$143,552)**. The amount of the proposed liability is based upon a review of the factors cited in Water Code sections 13327, as well as the State Water Resources Control Board's 2010 Water Quality Enforcement Policy, and includes consideration of the potential for harm and deviation from requirement.
2. A hearing on this matter will be conducted at the Central Valley Water Board meeting scheduled on **6/7 December 2012**, unless one of the following occurs by **2 October 2012**:
 - a) The Discharger waives the hearing by completing the attached form (checking the box next to Option #1) and returning it to the Central Valley Water Board, along with payment for the proposed civil liability of one hundred forty three thousand five hundred fifty two dollars (\$143,552); or
 - b) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests to engage in settlement discussions by checking the box next to Option #2 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed; or

- c) The Central Valley Water Board agrees to postpone any necessary hearing after the Discharger requests a delay by checking the box next to Option #3 on the attached form, and returns it to the Board along with a letter describing the issues to be discussed.
3. If a hearing is held, the Central Valley Water Board will consider whether to affirm, reject, or modify the proposed Administrative Civil Liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability.
4. If this matter proceeds to hearing, the Executive Officer reserves the right to amend the proposed amount of civil liability to conform to the evidence presented, including but not limited to, increasing the proposed amount to account for the costs of enforcement (including staff, legal and expert witness costs) incurred after the date of the issuance of this Complaint through completion of the hearing.

Original signed by Rick Moss for

PAMELA C. CREEDON, Executive Officer

10 September 2012

Date

Attachment A: Cease and Desist Order R5-2003-0108
Attachment B: Cease and Deist Order R5-2011-0019
Attachment C: Review of Seepage Discharge Compliance Plan dated 16 February 2012
Attachment D: Review of Report of Waste Discharge dated 21 August 2012
Attachment E: Penalty Calculations

mlb/wsw: 7Sept12

**WAIVER FORM
FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT**

By signing this waiver, I affirm and acknowledge the following:

I am duly authorized to represent the City of Ione (hereafter Discharger) in connection with Administrative Civil Liability Complaint R5-2012-0558 (hereafter Complaint). I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served. The person who has been issued a complaint may waive the right to a hearing."

(OPTION 1: Check here if the Discharger waives the hearing requirement and will pay in full.)

a. I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board.

b. I certify that the Discharger will remit payment for the proposed civil liability in the full amount of **one hundred forty three thousand five hundred fifty two dollars (\$143,552)** by check that references "ACL Complaint R5-2012-0558" made payable to the *Waste Discharge Permit Fund*. Payment must be received by the Central Valley Water Board by **2 October 2012**.

c. I understand the payment of the above amount constitutes a proposed settlement of the Complaint, and that any settlement will not become final until after a 30-day public notice and comment period. Should the Central Valley Water Board receive significant new information or comments during this comment period, the Central Valley Water Board's Executive Officer may withdraw the complaint, return payment, and issue a new complaint. I also understand that approval of the settlement will result in the Discharger having waived the right to contest the allegations in the Complaint and the imposition of civil liability.

d. I understand that payment of the above amount is not a substitute for compliance with applicable laws, and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

(OPTION 2: Check here if the Discharger waives the 90-day hearing requirement in order to engage in settlement discussions.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint, but I reserve the ability to request a hearing in the future. I certify that the Discharger will promptly engage the Central Valley Water Board Prosecution Team in settlement discussions to attempt to resolve the outstanding violation(s). By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing so that the Discharger and the Prosecution Team can discuss settlement. It remains within the discretion of the Central Valley Water Board to agree to delay the hearing. Any proposed settlement is subject to the conditions described above under "Option 1."

(OPTION 3: Check here if the Discharger waives the 90-day hearing requirement in order to extend the hearing date and/or hearing deadlines. Attach a separate sheet with the amount of additional time requested and the rationale.) I hereby waive any right the Discharger may have to a hearing before the Central Valley Water Board within 90 days after service of the complaint. By checking this box, the Discharger requests that the Central Valley Water Board delay the hearing and/or hearing deadlines so that the Discharger may have additional time to prepare for the hearing. It remains within the discretion of the Central Valley Water Board to approve the extension.

(Print Name and Title)

(Signature)

(Date)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0108
CEASE AND DESIST ORDER
REQUIRING
THE CITY OF IONE
AMADOR COUNTY
TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as “Regional Board”) finds that:

1. Waste Discharge Requirements (WDRs) Order No. 95-125, adopted by the Regional Board on 26 May 1995, prescribes requirements for the secondary wastewater treatment plant owned and operated by the City of Ione (hereafter referred to as “Discharger”)
2. The City of Ione Wastewater Treatment Plant is in Amador County in Section 26, T6N, R9E, MDB&M, at 1600 West Marlette Street.

WASTEWATER TREATMENT PLANT AND SITE CONDITIONS

3. The wastewater system collects, treats, and disposes of domestic and commercial wastewater from the City of Ione. The wastewater treatment plant provides secondary treatment and effluent disposal via a series of percolation/evaporation (P/E) ponds.
4. Current average daily flows to the wastewater treatment plant are about 0.40 million gallons per day (mgd), and the WDRs permit average daily flows of up to 1.2 mgd based on a 25-year total annual precipitation design criterion. The Discharger’s water balance indicates that the facility has adequate capacity for current flows under the 100-year total annual precipitation design criterion.
5. The unlined treatment and percolation/evaporation ponds are constructed within 100 feet of the south bank of Sutter Creek in quaternary alluvium deposits overlaying the Ione Formation. This site stratigraphy was created by Sutter Creek incising into the Ione clay and leaving streambed deposits of primarily coarse-grained alluvium.
6. The Discharger installed groundwater monitoring wells in June 2002 pursuant to an approved workplan. Groundwater quality has only been sampled once to date, while groundwater elevations have been measured 6 times. The groundwater gradient appears to be parallel to the creek flow direction (approximately west-northwest). Background groundwater quality appears to be excellent, with low salinity and hardness.

VIOLATIONS OF WASTE DISCHARGE REQUIREMENTS

10. Discharge Prohibition A.1 states that the discharge of wastes to surface waters or surface water drainage courses is prohibited.

11. Between 16 September 2000 and the present, Regional Board staff has performed several facility inspections. During those inspections, staff has regularly observed seepage along the southern creek bank below the facility's ponds. The existing stream channel bends around the treatment plant site. The erosional face of the bend, which separates the ponds from the creek, shows evidence of scour holes in which coarse channel deposits are exposed. Most of the observed seepage appears to originate in these areas. Staff are concerned that the seepage may be a discharge of effluent from the ponds to Sutter Creek.
12. On 5 December 2000, the Discharger submitted analytical data for a sample of the creek bank seepage that was obtained during staff's 25 October 2000 inspection. The analytical results did not clearly indicate whether or not the seepage was similar to treated effluent from the wastewater treatment facility.
13. On 29 October 2001, staff obtained samples of percolation pond effluent and water from five sampling locations along Sutter Creek upstream and downstream of the facility. Observed seepage conditions were the same as previous site visits. The analytical results were inconclusive as to the source of the water in the creek.
14. In addition, the Discharger has submitted monthly surface water monitoring data since 1997. Prior to June 2001, electrical conductivity (EC) was the only parameter monitored. The monitoring data for 1997 through 2002 indicate that EC in Sutter Creek upstream and downstream of the wastewater ponds are typically very similar, and significantly lower than EC of the effluent in Pond No. 4. Exceptions occurred in July through October 1997 and the last half of 2002 when the downstream EC was consistently significantly higher than upstream values.
15. Surface water monitoring results for pH and total dissolved solids (TDS) were also inconclusive. Total coliform counts in the creek were highly variable with no clear relationship between upstream and downstream creek samples and samples of effluent from Pond No. 4.
16. Interpretation of surface water data is complicated by a discharge of water from an unknown source from a pipe next to the Castle Oaks Golf Course into Sutter Creek immediately upstream of the treatment plant. Therefore, the water samples collected upstream of the Ione wastewater treatment plant may contain wastewater constituents, and may not be representative of the creek in a natural state.
17. On 21 January 2003, the Discharger submitted a geotechnical engineer's evaluation of seepage potential and slope stability for the southern bank of Sutter Creek. One section of the creek bank was determined to exhibit unacceptable factors of safety for static and dynamic slope stability. Continued erosion of the stream bank could precipitate failure of the bank, but the engineer stated that the failure surface would not likely impact the wastewater treatment ponds. The report stated that the phreatic surface of the ponds appears to intersect the creek bank, resulting in seepage into the creek during low flow conditions. The engineer estimated that the rate of seepage along the 1,400-foot affected section of creek bank is 173 gallons per day (gpd).

18. Ground Water Limitation D.1 of the WDRs states that the discharge of wastewater shall not degrade underlying groundwater.
19. Although groundwater samples have only been collected and analyzed once to date, the available data indicate that groundwater has been degraded with TDS, sodium, chloride, nitrogen, and total coliform organisms. Hardness and bicarbonate alkalinity also appear to be impacted.

FAILURE TO COMPLY WITH STAFF ENFORCEMENT LETTERS

20. On 21 September 2001, staff inspected the facility and noted that the Discharger had begun constructing a new percolation pond. The Discharger was advised that the WDRs would have to be revised before any wastewater was discharged into the new pond.
21. On 9 October 2001, the Executive Officer issued a request for technical reports pursuant to Section 13267 of the California Water Code. The request was made after staff determined that the Discharger's Report of Waste Discharge was inadequate. The Executive Officer required the Discharger to submit the following:
 - a. A groundwater monitoring workplan by 1 December 2001;
 - b. A monitoring well installation report within 60 days of staff approval of the workplan; and
 - c. A complete Report of Waste Discharge by 15 April 2002 to apply for revised WDRs to address the new ponds.
22. On 13 December 2001, the Discharger informed staff that Ponds 6 and 7, which are not authorized in the WDRs, might be needed during the upcoming winter. On 16 July 2002, staff inspected the facility and noted that the Discharger had begun using the new percolation pond.
23. The groundwater monitoring workplan was submitted in April 2002 and approved by staff on 12 June 2002. The monitoring well installation report was not submitted until January 2003.

REGULATORY CONSIDERATIONS

24. As a result of the events and activities described in this Order, the Regional Board finds that the Discharger has caused or permitted waste to be discharged in such a manner that it has created, and continues to threaten to create, a condition of pollution or nuisance. The Regional Board also finds that the Discharger is discharging waste in violation of WDRs Order No. 95-125, as described in Findings 10 through 23.
25. Surface water drainage from the facility is to Sutter Creek, a tributary of the Cosumnes River.
26. The Regional Board's Water Quality Control Plan (Fourth Edition) for the Sacramento River and San Joaquin River Basins (Basin Plan) establishes the beneficial uses of the waters of the Cosumnes River. These beneficial uses are municipal and domestic supply, irrigation, stock watering, contact recreation, canoeing and rafting, other noncontact recreation, warm and cold freshwater habitat, warm and cold migration, warm and cold spawning, and wildlife habitat.

27. Section 13301 of the California Water Code states in part: “When a Regional Board finds that a discharge of waste is taking place or threatening to take place in violation of the requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.”
28. Section 13267(b) of the California Water Code states: “In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”
29. The Discharger owns and operates the facility subject to this Order. Monitoring reports and other technical reports are necessary to determine compliance with the Waste Discharge Requirements and with this Order.
30. The issuance of this Order is an enforcement action by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act, pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
31. On 11 July 2003, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order.
32. Any person affected by this action of the Regional Board may petition the State Water Resources Control Board to review the action in accordance with Section 2050 through 2068, Title 23, California Code of Regulations. The petition must be received by the State Water Resources Control Board, Office of Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the Regional Board action took place. Copies of the law and regulations applicable to filing petitions are available at www.swrcb.ca.gov/water_laws/index.html and also will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to Sections 13301 and 13267 of the California Water Code, the City of Ione, its agents successors, and assigns, shall implement certain measures, and identify and implement facility improvements, in accordance with the scope and schedule set forth below to ensure long-term compliance with WDRs No. 95-125 or any revisions to those WDRs.

Each document submitted under this Order shall bear the following certification signed by the Discharger:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe

that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

1. The Discharger shall **forthwith** come into compliance with Discharge Prohibition A.1 and the Groundwater Limitation of WDRs No. 95-125. “Forthwith” means as soon as reasonably possible. In no event shall compliance be delayed beyond **30 December 2005**.
2. The Discharger shall comply with all other aspects of WDRs No. 95-125, including the revised monitoring and reporting program, immediately.
3. The Discharger shall not discharge wastewater into any treatment or percolation/evaporation pond, other than the seven ponds currently at the facility, until the Regional Board has adopted revised WDRs allowing such discharge.
4. **Beginning with the month of July 2003** and continuing until September 2004, the Discharger shall take monthly measurements of (a) the groundwater elevation in each monitoring well and (b) the surface water elevation of Sutter Creek adjacent to MW-2. The monitoring results shall be included in the quarterly groundwater reports required by revised MRP No. 95-125, and shall include an interpretation by a California Registered Geologist as to whether groundwater is flowing into Sutter Creek in the vicinity of the wastewater treatment plant.
5. The third quarter 2003 groundwater monitoring report, due by **1 November 2003**, shall contain a summary of groundwater monitoring. The report shall contain summary tables of all analytical and gradient data collected to date, compare groundwater constituent concentrations against background groundwater concentrations, and compare groundwater constituent concentrations against applicable water quality objectives. The report shall describe whether the discharge from the Ione wastewater treatment plant has degraded groundwater above background conditions and/or degraded groundwater above applicable water quality objectives.
6. By **1 January 2004**, the Discharger shall submit a Facility Guidance Document designed to address certain water quality policies, and their application to the discharge from the City of Ione’s wastewater treatment plant. The document shall address both NPDES and Anti-Degradation issues, specifically:
 - a. Is an NPDES permit necessary due to the seepage from the treatment/storage ponds into Ione Creek? If yes, and if the City does not desire to apply for an NPDES permit, then what modifications would the City need to make such that an NPDES permit is no longer necessary?
 - b. Is the discharge complying with the directives of State Board Resolution No. 68-16 (the “Anti-Degradation Policy”)? If not, what changes are necessary? If the groundwater has been degraded above background concentrations, then what reasonable Best Practicable Treatment and Control (BPTC) measures may be implemented to reduce the degradation to the extent possible? If the groundwater has been degraded above water quality

objectives, what BPTC measures may be implemented to reduced the degradation to less than the objectives?

The document shall discuss the range of alternatives for facility modifications and BPTC measures necessary to comply with State policies, and shall provide a general discussion of the pros/cons of each one, as they pertain to this facility.

7. By **30 November 2004**, the Discharger shall submit a Final Wastewater Master Plan. The master plan shall describe all facility improvements needed to:
 - a. Accommodate reasonable growth projections;
 - b. Provide for sufficient containment for the 100-year total annual precipitation event;
 - c. Provide for appropriate maintenance schedules to ensure stable effluent disposal capacity and prevent significant erosion of Sutter Creek along the ponds;
 - d. Reduce infiltration and inflow to acceptable levels;
 - e. Prevent sanitary sewer overflows;
 - f. Prevent seepage discharges to surface water (or obtain an NPDES permit to regulate those discharges); and
 - g. Evaluate and implement Best Practicable Treatment and Control measures to ensure that any groundwater degradation complies with State Board Resolution No. 68-16.

The master plan shall set forth a specific, detailed scope and schedule for studies, design, permitting, and construction of facility expansions and other improvements needed to comply with this Order and protect water quality.

8. **Within 60 days of staff's written approval** of the Final Wastewater Master Plan, the Discharger shall submit a Report of Waste Discharge to allow WDRs to be revised to require the implementation of the items in the Master Plan.
9. **Beginning with the third quarter of 2003**, the Discharger shall submit a Quarterly Compliance Status Report. The report shall describe all work completed during the calendar quarter to comply with this Cease and Desist Order; all operation and maintenance work completed on the wastewater treatment facility; and any new, modified, or renovated component of the treatment and disposal system. *Quarterly Compliance Status Reports* shall be submitted by the **15th day of the month following the quarter for which the report is prepared (e.g., the third quarterly report is due by 15 October each year)**.

In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by, or under the direct supervision of, registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning

engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 11 July 2003.

THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2011-0019

CEASE AND DESIST ORDER
FOR
CITY OF IONE WASTEWATER TREATMENT FACILITY
AMADOR COUNTY

TO CEASE AND DESIST
FROM DISCHARGING CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (“Central Valley Water Board” or “Board”) finds that:

1. On 26 May 1995, the Central Valley Water Board adopted Waste Discharge Requirements Order 95-125 (the “WDRs”) for a wastewater treatment and disposal facility owned and operated by the City of Ione (hereafter referred to as “Discharger”).
2. The City of Ione wastewater treatment facility (“WWTF”) is in Amador County in Section 26, T6N, R9E MDB&M. The WWTF treats domestic wastewater from the City of Ione, filter backwash water from a water treatment plant operated by Amador Water Agency, and domestic wastewater from Preston Youth Authority’s administration buildings. In addition to treated effluent from its own treatment plant, the Discharger accepts secondary effluent from Preston Reservoir¹ for disposal in the WWTF’s percolation/evaporation ponds.
3. The WWTF consists of seven unlined ponds covering approximately 28 acres. The first four ponds provide secondary treatment via aeration and settling and the remaining three ponds provide disposal of treated effluent via percolation and evaporation. The seventh pond is not permitted under the WDRs. The capacity of the treatment plant is 0.55 MGD as an average daily dry weather flow² and the disposal capacity is 0.75 MGD as an average daily flow³.
4. The unlined ponds are constructed in alluvial deposits overlaying a clay formation. Groundwater at the site and surrounding properties is very shallow (approximately 5 to 25 feet below ground surface). The Discharger has been monitoring shallow groundwater since 2002.

¹ Preston Reservoir is an effluent storage reservoir operated by the Amador Regional Sanitation Agency (ARSA). Whenever possible, this effluent receives tertiary treatment at a separate treatment plant that is operated by the City of Ione for the express purpose of providing recycled water to irrigate the Castle Oaks Golf Course. Effluent from the Preston Reservoir is only discharged to the Discharger’s percolation evaporation ponds for disposal to the extent that the golf course cannot accept more recycled water.

² City of Ione Wastewater Master Plan, June 2009.

³ Report of Waste Discharge, 22 March 2010.

5. Prohibition A.1 of the WDRs states:

Discharge of wastes to surface waters or surface water drainage course is prohibited.

6. The Groundwater Limitations of the WDRs state:

The discharge shall not cause the underlying groundwater to:

1. *Be degraded.*
2. *Contain chemicals, heavy metals, or trace elements in concentrations that adversely affect beneficial uses or exceed maximum contaminant levels specified in 22 CCR, Division 4, Chapter 15.*
3. *Contain taste or odor-producing substance in concentrations that cause nuisance or adversely affect beneficial uses.*
4. *Contain concentrations of chemical constituents in amounts that adversely affect agricultural use.*

2001-2003 Enforcement Actions

7. Sutter Creek flows from east to west approximately 100 feet north of the northernmost WWTF ponds. Beginning in September 2000, Board staff observed seepage entering the creek along the southern bank of Sutter Creek. Staff was concerned that the observed seepage was a discharge of effluent from the WWTF's ponds to Sutter Creek. However, creek water analyses completed by both the Discharger and staff did not conclusively show evidence of wastewater in the seepage. During a 21 September 2001 inspection, staff observed that the Discharger had begun construction of the seventh percolation pond without submitting a Report of Waste Discharge ("RWD"). Staff advised the Discharger that the WDRs would have to be revised before any wastewater was discharged into the pond. However, the Discharger began using the pond without obtaining regulatory coverage for the expanded facility.
8. On 9 October 2001, the Executive Officer issued an Order pursuant to Water Code section 13267 (the "13267 Order"), requiring the Discharger to submit technical reports, because the Discharger had not yet submitted a RWD. The 13267 Order required the Discharger to submit a groundwater monitoring well installation workplan by 1 December 2001; a monitoring well installation report by within 60 days of Board staff's approval of the workplan; and a complete RWD (to address the new pond) by 15 April 2002. The Discharger installed the monitoring wells but did not submit the RWD.
9. On 21 January 2003, the Discharger submitted a *Hydrogeologic and Geotechnical Report*. The report documented installation of groundwater monitoring wells and provided an assessment of potential seepage to Sutter Creek. Based on the subsurface investigation, groundwater levels, and in situ hydrogeologic testing, the report stated that shallow groundwater immediately adjacent to and downgradient of the ponds exhibited increased mineral concentrations⁴. At the time of the investigation, seepage was

⁴ Wallace Kuhl Associates, Hydrogeologic and Geotechnical Report, page 2.

observed in Sutter Creek⁵. The report estimated the seepage rate to be approximately 173 gallons per day⁶ into the creek. The report concluded that, at times of very low flow or no flow, there is a potential for groundwater to flow from the area underlying the wastewater treatment facility to the creek⁷. The report did not include recommendations for further evaluation, nor did it propose facility improvements to stop the seepage discharge into the creek.

2003 Cease and Desist Order

10. On 11 July 2003, the Central Valley Water Board issued Cease and Desist Order R5-2003-0108 (the "2003 CDO") as a result of wastewater-impacted seepage to Sutter Creek, degradation of groundwater quality, and failure to submit a RWD as required by the 13267 Order.
11. Item 1 of the 2003 CDO required that the Discharger come into compliance with Discharge Prohibition A.1 and the Groundwater Limitations of the WDRs no later than 30 December 2005. The 2003 CDO also required that the Discharger comply with a schedule for submittal of certain technical reports, as discussed below.
12. Item 6 of the 2003 CDO states:

By 1 January 2004, the Discharger shall submit a Facility Guidance Document designed to address certain water quality policies, and their application to the discharge from the City of Ione's wastewater treatment plant. The document shall address both NPDES and Anti-Degradation issues, specifically:

 - a. *Is an NPDES permit necessary due to the seepage from the treatment/storage ponds into Ione Creek? If yes, and if the City does not desire to apply for an NPDES permit, then what modifications would the City need to make such that an NPDES permit is no longer necessary?*
 - b. *Is the discharge complying with the directives of State Board Resolution No. 68-16 (the "Anti-Degradation Policy")? If not, what changes are necessary? If the groundwater has been degraded above background concentrations, then what reasonable Best Practicable Treatment and Control (BPTC) measures may be implemented to reduce the degradation to the extent possible? If the groundwater has been degraded above water quality objectives, what BPTC measures may be implemented to reduce the degradation to less than the objectives?*

The document shall discuss the range of alternatives for facility modifications and BPTC measures necessary to comply with State policies, and shall provide a general discussion of the pros/cons of each one, as they pertain to this facility.
13. The Discharger submitted a Facility Guidance Document on 26 January 2004. The report stated that the preponderance of evidence from a review of other site permits and situations, as cited in the report, indicates that an NPDES permit is not needed for the Discharger's ponds; however, the report stated that many of the reviewed situations

⁵ Wallace Kuhl Associates, Hydrogeologic and Geotechnical Report, Plate 6.

⁶ Wallace Kuhl Associates, Hydrogeologic and Geotechnical Report, pages 3-7.

⁷ Wallace Kuhl Associates, Hydrogeologic and Geotechnical Report, page 10

involved disinfection of effluent, greater setbacks, or greater separations between effluent and surface water. The report suggested that the Discharger should line all ponds within 200 feet of Sutter Creek or backfill all the ponds within 200 feet. The report evaluated alternatives for facility modifications and Best Practicable Treatment and Control ("BPTC") measures, and concluded that due to the limited sampling/analysis performed for the study (i.e., one sampling event), further research should be done. The report stated that based on the results of further research, modifications to the facilities must be completed to eliminate groundwater degradation in excess of water quality objectives. Staff approved the report on 18 March 2004.

14. Item 7 of the 2003 CDO states:

*By **30 November 2004**, the Discharger shall submit a Final Wastewater Master Plan. The master plan shall describe all facility improvements needed to:*

- a. Accommodate reasonable growth projections;*
- b. Provide for sufficient containment for the 100-year total annual precipitation event;*
- c. Provide for appropriate maintenance schedules to ensure stable effluent disposal capacity and prevent significant erosion of Sutter Creek along the ponds;*
- d. Reduce infiltration and inflow to acceptable levels;*
- e. Prevent sanitary sewer overflows;*
- f. Prevent seepage discharges to surface water (or obtain an NPDES permit to regulate those discharges); and*
- g. Evaluate and implement Best Practicable Treatment and Control measures to ensure that any groundwater degradation complies with State Board Resolution No. 68-16.*

The master plan shall set forth a specific, detailed scope and schedule for studies, design, permitting, and construction of facility expansions and other improvements needed to comply with this Order and protect water quality.

15. The Discharger submitted a Wastewater Master Plan on 30 November 2004, a draft Wastewater Master Plan in August 2009, and a final Wastewater Master Plan on 22 March 2010. Staff had been advised that the 30 November 2004 report was preliminary, and so did not provide comments. On 5 November 2010, staff informed the Discharger that the final Master Plan did not comply with the 2003 CDO because it did not demonstrate that the proposed WWTF modifications would prevent seepage discharges to Sutter Creek. Additionally, the final Master Plan did not include BPTC measures to mitigate the conditions that are degrading groundwater beneath the WWTF.

16. Item 8 of the 2003 CDO states:

***Within 60 days of staff's written approval** of the Final Wastewater Master Plan, the Discharger shall submit a Report of Waste Discharge to allow WDRs to be revised to require the implementation of the items in the Master Plan.*

17. The Discharger submitted a RWD on 1 November 2005. Between that date and September 2010, the Discharger submitted numerous revisions to the RWD, but has not

yet submitted a complete RWD that proposes facility changes that will bring the WWTF into compliance with the 2003 CDO. The history of RWD submittals is summarized below:

- a. The Discharger submitted a revised RWD on 12 June 2006. In a 19 March 2007 letter, the Discharger agreed to submit a second revised RWD by 12 March 2008. However, the revised RWD was not submitted until March 2010.
- b. On 22 March 2010, the Discharger submitted a RWD which proposed to replace the existing WWTF with a tertiary treatment system with UV disinfection. Treatment would take place in concrete tanks, and the four existing treatment ponds would be backfilled. The three existing percolation/evaporation ponds would continue to be used, and an additional percolation/evaporation pond would be built. The two northeastern percolation/evaporation ponds would be partially filled to provide a 200-foot setback from Sutter Creek. The project would increase the WWTF's treatment capacity to 0.8 MGD, and the disposal capacity would be increased to 0.90 MGD. The RWD stated that the project would be completed by August 2012.
- c. On 28 June 2010, staff informed the Discharger that the RWD was inadequate because it would not eliminate the seepage and would likely cause additional seepage into adjacent ditches, as well as surfacing of effluent-impacted groundwater at the southern end of the WWTF site. On 17 August 2010, staff issued a Notice of Violation because the RWD was still incomplete in violation of the 2003 CDO.
- d. The Discharger submitted another revision to the RWD on 7 September 2010. This submittal included the Final Environmental Impact Report ("EIR"), the Final Wastewater Master Plan, and the results of a numeric model that predicts the effects of the planned expansion on groundwater elevations and gradients. The groundwater model shows that the proposed WWTF expansion would still create seepage discharges to Sutter Creek, even with a 200-foot setback from the creek. The model also shows that the expanded facility would cause the local water table to rise as much as two feet, and would result in seasonal surfacing of groundwater at the south end of the WWTF. Neighboring landowners have already expressed concern about the high water table near the WWTF.
- e. On 5 October 2010, the Discharger submitted the results of a second numeric groundwater model for the planned expansion. This model included extraction of groundwater along the southern edge of the proposed new percolation/evaporation pond to control surfacing groundwater and conveyance of the extracted groundwater to the percolation/evaporations ponds for disposal. Although the report states that the Discharger could mitigate surfacing groundwater by pumping groundwater to the WWTF ponds, the RWD's capacity analysis does not account for the additional influent flows, and the seepage to the creek was not addressed. On 5 November 2010, staff again informed the Discharger that the RWD was incomplete.

Violations of the 2003 CDO

18. In summary, the Discharger has not come into compliance with Discharge Prohibition A.1 of the WDRs by 30 December 2005, in violation of Item 1 of the 2003 CDO. The

technical studies and monitoring completed since adoption of the 2003 CDO show that the unlined treatment and disposal ponds have created a localized groundwater “mound” that causes shallow groundwater beneath the WWTF ponds to flow towards Sutter Creek, where it seeps into the creek channel during periods when natural flows in the creek are low.

19. The Discharger has not come into compliance with the Groundwater Limitations of the WDRs, in violation of Item 1 of the 2003 CDO. The Discharger’s groundwater monitoring data and technical reports show that the shallow groundwater contains elevated concentrations of iron and manganese downgradient of the WWTF. Specifically, monitoring wells MW2 and MW3A are downgradient of the WWTF ponds, as well as directly adjacent to, and upgradient of, Sutter Creek. These wells consistently have dissolved iron and manganese concentrations greater than the background well (MW1). The following table summarizes dissolved iron and manganese concentrations since 2008⁸:

Dissolved Iron and Manganese Concentrations in Groundwater (µg/L)

Constituent	Monitoring Well and Location			Secondary MCL
	MW1 (Background)	MW2 (Downgradient)	MW3A (Downgradient)	
<u>Dissolved Iron</u>				
Range of Results	<5 to 31	25 to 2,600	<50 to 6,800	300
Mean Results	14.3	1,810	3,643	
<u>Dissolved Manganese</u>				
Range of Results	<5 to 28	2,600 to 4,500	5,000 to 7,200	50
Mean Result	8.3	3,704	5,832	

These results show that the discharge has caused dissolved iron and manganese in shallow groundwater to exceed the secondary MCLs, in violation of the groundwater limitations. Although iron and manganese are not present in the WWTF effluent at high concentrations, the presence of degradable organic matter in the wastewater depletes oxygen, which creates reducing conditions in the groundwater mound beneath the WWTF ponds. Reducing conditions promote dissolution of iron and manganese. These minerals are naturally present in the soil beneath the ponds. This mechanism of groundwater degradation was acknowledged in the December 2009 Final EIR, which states:

⁸ Prior to 2008, groundwater samples were not filtered before analysis for metals. Without filtration to remove clay and silt particles, analytical results for metals would include any metals contained within the minerals that form the soil. As discussed further below, iron and manganese are naturally present in the soil that underlies the wastewater ponds. Therefore, any assessment of groundwater degradation should be based on filtered samples, which would contain only the metals that were already dissolved in the groundwater.

*Dissolved iron and manganese levels [in shallow groundwater] are likely a result of anaerobic decomposition of biological material. This decomposition occurs either in the anaerobic zone at the bottom of the existing treatment ponds or subsurface as effluent enters the groundwater at the percolation ponds.*⁹

Combined with the fact that MW2 and MW3A are approximately 100 feet upgradient of the portion of Sutter Creek where groundwater has been observed seeping into the creek, these data show that it is likely that the seepage contains constituents that are present as a consequence of the treatment and discharge of waste in unlined ponds. The Discharger's WDRs do not allow these impacts to occur; the Discharger must eliminate the processes that result in the discharge of degraded groundwater to the creek in violation of Resolution 68-16. This could be accomplished by eliminating the groundwater degradation or by eliminating the seepage itself.

20. Despite numerous requests, the Discharger has not complied with Task 8 of the 2003 CDO, which requires submittal of a complete RWD that proposes improvements that will bring the facility into compliance with the WDRs and the 2003 CDO. Board staff concurs that the proposed tertiary treatment in lined ponds, followed by disinfection with ultraviolet light, will greatly improve the quality of the effluent discharged to the percolation/evaporation ponds, and may reduce the level of groundwater degradation caused by the discharge. However, the Discharger has not shown that the design would stop the seepage of degraded groundwater into Sutter Creek, and has not shown that the proposed improvements will result in significantly lower concentrations of iron and manganese in the shallow groundwater. Therefore, this Order requires that the Discharger demonstrate compliance with the Clean Water Act and applicable state regulations and policies, including Resolution 68-16, and to submit a new RWD that reflects the Discharger's compliance plan. In order to give the Discharger options to prevent surfacing wastewater or other impacts associated with raising the water table, this Order also allows the Discharger to propose an alternative to the proposed new percolation/evaporation pond and/or direct discharge of either groundwater or treated effluent to Sutter Creek, if the Discharger demonstrates that such discharge will comply with applicable regulations and policies.

Basis for Reduced Flow Limit

21. As discussed above, it is appropriate to issue a revised CDO because the Discharger has not complied with the 2003 CDO. Additionally, it is appropriate to restrict flows into the treatment facility and disposal ponds to that which the facility has been designed to accommodate.
22. Discharge Specification 2.1 of WDRS Order 95-125 states:

The monthly average dry weather discharge flow shall not exceed 1.2 million gallons/day.

⁹ City of Ione Wastewater Treatment Facility Final EIR, pages 2-36.

However, as noted in Finding No. 3, the Discharger's documents state that the capacity of the treatment plant is 0.55 MGD as an average daily dry weather flow, and the disposal capacity is 0.75 MGD as an average daily flow. Therefore, the flow limit that currently applies to the WWTF exceeds its actual capacity. At a minimum, the flow limit must be revised to reflect the actual treatment and disposal capacity.

23. Between September 2007 and October 2010, average monthly influent flows to the treatment plant ranged from 0.31 to 0.47 MGD and averaged 0.35 MGD, which is below the treatment capacity of 0.55 MGD. During the same period, average monthly effluent flows to the percolation/evaporation ponds ranged from 0.31 to 0.84 MGD, as compared to the disposal capacity of 0.75 MGD. The City exceeded its disposal capacity once (November 2007) and was at capacity or close to capacity five times (October 2007, December 2007, June 2009, October 2009, July 2010). For the remainder of the time, the City was significantly below its disposal capacity. The City should be able to comply with revised flow limits that reflect actual capacity.

Regulatory Considerations

24. The Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised September 2009 (the "Basin Plan"), designates beneficial uses, includes water quality objectives to protect the beneficial uses, and includes implementation plans to implement the water quality objectives.
25. Surface water drainage from the facility is to Sutter Creek, a tributary of the Cosumnes River. The beneficial uses of the Cosumnes River, as stated in the Basin Plan, are municipal and domestic supply, irrigation, stock watering, contact recreation, canoeing and rafting, other noncontact recreation, warm and cold freshwater habitat, warm and cold migration, warm and cold spawning, and wildlife habitat.
26. The beneficial uses of underlying groundwater are municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.
27. Water Code section 13301 states, in relevant part:

When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action. In the event of an existing or threatened violation of waste discharge requirements in the operation of a community sewer system, cease and desist orders may restrict or prohibit the volume, type, or concentration of waste that might be added to such system by discharges who did not discharge into the system prior to the issuance of the cease and desist order. Cease and desist orders may be issued directly by a board, after notice and hearing.

28. Water Code section 13267 (b) states:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

29. The technical reports required by this Order are necessary to assure compliance with both this Order and the WDRs, and to ensure protection of public health and safety. The Discharger owns and operates the facility that discharges the waste subject to this Order.

30. Issuance of this Order is an enforcement action of a regulatory agency, and therefore, is exempt from the provisions of the California Environmental Quality Act (Pub. Resources Code § 21000 et seq.), in accordance with California Code of Regulations, title 14, section 15321(a)(2).

IT IS HEREBY ORDERED that, pursuant to Water Code sections 13301 and 13267, the City of Ione, its agents, successors, and assigns shall implement the following measures necessary to ensure long-term compliance with WDRs Order 95-125, or any superseding permits or orders issued by the Central Valley Water Board.

This Cease and Desist Order rescinds and replaces Cease and Desist Order R5-2003-0108 except for the purpose of enforcing violations that have occurred to date.

Any person signing a document submitted to comply with this Order shall make the following certification:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

1. **Effective immediately**, the Discharger shall comply with all requirements of WDRs Order 95-125 (or subsequent WDRs that may rescind and/or replace Order 95-125), except as specifically noted below.
2. In accordance with the time schedule set forth in this order, the Discharger shall construct facility improvements that will effectively stop the mechanisms that result in the mobilization and discharge of iron and manganese in violation of State Board Resolution 68-16; and either:

- a. Stop any indirect discharge (seepage) of degraded groundwater to Sutter Creek that is in violation of the Clean Water Act; or
- b. Obtain an NPDES Permit that regulates the indirect discharge of degraded groundwater to Sutter Creek.

If the Discharger demonstrates that a direct discharge to surface water will comply with current regulations and policies applicable to surface water discharges, then either option above may include obtaining an NPDES permit for seasonal or year round direct surface water discharge of treated effluent and/or groundwater that has been degraded as a result of the existing land discharge.

3. By **30 January 2012**, the Discharger shall submit a *Seepage Discharge Compliance Plan*. At a minimum, the plan shall:
 - a. Specify the selected seepage compliance option, as described in Item 2, above.
 - b. Provide a conceptual design of the facility improvements required to achieve compliance with this Order and provide sufficient treatment, storage and disposal capacity through 2020.
 - c. Describe how the improvements/expansion project will be designed to prevent surfacing groundwater or increases in groundwater levels that could adversely impact neighboring land uses.
 - d. Provide a proposed scope and schedule of all work required for complete implementation of the selected option. The schedule shall include planning, predesign studies, CEQA compliance, project financing, engineering design, permitting, contractor procurement, construction, and startup testing.
 - e. Provide a preliminary capital cost estimate and a financing plan describing how the improvement project will be funded.
4. **If the selected seepage discharge compliance option does not require an NPDES permit**, the Discharger shall comply with the following requirements:
 - a. By **30 May 2012**, the Discharger shall submit an RWD or apply for revised WDRs. The RWD shall, at a minimum, address the items listed in Attachment A.
 - b. If requested by the Executive Officer, the Discharger shall submit a revised RWD that addresses staff's comments within **45 days** of the request.
 - c. By **30 October 2013**, the Discharger shall submit a technical report certifying that (1) the improvements/expansion project has been completed, (2) the facility does not discharge to Sutter Creek in violation of the Clean Water Act, and (3) any groundwater degradation that occurs due to treatment and disposal of wastewater is consistent with State Water Board Resolution 68-16.

5. **If the selected seepage discharge compliance option requires an NPDES permit** for either direct discharge or continued seepage discharge, the Discharger shall comply with the following requirements:
- a. By **30 January 2012**, the Discharger shall submit and implement a *Pre-Application Monitoring Plan* designed to provide all groundwater and surface water monitoring data required to support the NPDES permit application. The monitoring plan shall specify the media to be monitored, sampling locations and schedule, constituents to be analyzed, and proposed analytical methods. If flow monitoring data is needed to support a request for dilution credits, the monitoring plan shall also specify the proposed flow monitoring method, location, and schedule.
 - b. If requested by the Executive Officer, the Discharger shall submit a revised *Pre-Application Monitoring Plan* that addresses staff's comments within **45 days** of the request.
 - c. By **30 August 2012**, the Discharger shall submit a complete RWD to apply for an NPDES permit and revised WDRs for the wastewater treatment facility. The RWD shall, at minimum, address the items listed in Attachments A (for the land discharge WDRs) and B (for the NPDES permit).
 - d. If requested by the Executive Officer, the Discharger shall submit a revised RWD that addresses staff's comments within **14 days** of the request.
 - e. By **30 March 2013**, the Discharger shall submit a technical report certifying that the improvements/expansion project has been completed and that any discharges to surface water, whether direct or indirect, are regulated under a valid NPDES permit.

Interim Flow Limits

6. Influent flows to the wastewater treatment plant shall not exceed 0.55 MGD as a monthly average dry weather flow (based on flows from June through September each calendar year). Total effluent flows to the percolation/evaporation ponds shall not exceed 0.75 MGD as a monthly average flow for any calendar month. For the purpose of this Order, total effluent flow is defined as the sum of the monthly average treatment plant effluent flow plus the monthly average effluent flow accepted from the ARSA system which is directed to the percolation/evaporation ponds.

Quarterly Progress Reporting

7. Beginning **1 August 2011**, and by the first day of the second month following each calendar quarter (**i.e., by 1 February, 1 May, 1 August, and 1 November each year**), the Discharger shall submit a quarterly progress report describing: (a) the work completed to date regarding each of the reporting requirements described above; (b) a cumulative total since April 2011 of the number of new connections that have been permitted and the number of connections that have been removed from the collection

system in terms of equivalent single family dwelling units (EDUs); and (c) data showing whether or not the Discharger has complied with the interim flow limits contained in this Order.

In addition to the above, the Discharger shall comply with all applicable provisions of the Water Code that are not specifically referred to in this Order. As required by the Business and Professions Code sections 6735, 7835, and 7835.1, all technical reports shall be prepared by, or under the supervision of, a California Registered Engineer or Professional Geologist and signed/stamped by the registered professional.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date that this Order becomes final, except that if the thirtieth day following the date that this Order becomes final falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 8 April 2011.

PAMELA C. CREEDON, Executive Officer

- Attachment A Additional Information Requirement for a Report of Waste Discharge (Land Discharge Permits)
- Attachment B Application Requirements for NPDES Permits



California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
<http://www.waterboards.ca.gov/centralvalley>



Edmund G. Brown Jr.
Governor

Matthew Rodriguez
Secretary for
Environmental Protection

Attachment C to ACLC R5-2012-0551

16 February 2012

Jeff Butzlaff, Interim City Manager
City of Ione
P.O. Box 398
Ione, CA 95640

REVIEW OF SEEPAGE DISCHARGE COMPLIANCE PLAN, CEASE AND DESIST ORDER R5-2011-0019, CITY OF IONE, AMADOR COUNTY

The City of Ione's wastewater treatment facility is regulated by Waste Discharge Requirements Order 95-125 and by Cease and Desist Order (CDO) R5-2011-0019. The CDO requires that the City design and construct improvements to (a) obtain sufficient treatment, storage, and disposal capacity for all wastewater flows projected through 2020, (b) prevent groundwater pollution, and (c) either stop the wastewater seepage into Sutter Creek or obtain an NPDES permit to allow for the lawful discharge of this seepage.

The CDO required the submittal of a *Seepage Discharge Compliance Plan* (SDCP) by 30 January 2012. This plan is to describe the conceptual facility improvements to address capacity, groundwater pollution, and seepage; and to provide a scope, schedule, and preliminary financing plan for the improvements. The CDO also requires that the City submit a Report of Waste Discharge (RWD) by 30 May 2012; the RWD is to provide more detailed information regarding the facility improvements. Finally, the CDO requires that the facility improvements be completed by 30 October 2012.

The City submitted the SDCP on time. Water Board staff has reviewed the SDCP and have the following comments:

- The City states that it will construct facility improvements to prevent groundwater pollution by manganese and iron, and to stop the seepage of wastewater into Sutter Creek. The City will not apply for an NPDES permit.
- The CDGP contains the results of the expanded isotope study. Board staff agrees with the study conclusions that (a) there is no evidence that wastewater ponds 1-4 are seeping into Sutter Creek, (b) wastewater ponds 5, 6, and possibly 7 are seeping into the creek, and (c) the water influencing monitoring wells MW2, MW3, and MW3A is derived from ponds 5, 6, and possibly 7.
- The City hypothesizes that anoxic sediments in ponds 5 and 6 are causing the reducing conditions which have led to high iron and manganese concentrations in groundwater. There is anecdotal evidence that raw wastewater was discharged to these ponds many

- years ago; however, the City has not yet validated the hypothesis by sampling the ponds to determine if there is a layer of anoxic sediment.
- The City provided a *Facility Improvement Conceptual Design*, which included the conceptual design to stop the seepage to Sutter Creek and to prevent groundwater degradation. The City's conceptual design included the following elements:
 - Improve the secondary treatment in Ponds 1–4. The City would evaluate five alternatives that would improve treatment and reduce the possibility of anoxic sludge accumulating in ponds 5-7. The evaluations and final recommendation would be included in the Report of Waste Discharge.
 - Construct a setback between Ponds 5 and 6 and Sutter Creek. The setback would be constructed by filling in approximately 200 feet of the north portion of the two ponds. The City stated that this would reduce, if not eliminate, the influence of Ponds 5 and 6 on groundwater seepage to Sutter Creek. The setback distance will be justified in the final design. The City stated that it is expected that some potential for seepage to the creek will still exist with the improvements, and therefore the RWD will have to show that any seepage does not violate the Clean Water Act.
 - Remove anoxic sediments. Dewater and remove anoxic sediments from disposal Ponds 5, 6, and, if needed, from Pond 7.
 - Dispose of secondary effluent by percolation. Continue to dispose of secondary effluent in disposal Ponds 5, 6, and 7.
 - Monitor groundwater. Continue monitoring groundwater.
 - If necessary, treat to tertiary standards. If, within two years, groundwater monitoring shows that iron and manganese concentrations remain elevated, then the City will convey the secondary effluent to the existing tertiary plant for treatment. If not otherwise used for recycled water uses, the tertiary effluent would be returned to the secondary plant and disposed at Ponds 5, 6, and 7. The report does not discuss how the tertiary plant will be able to treat both Lone wastewater and ARSA wastewater.
 - The City provided a capacity analysis, and stated that the improvements would provide sufficient treatment, storage, and disposal capacity through 2020 and beyond. Figure 1 showed the influent average dry weather flow versus the disposal and treatment capacity. Table 1 provided two water balances, an existing and tentative future water balance. Appendix A provided another water balance. It is not clear whether or not the capacity analysis included the 650 AF of wastewater contributed by ARSA.
 - The City provided a schedule which included planning, pre-design, environmental documents, Proposition 218 analysis and completion, construction documents, funding through the State Revolving Funds, and construction completion. The schedule started with submittal of the SDCP on 30 January 2012 and ended with submittal of a construction management and certification report on October 2013. However, given that the City does not currently have a contract with an engineering firm to complete the RWD or obtain funding, it appears that the City will not be able to comply with this schedule and therefore will violate the CDO.
 - The City provided a preliminary capital cost analysis, and stated that it planned to pursue and obtain financing through the State Revolving Fund account.

Based on review of the submitted plan, staff requests that the City clarify certain aspects of the SDCP. Therefore, please submit the following information:

1. Water Balance. **By 16 March 2012**, please clarify whether the water balances depicted in Figure 1, Table 1, and Appendix A include:
 - a. The Amador Regional Sanitation Authority's (ARSA) backwash water into the treatment ponds,
 - b. The secondary effluent into the disposal ponds from Preston Reservoir (i.e., Mule Creek State Prison and ARSA), and
 - c. If the balances do not include the above-listed flows, then provide a revised water balance that includes these flows. If desired, the water balance may include a date by which the flows will be stopped per the contract. If Lone will notify ARSA that it will no longer accept the flows, then provide the letter to that effect.
2. Compliance with Dates in the CDO. Water Board staff has been notified that the contract to retain the project consultant has not been approved by the City. Therefore, **by 16 March 2012**, please fully explain how the City plans to meet the compliance dates required by the CDO, and provide a revised schedule to meet those dates.
3. Treatment of Wastewater at the Tertiary Plant. **By 16 March 2012**, please provide an explanation as to how Lone's secondary wastewater could be treated at the tertiary treatment plant at the same time that ARSA water is treated. Even if Lone notifies ARSA this year that it will no longer accept ARSA water after the five year period allowed by the contract, it appears that there could be an overlap of two years in which flows from both facilities would be treated at the same tertiary plant.
4. Pond 7 Expansion and Groundwater Surfacing. **By 16 March 2012**, clarify whether disposal Pond 7 would be expanded, and if so provide the schedule for the expansion and a technical analysis of the potential for surfacing groundwater or increases in groundwater levels adjacent to the pond or at neighboring land due to this expansion. In addition, provide the capacity of the expanded pond and schedule for completion of the proposed expansion.
5. Anoxic Conditions at the Disposal Ponds. **By 30 May 2012**, as part of the RWD, please provide test results, and a technical discussion of those test results, which verify whether anoxic conditions currently exist at the disposal ponds. Tests could include such items as a dissolved oxygen profile and depth/type of solids present in the ponds. If anoxic conditions are not present in the disposal ponds, then the City must provide an alternative design and improvements to stop the mechanism that results in the mobilization and discharge of iron and manganese in violation of State Board Resolution 68-16.
6. Other Items for the RWD. In addition to the items listed in Attachment A of the CDO, the RWD due on **30 May 2012** shall include (a) an engineering rationale for the

proposed setback distance for ponds 5 and 6, and clearly show that any remaining seepage is in compliance with the Clean Water Act, (b) an evaluation of the alternatives considered to improve the secondary treatment in ponds 1-4, and the recommended alternative, (c) an evaluation of the current liner in ponds 1-4 and whether it needs to be enhanced to protect groundwater quality and prevent seepage, and (d) a proposed timeline for dewatering ponds 5-7 and removing any anoxic sediments.

Water Board staff appreciates the timely submittal of the City's *Seepage Discharge Compliance Plan*. If you have any questions, please contact me at mboyd@waterboards.ca.gov or (916) 464-4676.

MARY BOYD, P.E.
Water Resource Control Engineer
Compliance and Enforcement

cc: Patrick Pulupa, Office of Chief Counsel, State Water Board, Sacramento
Mike Israel, Amador County Dept. of Environmental Health, Jackson
James Maynard, Interim City Attorney, Maynard Law, Sacramento
Art O'Brien, Robertson-Bryan, Inc., Elk Grove
Jim Scully, Lone

Central Valley Regional Water Quality Control Board

Attachment D to ACLC R5-2012-0551

21 August 2012

Edwin Pattison, City Manager
City of Ione
P.O. Box 398
Ione, CA 95640

Via email and US Mail

REJECTION OF REPORT OF WASTE DISCHARGE, CITY OF IONE, AMADOR COUNTY

The treatment and disposal of domestic wastewater at the City of Ione's wastewater treatment facility (WWTF) is regulated by Waste Discharge Requirements (WDRs) Order 95-125 and Cease and Desist Order (CDO) R5-2011-0019. The CDO requires, in part, that the Discharger construct facility improvements by 30 October 2013 to stop groundwater pollution, stop seepage of degraded groundwater into Sutter Creek, provide capacity for flows through 2020, and prevent surfacing of groundwater around the percolation ponds. In addition, the CDO requires that the City submit a *Seepage Discharge Compliance Plan* by 30 January 2012, a *Report of Waste Discharge* by 30 May 2012, and complete the facility upgrades by 30 October 2013.

The *Seepage Discharge Compliance Plan* was to describe the conceptual facility improvements to address capacity, groundwater pollution, surfacing, and seepage; and to provide a scope, schedule, and preliminary financing plan for the improvements. Water Board staff reviewed the *Plan* and provided comments in a 16 February 2012 letter (attached). In general, the plan was acceptable and staff simply asked that the City clarify several issues either by 16 March 2012 or as part of the Report of Waste Discharge. However, the City did not provide the requested information.

The Report of Waste Discharge was due by 30 May 2012, but the City did not submit the document until 30 July 2012. As described below, the City has significantly changed its approach toward compliance, and no longer wishes to follow the proposal described in the *Seepage Discharge Compliance Plan*. Unfortunately, Board staff's review finds that the new proposal is not of sufficient detail to show that the City will comply with the requirements of the CDO. Therefore, the Report of Waste Discharge is rejected.

In addition, during a meeting between the new City Manager and Board staff on 16 August 2012, the City informed staff that it is once again investigating whether it can use private land near the City's secondary treatment plant for the disposal of treated wastewater. This concept was not discussed in the RWD (which was submitted only weeks before the meeting). If the City does wish to proceed with additional land disposal, then it will need to submit a new RWD. The City remains in violation of the CDO because it has not committed to a plan of action that

will result in improvements to address the groundwater pollution, seepage into Sutter Creek, capacity, and surfacing of wastewater.

Review of the 30 July 2012 RWD

The City's RWD was titled "*Additional Information for Combined Report of Waste Discharge-Modifications to City Wastewater Treatment Plant and Castle Oaks WRP*" (RWD). An overview of the RWD contents is provided below, followed by Water Board staff's comments.

- Proposed Modifications to Two Separately-Regulated Plants: The RWD describes proposed modifications to both the City of Lone's secondary wastewater treatment plant (the subject of the CDO), and to the Castle Oaks tertiary wastewater treatment plant. These two facilities are regulated under two different permits from the Water Board. In order to revise a permit, all dischargers named on that permit must submit a signed Form 200 and agree to the proposed modifications. There are three dischargers listed on the Castle Oaks permit, but the RWD did not include a Form 200 with their signatures.
- Proposed Modifications to the Castle Oaks Tertiary Treatment Plant: The RWD proposed to make modifications to the Castle Oaks tertiary treatment plant, with the stated purpose of reducing flows to the Discharger's WWTF. The main proposal is to add 16 acres of City-owned land to the current land application area, and irrigate this land with tertiary-treated wastewater from the Castle Oaks plant.
- Modifications to the City of Lone's WWTF: Proposed modifications to the Discharger's WWTF include:
 - Install additional aerators at Ponds 1 and 2 and new aerators at Ponds 3 and 4 to improve secondary treatment and thereby help prevent anoxic conditions in Pond 5;
 - Install a mixer at Pond 5 to reduce stratification that causes anoxic conditions in P/E Pond 5;
 - Reduce the flow to the P/E ponds, which would allow Pond 5 to empty during the summer months which could prevent seepage of degraded groundwater to Sutter Creek.
 - Convert 11 acres of City-owned property next to Pond 7 to a land application area, thereby diverting some flow away from the P/E ponds.

Water Board Staff's Comments on the RWD

Water Board staff has completed a high-level review of the RWD, which was specifically directed at evaluating whether the proposal complies with the CDO. Based on review, Water Board staff rejects the document because it did not adequately address the requirements of the CDO, namely facility upgrades to stop groundwater seepage to Sutter Creek, prevent groundwater pollution, provide sufficient capacity, or address surfacing of groundwater around the percolation ponds. Staff's specific comments are provided below:

1. Prevention of Groundwater Pollution

The RWD did not propose, or provide technical justification, for facility improvements that have a high degree of certainty of preventing the current groundwater pollution by iron and manganese. The City's 30 January 2012 *Seepage Discharge Compliance Plan* postulated that the iron and manganese pollution in groundwater was due to a deep layer of anoxic solids in the bottom of Ponds 5 and 6. Water Board staff required testing to prove this hypothesis, and the City found that there are only 1-2 inches of solids in Pond 5.

The RWD now proposes to install a mixer in Pond 5 to eliminate stratification and therefore the potential for oxygen reduction potential (ORP). This proposal to prevent anoxic conditions is based on technical publications for mixing lake water. While it appears that the proposed mixing may eliminate stratification for the wastewater within Pond 5, neither the technical publications, nor the RWD, provided any supporting information to document that this mixing would prevent the groundwater pollution. In addition, the RWD did not propose additional steps that would be implemented if the mixing did not result in improved groundwater conditions within a specified time period, and did not propose additional groundwater monitoring to confirm whether or not the mixing resulted in improved groundwater conditions.

2. Prevention of Seepage into Sutter Creek

The RWD did not propose facility improvements that have a high degree of certainty of preventing wastewater seepage into Sutter Creek. The RWD proposes to lower the water level only in Pond 5 and only during June, July and August, by adding an additional 16 acres of land application area to the Castle Oaks tertiary treatment plant, and 11 acres of land application area to the lone secondary treatment plant. Given the studies conducted to date, staff question how this proposal will stop seepage.

Specifically, the proposal is not supported by the Hydrofocus technical report¹. This report states that Sutter Creek water quality is affected by groundwater associated with percolation from Pond 5, Pond 6, and Pond 7 during periods of low creek flow. And, that during the lowest flow in *September* 2011, Sutter Creek was influenced by groundwater associated with Ponds 5, 6, and likely Pond 7. In addition, the Hydrofocus technical report states that this influence was not observed during higher flow in *August* 2011. Therefore, lowering the water level in P/E Pond 5 during June, July, and August is not a sufficient improvement to stop seepage to Sutter Creek.

In addition, the creek water levels vary from year to year, and will not necessarily be lowest in June, July, and August. The RWD did not address how Pond 5 will be kept empty based on actual creek water levels, when low-flow periods occur during different months. The RWD did not address how seepage from Ponds 6 and 7 will be prevented.

3. Modifications to the Castle Oaks Tertiary Treatment Plant:

On 3 December 1993, the Central Valley Water Board issued Water Reclamation Requirements Order 93-240 for the Castle Oaks treatment plant to three agencies: Amador Regional Sanitation Authority (ARSA), Portlock International, and the City of Lone. According to Order 93-240, ARSA delivers secondary treated water to the plant, Portlock manages the tertiary effluent used for golf course irrigation, and the City of Lone owns and operates the plant. Because the current WDRs are issued to three entities, all three entities must submit a RWD for any modifications. The City of Lone's RWD is silent as to whether it has discussed the proposed modifications to the Castle Oaks treatment plant with ARSA and Portlock. Therefore, Board staff cannot evaluate the modifications, nor update the permit.

¹ Hydrofocus, January 2012. *Seepage Analysis-City of Lone Wastewater Treatment Plant, Final Report*. Page 41.

4. Surfacing Groundwater:

The RWD proposes to construct 11 acres of land application area adjacent to percolation pond 7. Several years ago, the City completed a groundwater modeling exercise that showed that there was a high potential for groundwater to surface if an additional percolation pond was constructed in this area. The RWD does not address whether or not groundwater would surface if a land application area is constructed. In addition, the RWD did not address surfacing of groundwater associated with the use of Pond 7. Staff's 16 February 2012 letter (attached) also required the City to address this issue.

5. Discharge of Castle Oaks Backwash Water to the Discharger's WWTF:

The RWD states that backwash water from the Castle Oaks tertiary treatment plant is discharged to the City of Lone's WWTF at a rate of 141,000 gallons per day. This discharge is not authorized by either the Castle Oaks WDRs or the City of Lone's WDRs, and is therefore a violation of both permits.

6. Capacity:

The RWD included a water balance. However, it is unclear whether the water balance included flows through the year 2020 and whether it included the Castle Oaks backwash flows. In addition, because the water balance included assumptions that changes would be made to the Castle Oaks treatment plant, and because these assumptions were not supported by a RWD signed by all three dischargers, it is unclear whether the water balance complies with the requirements of the CDO. Staff's 16 February 2012 letter (attached) also required the City to address questions about the water balance.

7. Schedule: The RWD did not include a schedule for the improvements. The CDO requires that all upgrades be completed by 30 October 2013.

8. Capital Costs and Financing: The RWD did not include this information.

9. Other Issues: The City did not address the other questions and concerns raised in staff's 16 February 2012 letter (attached).

Continuing Violation of Cease and Desist Orders

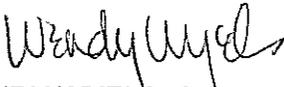
Water Board staff first identified significant water quality concerns at the City of Lone over 12 years ago. At that time, the City had constructed un-permitted disposal ponds, allowed wastewater to seep into Sutter Creek, and refused to voluntarily submit a Report of Waste Discharge. In 2003, the Central Valley Water Board issued Cease and Desist Order R5-2003-0108. This CDO required that the City submit a Report of Waste Discharge to address numerous violations of the WDRs. The City submitted its first RWD in 2005. That document was incomplete. The City changed its proposals numerous times, and has submitted multiple other RWDs, all of which have been incomplete.

Instead of issuing an Administrative Civil Liability penalty for failure to comply with the 2003 CDO, in 2011 the Board issued a new CDO. This CDO requires facility improvements to prevent groundwater pollution, address seepage into Sutter Creek, stop surfacing of groundwater, and provide sufficient capacity. During the 2011 Board hearing, the City pledged to comply with the timelines in the new CDO. Although the City met the first deadline with the

submittal of the Seepage Discharge Compliance Plan, the City changed direction once again, and in April 2012 asked the Board to extend the deadlines in the CDO. However, the Board declined to revise the CDO. The City did not submit the Report of Waste Discharge by the 30 May 2012 requirement, and the document that was recently submitted does not provide the detail to justify that the proposed changes will result in compliance with the CDO.

Since 2005, the City of Ione has repeatedly failed to submit a Report of Waste Discharge and to make subsequent facility upgrades, thereby continuing to cause environmental pollution. The City of Ione is subject to penalties of up to \$10,000 per day for violations of the CDO. Board staff will evaluate additional enforcement action for failure to comply with the 30 May 2012 deadline to submit a Report of Waste Discharge. Please note that while the Regional Board reserves its rights to take enforcement for Ione's violations under both the 2003 and 2011 CDO's, we request the City submit a final Report of Waste Discharge by **30 September 2012**, consistent with the directives of this letter and the 2011 CDO. This deadline does not serve to extend any term of the CDO, including the final compliance date of 30 October 2013. Any additional enforcement actions will consider the deadlines in the CDO.

If you have questions or wish to meet to discuss this matter, please contact Mary Boyd at mboyd@waterboards.ca.gov or (916) 464-4676.



WENDY WYELS, Supervisor
Compliance and Enforcement Section

Attachment: 16 February 2012 letter to the City of Ione

cc: Julie Macedo, Office of Enforcement, State Water Board, Sacramento
Anne Olson, Permitting Unit, Central Valley Water Board, Sacramento
Mike Israel, Amador County Dept. of Environmental Health, Jackson
James D. Maynard, City Attorney, City of Ione
Ron Smylie, Mayor, City of Ione
Mary Grace Pawson, GHD, Sacramento
Jim Scully, Ione



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Edmund G. Brown Jr.
Governor

16 February 2012

Jeff Butzlaff, Interim City Manager
City of Ione
P.O. Box 398
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REVIEW OF SEEPAGE DISCHARGE COMPLIANCE PLAN, CEASE AND DESIST ORDER R5-2011-0019, CITY OF IONE, AMADOR COUNTY

The City of Ione's wastewater treatment facility is regulated by Waste Discharge Requirements Order 95-125 and by Cease and Desist Order (CDO) R5-2011-0019. The CDO requires that the City design and construct improvements to (a) obtain sufficient treatment, storage, and disposal capacity for all wastewater flows projected through 2020, (b) prevent groundwater pollution, and (c) either stop the wastewater seepage into Sutter Creek or obtain an NPDES permit to allow for the lawful discharge of this seepage.

The CDO required the submittal of a *Seepage Discharge Compliance Plan* (SDCP) by 30 January 2012. This plan is to describe the conceptual facility improvements to address capacity, groundwater pollution, and seepage; and to provide a scope, schedule, and preliminary financing plan for the improvements. The CDO also requires that the City submit a Report of Waste Discharge (RWD) by 30 May 2012; the RWD is to provide more detailed information regarding the facility improvements. Finally, the CDO requires that the facility improvements be completed by 30 October 2012.

The City submitted the SDCP on time. Water Board staff has reviewed the SDCP and have the following comments:

- The City states that it will construct facility improvements to prevent groundwater pollution by manganese and iron, and to stop the seepage of wastewater into Sutter Creek. The City will not apply for an NPDES permit.
- The SDCP contains the results of the expanded isotope study. Board staff agrees with the study conclusions that (a) there is no evidence that wastewater ponds 1-4 are seeping into Sutter Creek, (b) wastewater ponds 5, 6, and possibly 7 are seeping into the creek, and (c) the water influencing monitoring wells MW2, MW3, and MW3A is derived from ponds 5, 6, and possibly 7.
- The City hypothesizes that anoxic sediments in ponds 5 and 6 are causing the reducing conditions which have led to high iron and manganese concentrations in groundwater. There is anecdotal evidence that raw wastewater was discharged to these ponds many

years ago; however, the City has not yet validated the hypothesis by sampling the ponds to determine if there is a layer of anoxic sediment.

- The City provided a *Facility Improvement Conceptual Design*, which included the conceptual design to stop the seepage to Sutter Creek and to prevent groundwater degradation. The City's conceptual design included the following elements:
 - Improve the secondary treatment in Ponds 1–4. The City would evaluate five alternatives that would improve treatment and reduce the possibility of anoxic sludge accumulating in ponds 5-7. The evaluations and final recommendation would be included in the Report of Waste Discharge.
 - Construct a setback between Ponds 5 and 6 and Sutter Creek. The setback would be constructed by filling in approximately 200 feet of the north portion of the two ponds. The City stated that this would reduce, if not eliminate, the influence of Ponds 5 and 6 on groundwater seepage to Sutter Creek. The setback distance will be justified in the final design. The City stated that it is expected that some potential for seepage to the creek will still exist with the improvements, and therefore the RWD will have to show that any seepage does not violate the Clean Water Act.
 - Remove anoxic sediments. Dewater and remove anoxic sediments from disposal Ponds 5, 6, and, if needed, from Pond 7.
 - Dispose of secondary effluent by percolation. Continue to dispose of secondary effluent in disposal Ponds 5, 6, and 7.
 - Monitor groundwater. Continue monitoring groundwater.
 - If necessary, treat to tertiary standards. If, within two years, groundwater monitoring shows that iron and manganese concentrations remain elevated, then the City will convey the secondary effluent to the existing tertiary plant for treatment. If not otherwise used for recycled water uses, the tertiary effluent would be returned to the secondary plant and disposed at Ponds 5, 6, and 7. The report does not discuss how the tertiary plant will be able to treat both Lone wastewater and ARSA wastewater.
- The City provided a capacity analysis, and stated that the improvements would provide sufficient treatment, storage, and disposal capacity through 2020 and beyond. Figure 1 showed the influent average dry weather flow versus the disposal and treatment capacity. Table 1 provided two water balances, an existing and tentative future water balance. Appendix A provided another water balance. It is not clear whether or not the capacity analysis included the 650 AF of wastewater contributed by ARSA.
- The City provided a schedule which included planning, pre-design, environmental documents, Proposition 218 analysis and completion, construction documents, funding through the State Revolving Funds, and construction completion. The schedule started with submittal of the SDCP on 30 January 2012 and ended with submittal of a construction management and certification report on October 2013. However, given that the City does not currently have a contract with an engineering firm to complete the RWD or obtain funding, it appears that the City will not be able to comply with this schedule and therefore will violate the CDO.
- The City provided a preliminary capital cost analysis, and stated that it planned to pursue and obtain financing through the State Revolving Fund account.

Based on review of the submitted plan, staff requests that the City clarify certain aspects of the SDCP. Therefore, please submit the following information:

1. Water Balance. **By 16 March 2012**, please clarify whether the water balances depicted in Figure 1, Table 1, and Appendix A include:
 - a. The Amador Regional Sanitation Authority's (ARSA) backwash water into the treatment ponds,
 - b. The secondary effluent into the disposal ponds from Preston Reservoir (i.e., Mule Creek State Prison and ARSA), and
 - c. If the balances do not include the above-listed flows, then provide a revised water balance that includes these flows. If desired, the water balance may include a date by which the flows will be stopped per the contract. If Lone will notify ARSA that it will no longer accept the flows, then provide the letter to that effect.
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4. Pond 7 Expansion and Groundwater Surfacing. **By 16 March 2012**, clarify whether disposal Pond 7 would be expanded, and if so provide the schedule for the expansion and a technical analysis of the potential for surfacing groundwater or increases in groundwater levels adjacent to the pond or at neighboring land due to this expansion. In addition, provide the capacity of the expanded pond and schedule for completion of the proposed expansion.
5. Anoxic Conditions at the Disposal Ponds. **By 30 May 2012**, as part of the RWD, please provide test results, and a technical discussion of those test results, which verify whether anoxic conditions currently exist at the disposal ponds. Tests could include such items as a dissolved oxygen profile and depth/type of solids present in the ponds. If anoxic conditions are not present in the disposal ponds, then the City must provide an alternative design and improvements to stop the mechanism that results in the mobilization and discharge of iron and manganese in violation of State Board Resolution 68-16.
6. Other Items for the RWD. In addition to the items listed in Attachment A of the CDO, the RWD due on **30 May 2012** shall include (a) an engineering rationale for the

proposed setback distance for ponds 5 and 6, and clearly show that any remaining seepage is in compliance with the Clean Water Act, (b) an evaluation of the alternatives considered to improve the secondary treatment in ponds 1-4, and the recommended alternative, (c) an evaluation of the current liner in ponds 1-4 and whether it needs to be enhanced to protect groundwater quality and prevent seepage, and (d) a proposed timeline for dewatering ponds 5-7 and removing any anoxic sediments.

Water Board staff appreciates the timely submittal of the City's *Seepage Discharge Compliance Plan*. If you have any questions, please contact me at mboyd@waterboards.ca.gov or (916) 464-4676.

MARY BOYD, P.E.
Water Resource Control Engineer
Compliance and Enforcement

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Attachment E – ACL Complaint R5-2012-0558
Specific Factors Considered for Administrative Civil Liability
City of Lone Wastewater Treatment 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 (CWC) section 13327. 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.

Steps 1 and 2 – Potential for Harm for Discharge Violations; Assessments for Discharge Violations

For this case, the violation is the failure to submit the Report of Waste Discharge. Although the wastewater treatment plant ponds continue to cause polluted groundwater to seep into Sutter Creek and continue to cause pollution of the underlying groundwater, Board staff elected not to pursue a penalty based on these discharges of waste. Therefore, the first two steps of the Penalty Calculation methodology do not apply.

Step 3 – Per Day Assessment for Non-Discharge Violation

The Enforcement Policy states that the Board shall calculate an initial liability for each non-discharge violation. For this case, the non-discharge violation is the failure to submit a Report of Waste Discharge by the date required by the 2011 CDO (i.e., 30 May 2012) through 3 September 2012, for a total of 66 days.

- A. Potential for Harm. According to the Enforcement Policy, most incidents would be considered to have a “moderate” potential for harm. Because this Complaint only considers violations of the 2011 CDO, the City of Lone’s failure to submit a Report of Waste Discharge was assigned a “moderate” factor because the continued delay in determining an acceptable project jeopardizes the City’s ability to obtain funding and to complete a project by the 30 October 2013 deadline in the CDO. However, if violations of the 2003 CDO were also considered, then the Potential for Harm factor would be higher because the failure to submit the RWD and complete the treatment plant upgrades under the timelines in the 2003 CDO has resulted in continued impacts to surface water and groundwater.
- B. Deviation from Requirement. Because this Complaint only considers violations of the 2011 CDO, the failure to submit a complete RWD by 30 May 2012 was assigned a “minor” Deviation from Requirement. The City has recently stated that it intends to submit a revised, acceptable, RWD by 30 September 2012. However, as stated above, if violations of the 2003 CDO were also considered, then the “Deviation from Requirement” factor would be substantially higher.
- C. Per Day Factor. Using Table 3 of the Enforcement Policy, the “per day factor” is 0.2.

The Per Day Assessment is the “per day factor” (0.2) multiplied by the maximum per day amount authorized under the California Water Code (i.e., \$5,000 per day, as found in Water Code Section 13350) multiplied by the number of days of violation.

The Initial Liability is $0.2 \times \$5,000 \times 66 \text{ days} = \$66,000$

The Enforcement Policy allows a reduction for multiple day violations. In order to do so, the Water Board must make three express findings. However, the City of Ione does not qualify for the multi-day reduction because the Water Board cannot find that the violation (a) is not causing daily detrimental impacts to the environment, (b) results in no economic benefit that can be measured on a daily basis, and (c) occurred without the knowledge or control of the City. The Initial Liability remains at \$66,000.

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 cleanup 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 **1.3**. Since at least the year 2000, the City has intentionally taken actions in violation of its WDRs and two CDOs. These actions include construction of additional percolation basins not allowed by the WDRs, and the failure to plan and construct facility improvements to prevent the pollution of groundwater and the seepage of that groundwater into Sutter Creek. In regard to the 2011 CDO, the City submitted the required *Seepage Discharge Compliance Plan*, which was intended to provide a high-level discussion of the facility improvements which would lead to compliance with the CDO. Water Board staff had minor comments on the *Plan*, and expected that the City would respond in the RWD. However, the City elected to change course and submitted a RWD which not only substantially deviates from the *Plan* and but does not provide certainty that the proposed improvements will result in compliance with the CDO.¹

Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. A multiplier between between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation. The City of Ione was assigned a multiplier value of **1.2**. The concept of "cleanup" does not apply to this case; it is more applicable in the case of a sewage spill. Therefore, Water Board staff reviewed the City's cooperation in returning to compliance with the WDRs. If the City's conduct since 2000 was taken into account, then the multiplier would have been higher. However, when only viewing the City's cooperation since issuance of the 2011 CDO, the multiplier value of 1.2 is appropriate. This is because the City submitted a generally-acceptable *Seepage Discharge Compliance Plan* but then changed course and submitted an incomplete and inadequate Report of Waste Discharge. However, the new City Manager has recently met with Board staff

¹ Further information is found in Water Board staff's *Review of Report of Waste Discharge* dated 21 August 2012, which is Attachment D of the ACL Complaint.

and pledged to submit a complete Report of Waste Discharge by the end of September.

History of Violation

When there is a history of repeat violations, the Enforcement Policy requires a minimum multiplier of 1.1 to be used. As described in the Findings of the ACL Complaint, the Discharger has a long history of violations of its WDRs, the 2003 CDO, and the 2011 CDO. If this Complaint were to consider the City's violations since 2000, then a large multiplier would be appropriate. However, because only violations of the 2011 CDO are considered, the multiplier factor is assessed at **1.2**. As stated above, the City failed to submit a complete Report of Waste Discharge by the 30 May 2012 date in the CDO, and as of the issuance of this Complaint, has yet to do so. The continued failure to submit a complete RWD jeopardizes the City's ability to fund the as-yet-unknown project, and jeopardizes the City's ability to meet the CDO's 30 October 2013 date for full compliance.

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 3.

Total Base Liability Amount: This value is calculated as the Initial Liability Amount (\$66,000) x Adjustment Factors (1.3) (1.2) (1.2) and is equal to \$123,552.

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 ability to pay was determined using the model MUNIPAY, developed by U.S. EPA to analyze municipal government financial conditions.² In environmental enforcement cases, the Discharger may claim an inability to afford compliance costs, and/or a penalty. The ABEL model has long been available to evaluate the financial health of corporations, and the more recently developed INDIPAY model evaluates individuals' finances. The MUNIPAY model provides the analogous role in evaluating the economic and financial condition of municipalities. This includes cities, towns, and villages of any size, and even independent and publicly-owned utilities (e.g., regional wastewater treatment plants). The MUNIPAY analysis presents a comprehensive summary of an applicant's financial condition and quantifies the entity's ability to pay a penalty and finance compliance actions.

The ability to pay analysis involves calculations for the amount of currently available funds and then, if necessary, the amount of funds available through financing. The currently available funds calculation looks for any excess monies in the municipality's "General Fund" balance and, if applicable to the case, its "Enterprise Fund" working capital balance. If currently available funds are not sufficient to pay for the environmental expenditures, the ability to pay analysis then assesses the municipality's current debt burden and its ability to take on additional debt to finance the environmental expenditures. Both sets of calculations have a

² MUNIPAY, Version 3.9, was developed under the direction of Jonathan Libber, BEN/ABEL Coordinator, Office of Enforcement and Compliance Assurance, U.S. EPA. Technical assistance provided to EPA by Industrial Economics, Incorporated (IEc), Cambridge, MA. <http://www.epa.gov/compliance/civil/econmodels/>

solid grounding in the academic and professional literature of fiscal management and public finance.

The MUNIPAY analysis indicates that the City of Ione can afford a civil liability of at least \$150,000. This conclusion is based on the amount of net current assets and the absence of any appreciable debt load in the Wastewater Enterprise Fund. The net current assets were \$758,980 as of the fiscal year ending June 30, 2010, the last financial statement available.³

Ione's 7,400 residents currently pay a monthly rate of \$40.70 for wastewater service. These fees are below the average wastewater fee in Amador County of \$61/month and are comparable to the statewide average of fee of \$30 per month for facilities that serve a population of 1,000 to 9,999 residents⁴.

Step 7 – Other Factors as Justice May Require

If the Central Valley Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require," but only if express findings are made to justify this.

Costs of Investigation and Enforcement Adjustment

The costs of investigation and enforcement are to be considered as "other factors as justice may require" under the Enforcement Policy, and should be added to the liability amount. Over the past year, staff of the Central Valley Water Board has spent over 135 hours associated with the compliance with the 2011 CDO and preparation of this enforcement action. The State Water Board Office of Enforcement has directed that all regions are to use a value of \$150 per hour for staff costs. For this case, staff time through preparation of the Complaint is \$20,000. The Enforcement Policy recommends that staff costs be added to the liability amount.

Step 8 – Economic Benefit

The Porter-Cologne Act requires that certain civil liabilities be set at a level that accounts for any "economic benefit or savings" violators gained through their violations. To establish the amount of civil liabilities, the Office of Enforcement uses a "Penalty Calculation Methodology" that addresses the economic benefit of noncompliance.⁵

The U.S. Environmental Protection Agency developed the BEN computer model to calculate the economic benefit a discharger derives from delaying and/or avoiding compliance with

³ City of Ione Financial Statements, June 30, 2010, page 17. Total current assets were \$854,748 and total current liabilities were \$95,768.

⁴ Data taken from the Wastewater User Charge Survey Report, F.Y. 2007-2008, published May 2008 by State Water Resources Control Board (www.waterboards.ca.gov/publications_forms/publications/general/).

⁵ Water Quality Enforcement Policy, Office of Enforcement, State Water Resources Control Board, November 17, 2009, Page 9.

environmental regulations.⁶ The BEN model was used in calculating the economic benefit derived by NBRID of not complying with existing environmental regulations and requirements.

Economic benefit represents the financial gains that a violator accrues by delaying and/or avoiding expenditures to meet mandated pollution control requirements. Funds not spent on environmental compliance are available for other profit-making activities or, alternatively, a defendant avoids the costs associated with obtaining additional funds for environmental compliance. Economic benefit represents the amount by which a defendant is financially better off from not having complied with environmental requirements in the specified timeframe. The appropriate economic benefit calculation should represent the amount of money that would make the violator indifferent between compliance and noncompliance. If the civil penalty does not recover at least this economic benefit, then the violator will retain an economic gain and have no financial incentive to comply. Because of the precedent of this retained gain, other regulated companies may see an economic advantage in similar noncompliance, and the penalty will fail to deter potential violators. Economic benefit does not represent compensation to the enforcement agency as in a typical "damages" calculation for a tort case, but instead is the minimum amount by which the violator must be penalized so as to return it to the financial position it would have been in had it complied on time.

The BEN model calculated an economic benefit of at least \$394 for not submitting the Report of Waste Discharge on time. This is based on the assumption that the cost of preparing the report is \$50,000, a noncompliance date of 30 May 2012, a compliance date of 3 September 2012, and a penalty payment date of 1 January 2013. The standard conditions and assumptions specified in BEN were employed in the analysis.

The Enforcement Policy states (p. 21) that the total liability shall be at least 10% higher than the economic benefit, "so that liabilities are not construed as the cost of doing business and the assessed liability provides a meaningful deterrent to future violations." For this case, this would result in a minimum liability of at least \$440.

Final adjusted liability

After adding staff costs, the final adjusted liability amount is \$143,552. This is greater than the assumed economic benefit plus 10%, and higher than the minimum liability set by Water Code section 13350.

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts for discharge violation must be determined for comparison to the amounts being proposed. These values are calculated in the ACL Complaint, and the values are repeated here.

Maximum Liability Amount: \$330,000 (per Water Code section 13350)

Minimum Liability Amount: \$6,600 (per Water Code section 13350).

⁶ BEN Version 4.6.0 was developed under the direction of Jonathan Libber, BEN/ABEL Coordinator, Office of Enforcement and Compliance Assurance, U.S. EPA. Technical assistance provided to EPA by Industrial Economics, Incorporated (IEc), Cambridge, MA. <http://www.epa.gov/compliance/civil/econmodels/>

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 violation, calculation of economic benefits, and additional staff time, the proposed Administrative Civil Liability is **\$143,552**.