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).

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- 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 <u>monthly measurements</u> 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 <u>Facility Guidance Document</u> 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 <u>Final Wastewater Master Plan</u>. 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 <u>Report of Waste Discharge</u> 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 <u>Quarterly Compliance Status Report</u>. 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 **15**th 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

ALO/JSK/WSW: 11-Jul-03