

CALIFORNIA REGIONAL WATER QUALITY CONTROL REGIONAL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2002-0224

WASTE DISCHARGE REQUIREMENTS

FOR  
AMADOR CITY  
WASTEWATER TREATMENT AND EXPORT SYSTEM  
AMADOR COUNTY

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

1. On 12 June 2002, Amador City (hereafter Discharger) submitted a Report of Waste Discharge (RWD) for a wastewater treatment facility to treat and transport domestic wastewater generated by Amador City. Additional information was received from the Discharger on 18 July 2002 and 29 October 2002.
2. For the purposes of this Order, the wastewater treatment facility (WWTF) shall mean the wastewater collection system, treatment plant, equalization basin, effluent pump station, and effluent export system. The site is shown on Attachment A, which is attached hereto and made part of this Order by reference.
3. The treatment plant is adjacent to State Highway 49, Amador City, in Section 36, T7N, R10E MDB&M. The site plan is shown on Attachment B, which is attached hereto and made part of this Order by reference.
4. The collection system, wastewater treatment plant (on Assessor's Parcel Number 008-260-002), and effluent export system are owned and operated by the Discharger.
5. Order No. 83-021, adopted by the Regional Board on 28 January 1983, prescribes requirements for the Amador City WWTF. This Order is neither adequate nor consistent with the current plans and policies of the Board.

**Existing Wastewater Facility**

6. The wastewater treatment plant receives domestic wastewater from approximately 82 residential connections. The RWD shows that the average dry weather flow is approximately 24,000 gallons per day (gpd).
7. Wastewater treatment processes include an influent bar screen, followed by aeration and clarification in a 4-6 inch thick concrete lined equalization basin. The total storage capacity of the equalization basin, with two feet of freeboard, is approximately 335,000 gallons.
8. The effluent is exported to the City of Sutter Creek's wastewater treatment plant via an effluent pump station. The pump station consists of two 10 horsepower pumps and a four inch force main. The RWD states that the force main is rated at 150 gpm; however, the actual discharge rate for each pump is approximately 47 gpm or 68,000 gpd. The maximum capacity of the force main

line between Amador City and the City of Sutter Creek is approximately 125,000 gpd. The force main may be drained to the equalization basin for maintenance purposes. A complete drain of the force main is approximately 7,000 gallons.

9. The effluent pump station's pumps and aerator are controlled by an automatic timer. The aeration unit is shut off approximately two hours before pumping is initiated in order to allow for solid separation. Wastewater is generally transferred during the evening and other low flow periods to the City of Sutter Creek's wastewater treatment plant.
10. The Discharger and the City of Sutter Creek have a contract that allows up to 39,000 gpd of domestic wastewater to be discharged to the City of Sutter Creek's wastewater treatment plant. The contract does not require that the wastewater be treated to a certain standard before it is transferred. However, during the wet season, the City of Sutter Creek has periodically requested that the Discharger delay the transfer of wastewater for a day due to hydraulic loadings concerns.
11. The City of Sutter Creek treats the wastewater from both cities to secondary standards and then discharges it to the Amador Regional Outfall System for disposal to grazing land or the Castle Oaks Golf Course. The City of Sutter Creek is regulated under Waste Discharge Requirements Order No. 94-152; the Amador Regional Outfall System is regulated under Water Reclamation Requirements Order No. 93-240.
12. On 13 June 2002, the Discharger collected a sample of the wastewater effluent discharged from the the equalization basin. The sample data from the monitoring event is presented below.

<u>Constituent</u>	<u>Units</u>	<u>Sample Concentration</u>
PH	S.U.	7.8
Total Dissolved Solids	mg/l	322
Total Kjeldahl Nitrogen	mg/l	39
Nitrogen, Ammonia-N	Mg/l	29
BOD <sub>5</sub>	mg/l	38
Total Coliform Organisms	MPN/100 ml	>2400

13. The treatment plant is not equipped with emergency electrical generators capable of powering the treatment plant equipment or the effluent pump station. In addition, the facility is not equipped with remote communication equipment (i.e. auto dialers) for notifying the operations staff of potential equipment failures or problems. The treatment plant is generally inspected daily during the business week for a short period of time but is left unattended for the majority of the day and on weekends.
14. The RWD indicates that the Discharger operates the equalization basin to provide sufficient storage capacity to accommodate seven days of wet weather flow. In order to ensure sufficient storage capacity is maintained in the equalization basin, the Discharger will operate the basin such that at the end of each pumping cycle, the water level will be at or below seven feet of freeboard. This amount of freeboard provides storage for approximately 335,000 gallons of wastewater. The Discharger believes that there is no need for an emergency generator or alarm

system because the equalization basin has never overflowed to date and the basin will be operated to provide several days of storage. A loss of power will prevent the transfer of wastewater and will prevent the aeration unit from operating. The storage of wastewater without aeration can create nuisance odors. The timely response to power failures and the prompt repair of equipment is necessary to prevent the loss of control of waste and to prevent nuisance conditions. The Discharger will contract with a local rental agency or utility for an electrical generator to provide backup power in the event of an emergency.

15. Sludge deposited in the equalization basin is periodically pumped to a concrete lined sludge drying bed adjacent to the equalization basin. The WWTF's Operation and Maintenance Manual states that sludge should be removed from the equalization basin when it reaches a depth of one foot. Leachate from the sludge drying bed is returned to the basin. The dried sludge is shipped offsite to a local landfill for disposal.
16. Trucked or hauled waste (i.e., from septic tanks or industries) may contain excessive solids that can exceed the Discharger's wastewater systems capabilities and may cause pump failures, line blockage or other system problems. In addition, trucked wastes may contain industrial waste that is harmful or toxic to the biological portion of the City of Sutter Creek's wastewater treatment plant. The Discharger's contract with the City of Sutter Creek prohibits the discharge of industrial waste. Therefore, it is necessary to prohibit both the discharge of trucked waste and industrial waste to the WWTF.

### **Sanitary Sewer System**

17. The collection system consists of approximately 10,000 feet of six inch gravity sewer lines, which were installed in the mid 1970's. The sewer lines make three stream crossings of Amador Creek; at this point, the lines are elevated above the 100-year flood level. The RWD states that the last sewer line segment prior to the equalization basin has a maximum capacity of approximately 224 gpm.
18. On 4 February 1998, a broken sewer line at the Amador Creek crossing spilled raw sewage into the creek. The Discharger repaired the sewer line and improved the support structures for the sewer line. The sewer line is exposed to the elements and may still be damaged, including by vandalism, which would result in raw sewage discharged to the creek. Therefore, routine inspection of the sewer lines at each creek crossing is appropriate.
19. The RWD states that the maximum volume of wastewater entering the system was approximately 53,000 gpd, which occurred in January 1997. The high peak flow observed during the wet season is over twice the volume of the average dry weather flows and is an indication of potential inflow and infiltration (I&I) problems within the collection system.
20. The Discharger's sanitary sewer system collects wastewater using sewers, pipes, pumps, and/or other conveyance systems and directs this raw sewage to the wastewater treatment plant. A "sanitary sewer overflow" is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the wastewater treatment plant. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered sanitary sewer

overflows, provided that the waste is fully contained within these temporary storage/conveyance facilities.

21. Sanitary sewer overflows consist of varying mixtures of domestic sewage, industrial wastewater, and commercial wastewater; this mixture depends on the pattern of land use in the sewage collection system tributary to the overflow. The chief causes of sanitary sewer overflows include grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and contractor caused blockages.
22. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants. Sanitary sewer overflows can cause temporary exceedences of applicable water quality objectives, pose a threat to public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters in the area.
23. The Discharger is expected to take all necessary steps to adequately maintain, operate, and prevent discharges from its sanitary sewer collection system. This Order requires the Discharger to prepare and implement a Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Response Plan.

#### **Site-Specific Conditions**

24. All portions of the treatment plant are outside the 100-year flood zone.
25. The mean annual rainfall, based on data from Electra Power House CIMIS weather station, is 28 inches per year.
26. The facility lies within the Middle Sierra Hydrologic Unit Area No. 532.40, as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

#### **Groundwater Degradation**

27. State Water Resources Control Regional Board (State Board) Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation Policy") requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives).
28. This wastewater treatment facility provides treatment and control of the discharge that incorporates:
  - a. A concrete lined equalization basin;
  - b. A lined sludge drying bed with and leachate returned to the equalization basin;
  - c. An operation and maintenance (O&M) manual; and

- d. Staffing to assure proper operation and maintenance.
29. The Regional Board has considered anti-degradation pursuant to State Board Resolution No. 68-16 and finds that degradation of groundwater by this discharge is not consistent with maximum benefit to the people of the State. The effluent and groundwater limits prescribed herein are intended to ensure that the groundwater is not being degraded. The facility treats and stores wastewater in a concrete lined equalization basin which will sufficiently inhibit the migration of domestic waste to the underlying groundwater provided it is adequately maintained and operated. Sludge is dried in a lined drying bed and hauled offsite for disposal at the local landfill. Effluent produced from the equalization basin is exported and is not discharged by the Discharger and therefore will not degrade the groundwater underlying the WWTF provided the integrity of the concrete liner is not compromised. However, the equalization basin cannot be routinely drained and removed from service to inspect the integrity of the liner. Furthermore, the equalization basin is situated on a small bluff immediately adjacent to Amador Creek and surface topography slopes steeply towards the creek. The soil is generally shallow overlying bedrock. The U. S. Department of Agriculture's *Soil Survey, Amador Area* classifies the soil as very rocky silt loam. Wastewater from liner leakage may migrate to the creek with little attenuation of the waste within the soil profile. Therefore, groundwater monitoring around the basin is appropriate for detection of liner failure.

### **Basin Plan, Beneficial Uses, and Regulatory Considerations**

30. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
31. Surface water drainage is to Amador Creek, tributary to Dry Creek, which is in turn tributary to the Sacramento-San Joaquin Delta.
32. The beneficial uses of Sacramento-San Joaquin Delta are municipal and domestic supply; agricultural irrigation and stock watering; industrial process and service supply; contact and other noncontact recreation; warm and cold freshwater habitat; migration for warm and cold water species; warm water spawning; wildlife habitat; and navigation.
33. The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
34. The State Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. Amador City's WWTF is designed to drain all runoff to the plant headworks. Because there is no storm water discharge from the industrial portion of the facility, the Discharger is not required to obtain coverage under General Permit No. CAS000001.

35. The action to revise waste discharge requirements for this facility is exempt with provisions of the California Environmental Quality Act in accordance with Section 15101(I)(d), Title 14, California Administrative Code.
36. Section 13267(b) of the California Water Code provides that: *“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, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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”*.

The technical reports required by this Order and the attached “Monitoring and Reporting Program No. R5-2002-0224” are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

37. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to CWC Section 13801, apply to all monitoring wells.
38. State regulations that prescribe procedures for detecting and characterizing the impact of waste constituents from waste management units on groundwater are found in Title 27. While the wastewater treatment facility is exempt from Title 27, the data analysis methods of Title 27 are appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order if monitoring should become necessary.
39. The discharge authorized herein and the treatment and storage facilities associated with the discharge, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, California Code of Regulations (CCR), Section 20005 et seq. (hereafter Title 27). The exemption, pursuant to Section 20090(a) of Title 27, is based on the following:
  - a. The waste consists primarily of domestic sewage and treated effluent;
  - b. The waste discharge requirements are consistent with water quality objectives; and
  - c. The treatment and storage facilities described herein are associated with a municipal wastewater treatment plant.
40. Pursuant to California Water Code Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

### Public Notice

41. All the above and the supplemental information and details in the attached Information Sheet, incorporated by reference herein, were considered in establishing the following conditions of discharge.
42. The Discharger and interested agencies and persons were notified of the intent to prescribe WDRs for this discharge and provided an opportunity for a public hearing and provided an opportunity to submit their written views and recommendations.
43. In a public meeting, all comments pertaining to the discharge were heard and considered.

**IT IS HEREBY ORDERED** that, pursuant to Sections 13263 and 13267 of the California Water Code, Order No. 83-021 is rescinded and Amador City, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

*[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]*

#### **A. Discharge Prohibitions**

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited.
3. Discharge of sewage from a sanitary sewer system at any point upstream of a wastewater treatment plant is prohibited. Discharge of treated wastewater downstream of the treatment plant, other than to the City of Sutter Creek's wastewater system, is prohibited.
4. Discharge of waste classified as 'hazardous' under Section 2521, Chapter 15 of Title 23 or 'designated', as defined in Section 13173 of California Water Code is prohibited.
5. The discharge of any wastewater other than that from domestic sources or domestic equivalent is prohibited, including trucked or hauled wastes (except for sewage captured during a collection system spill).

#### **B. Discharge Specifications**

1. The monthly average flow shall not exceed 50,000 gpd.
2. Wastewater treatment and use of recycled water shall not cause pollution or a nuisance as defined by Section 13050 of the California Water Code (CWC).

3. Public contact with wastewater shall be precluded or controlled through such means as fences and signs, or acceptable alternatives.
4. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.
5. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the property owned by the Discharger.
6. As a means of discerning compliance with Discharge Specification No. 5, the dissolved oxygen content in the upper one foot of the equalization basin shall not be less than 1.0 mg/l.
7. All treatment and storage areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
8. The wastewater equalization basin shall be managed to prevent breeding of mosquitoes. In particular, dead algae, vegetation, and debris shall not accumulate on the water surface.
9. The facility shall have sufficient treatment, storage, and disposal capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the winter months. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
10. Freeboard in the equalization basin shall never be less than two feet as measured from the water surface to the lowest point of overflow.
11. The amount of available storage capacity in the equalization basin shall be sufficient to contain seven days of peak wet weather flow.
12. As a means of discerning compliance with Discharge Specification No. 11, the Discharger shall manage the level of freeboard in the equalization basin by maintaining the amount of available freeboard in the equalization basin at seven feet after each pumping cycle.
13. The Discharger shall implement the O&M manual for the WWTF as contained in the RWD.
14. No stored wastewater or effluent shall have a pH less than 6.5 or greater than 9.0.

### **C. General Solids Disposal Specifications**

Sludge, as used in this document, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers to sludge that has been treated and



tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.

1. Sludge and solid waste shall be removed from screens, sumps, ponds, and clarifiers as needed to ensure optimal plant operation.
2. Treatment and storage of sludge generated by the WWTF shall be confined to the WWTF property, and shall be conducted in a manner that precludes infiltration of waste constituents into soils in a mass or at concentrations that will violate the Groundwater Limitations of this Order.
3. Any storage of residual sludge, solid waste, and biosolids at the WWTF shall be temporary, and the waste shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or at concentrations that will violate the Groundwater Limitations of this Order.
4. Residual sludge, biosolids, and solid waste shall be disposed of in a manner approved by the Executive Officer and consistent with Title 27. Removal for further treatment, disposal, or reuse at disposal sites (i.e., landfills, WWTPs, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification.

#### **D. Groundwater Limitations**

The discharge, in combination with other site derived sources, shall not cause underlying groundwater to contain waste constituents in concentration statistically greater than background water quality.

#### **E. Provisions**

1. All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code and shall be prepared as described by Provision E. 2.
  - a. By **11 April 2003**, the Discharger shall submit a *Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Response Plan* (SSS Plan) that describes the actions designed to prevent, or minimize, the potential for sanitary sewer overflows. The Discharger shall maintain the SSS Plan in an up-to-date condition and shall amend the SSS Plan whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sanitary sewer system or sewer facilities) that materially affects the potential for sanitary sewer overflows, or whenever there is a sanitary sewer overflow. The Discharger shall ensure that the up-to-date SSS Plan is readily available to sewer system personnel at all times and that sewer system personnel are familiar with it.

- i. At a minimum, the Operation and Maintenance portion of the plan shall show that the Discharger has the ability to properly manage, operate and maintain, at all times, all parts of the collection system that the Discharger owns or over which the Discharger has operational control and shall contain the following:
  1. Detailed maps of the sanitary sewer system, identifying sewer mains, manholes, and lift stations;
  2. A detailed listing of elements to be inspected, a description of inspection procedures and inspection frequency, and sample inspection forms;
  3. A schedule for routine inspection and testing of all pipelines, lift stations, valves, and other key system components. The inspection/testing program shall be designed to reveal problems that might lead to accidental spills and ensure that preventive maintenance is completed;
  4. Provisions for repair or replacement of old, worn out, or defective equipment;
  5. Provisions to minimize the need for manual operation of critical systems and provide spill alarms or other “fail safe” mechanisms;
  6. The ability to provide adequate capacity to convey base flows and peak flows for all parts of the collection system the Discharger owns or over which the Discharger has operational control.
- ii. At a minimum, the Overflow Prevention and Response Plan shall describe how the Discharger will take all feasible steps to stop and/or mitigate the impact of sanitary sewer overflows in portions of the collection system the Discharger owns or over which the Discharger has operational control and shall contain the following:
  1. Identification of areas of the collection system that historically have overflowed and an evaluation of the cause of the overflow;
  2. Maintenance activities that can be implemented to address the cause of the overflow and means to prevent future overflows. Maintenance activities may include pretreatment of wastewater from commercial dischargers who discharge high concentrations of oil and grease in their wastewater;
  3. Procedures for responding to sanitary sewer overflows designed to minimize the volume of sewer overflow that enters surface waters, and minimize the adverse effects of sewer overflows on water quality and beneficial uses;
  4. Steps to be taken when an overflow or spill occurs, and procedures that will be implemented to ensure that all overflows and spills are properly identified, responded to and reported; and
  5. A public notification plan, in which any posting of areas contaminated with sewage is performed at the direction of the Amador County Environmental Health Department. All parties with a reasonable potential for exposure to an overflow event shall be notified.

- b. By **28 May 2003**, the Discharger shall submit a workplan for characterization of groundwater quality. The workplan shall describe the installation of wells or other similar monitoring devices to allow evaluation of the groundwater quality upgradient and downgradient of the equalization basin. Every monitoring well shall be constructed to yield representative samples from the uppermost layer of the uppermost aquifer and to comply with applicable well standards. The workplan shall be consistent with, and include the items listed in, the first section of Attachment C, *“Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results.”*
    - c. By **30 September 2003**, the Discharger shall submit a groundwater well installation report prepared by a Registered Geologist. The report shall be consistent with, and include the items listed in, the second section of Attachment C.
2. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
3. The Discharger shall comply with the Monitoring and Reporting Program No. R5-2002-0224, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
4. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
5. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with discharge limits specified in this order.
6. The Discharger shall provide certified wastewater treatment plant operators in accordance with Title 23 of the California Code of Regulations, Division 3, Chapter 26.
7. As described in the Standard Provisions, the Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the discharge.
8. Upon the reduction, loss, or failure of the sanitary sewer system resulting in a sanitary sewer overflow, the Discharger shall take any necessary remedial action to (a) control or limit the volume of sewage discharged, (b) terminate the sewage discharge as rapidly as possible, and (c) recover as much as possible of the sewage discharged (including wash down water) for proper disposal. The Discharger shall implement all applicable remedial actions including,

but not limited to, the following:

- a. Interception and rerouting of sewage flows around the sewage line failure;
  - b. Vacuum truck recovery of sanitary sewer overflows and wash down water;
  - c. Use of portable aerators where complete recovery of the sanitary sewer overflows are not practicable and where severe oxygen depletion is expected in surface waters; and
  - d. Cleanup of sewage-related debris at the overflow site.
10. The Discharger shall report to the Regional Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
  11. The Discharger shall not allow pollutant-free wastewater to be discharged into the wastewater collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.
  12. The Discharger shall submit to the Regional Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharge shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board in writing when it returns to compliance with the time schedule.
  13. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
  14. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or recession of this Order.
  15. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
  16. The Regional Board will review this Order periodically and will revise requirements when necessary.

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2002-0224  
AMADOR CITY  
WASTEWATER TREATMENT AND EXPORT SYSTEM  
AMADOR COUNTY

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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 Regional Board, Central Valley Region, on 6 December 2002.

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THOMAS R.PINKOS, Executive Officer

ASB:12/6/02

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2002-0224

FOR  
AMADOR CITY  
WASTEWATER TREATMENT AND EXPORT SYSTEM  
AMADOR COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring domestic wastewater, treated effluent, and the equalization basin. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. Regional Board staff shall approve specific sample station locations prior to implementation of sampling activities.

All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to test pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

**COLLECTION SYSTEM AND FORCE MAIN LINE MONITORING**

The Discharger shall monitor the collection system at the three creek crossings on a weekly basis during non-rain periods and daily basis (Monday through Friday) during heavy rain events for damage to the sewer line or supporting structures. In addition, the Discharger shall monitor the force main line and associated air relief valves on a monthly basis. If the pressure meter at the pump station shows a significant loss in pressure within the force main line, then the Discharger shall conduct an inspection of the force main line. This information shall be submitted in the monthly reports.

**INFLUENT MONITORING**

Influent flow monitoring shall be performed at the headworks after the bar screen. Influent monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Influent Flow	gpd	Meter	Continuously	Monthly
Monthly Average Daily Flow	gpd	Calculated	Monthly	Monthly

<sup>1</sup> 5-day Biochemical Oxygen Demand

### EQUALIZATION BASIN MONITORING

The equalization basin shall be sampled for the parameters specified below:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Dissolved Oxygen <sup>1</sup>	mg/l	Grab	Daily <sup>2</sup>	Monthly
Freeboard	0.1 feet	Measurement	Daily <sup>2</sup>	Monthly
Odors	--	Observation	Daily <sup>2</sup>	Monthly
Levee condition <sup>3</sup>	--	Observation	Daily <sup>2</sup>	Monthly

- 1 Samples shall be collected at a depth of one foot, opposite the inlet. Samples shall be collected between 0700 and 0900 hours.
- 2 Inspections for freeboard measurements and odors shall be performed daily during the normal business week (i.e. Monday through Friday).
- 3 Equalization Basin containment levees shall be observed for signs of seepage or surfacing water along the exterior toe of the levees. If surfacing water is found, then the Discharger shall propose a method to determine the source of the surfacing water.

### EFFLUENT MONITORING

Effluent samples shall be collected before discharge to the effluent force main and shall be representative of the volume and nature of the discharge. Effluent monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Effluent Flow	gpd	Meter	Continuously	Monthly
BOD <sup>1</sup>	mg/l	Grab	Monthly	Monthly
Total Dissolved Solids	mg/l	Grab	Monthly	Monthly
pH	Standard units	Grab	Monthly	Monthly

<sup>1</sup> 5-day Biochemical Oxygen Demand

<sup>2</sup> Standard Minerals shall include, at a minimum, the following elements/compounds: Barium, Calcium, Magnesium, Potassium, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

### GROUNDWATER MONITORING

Beginning with the third quarter 2003, the Discharger shall conduct the following groundwater monitoring program. Prior to construction and/or sampling of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Board for review and approval. Once installed, all new wells shall be added to the MRP and shall be sampled and analyzed according to the schedule below.

Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged at least three well volumes until temperature, pH and electrical conductivity have stabilized. Depth to

groundwater shall be measured to the nearest 0.01 feet. Samples shall be collected using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling and Reporting Frequency</u>
Depth to Groundwater	0.01 feet	Measurement	Quarterly
Groundwater Elevation <sup>1</sup>	0.01 feet	Calculated	Quarterly
Gradient	feet/feet	Calculated	Quarterly
Gradient Direction	degrees	Calculated	Quarterly
Total Dissolved Solids	mg/l	Grab	Quarterly
Nitrate as Nitrogen	mg/l	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/l	Grab	Quarterly
pH	pH units	Grab	Quarterly
Total Coliform Organisms	MPN/100 ml	Grab	Quarterly

<sup>1</sup> Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.

### WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following:

<u>Constituents</u>	<u>Units</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	Annually
Electrical Conductivity (EC) <sup>1</sup>	µmhos/cm	Annually
pH	pH units	Annually
Standard Minerals <sup>2</sup>	mg/l	Annually

<sup>1</sup> If the source water is from more than one well, the EC shall be reported as a weighted average and include copies of supporting calculations.

<sup>2</sup> Standard Minerals shall include, at a minimum, the following elements/compounds: Barium, Calcium, Magnesium, Sodium, Potassium, Chloride, Nitrate, Sulfate, Total Alkalinity (including alkalinity series), and Hardness.

### REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, equalization basin, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Board.



### A. Monthly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in monthly monitoring reports. Monthly reports shall be submitted to the Regional Board on the **1<sup>st</sup> day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

1. Results of collection system, influent, effluent, and equalization basin monitoring;
2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
3. If requested by staff, copies of laboratory analytical report(s); and
4. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

### B. Quarterly Monitoring Reports

The Discharger shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Regional Board by the **1<sup>st</sup> day of the second month after the quarter** (i.e. the January-March quarterly report is due by May 1<sup>st</sup>) and may be combined with the monthly report. The Quarterly Report shall include the following:

1. Results of groundwater monitoring;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
6. Summary data tables of historical and current water table elevations and analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum; and
8. Copies of laboratory analytical report(s) for groundwater monitoring.

**C. Annual Report**

An Annual Report shall be prepared as the fourth quarter monitoring report. The Annual Report will include all monitoring data required in the monthly/quarterly schedule. The Annual Report shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. If requested by staff, tabular and graphical summaries of all data collected during the year;
2. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;
3. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
4. A copy of the certification for each certified wastewater treatment plant operator working at the facility and a statement about whether the Discharger is in compliance with Title 23, CCR, Division 3, Chapter 26.
5. Summary of information on the disposal of sludge and/or solid waste;
6. The results from annual monitoring of the water supply;
7. The results from any sludge monitoring required by the disposal facility;
8. If the Discharger has made revisions to the O&M manual for the WWTF, then a copy of the updated O&M manual; and
9. A forecast of influent flows, as described in Standard Provision No. E4.

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by:

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THOMAS PINKOS, Executive Officer

\_\_\_\_\_  
6 December 2002

(Date)