# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

#### ORDER NO. R5-2002-0144

# WASTE DISCHARGE REQUIREMENTS

#### FOR

# JOHNSVILLE PUBLIC UTILITY DISTRICT JOHNSVILLE WATER TREATMENT PLANT PLUMAS COUNTY

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

- 1. The Johnsville Public Utility District (hereafter Discharger) owns and operates a water treatment Plant (Plant) at 5267 Main Street, Johnsville, in Plumas County. The Plant is in Section 24, T22N, R11E, MDB&M, as shown on Attachment A, a part of this Order. The property is owned by the Discharger (AP No. 006-032-06). A schematic process flow diagram of the water treatment operations is shown in Attachment B, a part of this order.
- On 20 June 1997, the Regional Board adopted Order No. 97-108 (NPDES No. CA0084158) which prescribes requirements for backwash water discharge to Jamison Creek, at a location approximately 500 feet northeast of the Plant.
- 3. In a letter dated 15 April 2002, the Discharger requested recission of Order No. 97-108, and elimination of coverage under the NPDES program. According to the Discharger, no wastewater (backwash water or finished water overflow) reaches Jamison Creek or any surface water or surface water drainage course. Observations and site analysis by Regional Board staff are consistent with the Discharger's assertion.
- 4. Present waste discharge requirements established by Order No. 97-108 are neither adequate nor consistent with the plans and policies of the Regional Board, nor is the NPDES permit applicable due to the absence of surface water discharge. The purpose of this Order is to: 1) rescind Order No. 97-108, 2) eliminate coverage of the discharge under the NPDES program, 3) and provide coverage of the discharge under waste disposal to land requirements.
- 5. The Plant serves 52 users, all individual homes with the exception of one restaurant and the Plumas Eureka State Park. The Park consists of a visitor center, office, and five cabins. Average population served by the Plant is 35. All connections are un-metered. Maximum population served is currently 100, with the potential for a total of 71 connections (19 future connections in addition to current connections). Maximum daily water production is approximately 100,000 gallons.
- 6. The community is seasonal/recreational, with minimal occupation during the winter.

- 7. Raw water supply consists of springs, known as Upper Springs and Bennett Springs. The springs are approximately three miles southwest of the Plant and approximately 500 to 600 feet higher in elevation. Upper Springs has two collection boxes, one at each of two different locations; each box has approximately 500-gallons of capacity. The remaining source, Bennett Springs, is provided with a small reservoir. There is also a collection gallery at Bennett Springs that discharges to the reservoir.
- 8. The water treatment process consists of coagulant addition, a dual media clarifier, three filters (anthracite and graded sand) and a chlorination system. Due to the elevation difference between the source water and the treatment facilities, the Plant has been designed to operate by gravity. The water supply head is used to drive the raw water through the filter. Post filtration, the finished water flows under pressure to one of two 88,000-gallon redwood clear wells approximately 85 feet higher than the Plant. There is then sufficient head difference between the clear wells and the filters for filter backwash water supply.
- 9. Coagulant polymer is added to the raw water prior to clarification. The polymer currently used is primarily Clarifloc C-2015, dosed at 0.5 to 0.7 ppm in the summer and 0.8 to 1.7 ppm in the winter.
- 10. Each filter has a capacity of approximately 37 gallons per minute (surface area of 12.5 square feet and a maximum surface loading of 3.0 gallons per square foot per minute). Turbidity of influent and effluent is continuously monitored.
- 11. After filtration, water is chlorinated and discharged to the clear wells. The chlorine system consists of 150-pound cylinders and a chlorine gas injection unit. Because the finished water line is under high pressure, a booster pump is necessary to inject the chlorine solution into the filtered water discharge line. Chlorine concentration in the distribution system must be maintained at 0.2 to 0.5 mg/L at the first connection to the users.
- 12. Clear wells for finished water storage are located to the west of the Plant. From the clear well, the water is distributed to the users. Overflow from the clear wells is discharged to an overflow pond that was formerly used for finished water storage. During the winter, the Discharger continuously treats raw water at a low flow to prevent freezing of the system piping. Therefore there is a continuous overflow from the clear wells during the winter. However, the Discharger states that the overflow pond does not discharge to land or any surface water or drainage course.
- 13. Backwash of a filter is initiated manually when head loss becomes excessive. Backwashes can also be initiated automatically based upon effluent turbidity, and by timer. Total backwash flow is approximately 2,200 gallons over 11 minutes. During times of heavy rainfall the source water becomes very turbid, necessitating more frequent

backwashes. If the influent turbidity is too high, treatment is sometimes stopped, and finished water stored in the clear wells is utilized to maintain water supply.

- 14. The Discharger indicates that during the summer, a maximum of 2 backwashes per filter per week are performed (13,200 gallons of backwash water total per week for all three filters, or approximately 52,800 gallons per month), and during the winter a maximum of 1 backwash of the filters is performed per week (6,600 gallons of backwash water total per week for all three filters, or approximately 26,400 gallons per month).
- 15. Backwash water is discharged first to a 2,000-gallon rectangular settling tank, and then to a settling pond (approximately 15 ft wide by 30 ft long by 4 ft deep). Some of the backwash water percolates through the settling pond bottom and sides, and some overflows the pond and is discharged to a swale 240 ft to the north of the Plant. Jamison Creek is approximately 300 ft to the east of this swale. The Discharger indicates that there will be no backwashes performed during storm events, to prevent the discharge of any backwash water or backwash solids to Jamison Creek.
- 16. According to the Plant operator, there is approximately one foot of sludge in the bottom of the settling tank, and a few inches of solids in the bottom of the settling pond. The Discharger expects to remove solids from the settling tank within the next few years.
- 17. An inspection by Regional Board staff on 12 October 2001 revealed that the backwash water discharge from the Plant should not reach Jamison Creek if the Plant is properly operated.
- 18. The mean annual precipitation in the area, based on data from Department of Water Resources Station # A50 6998 00 (Plumas Eureka State Park), is 67 inches. Much of the precipitation falls as snow.
- 19. All portions of the Plant are outside the 100-year flood zone.
- 20. The Plant lies within the Sloat Hydrologic Unit Area No. 518.33, as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.
- 21. State Water Resources Control Board (SWRCB) Resolution No. 68-16 "Policy With Respect to Maintaining High Quality Waters of the State" (hereafter Resolution 68-16) 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 detrimental change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, will not result in water quality less than that described in the Regional Board's policies (i.e., not exceed water quality objectives), and that the discharge is meeting waste discharge requirements that result in the best practicable treatment or control of the discharge.

- 22. The Regional Board finds that there will be no detectable degradation of waters of the State due to the Plant operations, and therefore the discharge is in compliance with Resolution 68-16.
- 23. The Discharger provides treatment and control of the discharge that includes staffing to assure proper operation and maintenance.
- 24. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition, (hereafter 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 Water Resources Control Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
- 25. Surface water drainage from the Plant is to Jamison Creek, tributary to the Feather River.
- 26. The beneficial uses of Jamison Creek are not identified in the Basin Plan. However the Plan states, "The beneficial uses of any specifically identified water body generally apply to its tributary streams." Upon review of the flow conditions, habitat values, and beneficial uses of Jamison Creek, the Regional Board finds that the beneficial uses identified in the Plan for the Feather River are applicable to Jamison Creek. Therefore, the beneficial uses of the Jamison Creek are Municipal and Domestic Supply (MUN); Water Contact Recreation and Canoeing and Rafting (REC-1); Non-Contact Water Recreation (REC-2), Warm and Cold Fresh Water Habitat (WARM and COLD); Cold Water Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD).
- 27. The beneficial use of the underlying groundwater is domestic supply.
- 28. Section 13241 of the Water Code requires the Regional Board to consider various factors, including economic considerations, when adopting water quality objectives into its Basin Plan. Water Code Section 13263 requires the Regional Board to address these in adopting waste discharge requirements. However, the State Water Resources Control Board has held that a Regional Board need not address the factors in Section 13241 when implementing water quality objectives through waste discharge requirements, because those factors were considered in the Basin Plan process. These waste discharge requirements implement adopted water quality objectives and no additional analysis of Section 13241 factors is required.
- 29. Section 13267(b) of 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 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. R5-2002-0144 is necessary to assure compliance with these waste discharge requirements.

- 30. 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 Title 27 CCR Section 20090(b), is based on the following:
  - a. The waste consists primarily of backwash water and treated raw water and the Regional Board is issuing waste discharge requirements;
  - 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 water treatment plant and neither the wastewater nor solids need to be managed according to Chapter 11, Division 4.4, Title 22 of this code as a hazardous waste.
- 31. 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.
- 32. The United States Environmental Protection Agency (USEPA), on 16 November 1990, promulgated storm water regulations (40 CFR Parts 122, 123, and 124) which require specific categories of industrial facilities which discharge storm water to obtain NPDES permits and to implement Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate industrial storm water pollution. Water treatment and supply facilities are not one of the industries required to obtain coverage under a stormwater permit. Furthermore, all chemicals at this facility are stored inside buildings, and there are no other operations, such as vehicle maintenance, that would represent a threat of contaminated stormwater runoff.
- 33. The action to adopt waste discharge requirements for this facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301.

- 34. The Regional Board has considered the information in the attached Information Sheet in developing the findings of this Order. The attached Information Sheet is part of this Order.
- 35. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 36. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order No. 97-108 (NPDES No. CA0084158) is rescinded and the Johnsville Public Utility District, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder shall comply with the following:

# A. Discharge Prohibitions:

- 1. Discharge of finished water at a location or in a manner different from that described in Finding No. 12 is prohibited.
- 2. Discharge of backwash water at a location or in a manner different from that described in Finding No. 15 is prohibited.
- 3. The by-pass or overflow of wastes (including backwash water discharge and finished water overflow from the clear well) to surface waters or surface water drainage courses is prohibited, except as allowed by Provision E.2 of the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991.
- 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.

# **B.** Discharge Specifications:

- 1. The monthly average backwash water flow shall not exceed 52,800 gallons from June through October nor 26,400 gallons from November through May.
- 2. Plant operation shall not cause pollution or a nuisance as defined by Section 13050 of the California Water Code.

- 3. Water treatment facilities, storage facilities, and the backwash water settling pond shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 4. The Discharger shall operate all systems and equipment to maximize treatment of backwash water and optimize the quality of this discharge.
- 5. The backwash water settling pond and clear well overflow pond shall have sufficient treatment, storage, and disposal capacity to accommodate allowable wastewater flow and design seasonal precipitation 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. Freeboard shall never be less than two feet (measured vertically to the lowest point of overflow).
- 6. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
  - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
  - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
  - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
- 7. On or about **1 October** of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification No. 5.

# C. Groundwater Limitation:

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

# D. Sludge Disposal:

- 1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with *Consolidated* Regulations *for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.
- 2. Any proposed change in sludge use or disposal practice from a previously approved practice shall be reported to the Executive Officer and USEPA Regional Administrator at least **90 days** in advance of the change.

### E. Provisions:

- 1. Within **30 days** of the adoption of this Order, the Discharger shall:
  - a. Provide material safety data sheets (MSDS) for all products used in the water treatment process. If new products are proposed for use then MSDS shall be submitted to the Regional Board prior to their use.
  - b. Provide the name and certificate grade of the primary plant operator (see Provision No. 3). Fifteen days prior to any change in the primary plant operator, the Discharger shall notify the Regional Board, and shall certify that the new operator has been familiarized with the Plant Operations and Maintenance (O&M) Manual (see Provision No. 2) and this Order within fifteen days after the changeover.
- 2. Within **90 days** of adoption of the waste discharge requirements, the Discharger shall submit:
  - a. A sludge disposal plan describing the annual volume of sludge generated by the Plant and specifying the disposal practices (Refer to the Monitoring and Reporting Program for this Order).
  - b. An O&M Manual for the Plant. The O&M Manual will be reviewed by Regional Board staff, and the O&M Manual shall be implemented within **30 days** of its acceptance by staff. The O&M Manual shall instruct field personnel on managing the day-to-day backwash water and finished water discharge operations to comply with the terms and conditions of this Order and how to make field adjustments, as necessary, to preclude nuisance conditions. A copy of the O&M Manual shall be kept at the Plant for reference by operating personnel. Key personnel shall be familiar with its contents. The O&M Manual shall include the following elements regarding compliance with this Order:
    - 1) A discussion of backwash practices, including: a) time, duration, and frequency of backwash, b) description of area of land discharge of backwash water, and c) inspection procedures to assure there is no discharge of backwash water or backwash solids to Jamison Creek.
    - 2) Instructions for operation of the Plant during cold weather conditions to assure that finished water does not overflow the clear well at such a rate that it could discharge from the clear well overflow pond.
    - 3) Inspection procedure for the backwash water settling tank and settling pond to assure they are operating at their optimum level and there is no danger of excessive solids carryover from either of these units.
- 3. The Discharger shall provide certified water treatment plant operators in accordance with Title 22 of the California Code of Regulations, Division 4, Chapter 13.

- 4. The Discharger shall comply with Monitoring and Reporting Program No. R5-2002-0144, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 5. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste discharge requirements," dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."
- 6. The Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the discharge.
- 7. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, 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.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Regional Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

- 8. A copy of this Order shall be kept at the Plant for reference by operating personnel. Key operating personnel shall be familiar with its contents.
- 9. The Regional Board will review this Order periodically and will revise requirements when necessary.
- 10. 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 Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

I, THOMAS R. PINKOS, Acting 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 19 July 2002.

THOMAS R. PINKOS Acting Executive Officer

RSD: sae 30 July 2002

# INFORMATION SHEET

ORDER NO. R5-2002-0144 JOHNSVILLE PUBLIC UTILITY DISTRICT JOHNSVILLE WATER TREATMENT PLANT PLUMAS COUNTY

#### Background

The Johnsville Public Utility District (hereafter Discharger) operates a water treatment plant (Plant) in Johnsville, at 5267 Main Street, in Plumas County. The Plant is in Section 24, T22N, R11E, MDB&M. The Plant consists of a dual media clarifier, three filters (anthracite and graded sand) and a chlorination system. The filters each have a capacity of approximately 37 gallons per minute. The raw water source consists of springs approximately three miles southwest of the Plant and approximately 500 to 600 feet higher in elevation.

After filtration, water is chlorinated and discharged to one of two 88,000-gallon redwood clear wells with overflows. The clear wells are located to the west and approximately 86 feet above the Plant and customers. From the clear well, the water is distributed to the users. Finished water is also used for filter backwash. Overflow from the clear well is discharged to an overflow pond that was formerly used for finished water storage. During the winter, the Discharger operates the Plant on a continuous basis at a low flow to prevent freezing of the system piping, with a consequent continuous overflow of finished water to the clear wells.

The Plant serves 52 connections, all individual connections except one restaurant and the Plumas-Eureka State Park, and all un-metered, with an average population of 35. Maximum population served is currently 100, with the potential for a total of 71 connections. The community is seasonal/recreational, with minimal occupation during the winter. Maximum daily water production is approximately 100,000 gallons.

#### **Backwash Water Disposal**

Backwash is initiated manually upon conditions of high head loss across the filters. Backwashes can also be initiated automatically based upon effluent turbidity and by timer. Total backwash flow is approximately 1100 gallons over 11 minutes. During normal winter operation, backwashes will occur approximately every 7 days. During normal summer operation, backwashes will occur approximately twice per week at a maximum. During times of heavy rainfall, source water becomes very turbid, necessitating more frequent backwashes, and sometimes water production is stopped and the clear wells are drawn down for water supply.

Backwash water is discharged first to a 2000-gallon rectangular settling tank, and then to a settling pond

(approximately 15 ft wide by 30 ft long by 4 ft deep). Some of the backwash water percolates through the settling pond, and some overflows the pond and is discharged to a swale 240 ft to the north of the Plant. Jamison Creek is approximately 300 ft to the east of this swale.

An inspection by staff on 12 October 2001 revealed that neither the backwash water discharge nor the finished water discharge should reach Jamison Creek if the Plant is properly operated.

# Basin Plan, Beneficial Uses, and Regulatory Considerations

Surface water drainage is to Jamison Creek, tributary to the Middle Fork of the Feather River. The *Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region, Fourth Edition* (Basin Plan), designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for all waters of the Basin. Beneficial uses determine the water quality objectives that apply to a water body. For example, waters designated as municipal and domestic supply must meet the maximum contaminant levels (MCLs) for drinking waters. The Basin Plan sets forth the applicable beneficial uses (domestic supply in this instance) of surface water and groundwater, procedures for application of water quality objectives, and the process for and factors to consider in allocating waste assimilation capacity. This discharge should contain only minor amounts of chlorides, polymer, and trihalomethanes owing to the small amount of discharge. In addition, tri-halomethanes are volatile so degradation of ground water should not occur due to these constituents.

#### Policy for Maintaining High Quality Waters in California

Section 13000 of the California Water Code requires that waters of the State that are better in quality than established water quality objectives be maintained "consistent with the maximum benefit to the people of the State." Waters can be of high quality for some constituents or beneficial uses and not others. Policies and procedures for complying with this requirement are set forth in the Basin Plan (including by reference State Water Board Resolution No. 68-16, "Statement of Policy With Respect to Maintaining High Quality Waters in California,"). Resolution 68-16 is applied on a case-by-case, constituent-by-constituent basis in determining whether a certain degree of degradation can be justified.

In allowing a discharge, the Board must comply with California Water Code (CWC) section 13263 in setting appropriate conditions. The Board is required, relative to the water that may be affected by the discharge, to implement the Basin Plan and consider the beneficial uses to be protected along with the water quality objectives essential for that purpose. The Board need not authorize the full utilization of the waste assimilation capacity of the groundwater (CWC 13263(b)) and must consider other waste discharges and factors that affect that capacity.

The only constituents in backwash water that could potentially affect water quality are chlorine/chloride, tri-halomethanes (a by-product of chlorination of the filtered water), and polymer. Because the backwash water is subject to two settling steps prior to surface discharge, there will be very minor concentrations of any these constituents (greater than background concentration) that have any chance of reaching groundwater. Incremental increase in chloride concentration from the raw water to the finished water is less than 2 parts per million, and total incremental mass discharge of chloride will be a maximum of approximately 0.04 lb/week, assuming all chloride remains in the water, and none is removed in the backwash water sludge. Tri-halomethane discharge will be approximately 10 times less than that of chloride. In addition, tri-halomethanes are volatile and will be lost to the atmosphere during backwash, settling and land discharge. Owing to the very small amounts of pollutants discharged, and the location and frequency of discharge, no detectable degradation of water quality is expected from the operation of the water treatment Plant. Groundwater monitoring would not be relevant at the Plant, as there is very little recharge to groundwater from the Plant operations, and a very large dilution of any such recharge.

# Title 27

Title 27, CCR, Section 20005 et seq. ("Title 27"), contains regulations to address certain discharges to land. Title 27 establishes a waste classification system, specifies siting and construction standards for containment of classified waste, requires extensive monitoring of groundwater and the unsaturated zone for any indication of failure of containment, and specifies closure and post-closure maintenance requirements. Generally, no degradation of groundwater quality by any waste constituent is acceptable.

Discharges of treated backwash water can be controlled to a degree that will not result in unreasonable degradation of groundwater. For this reason, they have been conditionally exempted from Title 27 [Section 20090(b) of Title 27]. The condition requires that the discharge not result in violation of any water quality objective in groundwater.

# **Proposed Order Terms and Conditions**

Discharge Prohibitions, Specifications, and Monitoring

The proposed Order establishes a monthly average backwash water discharge flow limit of 52,800 gallons from June through October and 26,400 gallons from November through May. No degradation of groundwater is allowed by the Order.

# Monitoring Requirements

Section 13267 of the CWC authorizes the Regional Board to require monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the state. The

Regional Board and staff have, in recent years, have been increasing their efforts on obtaining all necessary information to implement State Board and Regional Board policies, and assuring that discharge and receiving water information is timely as well as representative and accurate, thereby improving accountability of any discharger for meeting the conditions of discharge. Section 13268 of the CWC authorizes assessment of civil administrative liability where appropriate, e.g. in the case of a Discharger's failure to submit required monitoring or technical reports.

The proposed Order requires the Discharger to conduct monitoring of the finished water overflow pond, the finished water clear wells, the backwash water settling pond and settling tank, and the backwash water discharge to a swale near Jamison Creek.

RSD: sae

14 August 2002

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING PROGRAM NO. R5-2002-0144

# FOR JOHNSVILLE PUBLIC UTILITY DISTRICT JOHNSVILLE WATER TREATMENT PLANT PLUMAS COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring operations of a water treatment plant, including backwash water discharge and finished water overflow. 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 shall 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.

# **BACKWASH WATER MONITORING**

The swale area to which the backwash water discharges (east of Main Street) and the areas adjacent to the discharge shall be inspected for any signs of discharge to Jamison Creek **during each backwash**. This monitoring may be suspended when the discharge area is inaccessible due to snow pack. Any accessibility problems must be noted on the Discharger's self-monitoring report.

# FINISHED WATER OVERFLOW AND CLEAR WELL MONITORING

The clear well overflow pond (former finished water storage pond) and clear wells shall be inspected **monthly**. Pond inspection shall be performed for integrity of pond berms, any leakage from those berms, and any overflow from the overflow pond, and for assurance of adequate mosquito control measures. Pond freeboard shall be measured **monthly**. Clear wells shall be inspected for any leakage and for tank integrity. This monitoring may be suspended when the discharge area is inaccessible due to snow pack. Any accessibility problems must be noted on the Discharger's self-monitoring report.

# SETTLING TANK AND SETTLING POND MONITORING

The backwash water settling tank and settling pond shall be inspected **every six months** for accumulation of sludge (solids). Solids shall be removed from these settling units when such removal is necessary to maintain adequate solids removal.

# FINISHED WATER CHLORINE MONITORING

Chlorine concentration monitoring of finished water required by the California Department of Health Services shall be submitted **monthly** as part of this monitoring program.

# REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., finished water, pond, 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 in the next scheduled monitoring report.

# A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board on the  $1^{st}$  day of the second month following sampling (i.e. the January Report is due by 1 March).

# B. Annual Report

An Annual Report shall be prepared as the December monthly monitoring report if requested by Regional Board staff. The Annual Report shall include all monitoring data required in the monthly 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. A discussion of compliance and any necessary corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;
- 2. Summary of maintenance and repairs activities which were performed on the plant or distribution system;

3. To determine compliance with Provision No. R5-2002-0144, the Discharger shall submit written verification of compliance including a copy of each operator's certification.

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 a statement by the Discharger, or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

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

Ordered by:

THOMAS R. PINKOS, Acting Executive Officer

19 July 2002 (Date)

RSD: sae 14 August 2002