CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2004-0020

WASTE DISCHARGE REQUIREMENTS

FOR
BROWNS VALLEY IRRIGATION DISTRICT
PINELAND DEVELOPMENT COMPANY, INC.
COLLINS LAKE RECREATIONAL AREA
YUBA COUNTY

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

1. Browns Valley Irrigation District and Pineland Development Company, Inc. (hereafter jointly referred to as "Discharger") submitted a Report of Waste Discharge (RWD) on 8 August 2002, as well as supplemental information dated 14 December 2002, 17 June 2003, and 17 November 2003 for the expansion of an existing wastewater treatment facility at the Collins Lake Recreational Area in Yuba County.

2. The Collins Lake Recreation Area is at Merle Collins Reservoir, about 20 miles northeast of Marysville in Section 21, T17N, R5E, MDB&M (Assessors Parcel Numbers 44-140-005, 044-140-006, 044-140-010, and 044-110-005) as shown on Attachment A, which is attached hereto and made part of this Order by reference.

3. Waste Discharge Requirements Order No. 77-18, adopted by the Board on 25 February 1977, prescribes requirements for a discharge of domestic wastewater to a septic tank/leachfield system. Order No. 77-18 is neither adequate nor consistent with current plans and policies of the Board.

Wastewater Treatment and Disposal System

4. The Collins Lake Recreational Area currently contains 186 campsites without hookups, 4 campsites with hookups, 40 day use (picnic) spaces, and an unimproved open camping area. These facilities are served by a combination of chemical toilets and holding pits.

5. Wastewater from the holding pits is hauled off-site to a receiving station. Wastewater from the portable toilets is removed on a regular basis and is currently transported by a truck to Leachfield No. 1.

6. The Recreational Area also contains "fixed public facilities," including an office and store with the equivalent of 22 full time employees, a pay laundry, six pay showers, four flush toilets, and an RV dump station. Wastewater from these facilities currently flows to a second septic tank/leachfield system (Leachfield No. 2).

7. The Discharger is planning to expand the recreation area by 88 campsites (30 with full utility hookups and 58 without hookups) and build a new wastewater treatment system that will discharge to a new leachfield (Leachfield No. 3). The Discharger has stated that this new system will be

constructed during the summer of 2004, and will be fully operational by 1 November 2004. Following completion of the treatment system and Leachfield No. 3, most wastes that previously entered Leachfield No. 2 will be re-routed to Leachfield No. 3. Leachfield No. 2 will only serve the RV dump station and portable toilets. The locations of the leachfields are shown on Attachment A.

8. The Discharger has recently proposed delaying installation of monitoring wells at Leachfield No. 1 until the wastewater flow rate increases. As a result, this Order prohibits use of Leachfield No. 1 until the wells are installed and the Executive Officer authorizes its use. Until that time, all waste will be discharged to either Leachfield No. 2 or Leachfield No. 3.

9. Prior to discharge to Leachfield No. 3, wastewater will be treated in a series of septic tanks, four 3,000 gallon settling tanks, three 3,000 gallon recirculating tanks, an 1,800 square foot recirculating sand filter, and a 2,000 gallon dosing tank. Wastewater will then be discharged via pressure dosing to a six-zone leachfield containing approximately 2,460 linear feet of leachline.

10. Based on historical water use during the peak season, the Discharger estimates a current wastewater flow from the laundry, showers, and toilets of 3,500 gallons per day (gpd) to Leachfield No. 2. Once the expansion has been completed, the Discharger estimates that the total flow to all leachfields will be 8,700 gpd, the majority of which will go to Leachfield No. 3.

11. According to the RWD, Leachfield No. 3 will be sized to dispose of 8,700 gpd of wastewater, thereby providing the capacity to treat effluent from Leachfields No. 1 and No. 2 during emergencies or peak flow conditions.

12. The Discharger estimates, based on pumping records for 2002 and 2003, that the average volume of wastewater discharged (via truck delivery) to Leachfield No. 1 during the off season will be 130 gpd, while the average discharged during the peak season (June through August) will be 285 gpd. However, until groundwater monitoring wells are installed at Leachfield No. 1, this wastewater may only be disposed of in Leachfields No. 2 or 3 or hauled off-site for disposal with holding tank (pit toilets) waste or septage.

13. Based on actual RV departures from the park in January 2003 (off season) and July 2003 (peak season), the Discharger indicates that the RV dump station received an average of 70 gpd during the off season and 1,155 gpd of wastewater during the peak season. The volume of RV waste is anticipated to increase with the expansion. RV waste will continue to be discharged to Leachfield No. 2. However, the overall loading of Leachfield No. 2 will decrease because waste from the fixed public facilities will be discharged to Leachfield No. 3.

14. Wastewater associated with two pit toilets is emptied by a licensed waste hauler and transported to an off-site wastewater treatment plant for proper disposal.

15. WDRs Order No. 77-18 did not require any influent or effluent monitoring, and the Discharger did not submit any analytical data as part of the RWD. In addition to typical domestic wastewater constituents, because portable toilet and RV waste can be discharged to Leachfields No. 2 or 3, all

the leachfields may contain the chemicals typically present in such waste (i.e., ammonia, phenol, and zinc). The Discharger states that enzyme based detergents are used as a deodorizer in RV holding tanks, and that the park prohibits the use of formaldehyde.

16. It is anticipated that wastewater from Leachfield No. 2 will periodically be diverted to Leachfield No. 3. This will assist in the long-term viability of Leachfield No. 2.

Sanitary Sewer Collection System

17. The Collins Lake Recreational Area sanitary sewer collection system consists of a network of 3 or 4-inch diameter ABS piping laid at variable grades throughout the site. For the new system, the effluent will be collected in seven septic tanks, four pump tanks, and four holding tanks prior to entering the leachfield. The existing collection system consists of five septic tanks and one pump tank. From the septic tanks, the effluent is pumped into a series of three settling/holding tanks. Force mains are typically constructed of 2-inch diameter PVC piping.

18. 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 facility (in this case, the dosing tanks). 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.

19. Within this system, a sanitary sewer overflow consists of domestic sewage. The chief causes of sanitary sewer overflows include grease blockages, root blockages, debris blockages, sewer line flood damage, air relief/vacuum valve failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and contractor caused blockages.

20. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic wastes, nutrients, oxygen demanding organic compounds, oil and grease, and other wastes. Sanitary sewer overflows can cause temporary excedences 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.

21. 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

22. The average annual rainfall at the site is approximately 43.3 inches per year. The 100 year return annual total rainfall amount is 78.5 inches.

23. The topography of site is rolling hills; Leachfeld No. 3 will be on a slope of about 20%, while the average slopes at the site range from 15 to 25%.

24. The surrounding land uses are zoned for commercial and residential development.

25. All portions of the septic tank/leachfield systems are outside the 100-year flood zone.

26. The facility lies within the Browns Valley Hydrologic Unit Area No. 517.12, as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

27. Percolation tests have been conducted at 20-inch and 36-inch depths at ten locations within proposed leachfield No. 3. The average percolation rate at the 20-inch depth was 8 minutes per inch (MPI) and at the 36-inch depth, 43 MPI.

28. Soil mantle tests were have been conducted at eight locations within leachfield No. 3; no rock outcroppings were encountered. Soils within the upper 30-inches consist of clay loam, while deeper layers (40 to 60-inches) consist of clay loam and/or silty-clay loam, with some hardpan and clay. Decomposed parent material is at approximately five feet below ground surface (bgs).

29. Groundwater was not encountered in any of the test holes, which ranged from 6 to 8 feet below ground surface (bgs), within Leachfield No. 3. No groundwater was encountered during the winter of 2002 in provisional test wells constructed to approximately 8 feet bgs. Based on County historical groundwater data, the Discharger estimates that first groundwater is found at approximately 30 to 40 feet bgs.

30. Well logs from five potable water wells drilled to depths of approximately 120 feet to 180 feet bgs indicate that static water levels in the area range from approximately 70 to 75 feet bgs.

31. On 17 June 2003, the Discharger submitted a Groundwater Monitoring Workplan for the installation of two monitoring wells within Leachfield No. 3. On 25 July 2003, Regional Board staff granted a conditional approval of the Groundwater Monitoring Workplan for the installation of three groundwater monitoring wells within Leachfield No. 3. Because the Discharger has subsequently elected to continue operating Leachfields No. 1 and 2, groundwater monitoring is required at all the leachfields.

Groundwater Degradation

32. State Water Resources Control Board (SWRCB) 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 State and Regional Board's policies (e.g., quality that exceeds water quality objectives).

33. The Regional Board finds that the Discharger has not demonstrated that it is to the maximum benefit to the people of the State of California to degrade groundwater, and therefore groundwater degradation is not allowed under this Order.

Basin Plan, Beneficial Uses, and Regulatory Considerations

34. 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 Water Resources Control Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.

35. Surface water drainage from the surrounding area is to Dry Creek, which is a tributary of the Yuba River below Englebright Reservoir.

36. The beneficial uses of Yuba River below Englebright Reservoir are agricultural supply; hydropower generation; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction and/or early development; and wildlife habitat.

37. The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

38. The State Water Resources Control 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. The wastewater treatment plant facilities will be underground and therefore not exposed to stormwater runoff. Because there is no storm water discharge, the Discharger is not required to obtain coverage under General Permit No. CAS000001.

39. On 2 August 2002, in accordance with the California Environmental Quality Act (CEQA)(CCR, Title 14, Section 15261 et. seq.), the County of Yuba Planning Commission certified a Mitigated Negative Declaration for the expansion of the Collins Lake Recreation Area septic tank leachfield system. Mitigation measures include the requirement that the Discharger shall obtain updated WDRs prior to inititating construction activities.

40. 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 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. R5-2004-0020" are necessary to assure compliance with these waste discharge requirements. The Discharger operates facilities that discharge waste subject to this Order.

41. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells, 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.

42. 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 of the California Code of Regulations, Division 2. Subdivision 1, Section 20005 et seq. (hereafter Title 27). While the wastewater treatment facility is exempt from Title 27, the data analysis methods of Title 27 may be appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order.

43. 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. The exemption, pursuant to Title 27 CCR Section 20090(a), 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 domestic wastewater treatment facility.

44. 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

45. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.

46. The Discharger and interested agencies and persons were notified of the intent to prescribe waste discharge requirements for this discharge, and provided an opportunity to submit written views and recommendations, and to be heard in a public meeting.

47. In a public meeting, all comments pertaining to the discharge were heard and considered.

IT IS HEREBY ORDERED that Order No. 77-18 is rescinded, and pursuant to Sections 13263 and 13267 of the California Water Code, Browns Valley Irrigation District and Pineland Development Company, Inc, their 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 the dosing tanks, including septic tanks, is prohibited. Discharge of treated wastewater outside of the leachfield area is prohibited.

4. Surfacing of wastewater within or downgradient of the leachfield areas is prohibited.

5. 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.

6. The use of the Leachfield No. 3 is prohibited until the Discharger has submitted, and the Executive Officer has approved, the construction report required per Provision No. F.1.d.

B. Discharge Specifications

1. Prior to 1 November 2004, the monthly average flow to Leachfield No. 2 shall not exceed 3,500 gpd during the peak season (June through August) and 1,500 gpd during the off season (September through May).
2. After 1 November 2004, the monthly average flow to Leachfield No. 2 shall not exceed 2,000 gpd.

3. Discharge to Leachfield No. 1 is prohibited without written authorization from the Executive Officer. Installation of groundwater monitoring wells is required prior to requesting authorization to discharge. Once authorized, the monthly average flow to Leachfield No. 1 shall not exceed 300 gpd.

4. Once authorized as described in Prohibition No. A.6, the monthly average flow to Leachfield No. 3 shall not exceed 8,700 gpd.

5. The wastewater treatment and leachfield areas shall not cause pollution or a nuisance as defined by Section 13050 of the California Water Code.

6. Public contact with wastewater and the subsurface disposal areas shall be precluded or controlled through such means as fences, signs, or acceptable alternatives.

7. 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.

8. Objectionable odors originating from the treatment facilities or leachfield areas shall not be perceivable beyond the limits of the subject area.

9. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

10. Application of wastewater shall be confined to the disposal areas as defined in this Order.

11. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge. In particular, the following items shall be completed in accordance with the Operation and Maintenance Plan required by the Provisions:

    a. The Discharger shall conduct inspections of the septic tanks on at least an annual basis.

    b. The Discharger shall cut the vegetation and remove the plant litter from the leachfield areas as needed to prevent root intrusion into the leachlines and to remove the nitrogen accumulated by the plant material.

    c. The Discharger shall annually evaluate whether wastewater is evenly distributed to all the leachlines and make modifications to the systems as necessary.

    d. The Discharger shall properly maintain the septic tanks, including pumping a tank when any one of the following conditions exist, or can be reasonably projected to occur before the next inspection of a tank:

        1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment,

        2. The scum layer is within three inches of the outlet device; or,

        3. The sludge layer is within eight inches of the outlet device.

12. Septic tanks that are cracked or otherwise damaged shall be properly repaired or replaced.

13. The wastewater system 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.

14. The following buffer zones shall be maintained:

    a. A 100-foot buffer zone between any watercourse and the leachfield areas;

    b. A 100-foot buffer zone between any spring, wetlands, domestic well, or irrigation well and the leachfield areas; and

    c. A 50-foot buffer zone from the leachfield areas to the nearest property boundary.

C. Effluent Limitations

Effluent discharged from the dosing tanks shall not have a pH less than 6.5 or greater than 8.4.

D. General Solids Disposal Specifications

Sludge means the solid, semisolid, and liquid residues removed during the 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.

1. Sludge shall be removed from the septic tanks and dosing tanks as needed to ensure optimal life of the leachfields.
2. Sludge removal shall be by a licensed liquid waste hauler and documented by copies of manifests.
3. Any storage of residual sludge or solid waste at the facility 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 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 operated in accordance with valid waste discharge requirements issued by a Regional Water Quality Control Board will satisfy this specification.

E. Groundwater Limitations

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

F. Provisions

1. All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code and shall be prepared by a registered professional as described by Provision F.2.

a. By **1 March 2004**, the Discharger shall submit an amended workplan for characterization of groundwater quality associated with Leachfields Nos. 1, 2, and 3. The workplan shall describe the installation of sufficient groundwater wells to allow evaluation of the groundwater quality upgradient and downgradient of the leachfields. Every monitoring well shall be constructed to yield representative samples from the uppermost saturated interval and to comply with applicable well standards. The workplan shall be consistent with, and include items listed in, the first section of Attachment B, *"Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results."*

b. By **1 April 2004**, the Discharger shall submit a report describing how it will meter or estimate flows at each leachfield.

c. By **1 July 2004**, the Discharger shall submit a groundwater well installation report of results that is consistent with, and includes the items listed in, the second and third sections of Attachment B. The report shall document that wells have been installed at all three leachfields. The report shall also describe the qualified consultant that the Discharger will use to collect groundwater samples.

d. **At least 30 days prior to use**, the Discharger shall submit a report certifying that the new wastewater system has been constructed as described in Finding No. 9 of this Order. The report at a minumum shall provide the following:

   i. The number, size, and construction material of each septic tank installed within the Collins Lake Recreational Area.

   ii. A detailed description of the treatment system, including size and location of the unit, the material that the tanks are constructed of, and flow design capacity.

   iii. A description of the type and location of the flow meter which has been installed to meet compliance with the Monitoring and Reporting Program.

   iv. A detailed description of the leachfield area, including: the total acreage, total linear feet of leachline installed, dimensions of the subsurface disposal trenches, depths at which the leachlines were set, number and locations of all leachline observation ports, and types of infiltrators installed. In addition, the report shall include a description of the vegetation installed over the disposal area.

e. **By 1 July 2004**, the Discharger shall submit and implement an Operation and Maintenance (O&M) Plan for each of the treatment/disposal systems. The O&M Plan shall instruct field personnel on how to manage the day-to-day discharge operations to comply with the terms and conditions of this Order and how to make field adjustments, as necessary, to preclude nuisance conditions (e.g., surfacing water). It shall also include a nuisance condition troubleshooting flowchart and a description of notification requirements. A copy of the O&M Plan shall be kept at the facility for reference by

operating personnel. Key personnel shall be familiar with its contents. The O&M Plan shall include the following documents as report appendices:

i. A Vegetation Control Plan which describes how vegetation will be controlled, maintained, and removed in the leachfield areas to prevent root intrusion and damage.

ii. An Inspection Plan which decribes the procedures for annually inspecting and testing of septic tanks and the treatment system to determine if collected scum and/or sludge needs to be removed, evaluates whether wastewater is evenly distributed to the leachfields, and recommends modifications to the systems as necessary.

iii. A maintenance plan which describes maintenace procedure of the collection system, septic tanks, and treatment system including the timely removal and disposal of accumulated scum/sludge. Sludge and solid waste removed from septic tanks and treatment systems shall be pumped and hauled only by a licensed septage hauler. Septic tanks that are cracked or otherwise damaged shall be promptly repaired or replaced.

iv. A Sanitary Sewer Operation Maintenance Overflow Prevention and Response Plan (SSO Plan) that describes (a) the actions designed to prevent or minimize the potential for overflows and (b) the response to be taken for any overflows. The Discharger shall maintain the SSO Plan in an up-to-date condition and shall amend the SSO Plan whenever there is a change (e.g., in the design, construction, operation, or maintenance of the collection system) that materially affects the potential for overflows, or whenever there is an overflow. The Discharger shall ensure that the up-to-date SSO Plan is readily available to operating personnel at all times and that the personnel are familiar with it.

f. By **1 November 2005**, the Discharger shall submit a *Background Groundwater Quality Study Report*. For each groundwater monitoring parameter/constituent identified in the Monitoring and Reporting Program, the report shall present a summary of monitoring data, a calculation of the concentration in background monitoring well(s), and a comparison of background groundwater quality to that in wells used to monitor the facility. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), and shall be based on data from at least four consecutive quarterly groundwater monitoring events.

g. If groundwater monitoring reports show that groundwater exceeds the groundwater limitation required by this Order, then within **120 days** of the Executive Officer's request, the Discharger shall submit a technical report which shall include a comprehensive evaluation of treatment and control measures that address full mitigation of the source of exceedance(s). The report shall describe treatment and control alternatives studied, the alternative(s) recommended for implementation, and any specific methods the Discharger proposes to monitor and assure continuous optimal

performance, the source of funding, and proposed schedule for implementation. The recommended improvements and implementation schedule are subject to the Executive Officer's approval, but the schedule for full implementation shall be as short as practicable and not exceed two years unless specifically approved by the Regional Board.

2. 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 direction 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.

3. The Discharger shall comply with the Monitoring and Reporting Program No. R5-2004-0020, 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 assure compliance with terms of this Order.

6. 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.

7. 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."

8. The Discharger shall not allow waste-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. Waste-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of wastes.

9. 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 Discharger 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.

10. 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.

11. 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 recession of this Order.

12. 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.

13. The Regional Board will review this Order periodically and will revise requirements when necessary.

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 30 January 2004.

Original signed by

_____

THOMAS R. PINKOS, Executive Officer

TRO: 1/30/2004

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2004-0020

BROWNS VALLEY IRRIGATION DISTRICT
PINELAND DEVELOPMENT COMPANY, INC.
COLLINS LAKE RECREATIONAL AREA
YUBA COUNTY

This Monitoring and Reporting Program (MRP) incorporates requirements for monitoring all aspects of the wastewater collection, treatment, and disposal systems and 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.

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) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field 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.

SEPTIC TANK MONITORING

The Discharger shall report annually any maintenance, failures, and/or repairs conducted during the year to each of the septic tanks. The Discharger shall monitor the septic tanks and septic tank effluent pumping system as follows:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Sludge depth and scum thickness in the first compartment of each septic tank	Feet	Staff Gauge	Annually	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually	Annually
Last pump out date	Date	NA	NA	Annually
Volume pumped	Gallons	NA	NA	Annually

The septic tank shall be pumped when any one of the following conditions exist or may occur before the next inspection:

a. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment;
b. The scum layer is within three inches of the outlet port; or
c. The sludge layer is within eight inches of the outlet port.

In lieu of septic tank measurements, the septic tank may be pumped annually.

EFFLUENT MONITORING: ALL LEACHFIELDS

Samples shall be collected prior to discharge to each leachfield. Effluent monitoring shall include, at a minimum, the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow	gpd	Estimate	Daily	Monthly
pH[1]	pH units	Grab	Monthly/Quarterly[3]	Monthly[4]
BOD_5[2]	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Nitrate as Nitrogen	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Total Kjeldahl Nitrogen	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Total Dissolved Solids	µmhos/cm	Grab	Monthly/Quarterly[3]	Monthly[4]
Formaldehyde	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Phenol	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Zinc	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Ammonia	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]
Oil and Grease	mg/L	Grab	Monthly/Quarterly[3]	Monthly[4]

[1] Hand held field meter may be used.
[2] 5-day, 20°C Biochemical Oxygen Demand.
[3] Sampling frequency is quarterly (one sample required) for the period January – March and October – December. Monthly sampling shall be performed from April to September.
[4] If a sample is not required during a particular month, then the Discharger shall clearly state so in the monthly monitoring report.

LEACHFIELD MONITORING

Visual inspection of the three leachfields shall be conducted on a monthly basis. Results shall be recorded and submitted with the monthly or quarterly monitoring reports. Evidence of surfacing wastewater, erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. If surfacing water is found, then a sample shall be collected and tested for total coliform organisms and total dissolved solids. In addition to the visual inspections, monitoring of the leachfields shall include the following:

Constituent	Units	Sample Type	Sampling Frequency	Reporting Frequency
Visual Inspection	NA	NA	Monthly	Monthly
Leachline Riser Inspection[1]	Inches	Measurement	Quarterly	Quarterly

[1] The Discharger shall measure the depth of wastewater in each inspection riser. The Discharger shall provide the depth of each disposal trench and the corresponding depth of the soil remaining between the ponded wastewater and the surface.

GROUNDWATER MONITORING

The groundwater monitoring program shall begin in the third quarter of 2004. 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 or until purged dry. Depth to groundwater shall be measured to the nearest 0.01 feet. Samples shall be collected using standard EPA methods. Groundwater monitoring for all three leachfields shall include, at a minimum, the following:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Groundwater Elevation[1]	0.01 Feet	Measurement	Quarterly	Quarterly
Depth to Groundwater	0.01 Feet	Calculated	Quarterly	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly	Quarterly
pH[2]	pH Units	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Ammonia as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Formaldehyde	mg/L	Grab	Quarterly	Quarterly
Zinc	mg/L	Grab	Quarterly	Quarterly
Phenols	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms[3]	MPN/100 ml	Grab	Quarterly	Quarterly
Standard Minerals[4]	mg/L	Grab	Annual	Annually

[1] Groundwater elevation shall be determined based on depth-to-water measurements from a surveyed measuring point elevation on the well.
[2] Hand held field meter may be used.
[3] Using a minimum of 15 tubes or three dilutions
[4] Standard Minerals shall include the following: boron, calcium, iron, manganese, magnesium, potassium, sodium, chloride, 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, leachfield, groundwater, 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.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board on the **1st 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 the effluent monitoring for each leachfield and the leachfield 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 Report

Beginning with the third quarter of 2004, 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 **1st day of the second month after the quarter** (i.e. the January-March quarterly report is due by May 1st) and may be combined with the monthly report. The Quarterly Report shall include the following:

1. Results of the groundwater monitoring and leachline riser 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 tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);

5. A comparison of the 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 and 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. The contents of the regular groundwater monitoring report for the last quarter of the year;

2. If requested by staff, tabular and graphical summaries of all data collected during the year;

3. A description of any activity to control vegetation in the leachfield area;

4. Results of the septic tank monitoring;

5. Annual summary of the septic tank inspections for the year, including the number of tanks pumped out, the name(s) of the entities that removed the waste, and the volume of waste removed.

6. A statement of when the Operation and Maintenance Manual was last reviewed for adequacy, and a description of any changes made during the year;

7. A description of the annual evaluation of effluent distribution and adjustments made, if any;

8. A summary of maintenance and repair activities that were performed on the collection system; and

9. A discussion of any 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.

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.

Original signed by

Ordered by:_____
THOMAS R. PINKOS, Executive Officer

30 January 2004
(Date)

TRO: 1/30/2004

INFORMATION SHEET

ORDER NO. R5-2004-0020

BROWNS VALLEY IRRIGATION DISTRICT
PINELAND DEVELOPMENT COMPANY, INC.
COLLINS LAKE RECREATIONAL AREA
YUBA COUNTY

The Collins Lake Recreation Area Campground is located at Merle Collins Reservoir, about 20 miles northeast of Marysville. The existing wastewater treatment and disposal system consists of two separate leachfields. Leachfield No. 1 is used for the treatment of waste generated from 25 portable chemical toilets. The waste is removed on a regular basis and transported by truck to the septic tank/leachfield located below the Collins Lake Dam. Leachfield No. 2 handles waste from 186 campsites without hookups, 4 campsites with hookups, 40 day-use picnic areas, 6 pay showers, a pay laundry, 4 public flush toilets, the office, store, and the RV dump station. Due to the addition of 88 public campsites, a new treatment system and leachfield (Leachfield No. 3) will be constructed. The new system will treat all the wastewater except the RV dump station (which will continue to be discharged to Leachfield No. 2) and the portable toilet waste (which will be discharged to Leachfield No. 2 or 3). The use of Leachfield No. 1 requires written approval of the Executive Officer. Of the 88 new public campsites, 30 will have full utility hookups and 58 will be sites without hookups.

The treatment system at Leachfield No. 3 will be operational by 1 November 2004 and will consist of a series of septic tanks, four 3,000 gallon settling tanks, three 3,000 gallon recirculating tanks, an 1,800 square foot recirculating sand filter, and a 2,000 gallon dosing tank. Wastewater will then be discharged via pressure dosing to a six-zone leachfield containing approximately 2,460 linear feet of leachline.

The RWD estimates a maximum daily process wastewater flow rate of 8,700 gallons per day (gpd) to Leachfield No. 3. This flow is based on typical average recreation area usage during the peak season (June through August). The Discharger estimates that the portable toilets generate approximately 300 gpd; this flow will either be discharged to Leachfields No. 2 or 3, or will be hauled off-site for appropriate disposal. Leachfield No. 2 will receive approximately 1,200 gpd of RV waste. Wastewater from two pit toilets is emptied by a licensed waste hauler and transported to an off-site wastewater treatment plant for proper disposal.

Well logs from water wells drilled to depths of approximately 120 feet to 180 feet bgs indicate that static water levels in the area range from approximately 70 to 75 feet bgs. This Order requires the Discharger to install groundwater monitoring wells and monitor the groundwater upgradient and downgradient of all the leachfields. The Discharger has requested that wells for Leachfield No. 1 not be required at this time. As a result, use of Leachfield No. 1 is prohibited until the wells are installed and written authorization is received from the Executive Officer.

Surface water drainage from the surrounding area is to Dry Creek, which is a tributary of the Yuba River.

TRO: 1/6/2004