

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION**

**MEETING OF SEPTEMBER 14 & 15, 2011**  
Kings Beach

**ITEM:** 6

**SUBJECT:** **WATER RECLAMATION REQUIREMENTS AND  
WASTE DISCHARGE REQUIREMENTS FOR SOUTH TAHOE  
PUBLIC UTILITY DISTRICT, DISCHARGE OF RECYCLED  
WASTEWATER ONTO THE DIAMOND VALLEY RANCH,  
ALPINE COUNTY**

**CHRONOLOGY:** This is a new item.

**ISSUES:** Should the Water Board adopt Water Reclamation Requirements and Waste Discharge Requirements for South Tahoe Public Utility District for use of recycled wastewater at the Diamond Valley Ranch for fodder crops, nonstructural fire fighting, dust control, soil compaction, and soil consolidation around nonpotable water piping?

**DISCUSSION:** The District filed a Report of Waste Discharge (ROWD) for use of recycled wastewater on its Diamond Valley Ranch in Alpine County. The District operates a wastewater treatment plant in South Lake Tahoe that produces disinfected secondary-23 recycled water (recycled-23 water) meeting the requirements defined in California Code of Regulations, title 22, section 60301.225. That level of treatment produces water acceptable for producing fodder crops, dust control, nonstructural firefighting, soil compaction, and consolidation of soil around "nonpotable" piping for water supplies. The District has proposed to use the recycled-23 water for all of those uses, and has also requested use for consolidation of soil around a fresh water pipeline.

The District currently stores the recycled-23 water it produces at Harvey Place Reservoir in Alpine County for use on private ranches in Alpine County regulated under separate Orders. The District is now proposing to also irrigate and manage wastewater on the Diamond Valley Ranch purchased for this purpose.

The District plans to irrigate up to 377 acres of land by a mixture of sprinkler irrigation and flood irrigation. A requirement of the

proposed Order is to not discharge to wetlands. Four fields (D, E, F, and H) that make up a large portion of the 377 acres shown in the proposed Order are not to receive recycled-23 water until additional wetland delineation has been finalized. The Order will need to be amended by the Water Board before these fields may be used if the proposed Order is adopted.

The District has proposed to have two fields be irrigated by sprinklers and shallow flooding, and also be used infrequently as an emergency storage basin for recycled-23 water. These two fields will have the ability to store up to 300 acre-feet, or 98 million gallons, of recycled-23 water under emergency conditions to prevent uncontrolled release of recycled-23 water.

The District has provided a nutrient management plan for the irrigation and a ground water monitoring program for the area. The District's discharge or use of recycled-23 water will protect the beneficial uses of the ground water, and the proposed ground water monitoring and reporting program will detect adverse affects to high quality ground water.

Water Board staff solicited from interested persons comments on a tentative Order and received comments from the District (see Enclosure 3). A response to the comments (see Enclosure 4) was provided with the proposed Order that was distributed in mid-August 2011, and the District commented further (see Enclosure 6), requesting clarification on restrictions on the use of recycled-23 water for the consolidation of soil around fresh water conveyance piping. The District conveys fresh water diverted from the West Fork of the Carson River in a ditch across the District property for use by others on non-District property. The District has proposed to replace portions of the ditch with piping, and to consolidate the soil around it with recycled-23 water. Water Board staff considers the fresh water diversion to be a potable water pipeline. There are no specific requirements associated with recycled water use around such "fresh" water pipelines. Because there are no requirements for fresh water pipelines, the Order protects the water in the pipe as a potential source of drinking water by applying the standard for "potable" water pipelines. Staff will respond to these comments in a separate letter, to be provided to you later.

**RECOMMENDATION:** Adopt the Order as proposed.

<b>Enclosure</b>	<b>Item</b>	<b>Bates Number</b>
1	Fact Sheet	6-4
2	Proposed Board Order	6-6
3	District comments of August 8, 2011 on tentative Order	6-49
4	Staff Response Letter of August 16, 2011 to the District comments	6-57
5	Staff Proposed Order Cover letter, August 16, 2011	6-60
6	District comments August 22, 2011, requesting clarification on using potable water pipeline requirements on fresh water pipelines	6-62

# **ENCLOSURE 1**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION  
FACT SHEET**

**ITEM NO:** 6

**DISCHARGER NAME:** South Tahoe Public Utility District

**FACILITY TYPE:** Reclamation Facility – Irrigation of fodder crops and construction uses with recycled wastewater

**PROJECT NAME:** Water Reclamation Requirements and Waste Discharge Requirements for the South Tahoe Public Utility District discharge of recycled wastewater onto the Diamond Valley Ranch

**WDID NO.:** 6A021008003

**LOCATION:** Diamond Valley Ranch located in Alpine County, adjacent to Harvey Place Reservoir

**TYPE OF WASTE:** Recycled wastewater meeting secondary-23 disinfected standards

**PROGRAM:** Water Reclamation Requirements

**DISPOSAL FACILITIES:** Surface disposal onto land to grow fodder crops

**RECEIVING WATERS:** Ground waters of the Carson Valley

**BENEFICIAL USES:** Ground waters – Municipal and domestic supply (MUN)  
Agricultural (AGR)  
Freshwater replenishment (FRSH)  
Industrial (IND)

**CEQA COMPLIANCE:** The South Tahoe Public Utility District acting as Lead Agency, adopted an Environmental Impact Report

**LANDOWNER:** South Tahoe Public Utility District

**NEARBY DEVELOPMENT:** Ranching, farming, and open lands

**NATURE OF AREA:** Rural area with ranching and farming nearby

# **ENCLOSURE 2**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**WATER RECLAMATION REQUIREMENTS  
AND  
WASTE DISCHARGE REQUIREMENTS  
BOARD ORDER NO. R6T-2011- (PROPOSED)  
WDID NO. 6A021008003**

For

**SOUTH TAHOE PUBLIC UTILITY DISTRICT  
DISCHARGE OF RECYCLED WASTEWATER ONTO THE  
DIAMOND VALLEY RANCH**

Alpine County

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The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

The South Tahoe Public Utility District is the owner of the land where recycled wastewater will be applied, the supplier of the recycled wastewater and the user (Discharger). For the purposes of this Order, South Tahoe Public Utility District is referred to as the "Discharger."

2. History

This Order is for the irrigation, with recycled water, of fodder crops on a ranch located in Diamond Valley in Alpine County. The Discharger owns the land and this Order is the first order adopted for the use of secondary treated disinfected wastewater for this property.

3. Source of the Recycled Water

The Discharger operates an existing sewage collection and treatment system that provides sewage collection and treatment services for the South Lake Tahoe area. The wastewater is treated to a secondary treatment standard and meets a 5-day biochemical oxygen demand (BOD) of 30 mg/L (milligrams per liter) and 30 mg/L of total suspended solids. The Discharger's last step in the treatment process is disinfecting the wastewater by chlorine injection. The chlorinated wastewater is pumped out of the Lake Tahoe Basin via Luther Pass in a pipeline that acts as the contact chamber.

The Discharger's disinfected wastewater meets the disinfected secondary-23 recycled water standard as defined in California Code of Regulations, title 22, section 60301.225. The disinfected wastewater meeting the standard will be referred to as "recycled-23 water" for purposes of this Order.

The Discharger also stores the recycled-23 water in Harvey Place Reservoir in Alpine County, located adjacent to and upgradient of Diamond Valley Ranch, for use in spring, summer and fall for irrigation of several ranches (regulated under separate water reclamation requirements) in Alpine County. The Discharger has been a supplier of recycled-23 water for over 20 years to ranches in Alpine County in Southern Carson Valley and Wade Valley. With this Order the Discharger will become an authorized user of their recycled-23 water in Diamond Valley. In 2009, the Discharger produced 1.455 billion gallons, or 4,466 acre-ft, of recycled-23 water that was used for irrigation, not including evaporative loss during storage.

4. Reason for Action

The Discharger filed a Report of Waste Discharge (ROWD) in August 2010 and supplemental material to complete the ROWD on November 23, 2010 to use recycled-23 water for the production of fodder crops on 372 acres of the Diamond Valley Ranch (henceforth the "Ranch"). The Discharger has proposed to create two fields at the Ranch, comprising 50 acres of the 372 acres, that will normally be flood irrigated with recycled-23 water, but will also have the capability to be flooded with several feet of recycled-23 water as an emergency storage measure in the event that Harvey Place Reservoir has inadequate storage capacity or there are other emergency storage needs associated with Harvey Place Reservoir.

5. Facility

The Ranch is located in the northeast portion of Alpine County, adjacent to the southern end of the Carson Valley in Alpine County as shown on Attachment A. The Ranch has been used for cattle grazing, but has not previously received recycled water.

The Discharger proposes to construct a facility at the Ranch that comprises 322 acres of fields to be spray irrigated with recycled-23 water to grow alfalfa and other fodder crops, and 50 acres of fields that can be both flood irrigated to grow alfalfa and other fodder crops; the 50 acres may also be flooded for emergency storage purposes. The Discharger will also place piping to support the irrigation of the fields, and alter the current piping for delivery of recycled-23 water to Harvey Place Reservoir.

The portions of circular areas shown on Attachment B as Fields A through H are the 322 acres of fields the Discharger proposes to irrigate via center-pivot irrigation systems. There are two additional rectangular areas labeled as Fields 1 and 2, also shown on Attachment B, that will receive recycled-23 water. These two fields will be constructed with berms roughly seven feet high, and have the ability to

store up to 300 acre-feet, or 98 million gallons, of recycled-23 water if there are storage capacity issues at Harvey Place Reservoir. When used for emergency storage, the recycled-23 water delivered to Fields 1 and 2 that does not evaporate will remain until it percolates, is pumped to Harvey Place Reservoir, or delivered to other authorized recycling areas.

In addition to all of the fields, the proposed Facility will also include all the associated underground piping to convey the recycled-23 water to the fields and a new main line that will direct all recycled-23 water to flow through a pump station. The pump station will allow recycled-23 water to go directly to irrigation fields or to Harvey Place Reservoir (a portion of the current pipeline for recycled-23 water use will be abandoned).

#### 6. Recycled-23 Water Quality

The Discharger will be using disinfected secondary-23 recycled water as defined in California Code of Regulation, title 22, section 60301.225. Recycled-23 water has been oxidized and disinfected. The median concentration of total coliform bacteria in the disinfected effluent does not exceed 23 MPN/100mL utilizing the bacteriological results of the last seven days for which analyses have been completed, and the number of total coliform bacteria does not exceed 240 MPN/100mL in more than one sample in a 30-day period.

#### 7. Irrigation of Recycled-23 Water

The California Code of Regulations, title 22, section 60304(c) specifies that recycled water meeting recycled-23 water may be used for the following:

- a. Cemeteries,
- b. Freeway landscaping,
- c. Restricted access golf courses,
- d. Ornamental nursery stock and sod farms where access by the general public is not restricted,
- e. Pasture for animals producing milk for human consumption, and
- f. Any nonedible vegetation where access is controlled so that the irrigated area cannot be used as if it were part of a park, playground or school yard.

Also included are those uses defined under section 60304(d), for undisinfected secondary recycled water (treated to lower standard than recycled-23 water), thus, recycled-23 water uses also include the following:

- g. Orchards where the recycled water does not come into contact with the edible portion of the crop,
- h. Vineyards where the recycled water does not come into contact with the edible portion of the crop,

- i. Non food-bearing trees (Christmas tree farms are included in this category provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting or allowing access by the general public),
- j. Fodder and fiber crops and pasture for animals not producing milk for human consumption,
- k. Seed crops not eaten by humans,
- l. Food crops that must undergo commercial pathogen-destroying processing before being consumed by humans, and
- m. Ornamental nursery stock and sod farms provided no irrigation with recycled water occurs for a period of 14 days prior to harvesting, retail sale, or allowing access by the general public.

The Discharger has requested to use recycled-23 water as described in items e and j, above.

8. Other Uses of Recycled-23 Water

Pursuant to California Code of Regulations, title 22, section 60307(b) recycled-23 water may also be used for the following:

- a. Industrial boiler feed,
- b. Nonstructural fire fighting,
- c. Backfill consolidation around nonpotable piping,
- d. Soil compaction,
- e. Mixing concrete, and
- f. Dust control on roads and streets.

The Discharger has requested to use recycled-23 water as described in items b, c, d, and f, above.

9. Basin Plan

The Water Board adopted the *Water Quality Control Plan for the Lahontan Region* (Basin Plan), which became effective in 1995. This Order implements the requirements of the Basin Plan.

10. Regulations for Wastewater Treatment and Disposal

California Water Code section 13172 directed the State Water Resources Control Board (State Water Board) to write regulations for waste disposal sites to protect water quality "except for sewage treatment plants..." Those regulations are now incorporated in the California Code of Regulations, title 27. The disposal or reuse of recycled-23 water is not exempt from title 27, by the statute alone.

11. California Code of Regulations Title 27

California Code of Regulations, title 27, section 20090, defines the activities that may be exempt from title 27 requirements; the section provides a list of preconditions that must be met for the exemptions to apply. Section 20090(b) is the most applicable exemption, applying to discharges of wastewater to land, including evaporation ponds. The full text of the exemption follows.

*“The following activities shall be exempt from the SWRCB [State Water Resources Control Board]-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:*

- (b) Wastewater - Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:
  - (1) the applicable RWQCB [Water Board] has issued WDRs [Waste Discharge Requirements], reclamation requirements, or waived such issuance;*
  - (2) the discharge is in compliance with the applicable water quality control plan;*
  - and*
  - (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.”**

Exempting from the requirements of title 27 the discharge of recycled-23 water for irrigation and discharge to Fields 1 and 2 (for both flooding for storage and flood irrigation) is appropriate for the following reasons: (1) this Order as adopted constitutes issuance of Reclamation Requirements/Waste Discharge Requirements in compliance with the Basin Plan, (2) the discharges will be in compliance with the Basin Plan, and will be monitored to verify that the discharge is in compliance with the Basin Plan, and (3) the recycled-23 water does not need to be managed as a hazardous waste.

12. Regulation of Recycled Water

- a. California Code of Regulations, Title 22, Department of Public Health  
The California Department of Public Health (CDPH), formerly the Department of Health Services, established criteria for using recycled water. These criteria are codified in title 22 and include such requirements as Sources of Recycled Water, Uses of Recycled Water and Use Area Requirements. CDPH adopted revised water recycling criteria that became effective on March 20, 2001. Applicable criteria are prescribed in this Order.
- b. Engineering Reports  
As required by California Code of Regulation, title 22, section 60323, the Discharger has submitted an engineering report for the production and use of recycled-23 water to CDPH. Prior to the use of recycled-23 water on this project, the Discharger must obtain acceptance of the project from the CDPH,

and must implement the CDPH conditions identified for project acceptance, as required by this Order.

13. Ground Water

The Discharger has a number of ground water monitoring wells installed at the Ranch. The depth to first ground water varies from 5 feet to 38 feet below the land surface. The shallow ground water appears to be recharged from precipitation and surface flows through the area, and the quality is suitable to meet the designated beneficial uses. From the limited ground water data, total dissolved solids (TDS) ranges from 57 to 183 mg/L and total nitrogen ranges from less than 1 mg/L to 4.25 mg/L, with a nitrate (as nitrogen) median concentration of .35 mg/L.

14. Hydrogeology

It is assumed that the ground water flow through the Ranch is north towards the West Fork of the Carson River by way of shallow ground water flows through consolidated volcanic rock and unconsolidated alluvial deposits. The tertiary volcanic rocks forming the low-lying hills between the Ranch and the West Fork of the Carson River is a low permeable boundary believed to accentuate the ground water flow towards the northeast.

15. Site Geology

The Ranch is mapped as a quaternary moraine with younger outwash and valley fill deposits. The subsurface is a poorly-graded mixture of medium to coarse granitic sands and gravels with thin layers of clayey sand and silts. Under the unconsolidated deposits are tertiary volcanic rock, andesitic tuffs and lava.

16. Site Hydrology

The Ranch has been and is currently supplied by fresh water diversions from the West Fork of the Carson River. Indian Creek flows east of the ranch along the southern portion of the Diamond Valley and Indian Creek meets up with the East Fork of the Carson River in Nevada.

17. Authorized Disposal Sites

The authorized disposal sites are the Fields A, B, C, G, 1 and 2 as shown on Attachment B. (Fields D, E, F, and H are shown on Attachment B but are not authorized in this Order because of issues due to wetland delineation and may be authorized by amending this Order.) Fields 1 and 2 are the fields that will be flood or sprinkler irrigated and may be used as emergency storage by being flooded with up to five feet of recycled-23 water when needed (provided two feet of free board is maintained). Fields A, B, C, and G are the fields that will be spray irrigated with recycled-23 water. All fields must be irrigated at agronomic rates, except Fields 1

and 2 when they are used for emergency storage. In addition to the fields, recycled-23 water may be used for nonstructural firefighting, dust control and soil compaction on fields, roads and field berms, and consolidation of soils around nonpotable water piping, provided all CDPH regulations are followed. The Discharger is authorized to use or dispose of recycled-23 water only at locations as provided above.

18. Receiving Waters

The potential receiving waters for the discharge are the ground waters in the Carson Valley ground water basin (Department of Water Resources Ground Water Basin No. 6-6).

19. Beneficial Uses of Ground Water

The beneficial uses for the ground waters of the Carson Valley Basin, as specified and defined in the Basin Plan, are:

- a. Municipal and Domestic Supply (MUN)
- b. Agricultural (AGR)
- c. Fresh Water Replenishment (FRSH)
- d. Industrial (IND)

20. Water Code Section 13241 Considerations

Pursuant to California Water Code section 13241, the requirements of this Order take into consideration the following:

(a) Past, present, and probable future beneficial uses of water.

The findings of this Order identify past, present, and probable future beneficial uses of water, as described in the Basin Plan, that are potentially affected by the discharge. Present or probable future beneficial uses of the water, including municipal water supply, agricultural supply, freshwater replenishment and industrial service supply will not be affected by the discharge, and will be maintained. The use of recycled-23 water on the Ranch will be monitored to assure the ground water is not being adversely affected by water recycling or other discharges associated with the land use, such as cattle grazing and alfalfa production. This Order does not authorize degrading the ground water from the use of recycled water in a manner that would impair past, present and probable future beneficial uses.

(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

The findings of this Order concerning geology, hydrogeology, and hydrology provide general information on the hydrographic unit. Available information on the ground water at the Ranch indicates the water is of high quality and suitable for all prescribed beneficial uses. The ground water presently has very low concentrations of total

dissolved solids and low nutrient levels. (From limited ground water data, TDS range is 57 -183 mg/L, total N of less than 1mg/L to 4.25 mg/L)

The Water Board has considered the environmental characteristics of the hydrographic unit, including the quality of water available.

(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area.

The Water Board has considered past and potential activities that affect water quality, and water quality conditions that could be reasonably achieved through Water Board controls.

Factors that could affect water quality in the area include historic agricultural and grazing uses, which have generally not been regulated by the Water Board. Activities that have been historically regulated or controlled by the Water Board include the following: (1) use of pesticides, (2) on-site waste disposal (OSWD - septic tank and leach field) systems, (3) construction activities not including land tilling, (4) wetland dredge and fill disturbance not associated with agriculture, and (5) irrigation with recycled-23 water.

- (1) Pesticides have been used in the project area and there is no known ground water pollution associated with the use of pesticides in Diamond Valley. Pesticides and recycled-23 water do not involve similar pollutants. Controls are specified as objectives for pesticides, as described in the Basin Plan.
- (2) The Ranch and adjacent area has a very limited number of small on-site waste disposal systems and there is presently ample space to disperse the discharge. Except for the one residence on the Ranch, most other OSWD are up-gradient of the Ranch and current ground water sampling does not indicate any problem with the use of OSWD. The use of recycled-23 water could add to salt and nutrient loading in combination with OSWD systems; however, the Discharger has produced a nutrient management plan to irrigate at agronomic rates with the nutrient rich recycled-23 water. Current estimates for alfalfa production indicate that additional nutrients in addition to those provided from the use of recycled-23 water will be needed for optimal plant growth. The Discharger will also have to annually produce reports to show that agronomic rates were used to balance plant water and nutrients requirements.
- (3) The construction activities will primarily be temporary, and the primary pollutant will be sediment and associated pollutants that can be attached to or associated with sediment. Best Management Practices will be implemented to control erosion and to minimize impacts to water quality from sediment and the recycled-23 water used for construction.
- (4) The wetland disturbance that may occur will be regulated separately with appropriate permits from the U.S. Army Corps of Engineers and/or Clean Water Act section 401 certification or waste discharge requirements from the Lahontan Regional Board, which will include requirements that the project

avoid, minimize, and then mitigate impacts to wetlands, as has been done on other projects within the Lahontan Region. The use of recycled-23 water will not occur on wetlands and existing wetlands on the Ranch should not be adversely affected by the use of recycled-23 water.

- (5) The use of recycled-23 water is a new discharge for the area and will be regulated by this Order. The Discharger must produce an annual cropping plan to balance the amount of nutrients applied, harvested amounts, and irrigation requirements. The irrigation at agronomic rates, with respect to water and nutrient balance, should prevent any degradation of ground water that would adversely affect beneficial uses. Ground water monitoring will be required to verify that the ground water continues to meet the beneficial uses.

(d) Economic considerations.

The Discharger has purchased the Ranch to use recycled-23 water for the production of animal fodder crops and to assist in the management of recycled-23 water. This Order authorizes the use of recycled-23 water and adds costs associated with monitoring for potential degradation of the ground water and to prevent surface runoff to surface waters. Using recycled-23 water for irrigation is considered an economic benefit for the area as it reduces demands on fresh water supplies, reduces pumping costs, and reduces fertilization requirements.

(e) The need for developing housing within the region.

The Discharger is not responsible for developing housing within the region; however, using recycled-23 water may benefit the region by reducing the demand for fresh water supply for ranching. This Order is not associated with the need to develop housing within the Region, nor will it prevent housing development.

(f) The need to develop and use recycled water.

The Discharger has agreements to supply several private ranchers with recycled-23 water. The Discharger has no agreement or ability to require the current ranchers to continue to accept recycled-23 water at their ranches. The Discharger purchased the Ranch to secure an area to beneficially use their recycled-23 water. This Order aids the Discharger in further developing use of recycled-23 water in the Lahontan Region.

21. State Water Board Recycled Water Policy

State Water Board Resolution No. 2009-0011, "Adoption of a Policy for Water Quality Control for Recycled Water," references and adopts the "State Water Resources Control Board Recycled Water Policy" (Recycled Water Policy). The Recycled Water Policy provides direction to the State and Regional Water Boards regarding the appropriate criteria to be used in issuing permits for recycled water projects. The Recycled Water Policy describes permitting criteria intended to

streamline, and provide consistency for, the permitting of the vast majority of recycled water projects. This Order implements the Recycled Water Policy.

22. Policy for Maintaining High Quality Waters

State Water Resources Control Board (State Water Board) Resolution No. 68-16 requires the Lahontan Water Board, in regulating the discharge of waste, to

*. . . maintain existing high quality waters of the State 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 present and anticipated beneficial uses, and will not result in water quality less than that described in State or Regional Water Board policies; and require that any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters must meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained.*

The Discharger produced a nutrient management plan to balance the nutrient and water requirements for crops and to prevent the degradation of ground water by nutrients in the recycled-23 water. In addition the Discharger will produce an Annual Cropping Plan each year to estimate the proper nutrient and water balance needed for the use of recycled-23 water for irrigation of the crops planned for the next year on the Ranch. Irrigation operations may result in some ground water degradation from salts due to the need to leach salts from the root zone of the crops. This degradation is expected to be minor and will not result in the water quality objectives being exceeded, and will not result in loss of or adverse impact to the most sensitive beneficial use of ground water. Irrigation operations will be conducted at agronomic rates, which is the best practicable treatment or control of the discharge.

Emergency storage of recycled-23 water in Fields 1 and 2 will only occur on an emergency basis (particularly during times of natural flooding). The Discharger will be required to monitor ground water in and around all the fields for degradation. The Discharger estimates that nitrate (as nitrogen) concentrations in shallow ground water will increase from a median of .35 mg/L to 2.16 mg/L as a result of emergency storage at fields 1 and 2. This level is well below the maximum containment level (MCL) of 10 mg/L for nitrate (as nitrogen), and is consistent with maximum benefit to the people of the State as protective of all beneficial uses.

23. California Environmental Quality Act Compliance (CEQA)

The Discharger, acting as Lead Agency under the California Environmental Quality Act (CEQA, Public Resources Code 21000, et seq.), has certified a programmatic *Recycled Water Facilities Master Plan Environmental Impact Report (EIR), Final –*

*November 2009* (henceforth, the “Master Plan,” SCH # 2007042116) together with Master Plan projects 1, 2, 11 and 12 following project-level review and analysis of these projects. The Discharger determined that Master Plan projects 1 and 2 warranted additional analysis prior to implementation, and prepared a *Supplemental Master Plan EIR* (SCH # 2001082130) in March 2011 that was certified by the Discharger on August 18, 2011.

The Water Board, acting as a CEQA Responsible Agency in compliance with California Code of Regulations, title 14, section 15096, evaluated the impacts to water quality addressed in the above-cited environmental documents. As a result of the analysis, the Water Board finds the mitigation measures in the Final and Supplemental EIRs, combined with compliance with the requirements specified by this Order, will reduce water quality impacts to less than significant levels. These mitigation measures within the Water Board’s jurisdiction will be incorporated into this Order. Other impacts unrelated to water quality are not within the Water Board’s regulatory authority to control.

24. Notification of Interested Parties

The Water Board has notified the Discharger and interested parties of its intent to issue requirements for the discharge. A notice of the availability of a draft order, and that a public meeting to consider adoption of this Order was sent by mail to interested persons and agencies. The public meeting was also disclosed in an agenda announcement sent to interested persons and available on the Water Board’s website. The Water Board has considered comments provided in accordance with applicable time limits. The Water Board, in a public meeting on September 14, 2011, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED THAT**, pursuant to California Water Code, sections 13260, 13263, 13267, and 13523, the Discharger must comply with the following:

**I. AUTHORIZED DISCHARGE AREAS**

The recycled-23 water must be discharged to the authorized disposal sites as described in Finding No.17, above, except as provided in C., below. The following are specifications for the authorized disposal areas (irrigated fields).

- A. Recycled-23 water is authorized to be used on Fields A, B, C, and G as shown on Attachment B of this Order, in accordance with the following:
  - 1. Irrigation of Fields A, B, C, and G must be designed to prevent the discharge of recycled-23 water from running off the irrigation field as surface flow.
  - 2. The irrigation systems must be operated to minimize recycled-23 water spray from drifting off the fields.
  - 3. Irrigation of Fields A, B, C, and G must be at agronomic rates and in conformance with the annual cropping plan.

- B. Recycled-23 water is authorized to be discharged on Fields 1 and 2 as shown on Attachment B of this Order, in accordance with the following:
1. When Fields 1 and 2 are irrigated with recycled-23 water, standing water will be minimized and applications of recycled-23 water must be at agronomic rates.
  2. Fields 1 and 2 may be flooded in the event of an emergency for temporary water storage with recycled-23 water to not less than two feet from the top of the lowest portion of the containment berm.
  3. In the event that Fields 1 or 2 are used for emergency storage the Discharger must notify the Water Board by telephone within 48 hours of discharging recycled-23 water to the field.
- C. Recycled-23 water is authorized to be used for nonstructural firefighting purposes, dust control and soil compaction on fields, roads and field berms, and consolidation of soils around nonpotable water piping, within the Ranch provided all CDPH regulations are followed. The Discharger must also do the following:
1. Where contractors are used, the Discharger must maintain documentation that contractors and their employees are informed that nonpotable recycled-23 water is in use.
  2. Recycled-23 water may not be used for backfill consolidation around potable water piping and freshwater conveyance piping systems.
  3. Water tanks, trucks and other devices used to hold, spread, or convey recycled-23 water must be placarded (as discussed below in item II.A.4) to inform those using the water that nonpotable water is in use.

## **II GENERAL REQUIREMENTS AND PROHIBITIONS**

### **A. Department of Public Health Requirements**

The use of recycled-23 water must comply with the following:

1. No irrigation with, or impoundment of, recycled-23 water will take place within 100 feet of any domestic water supply well (California Code of Regulations, title 22 section 60310 (c)).
2. No spray irrigation with any recycled water will take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard (California Code of Regulations, title 22 section 60310 (f)).
3. Recycled-23 water used for surface irrigation may also be used for the purposes described in Finding Nos. 7 and 8, of this Order, provided the water meets the disinfected recycled-23 water standards as defined in California Code of Regulations, title 22, section 60301.225.

4. Pursuant to California Code of Regulations, title 22, section 60310(g), in areas where the recycled-23 water is used that are accessible to the public, signs will be visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER-DO NOT DRINK." Signs must display an international symbol similar to that shown on Attachment C. The Discharger may use other signage and wording as accepted by the CDPH, a written copy of the acceptance must be provided to the Water Board prior to the discharge.
5. Prior to the use of recycled-23 water on the Ranch, the Discharger must submit an engineering report to and obtain acceptance from CDPH and must implement any CDPH conditions of acceptance.

B. General Requirements

1. Fencing must be placed and maintained on the perimeter of the authorized disposal sites to prevent public access.
2. The discharge of waste must not cause or threaten to cause pollution, as defined in Water Code section 13050.
3. The discharge of waste must not cause or threaten to cause a nuisance, as defined in Water Code section 13050.
4. The use of recycled-23 water must not cause or threaten to cause pollution, as defined in Water Code Section 13050.
5. The use of recycled-23 water must not cause or threaten to cause a nuisance, as defined in Water Code Section 13050.
6. If a pollution or nuisance occurs, corrective measures must be implemented immediately to eliminate the pollution or nuisance.
7. Pipelines must be maintained to identify, prevent, or timely correct, leakage.
8. The discharge of recycled-23 water at a rate and/or amount that causes ponding or other than incidental runoff must be prevented. The exception to ponding recycled-23 water will be for Fields 1 and 2 when they are being used for storage.

C. Prohibitions

1. Discharge of untreated or partially-treated sewage to the recycled-23 water distribution system is prohibited.
2. Where any numeric or narrative water quality objective contained in the Basin Plan is already being exceeded, the use of recycled water that causes further degradation or pollution is prohibited.
3. The use of recycled-23 water that causes a violation of any numeric or narrative water quality objective contained in the Basin Plan for ground waters or surface waters is prohibited.

4. The discharge of any waste or deleterious material to surface waters, including wetlands, of the East Fork Carson River or West Fork Carson River hydrologic units is prohibited.

### III. PROVISIONS AND MISCELLANEOUS REQUIREMENTS

#### A. Standard Provisions

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," in Attachment D which is made part of this Order, except that protection against inundation of the emergency disposal Fields 1 and 2 shall not be required.

#### B. Monitoring and Reporting Program

A monitoring and reporting program (MRP) is necessary to verify compliance with requirements. Pursuant to Water Code section 13267, subdivision (b), the Discharger must comply with MRP No. 2011-(**PROPOSED**) as specified by the Water Board Executive Officer.

#### C. Claim of Copyright or Other Protection

Any and all reports and other documents submitted to the Water Board pursuant to this Order will need to be copied for some or all of the following reasons: (1) normal internal use of the document, including staff copies, record copies, copies for Water Board members and agenda packets, (2) any further proceedings of the Water Board and the State Water Board, (3) any court proceeding that may involve the document, and (4) any copies requested by members of the public pursuant to the Public Records Act or other legal proceeding.

If the Discharger or its contractor(s) claims any copyright or other protection, the submittal must include a notice, and the notice will accompany all documents copied for the reasons stated above. If copyright protection for a submitted document is claimed, failure to expressly grant permission for the copying stated above will render the document unusable for the Water Board's purposes and will result in the document being returned to the Discharger as if the task had not been completed.

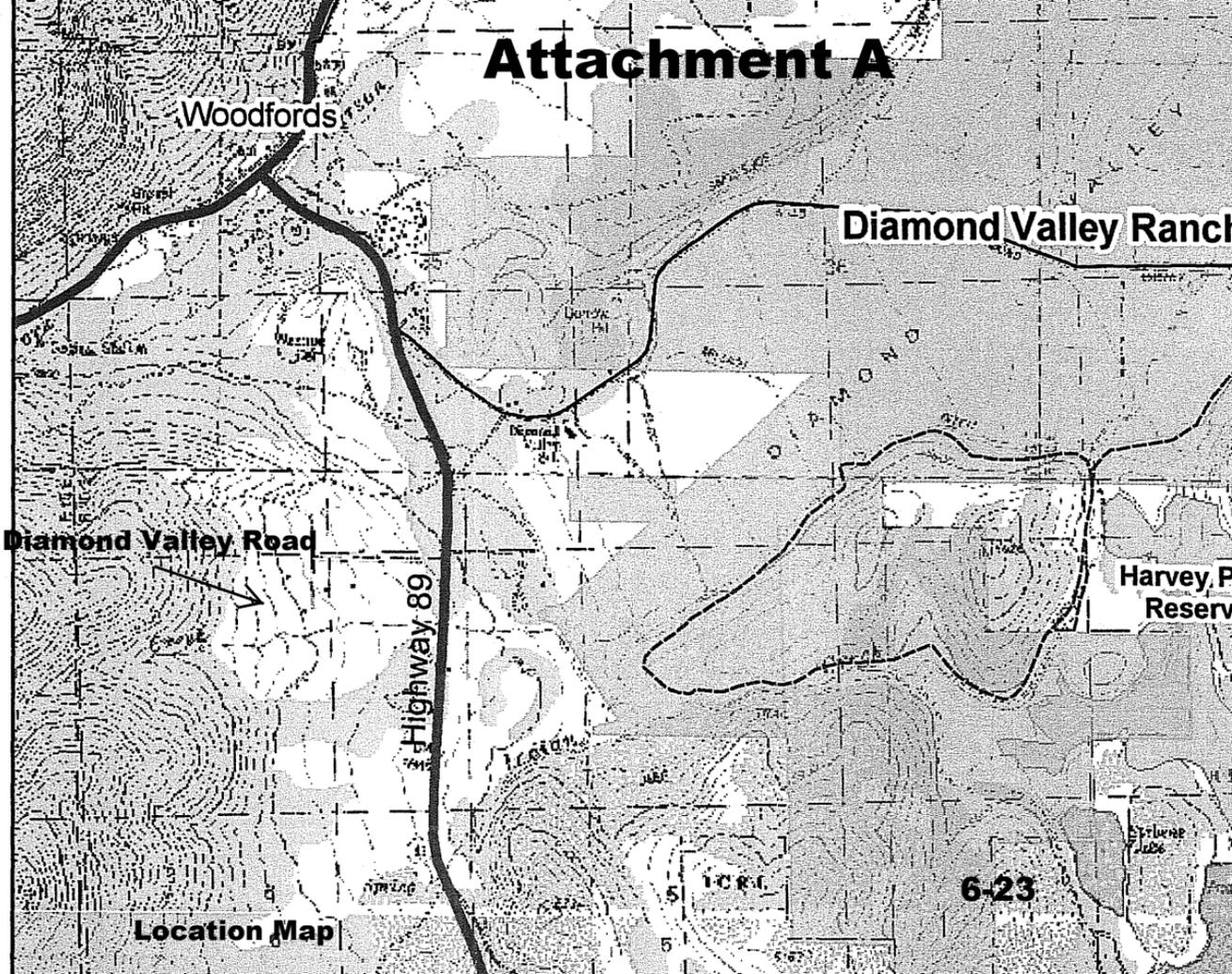
#### D. Annual Fee

The Discharger operating under these waste discharge requirements is subject to an annual fee pursuant to the California Code of Regulations, title 23, section 2200 et seq., as amended.



# **ATTACHMENT A**

# Attachment A



Woodfords

Diamond Valley Ranch

Diamond Valley Road

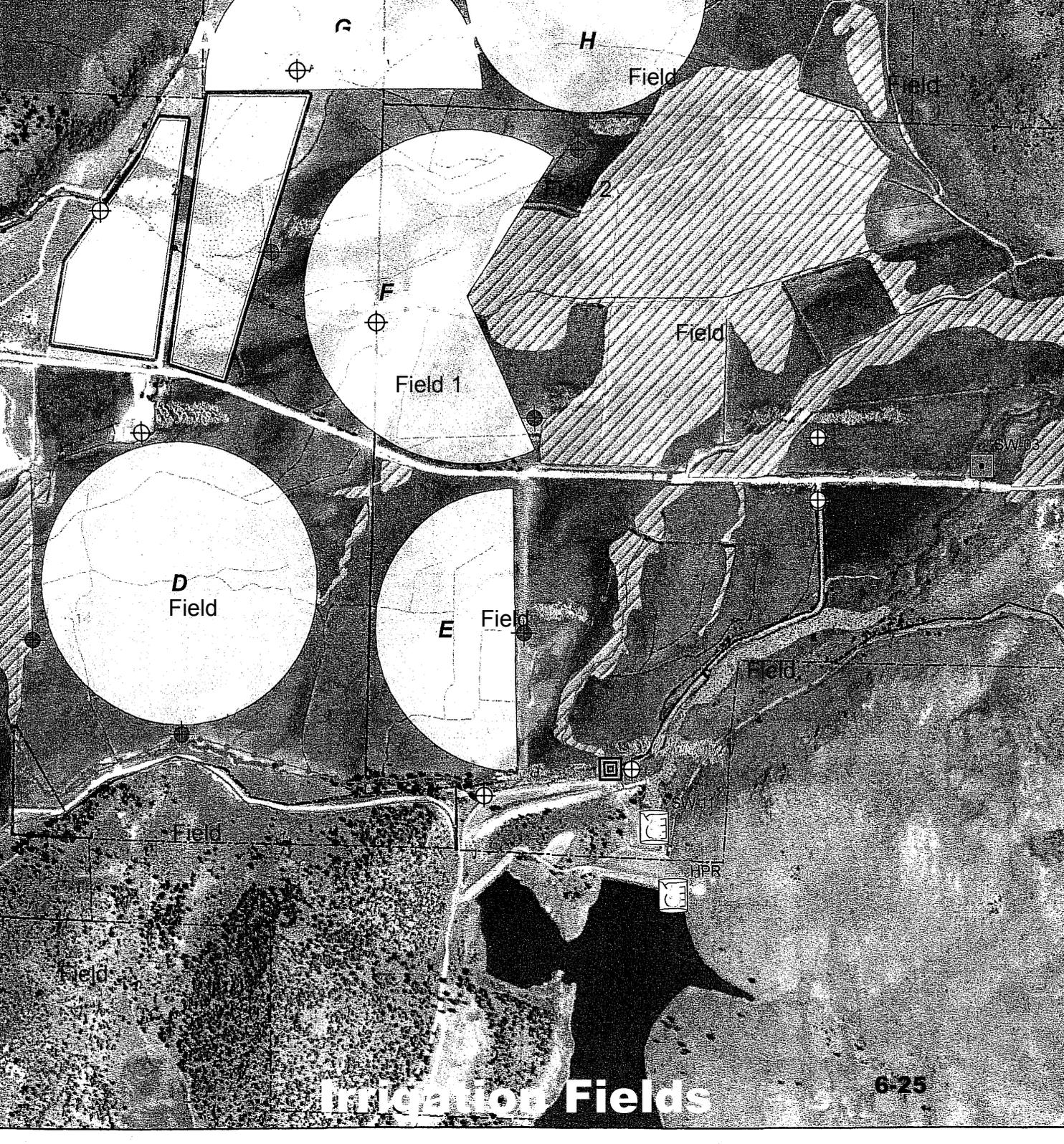
Highway 89

Harvey P. Reserv

Location Map

6-23

# **ATTACHMENT B**



A

G

H

Field

Field

F

Field 1

Field

D

Field

E

Field

Field

Field

Field

HPR

# Irrigation Fields

# **ATTACHMENT C**

Attachment C



# **ATTACHMENT D**

ATTACHMENT D  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**STANDARD PROVISIONS**  
FOR WASTE DISCHARGE REQUIREMENTS  
AND WATER RECLAMATION REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Water Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements/Water Reclamation Requirements (WDR/WRRs);
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Water Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Water Board at least 140 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to WDR/WRR shall be considered to have a continuing responsibility for ensuring compliance with applicable WDR/WRR in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDR/WRR shall be reported to the Water Board. Notification of applicable WDR/WRR shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Water Board.
- d. If a Discharger becomes aware that any information submitted to the Water Board is incorrect, the Discharger shall immediately notify the Water Board, in writing, and correct that information.
- e. Reports required by the WDR/WRR, and other information requested by the Water Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any

information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.

- f. If the Discharger becomes aware that their WDR/WRR (or permit) is no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Water Board in writing and request that their WDR/WRR (or permit) be rescinded.

3. Right to Revise WDR/WRR

The Water Board reserves the privilege of changing all or any portion of the WDR/WRR upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDR/WRR may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDR/WRR which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDR/WRR. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDR/WRR.

7. Waste Discharge Requirement Actions

The WDR/WRR may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDR/WRR conditions.

8. Property Rights

The WDR/WRR do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDR/WRR including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDR/WRR shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDR/WRR are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Water Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses, and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater reuse or disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. 2011-(PROPOSED)  
WDID NO. 6A021008003

FOR

SOUTH TAHOE PUBLIC UTILITY DISTRICT

DISCHARGE OF RECYCLED WASTEWATER ONTO THE  
DIAMOND VALLEY RANCH

Alpine County

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This monitoring and reporting program (MRP) includes:

- I. General Requirements
- II. Quarterly Monitoring and Reporting Requirements
- III. Annual Reporting Requirements
- IV. Completion Report for New Monitoring Wells

**I. GENERAL REQUIREMENTS**

A. Effective date

This MRP for the reuse of recycled-23 water is effective on the date of adoption, or as amended by the Executive Officer, and is required pursuant to California Water Code Section 13267(b).

B. Overview of Reports Required

The Discharger must each year provide **four (4) Quarterly Monitoring Reports and three (3) Annual Reports (Annual Summary Report; Annual Cropping Report; and Annual Disposal Site Monitoring)**. The monitoring period covered for each report and the dates the reports are due are listed below in each respective subsection. Each report must provide information on general operations and ground water quality, as specified herein.

C. Certified Cover Letter

The Discharger must use Attachment 1 as a cover letter, or a cover letter containing the same information, for all reports provided to the Water Board. All violations of requirements must be disclosed in the report's cover letter.

D. General Provisions

The Discharger must comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is made part of this Monitoring and Reporting Program as Attachment 2.

## II. QUARTERLY MONITORING REPORTING REQUIREMENTS

The Discharger must monitor the following and submit quarterly reports on the following reoccurring dates, covering the time periods stated.

<u>Monitoring Period</u>	<u>Report Due Date</u>
October 1 - December 31	<b>January 30</b>
January 1 - March 31	<b>April 30</b>
April 1 - June 30	<b>July 30</b>
July 1 - September 30	<b>October 30</b>

The information that must be included to complete the monitoring report is specified below in items A.-D. below.

### A. Irrigation Monitoring

For each authorized irrigation site, the Discharger must monitor and record the following information:

1. Fields being irrigated; if a field or fields are not used for recycled water, report that no recycled water is in use (e.g., winter when no irrigation is occurring).
2. Crop name(s) and types (i.e., fodder, seed or other).
3. The date irrigation began and ended for each field receiving wastewater.
4. Approximate harvest dates and the estimated tonnage of harvest from each field.
5. The volume of recycled wastewater applied monthly to each field in production.
6. The type and amount of fertilizer applied to each field.
7. For crops with no standard literature values for nitrogen uptake, tissue samples of harvested crops must be collected and analyzed for total nitrogen to estimate nitrogen removal from the applied recycled-23 water.
8. Total nitrogen in representative soil samples from the irrigation sites.
9. The Discharger must record dates of irrigation, inspections, and report any recycled-23 water discharged as runoff outside of the authorized disposal site.
10. For each day of irrigation, maximum daily wind speed and direction, time of maximum daily wind speed and direction, and dates the discharge is shut down due to high winds.

**B. Monitoring Use of Recycled-23 Water Related to Construction**

The Discharger plans for large amounts of ground disturbance and may use recycled-23 water for construction. When the Discharger is using recycled-23 water for construction work the following must be monitored and reported quarterly:

1. The amount of recycled-23 water used for construction during each month.
2. The location(s) where the recycled-23 water was used.
3. Spills of recycled-23 water greater than 100 gallons to ground or any discharge to surface water.
4. A copy of weekly training logs informing the contractor and its employees that recycled-23 water or non-potable water is in use at the site.
5. A copy of weekly inspections of water trucks and water tanks to verify that they bear signs indicating non-potable water is in use.

**C. Ground Water Monitoring**

The following are the procedures that must be performed prior to collecting ground water samples from the monitoring wells and the list of parameters that the samples must be analyzed for.

1. Each time a monitoring well is sampled and prior to well purging as specified below, the depth (below ground surface) of ground water in each well shall be measured and the elevation (mean sea level) determined and reported with the ground water analysis results.
2. Well purging
  - a. Ground water samples must be collected after removing a minimum of one volume of water in the well casing and temperature, electrical conductivity, and pH measurements of the well water have stabilized to approximately  $\pm 10\%$  for each successive measurement.
  - b. The measurements of temperature, electrical conductivity, and pH during purging shall be reported with the ground water analysis. Parameter values shall be reported in the following units:

<u>Parameter</u>	<u>Units</u>
Temperature	°C or °F
Electrical Conductivity	µmho/cm or dS/m
pH	pH units

- c. The well casing diameter, well depth, and total purged volume prior to sampling shall be reported within the ground water analysis results.

3. The Discharger has seven ground water monitoring wells installed, and has proposed to install seven additional monitoring wells, at the Diamond Valley Ranch.

a. The monitoring wells that are installed and ready to be sampled are shown on Attachment 3 of this MRP and described below.

<u>Monitoring Well</u>	<u>Location</u>
ACMW-07S	Within Field C
ACMW-08N	Within Field C
ACMW-09N	Within Field G
ACMW-10	North of Field D
ACMW-11	Within Field F
ACMW-12	West of Field 1

b. The following monitoring wells were proposed by the Discharger, as part of the report of waste discharge. The Discharger must begin quarterly reporting from these wells by October 15, 2012. The proposed monitoring wells are shown on Attachment 3 of this MRP now labeled DMW.

<u>Monitoring Well</u>	<u>Location</u>
ACMW-13	West of Field D
ACMW-16	Southeast corner of Field F
ACMW-14	South of Field D
ACMW-15	East of Field E
ACMW-19	East of all Fields near Indian Creek
ACMW-18	Between Fields F and H
ACMW-17	East of Field 2

c. The following are the parameters for which the quarterly collected ground water samples must be analyzed for both the existing wells and proposed wells as labeled above and shown on Attachment 3.

<u>Parameter</u>	<u>Units</u>
Kjeldahl Nitrogen	mg/L as N
Nitrate Nitrogen	mg/L as N
Ammonia Nitrogen	mg/L as N
Total Dissolved solids	mg/L
Chloride	mg/L
Total Phosphorus	mg/L

D. Emergency Storage Monitoring for Fields 1 and 2

The following are monitoring requirements that must be reported quarterly if Fields 1 and 2 are used for emergency storage.

1. Daily flows in million gallons per day into the fields; specify which field is in use or that both are in use.
2. Inspections of the fields must include:
  - a. Daily inspection for failure of the berms of the field(s) in use,
  - b. Daily inspection of the condition of the berms, looking for seepage through the berms, and
  - c. Daily measurements of free board (distance from recycled water surface to the lowest point on the containment berm).
3. When the fields cease receiving recycled-23 water, provide the total flow received.
4. Provide the date the recycled-23 water was removed and where the recycled water was sent (e.g., to Harvey Place Reservoir, Field A, etc.), with amounts by location.
5. How many days the recycled-23 water remained in Fields 1 and 2.

### III. ANNUAL MONITORING AND REPORTING REQUIREMENTS

Three annual reports must be submitted annually: an Annual Summary Report, an Annual Cropping Report and an Authorized Disposal Site Monitoring Report. All annual reports are due on **January 30** of each year and may be submitted together or separately.

#### A. Annual Summary Report

The report must provide the following:

1. A summary and evaluation of the MRP information obtained for the prior calendar year, from quarterly monitoring reports, which also includes an evaluation of compliance status with agronomic application rate requirements for water and nitrogen.
2. Ground water data reports must include multi-year graphs and trend analyses for total dissolved solids, nitrate as N, and chloride data from the time that monitoring began.
3. Provide the direction of the ground water flow and gradient for the Ranch for each quarter on a scaled map. Also provide monitoring well static water level data (with respect to mean sea level or a datum) for the entire year.
5. If an existing monitoring well yields no water for sampling during two consecutive quarters, the Discharger must provide an explanation as to why the well is dry. If Discharger does not believe the monitoring well will recover, the Discharger must provide either an explanation that monitoring without that well is still adequate or provide a schedule on when and how the

monitoring deficiency will be corrected (i.e., by redrilling or replacing the dry monitoring well).

6. A summary of the compliance record and corrective actions needed, taken or planned to bring the discharge into full compliance with the requirements.

#### B. Annual Cropping Report

An Annual Cropping Plan Report must include, but is not limited to, the following items describing the proposed cropping plan for the calendar year in which the report is submitted (items 1-4 must be provided for each field and crop type).

1. Provide the type of crops to be grown for the next year.
2. Estimate the volume of water needed based on crop needs (irrigation efficiency, evapotranspiration and need for maintenance leaching) for the next year. Provide the basis for calculations, including data for irrigation efficiency as measured in the field using methods described in appropriate literature references (i.e., Intermountain Alfalfa Management, Publication 3366, University of California Division of Agriculture and Natural Resources, 1997).
3. Amount of nitrogen expected to be applied to the crop from all sources, including estimates of nitrogen available in the root zone based on annual soil testing.
4. Amount of nitrogen expected in the harvested crop per harvest and total amount expected to be removed from the field for the year.
5. Describe the fate of nitrogen that has been applied, or that is available in the root zone, that is not accounted for in the crops harvested during the prior year.

#### C. Authorized Disposal Site Monitoring Report

The report must provide information including, but not limited to, the following:

1. Annual analysis and summary, by a certified soil scientist, qualified agronomist, or other qualified professional<sup>1</sup>, of the amount of water and nitrogen applied or available to the crops for each irrigated field. The analysis must compare the actual water and nitrogen applications to those predicted in the Annual Cropping Plan for the previous year and discuss any significant differences. Additionally, this annual report must include a comparison of the actual crop production at harvest to that projected in the previous year's Annual Cropping Plan.
2. For each harvest completed during the previous year, the report must include

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<sup>1</sup> A statement of qualifications must be provided.

the total amount of nitrogen harvested based on the results of site-specific plant tissue analyses. Conservative (lower-bound) estimates of the amount of nitrogen harvested may be used in lieu of site-specific plant tissue analyses provided the estimate is justified by use of prior site-specific tissue analyses or literature references for crop grown using recycled water. The production from the field may be determined by multiplying the number of bales by an average bale weight. The results of this calculation must be compared to the total amount of nitrogen applied to the crop from all sources (e.g., wastewater, other water, and fertilizer) or available in the soil during production. A comparison with the previous year's Annual Cropping Plan must be provided, and any significant differences from the Annual Cropping Plan must be addressed.

3. Recycled water balance for the crop cycle including: the amount of water applied to each field, water losses due to irrigation inefficiency and evapotranspiration. These values must be compared to the values proposed in the Annual Cropping Plan for the previous year and any significant differences must be addressed. If recycled water is blended with non-recycled water to meet the water demand during warmer seasons, the quantity and percentage of recycled water and the total water applied must be determined and reported. Nitrogen content of non-recycled water must also be determined and reported.
4. Summary of daily wind speed(s) and direction(s) at the Ranch (may be measured at a central location at the Ranch representative of the Authorized Disposal Site), indicating periods when irrigation ceased due to the potential to transport recycled-23 water offsite by high wind conditions. Additionally, the report must include a discussion of the factors that lead to a decision to continue irrigation when the wind speed exceeds the level defined by the Discharger as its best management practice for preventing spray drift or off-site transport of recycled-23 water.
5. Monthly evaluation of the effectiveness of measures to prevent offsite drift of recycled-23 water aerosols.
6. Summary of maintenance activities such as maintenance of fence and setbacks from the property lines or wells for the use of disinfected recycled-23 water, disking, deep disking, weed removal and recontouring at irrigated fields.
7. Summary of inspections for ponding, offsite flow or offsite drift when irrigation with recycled water is occurring.
8. Provide information on any and all manufactured chemicals used on the agricultural fields, including rates (e.g., pounds per acre per year) and amounts applied to specific areas.

**V. COMPLETION REPORT FOR NEW MONITORING WELLS**

The Discharger must provide a well completion report **by January 30, 2013** on the monitoring well construction identified in MRP section II.C.3.b. The report must include the following:

1. A well drilling report on the lithology of each well.
2. The elevation (mean sea level or datum) of first ground water encountered.
3. The elevation (mean sea level or datum) of standing water after development.
4. The total depth of the well, the well screen interval and datum from which static water elevations will be measured.
5. The vertical thickness of the monitoring well seal.

Ordered by: \_\_\_\_\_ Dated: \_\_\_\_\_

HAROLD J. SINGER  
EXECUTIVE OFFICER

- Attachments:
1. Certified Cover Letter for Reporting
  2. General Provisions for Monitoring and Reporting
  3. Facility Map Showing Monitoring Wells

# **ATTACHMENT 1**

ATTACHMENT 1

Date \_\_\_\_\_

California Regional Water Quality Control Board  
Lahontan Region  
2501 Lake Tahoe Boulevard  
South Lake Tahoe, CA 96150

Facility Name:

\_\_\_\_\_  
\_\_\_\_\_

Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact Person:

\_\_\_\_\_

Job Title:

\_\_\_\_\_

Phone:

\_\_\_\_\_

Email:

\_\_\_\_\_

WDR/NPDES Order Number:

\_\_\_\_\_

WDID Number:

\_\_\_\_\_

Type of Report (circle one):

Monthly    Quarterly    Semi-Annual    Annual    Other

Month(s) (circle applicable month(s)\*:

JAN    FEB    MAR    APR    MAY    JUN  
JUL    AUG    SEP    OCT    NOV    DEC

\*annual Reports (circle the first month of the reporting period)

Year:

\_\_\_\_\_

Violation(s)? (Please check one): \_\_\_\_\_ NO

\_\_\_\_\_ YES\*

\*If YES is marked complete a-g (Attach Additional information as necessary)

a) Brief Description of Violation:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**b) Section(s) of WDRs/NPDES Permit Violated:**

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**c) Reported Value(s) or Volume:**

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**d) WDRs/NPDES Limit/Condition:**

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**e) Date(s) and Duration of Violation(s):**

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**f) Explanation of Cause(s):**

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**g) Corrective Action(s)**  
(Specify actions taken and a schedule for actions to be taken)

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact \_\_\_\_\_ at the number provided above.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

# **ATTACHMENT 2**

## ATTACHMENT 2

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### **GENERAL PROVISIONS** FOR MONITORING AND REPORTING

##### 1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
  - i. Standard Methods for the Examination of Water and Wastewater
  - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal

the discharge period, or 24 hours, whichever period is shorter.

## 2. OPERATIONAL REQUIREMENTS

### a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

### b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

## 3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
  - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
  - ii. In the case of a partnership, by a general partner;

- iii. In the case of a sole proprietorship, by the proprietor; or
  - iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
- i. Name and telephone number of individual who can answer questions about the report.
  - ii. The Monitoring and Reporting Program Number.
  - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

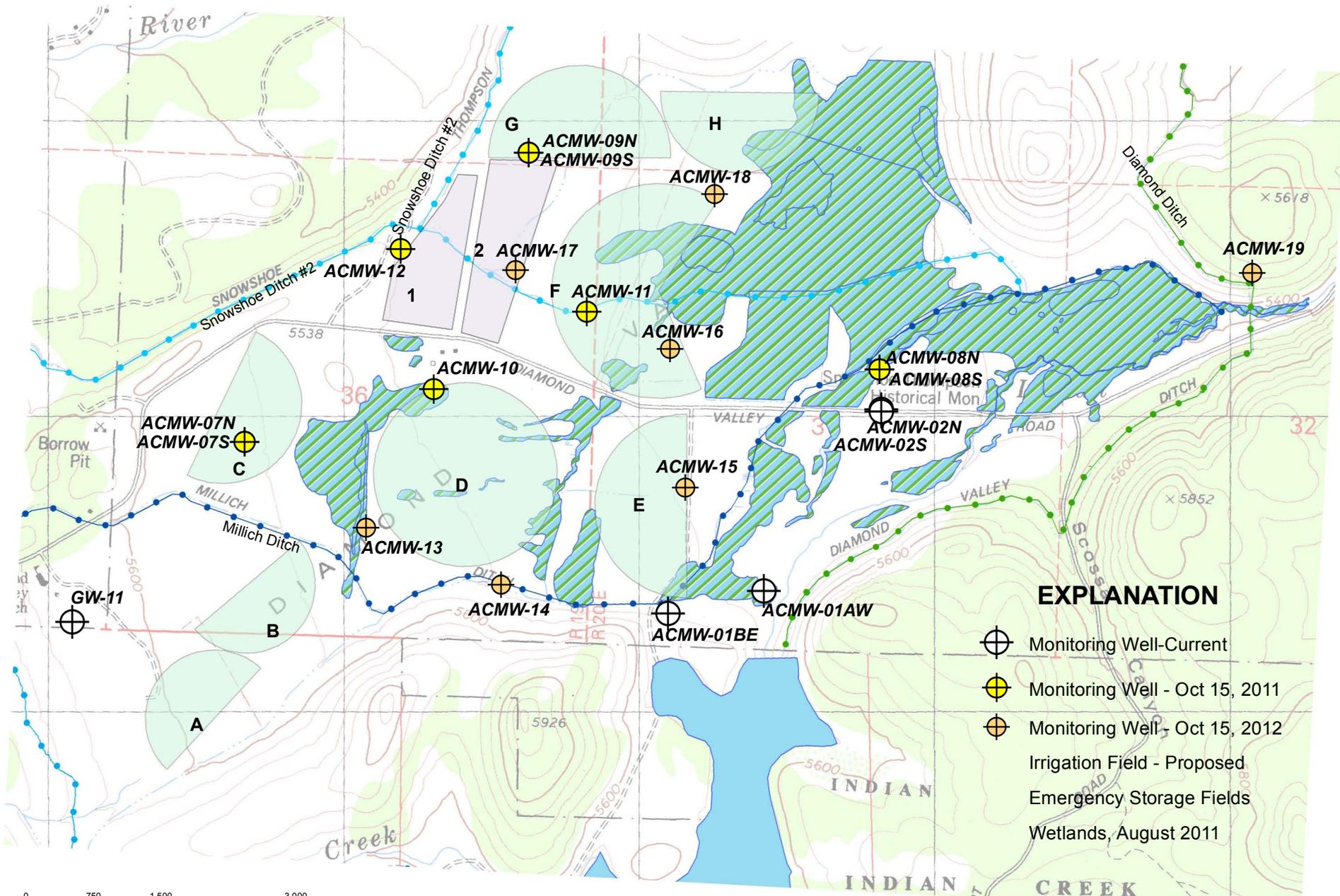
#### 4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

T:\FORMS\GENPROV MRP.doc

file: general pro mrp

# **ATTACHMENT 3**



**EXPLANATION**

- Monitoring Well-Current
- Monitoring Well - Oct 15, 2011
- Monitoring Well - Oct 15, 2012
- Irrigation Field - Proposed
- Emergency Storage Fields
- Wetlands, August 2011

0 750 1,500 3,000 Feet  
Scale 1: 18000



**South Tahoe Public Utility District  
Monitoring Well Locations -  
Diamond Valley, Alpine County, CA**

MRP - Attachment 3



# **ENCLOSURE 3**



# South Tahoe Public Utility District

1275 Meadow Crest Drive • South Lake Tahoe • CA 96150  
Phone 530 544-6474 • Fax 530 541-0614

August 8, 2011



Robert Tucker, P.E.  
Water Resources Control Engineer  
California Regional water Quality Control Board  
Lahontan Region  
2501 Lake Tahoe Boulevard  
South lake Tahoe, CA 96150

Re: Diamond Valley Ranch Recycled Water Project -Comments to Board  
Order No. R6T-2011-(Tentative); WDID No. 6A021008003

Dear Rob:

South Tahoe Public Utility District (District) staff has carefully reviewed the July 8, 2011 tentative Board Order, Water Reclamation Requirements and Waste Discharge Requirements for the District's proposed discharge of recycled wastewater onto the Diamond Valley Ranch, Alpine County, CA. We offer the following proposed changes to the tentative Board Order for your review and consideration.

## **BOARD ORDER No. R6T-2011-(Tentative)**

### 1) Page 1, Item 3 Sources of the Recycled Water

1<sup>st</sup> ppgh, 3<sup>rd</sup> line: Change to "...wastewater is treated to a filtered secondary treatment standard..."

### 2) Page 2, Item 5 Facility:

2<sup>nd</sup> ppgh, 4<sup>th</sup> line: Change to "...the 50 acres may also be flooded for emergency..."

5<sup>th</sup> ppgh, 3<sup>rd</sup> line: Change to "...recycled-23 water to flow through a pump station. The pump station will allow recycled-23 water to go ..."

**Comment:** Fields 1 and 2 will most likely be used for emergency storage during the winter and/or early spring, when the occurrence of rain-on-snow flood events is greatest. At the time of emergency storage, evaporative losses are likely to be negligible. Emergency storage of recycled water is not anticipated to exceed 100 days. Preliminary estimates of the nitrate load infiltrated to shallow groundwater during a 100-day storage period, suggest increases in nitrate concentrations on the order of 2 milligrams per liter (mg/L) by percolation from these fields.

3) Page 4, Item 8 Other Uses of Recycled-23 Water:

2<sup>nd</sup> ppgh, 1<sup>st</sup> line: Change to "...recycled-23 water as described in items b, c, d and f ..."

**Comment:** A substantial portion of project construction work activities will occur within open pastures on District lands. The District requests that recycled-23 water be available for nonstructural firefighting to reduce the threat of grass fires during construction.

4) Page 6, Item 15 Site Geology:

2<sup>nd</sup> line: Change to "...mixture of medium to coarse..."

5) Page 6, Item 17 Authorized Disposal Sites:

2<sup>nd</sup> line: Change to "...fields that will be flooded or sprinkler irrigated..."

**Comment:** District requests that solid set sprinkler also be permitted for recycled water irrigation within the bermed areas of Fields 1 and 2. This would provide greater operational flexibility and would not result in any increase in application rates.

8<sup>th</sup> line: Change to "...used for nonstructural firefighting and dust control; and during the construction..."

**Comment:** A substantial portion of project construction work activities will occur within open pastures on District lands. The District requests that recycled-23 water be available for nonstructural firefighting to reduce the threat of grass fires during construction.

6) Page 10, Item 23 California Environmental Quality Act Compliance (CEQA):

1<sup>st</sup> ppg, 8<sup>th</sup> line: Change to "...in March 2011 that is anticipated to be certified by the Discharger on August 18, 2011."

**Comment:** The 45-day public comment period for the draft Supplemental EIR (SEIR) commenced on March 28, 2011. Public meeting to receive public input on the SEIR was convened on April 21, 2011. The District has considered comments provided and included these comments in the final document. The final SEIR is scheduled to be considered for adoption by the District's Board of Directors at the Regular Meeting to be held on August 18, 2011.

7) Page 12, I. AUTHORIZED DISCHARGE AREAS

C.: Change to: "Recycled-23 water is authorized to be used for nonstructural firefighting purposes during construction and for dust control associated with...."

**Comment:** A substantial portion of project construction work activities will occur within open pastures on District lands. The District requests that recycled-23 water be available for nonstructural firefighting to reduce the threat of grass fires during construction.

C.2. Change to: "Recycled-23 may not be used for backfill consolidation around potable piping.

**Comment:** The freshwater piping systems are used to convey irrigation water from neighboring ditch systems to the pump station for filtration and discharge to the irrigation system. The irrigation water is not suitable for potable uses. An allowed use of Recycled-23 Water under Title 22 is for backfill consolidation around nonpotable piping. The freshwater system will convey nonpotable water.

C.3. Change to: "...tanks, trucks and other devices used to..."

8) ATTACHMENT B-

**Comment:** Enclosed is a revised map showing the irrigation fields and the proposed monitoring well locations with the changes in the well identifiers as presented in Comments 11 and 12 (below).

9) ATTACHMENT 1-

**Comment:** Please provide an electronic version (.doc) of Attachment 1 for Discharger reporting purposes.

**MONITORING AND REPORTING PROGRAM**

10)Section II.A.8

Total nitrogen measured in representative soil samples from the irrigation sites.

**Comment:** Please elaborate on how many sites (sample density), locations, and depth criteria, to be used for the collection of soil samples from the irrigation fields.

11)Section II.C.3 (a)

The current wells specified in Section II.C.3 (a) are:

- ACMW-07S
- ACMW-07N
- ACMW-09S
- ACMW-09N
- ACMW-10
- ACMW-11
- ACMW-12

**Comment:** Of the wells specified, the District has equipped the following wells with dedicated sample pumps for quarterly groundwater monitoring:

- ACMW-07S
- ACMW-08N
- ACMW-09N
- ACMW-10
- ACMW-11
- ACMW-12

ACMW-08N is a shallow monitoring well located within the east half of Diamond Valley, north of Diamond Valley Road. The well is completed in the uppermost water bearing zone and is constructed with a screen interval from 60-ft to 70-ft (total depth). The annular seal extends from ground surface to 58-feet. The District suggests that ACMW-08N be added to the monitoring program.

Water quality samples are typically not collected from ACMW-07N and ACMW-09S.

ACMW-07N is an observation well used to measure groundwater elevations in a deep water-bearing zone, with a screen interval from 300-ft to 340-ft (total depth). The annular seal extends from ground surface to 291-feet. The District suggests that ACMW-07N not be included in the monitoring program at this time. ACMW-07N should be considered for addition to the monitoring well network; only after significant changes in water quality is detected in the shallow monitoring wells.

ACMW-09S is a shallow monitoring well which is completed in a perched water horizon. This well is constructed with a screen interval from 10-ft to 20-ft (total depth). The annular seal extends from ground surface to 8-feet. This well has frequently been dry and is not believed to have good hydraulic connection to the water table. The District suggests that ACMW-09N be used for shallow groundwater monitoring and that ACMW-09S not be included in the monitoring program.

12)Section II.C.3 (b)

**Comment:** The monitoring well designations listed in Section II.C.3 (b) are well site identifiers used by the District during the planning of the revised monitoring well network. To be consistent with the established numbering system used by the District, the District requests that the monitoring well designations used in the monitoring and reporting program be changed using the corresponding STPUD well identifier as follows:

WELL SITE	STPUD WELL I.D.	LOCATION
DMW-14	ACMW-13	West of Field D
DMW-16	ACMW-16	Southeast corner of Field F
DMW-17	ACMW-14	Southeast of Field D
DMW-18	ACMW-15	East of Field F
DMW-19	ACMW-19	East of all Fields near Indian Creek
DMW-21	ACMW-18	Between Fields F and H
DMW-22	ACMW-17	East of Field 2

13)Section III.C.4

**Comment:** The Monitoring and Reporting Program requires "Summary of daily wind speeds(s) and directions (s) at the Authorized Disposal Site,..." Please clarify whether the Authorized Disposal Site indicates a specific irrigation field, flood irrigation/emergency containment field, or the proposed recycled water application areas within Diamond Valley, as a whole. The District is proposing to install a centrally located California Irrigation

Management Information System (CIMIS) weather station for data collection and determination of balanced application rates using real-time ET and Crop ET values for Diamond Valley.

14) MRP - ATTACHMENT 3

**Comment:** Enclosed is a revised map showing the irrigation fields and the proposed monitoring well locations with the changes in the well identifiers as previously presented in Comments 11 and 12.

It is our understanding that LRWQCB staff plan to present the proposed Order to the Water Board for consideration at the September 14-15 2011 meeting, in Kings Beach, CA. Please contact Ivo Bergsohn ([iberqsohn@stpud.dst.ca.us](mailto:iberqsohn@stpud.dst.ca.us)) should you have any questions or wish to further discuss these comments. Ivo can also provide any additional project information that may be required by staff to complete the Order. Again, we appreciate this opportunity to comment.

Sincerely,



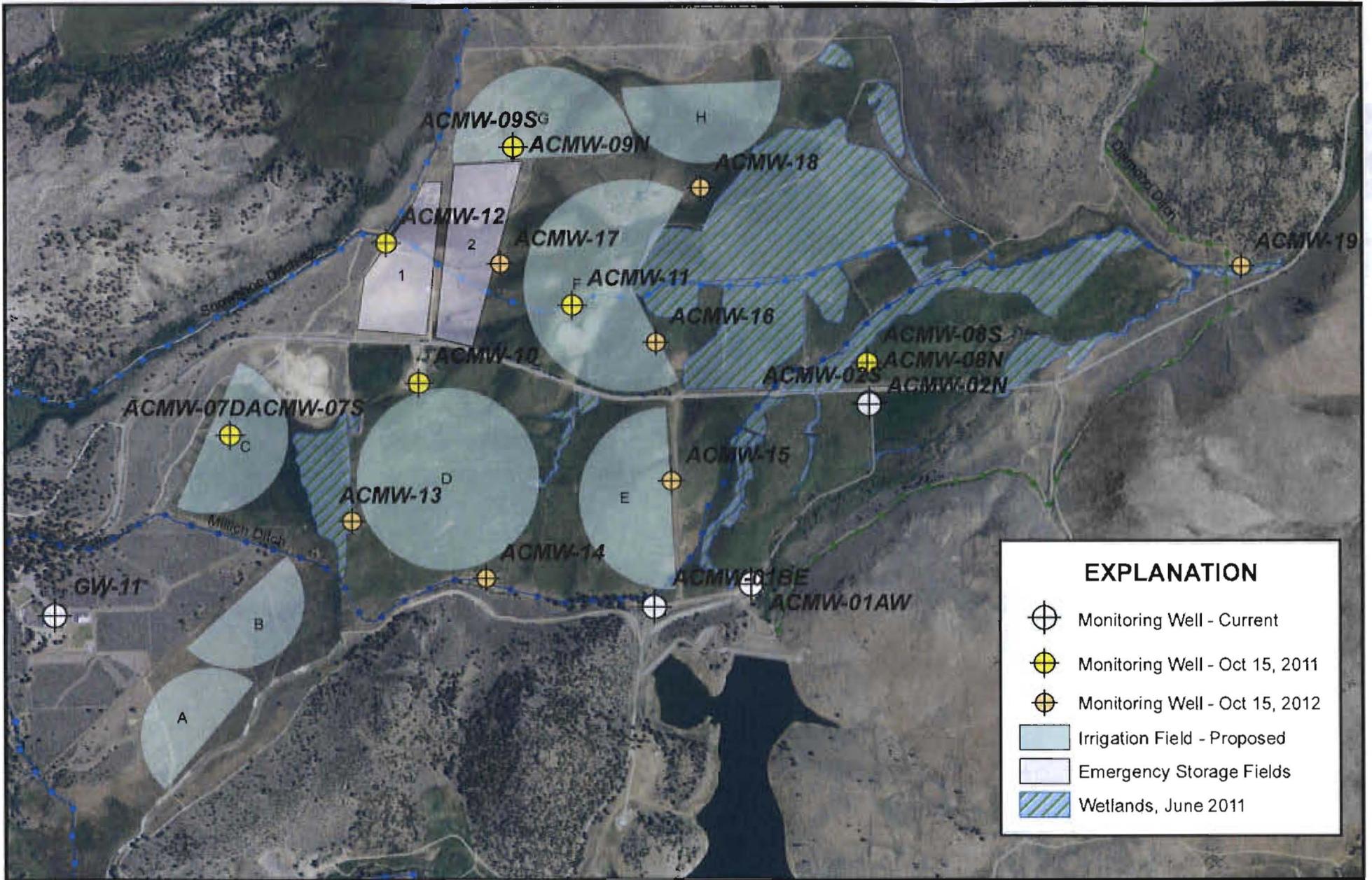
Ivo Bergsohn, P.G., C.Hg.  
Hydrgeologist



Paul Sciuto, P.E.  
Assistant General Manager

Attachments

Cc: T. Powers  
H. Bird  
R. Solbrig  
File



**EXPLANATION**

- Monitoring Well - Current
- Monitoring Well - Oct 15, 2011
- Monitoring Well - Oct 15, 2012
- Irrigation Field - Proposed
- Emergency Storage Fields
- Wetlands, June 2011



**South Tahoe Public Utility District  
Monitoring Well Locations -  
Diamond Valley, Alpine County, CA**

Attachment B



# **ENCLOSURE 4**



# California Regional Water Quality Control Board Lahontan Region



RTI

Matthew Rodriguez  
Secretary for  
Environmental Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
(530) 542-5400 • Fax (530) 544-2271  
www.waterboards.ca.gov/lahontan

Edmund G. Brown Jr.  
Governor

August 16, 2011

Richard Solbrig  
South Tahoe Public Utility District  
1275 Meadow Crest Dr.  
South Lake Tahoe, CA 96150

## **RESPONSE TO SOUTH TAHOE PUBLIC UTILITY DISTRICT COMMENTS ON THE TENTATIVE WATER RECLAMATION REQUIREMENTS FOR DISCHARGE OF RECYCLED WASTEWATER ONTO THE DIAMOND VALLEY RANCH, ALPINE COUNTY (WDID 6A021008003)**

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff reviewed the above-mentioned document dated August 8, 2011. We have made changes to the Proposed Order to address most of the comments in the letter. The following are our responses to your comments on the Tentative Board Order that we did not agree with.

- 1) Item 1 in the letter requests to add the word "filtered" to "secondary treatment standards." The term "filtered wastewater" has a distinct definition in California Code of Regulations title 22, section 60301.320. The District effluent would have to an average 2 NTU per 24-hour period to meet this definition. Since the District is not required to meet the "filtered" standards we did not add the term.
- 2) Item 6 in the letter suggested to use the phrase "anticipated to be certified . . .", with regards to a California Environmental Quality Act (CEQA) and Supplemental Environmental Impact Report (SEIR) regarding this project. We made no changes in response. If the SEIR is not adopted as proposed before our meeting of September 14, 2011, then the Proposed Order likely will be removed from our September 14, 2011 agenda.
- 3) Item 7 in the letter requested to allow recycled-23 water to be used for consolidation around freshwater piping, changing requirement I.C.2. California Code of Regulations title 22 has specific requirements for the quality of reclaimed water required for use in consolidation of soil around potable and non-potable piping. There are no specific requirements for use of consolidation around freshwater conveyance piping; however, the water in the piping could be used as a drinking water source. We believe it is appropriate to use either fresh water or potable water for consolidation of soil around freshwater conveyance piping.

*California Environmental Protection Agency*



- 4) Item 13 in the letter comments on wind speed and direction monitoring and whether a specific disposal site is needed for wind speed monitoring. We changed the Order to allow for a centralized unit to monitor wind speed and direction so long as it is representative of reuse area winds. The purpose of wind monitoring is to prevent spray from leaving the authorized disposal areas.
- 5) The largest change in the Proposed Order is removing reuse on Fields D, E, F, and H. The District is still working with the Army Corps of Engineers on wetland delineation issues for these fields. Until those issues are resolved those fields may not receive recycled-23 water. The District will have to request in writing amended requirements to use those fields.

The Proposed Order is not enclosed with this letter and will be sent under a separate cover letter. Please review the Proposed Order for the changes that you have suggested and those noted above. If you have any questions regarding this matter please call me at (530) 542-5467.

Please submit your comments by **September 2, 2011** so we may provide your comments to our Board Members prior to our Board meeting. Comments not submitted prior to September 2, 2011 may not be considered by the Board.



Robert Tucker  
Water Resource Control Engineer

cc: Ivo Bergsohn/South Tahoe Public Utility District

RTT/clhT: Agenda Items\2011\8-September\STPUD-diamond Valley\proposed\cover letter to STPUD

# **ENCLOSURE 5**



# California Regional Water Quality Control Board Lahontan Region



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150  
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**Edmund G. Brown Jr.**  
Governor

August 16, 2011

TO ALL INTERESTED PERSONS AND AGENCIES:

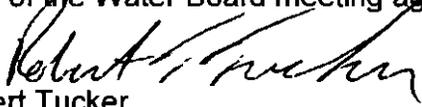
## **PROPOSED WATER RECLAMATION REQUIREMENTS AND WASTE DISCHARGE REQUIREMENTS FOR THE DISPOSAL OF RECYCLED WASTEWATER TREATMENT AND DISPOSAL FACILITY, ALPINE COUNTY (WDID: 6A021008003)**

Enclosed is a proposed Board Order, Water Reclamation Requirements and Waste Discharge Requirements for the South Tahoe Public Utility District (District). The Proposed Order will allow the District to discharge/use secondary treated disinfected wastewater on the District's Diamond Valley Ranch in Alpine County. The Water Board requests you review the Proposed Order and provide your written comments no later than **September 2, 2011**. Comments received after that date may not be considered in preparation for the final Proposed Order to be presented to the Water Board for consideration at the public meeting to be held on September 14-15, 2011, in Kings Beach.

Changes made to the proposed Order from the tentative are the following;

1. The District requested to be able to use the recycled-23 water for nonstructural firefighting. The water meets the requirements for nonstructural firefighting, and it is acceptable to use of recycled-23 water for nonstructural firefighting. The Board order has been changed to allow this use.
2. The largest change in the Proposed Order is removing reuse on Fields D, E, F, and H. The District is still working with the Army Corps of Engineers on wetland delineation issues for these fields. Until those issues are resolved those fields may not receive recycled-23 water. The District will have to request in writing amended requirements to use those fields.

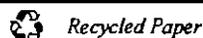
If you need further information regarding this matter, please contact this office. Approximately 10 to 15 days prior to each meeting, the Water Board publishes its agenda on the Internet at <http://www.waterboards.ca.gov/lahontan/>. If you prefer to receive a hard copy of the Water Board meeting agenda, please contact Rob Tucker at (530) 542-5467.

  
Robert Tucker  
Water Resources Control Engineer

Enclosures: Proposed Board Order

RTT/clhT: Agenda Items/2011/8-September/STPUD-diamond Valley/proposed/interested cov ltr.doc

**California Environmental Protection Agency**



# **ENCLOSURE 6**

**From:** Ivo Bergsohn <Ibergsohn@stpud.dst.ca.us>  
**To:** 'Robert Tucker' <RTucker@waterboards.ca.gov>  
**CC:** Hal Bird <HBird@stpud.dst.ca.us>, Heidi Baugh <hbaugh@stpud.dst.ca.us>  
**Date:** 8/22/2011 4:36 PM  
**Subject:** LRWQCB Response to Comments - Item 3

Hi Rob-

The District is concerned that I.C.2 (page 12) of the proposed Board Order [R6T-2011-(PROPOSED)] is not consistent with the permitted uses for disinfected secondary-23 recycled water under Title 22, 60307(b)(3). The proposed Board Order also appears to be at odds with the Waste Discharge Requirements and Water Recycling Requirements approved by the LRWQCB for the Los Angeles County Palmdale Water Reclamation Plant (Board Order No. R6V-2011-0012). The District does not want to unnecessarily delay the Water Boards consideration of the proposed Board Order scheduled for the September 14-15 Board Meeting. However, the District would like written clarification explaining the Water Board's policy on this matter.

Regards,

Ivo Bergsohn, PG, CHG  
Hydrogeologist  
South Tahoe Public Utility District  
1275 Meadow Crest Drive  
South Lake Tahoe, CA 96150  
530.543.6204  
530.541.4319 (fax)  
From: Ivo Bergsohn  
Sent: Monday, August 22, 2011 11:07 AM  
To: 'Robert Tucker'  
Cc: Hal Bird  
Subject: RE: Copy of letter

Thanks Rob-

We will take a look at it and get back to you with regard to Item 3.

Ivo Bergsohn, PG, CHG  
Hydrogeologist  
South Tahoe Public Utility District  
1275 Meadow Crest Drive  
South Lake Tahoe, CA 96150  
530.543.6204  
530.541.4319 (fax)  
From: Robert Tucker [mailto:RTucker@waterboards.ca.gov]  
Sent: Monday, August 22, 2011 11:00 AM  
To: Hal Bird; Ivo Bergsohn  
Subject: Copy of letter

copy of the District's specific letter

Rob

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**From:** Ivo Bergsohn <lbergsohn@stpud.dst.ca.us>  
**To:** "RTucker@waterboards.ca.gov" <RTucker@waterboards.ca.gov>  
**CC:** Hal Bird <HBird@stpud.dst.ca.us>, Heidi Baugh <hbaugh@stpud.dst.ca.us>  
**Date:** 8/22/2011 5:08 PM  
**Subject:** Recycled Water Maintenance Use

Rob-

In follow-up to our conversation this morning, please consider the following changes in the proposed Board Order (R6T-2011-(PROPOSED) permitting the use of recycled -23 water for maintenance uses:

1. Page 4 Item 8 " The Discharger has requested to use recycled-23 water as described in items b, c, d, and f, above, for the project construction and continued maintenance of the project."
  
2. Page 7; 1st ppg, 1st sentence. "In addition to the fields, recycled-23 water may be used for nonstructural firefighting and dust control during the construction and maintenance of fields, roads, field berms and compaction on non-potable water piping, provided all CDPH regulations are followed."
  
3. Page 12; Item C - Recycled-23 Water is authorized to be used for nonstructural firefighting purposes, dust control associated with the construction and maintenance of roads, irrigation fields, berms and non-potable water pipelines within Ranch.

Thanks,

Ivo Bergsohn, PG, CHG  
Hydrogeologist  
South Tahoe Public Utility District  
1275 Meadow Crest Drive  
South Lake Tahoe, CA 96150  
530.543.6204  
530.541.4319 (fax)

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