# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION 895 Aerovista Place, Suite 101 San Luis Obispo, California 93401

# DRAFT WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2004-0065

Waste Discharger Identification No. 3 351000001 Proposed for Consideration at the December 3, 2004 Meeting

#### For

# SUNNYSLOPE COUNTY WATER DISTRICT, RIDGEMARK ESTATES SUBDIVISION, WASTEWATER TREATMENT PLANT SAN BENITO COUNTY

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

#### **FACILITY OWNER AND LOCATION**

- 1. The Sunnyslope County Water District (hereafter "Discharger") owns and operates the Ridgemark Estates Development Treatment Plant (hereafter "Facility").
- 2. The 636-acre development and Facility are located approximately 3 miles southeast of the City of Hollister and are approximately bounded by Airline Highway (Highway 25) to the east/northeast and Southside Road to the west/southwest (see Attachment A). The development consists of two subdivisions, Ridgemark Estates I (north) and Ridgemark Estates II (south), completed in 1974 and 1988, respectively.

# **PURPOSE OF ORDER**

- 3. On April 25, 2000, Regional Board staff requested the Discharger to submit a Report of Waste Discharge. On June 2, 2000, the Discharger submitted a Report of Waste Discharge (ROWD) that was determined to be incomplete. Over the next several years additional ROWD applications and technical reports were submitted to address deficiencies in the original application.
- 4. The existing Waste Discharge Requirements (WDR) Order No. 89-58 is significantly out of

- date and review of available data indicates deficiencies in Facility treatment performance and disposal capacity.
- Order No. R3-2004-0065 significantly revises waste discharge requirements in an effort to either improve wastewater treatment and disposal performance, or eliminate the Facility altogether by connection of the development to the City of Hollister wastewater collection system.
- 6. Significant monitoring and reporting changes in this Order also reflect the need for additional data required to adequately evaluate the Facility and develop a long-term wastewater management plan.

#### FACILITY DESCRIPTION

# Treatment Facility

7. The development is serviced by two separate wastewater treatment systems located within each of the subdivisions (see Attachment A), which will hereafter be referred to as Ridgemark I (RM-I), located in the northern portion of the development, and Ridgemark II (RM-II), located within the southern portion of the development adjacent to the Ridgemark Estates golf course.

Item 18, Attachment 3 Sunnyslope County WD December 3, 2004 Meeting

- 8. Both treatment systems consist of partial-mix facultative (aerobic-anaerobic) treatment (stabilization) and disposal ponds in series.
- Ridgemark I was brought on-line in 1974 and consists of two treatment ponds (RM-I ponds 1 & 2) and three additional ponds frequently identified as 'disposal' ponds (RM-I ponds 3, 4, and 5). Ridgemark II was brought on-line in 1988 and consists of two treatment ponds (RM-II ponds 1 and 2) and two 'disposal' ponds (RM-II ponds 3 and 4).
- 10. A shallow disposal pond/spreading basin (pond 6) was installed in 1990 to augment Facility disposal capacity at RM-I as the wastewater flow gradually increased in excess of evaporation and decreasing percolation rates. Pond 6 is located northwest of RM-I and currently serves as the final infiltration/percolation disposal area for RM-I.

# Wastewater Disposal

- Wastewater disposal occurs by percolation and evaporation within the treatment and 'disposal' ponds.
- 12. Ambiguities in terminology and discussions within historical engineering reports indicate the 'disposal' ponds, other than pond 6, were originally designed as polishing ponds and terminal storage basins with the intent of utilizing spray irrigation or water reclamation as the final disposal alternative and not infiltration/percolation.
- 13. The large volumes (1.7 million gallons to 3.8 million gallons) and depths (10 feet to 17 feet) of the 'disposal' ponds are more characteristic of storage and treatment basins than shallow percolation beds or spreading basins which require frequent wetting and drying cycles and regular maintenance (removal of soil top layer containing deposited fines, ripping and disking) for optimal infiltration rates.
- 14. Annual drying and ripping/disking has been conducted in the summer/fall since 1991 on pond 6 only. RM-II ponds 3 and 4 have been ripped/disked twice with no appreciable

- increase in infiltration/percolation due to the hardpan clay soils encountered beneath the ponds.
- 15. Although the disposal of significant volumes of wastewater appears to be occurring at RM-I and RM-II through percolation and evaporation, pond 6 is the only disposal area designed and operated in accordance with standard engineering practices for the disposal of wastewater via infiltration/percolation.
- 16. Significant evaporation is likely occurring in the treatment and disposal ponds due to extended hydraulic retention times and large surface areas as indicated by the significant concentration of salts in the effluent.

# **Design and Current Capacity**

- 17. Both facilities are permitted for a combined daily flow of 370,000 gallons averaged over each month (30-day average). RM-I was originally designed for a flow rate of 168,000 gallons per day (gpd) and RM-II was designed for a flow rate of 240,000 gpd. Average 30-day wastewater flows (September 2001 through December 2003) are approximately 187,000 gpd for RM-I and 82,000 gpd for RM-II for a total of 269,000 gpd for both treatment facilities.
- 18. Although RM-I appears to exceed its design flow capacity of 168,000 gpd, both treatment facilities were significantly over-designed based on high loading and hydraulic detention time assumptions.
- 19. The RM-II ponds have been slowly filling up since they were brought on-line in 1988, indicating that RM-II influent flows exceed the infiltration/percolation disposal flow and evaporative losses from the RM-II ponds. The amount of available storage in RM-II pond 4 is uncertain. No additional disposal alternatives for RM-II are available at this time other than pumping RM-II pond 4 effluent to RM-I pond 5 for final disposal in pond 6. It is uncertain whether pond 6 can handle additional disposal flows from RM-II.

- 20. During a 852-day period between September 1, 2001 and December 31, 2003, wastewater was pumped from pond 5 to pond 6 during only 301 days, or approximately 35% percent of the days. In addition, comparison of 30-day running averages for RM-I influent and pond 6 effluent flows indicate approximately 36% (68,000 gpd) of the influent flow to RM-I (187,000 gpd) is pumped to pond 6.
- 21. It is uncertain how much disposal via infiltration/percolation is occurring at the Facility aside from estimates for pond 6. As the 'disposal' ponds have essentially contained wastewater since their construction, any fortuitous infiltration/percolation capacity is likely diminishing over time due to prolonged wetting and solids loading. Although the Facility currently appears to be handling wastewater flows, review of available data indicate the Discharger is at risk of exceeding its disposal capacity at both facilities in the near future.
- 22. The Discharger has been aware of the limited and diminishing disposal capacity problem for some time and has been evaluating potential disposal locations prior to 2001. Recent attempts by the Discharger to acquire property south of the development for additional wastewater disposal have reportedly been thwarted by public opposition and local agency concerns regarding site suitability and appropriate environmental review. The Discharger is currently negotiating with the landowner and is working with the San Benito County Water District to evaluate groundwater quality and flow in the proposed disposal area.
- 23. The Discharger is currently pursuing dialogue with the City of Hollister regarding a potential tie-in of the Ridgemark Estates wastewater collection system to the City's collection system for wastewater treatment and disposal at the City of Hollister domestic wastewater treatment plant.

# **Treatment Efficiency**

24. Previous monitoring requirements provide only limited data regarding RM-I and RM-II

- treatment efficiencies. Existing effluent sampling consists of daily flow measurements, weekly dissolved oxygen and pH analyses, and semiannual (March and September) TDS, sodium, chloride, nitrate, and total nitrogen sampling. Influent wastewater sampling was not required in the previous permit.
- 25. Organic stabilization (reduction of biochemical oxygen demand [BOD]) and total suspended solids (TSS) removal efficiencies are essentially undocumented. However, limited data and visual inspection indicate the Facility achieves effluent BOD and TSS levels commensurate with partial-mix facultative treatment ponds.
- 26. Review of semiannual effluent nitrate, total nitrogen, and total Kjedahl nitrogen data indicate the two treatment facilities are effecting no appreciable nitrogen removal (nitrification and denitrification) in the first treatment ponds. Potential processes nitrification/denitrification subsequent ponds are undocumented and unlikely given current treatment system operational and physical constraints. Some nitrification may be occurring in the vadose zone beneath disposal pond 6 or other treatment/disposal ponds as wastewater percolates through the soil.
- 27. Influent pH at RM-II has regularly exceeded the maximum pH discharge specification of 8.4 units at the RM-II treatment facility dating back to 1994. RM-II pond 2 influent pH levels have been recorded as high as 8.8 units. Several notices of violation have been issued to the Discharger over the years to address the high influent pH levels. A wastewater collection system analysis was conducted in 1997 documenting high pH levels within the collection system, but no trend or individual source of elevated pH was observed. Elevated influent pH levels are presumably a result of excessive detergent usage within community to combat 'hard water.' Algal photosynthesis has also been implicated in pH fluctuations within the treatment and disposal ponds. Subsequently, the Discharger has been

unable to implement corrective measures and reduce the pH of RM-II wastewater.

- 28. Elevated levels of total dissolved solids, sodium and chloride (salts) are present in the wastewater effluent. Increases in salt concentrations at the Facility are primarily attributable to the domestic use of water softening devices in the community and concentration through evaporation of wastewater from the treatment ponds.
- 29. Data from a 1999 evaluation indicates that an observed 70% to 72% increase in TDS was attributable to the domestic use of water softeners. An additional 52% and 89% observed increase in TDS concentrations for RM-I and RM-II, respectively, was attributable to evaporation of wastewater from the treatment ponds. Total TDS increases in wastewater effluent of approximately 124% and 159% from that of the supply water were observed for RM-I and RM-II, respectively. Even higher increases are apparent for sodium and chloride.
- 30. Comparison of water supply and facility effluent TDS, sodium and chloride data are tabulated in the following table:

Table 1: Semiannual Effluent TDS, Sodium & Chloride Data Synopsis

	V.VII	100000000000000000000000000000000000000	1000
	Supply	Effluent	
	760	1600	1670
TDS	860	1940	2480
	816	1760	2086
•	83	370	320
Na	190	440	600
	105	404	464
	81	500	570
Cl	120	660	940
	103	587	761

# Notes:

- a) Minimum, maximum and average values calculated from March 1996 to September 2003 semiannual monitoring data
- b) RM-I and RM-II effluent concentrations for samples collected from pond 2 (both facilities)

#### SITE DESCRIPTION

#### Land Uses

31. The surrounding area is principally composed of agricultural mixed farming, intermixed with rural development. The rolling hills comprising the development were formerly a turkey ranch, and pasture and grazing land.

# Geographic Setting & Geology

- 32. The Facility is located in the Hollister Valley south of the City of Hollister and north of Bird Creek Hills between the Diablo Range to the east/northeast and the Gabilian Range to the west/southwest.
- 33. The Facility is located within an active seismic zone. The Calaveras Fault zone lies to the south and west. The Tres Pinos Fault zone, a branch of the Calaveras Fault, passes through the development immediately south and parallel to Airline Highway and the San Andreas Rift zone is located several miles to the south.
- 34. The alluvial materials in the Hollister Valley include Quaternary alluvium and terrace deposits, with terrace deposits more prevalent along the east side of the valley. Stream gravel is present along the San Benito River. As such, the surface layers in the development/facility area are composed of undifferentiated alluvium and San Benito Gravels (clay, sand and gravel).

## Surface Water

- 35. The Facility is approximately one mile north of the confluences of Bird Creek and Tres Pinos Creek with the San Benito River. Tres Pinos Creek is located approximately one mile south of the RM-II treatment/disposal ponds and the San Benito River is located approximately one half mile west of the RM-I treatment/disposal ponds and final disposal pond 6.
- 36. No other major surface water bodies are near the Facility excepting Paicines Reservoir approximately 6 miles to the southeast and San Justo Reservoir approximately five miles to the

northwest. In addition, Ridgemark Estates maintains twelve storage reservoirs and retention ponds within the development for landscape/golf course irrigation and stormwater retention. The combined storage capacity of these is approximately 128.7 acre-feet (41.9 million gallons).

# Groundwater

- 37. The development is located within the Tres Pinos Creek Valley groundwater basin and is a sub-area of the Pajaro River sub-basin as designated in the Basin Plan.
- 38. Groundwater in the basin is generally of poor quality as a result of high mineral content. Elevated total dissolved solids (TDS typically referred to as salts), and the components of TDS such as chloride, sodium, sulfate, boron, and metals, particularly iron and manganese, are common. Various areas within the basin are also subject to elevated levels of nitrate, presumably resultant of historical agricultural practices.
- 39. Groundwater quality in the area around Ridgemark Estates is generally characteristic of domestic supply quality as determined from selected municipal drinking water wells as tabulated in the following 'water supply' section. Background shallow groundwater conditions are assumed to be similar based on groundwater data from RM-I monitoring well MW-2, but additional data is necessary to verify this.
- 40. Depth to water beneath the two wastewater treatment facilities and pond 6 varies significantly (from 40 to 140 feet below ground surface) with respect to geographic setting and location of facility monitoring wells.
- 41. Review of Facility groundwater monitoring data indicate groundwater impacts may be occurring in the vicinity of the treatment and disposal systems. Increased concentrations of sodium, chloride, TDS, and nitrate have been detected in selected monitoring wells.

- Additional investigation activities are required to confirm and quantify groundwater impacts.
- 42. Water supply (municipal groundwater supply well) and groundwater monitoring well data are tabulated below for comparison:

Table 2: Semiannual Groundwater TDS, Sodium & Chloride Data Synopsis

	Exercentiacocardos		302202000000000000000000000000000000000	wooddanoomiiggaa
	Markey		Marie Land Commence Commence Commence	
	760	780	660	1980
TDS	860	1900	910	2520
	816	1251	751	2187
	83	90	67	280
Na	190	330	140	590
	105	175	81	384
	81	120	88	610
Cl	120	510	200	860
	103	354	152	780
NO	2	5.8	0.1	0
NO <sub>3</sub>	7	17	7	0.75
(as N)	3.7	10	5	0.1

Notes:

- Minimum, maximum and average values calculated from March 1996 to September 2003 semiannual monitoring data
- b) Min, max and average of Nitrate data for Sunnyslope County Water District Well no.'s 5 and 8 between May 1995 and September 2003

# Water Supply

- 43. Ridgemark Estates' domestic water supply is provided by the Sunnyslope County Water District via two wells, well 5 and well 8 located within or adjacent to the development. Approximate well locations are shown on Attachment A. Additional wells (denoted as RMK wells on Attachment A) are also utilized by Ridgemark Incorporated for golf course irrigation. No data was available for the irrigation wells.
- 44. Ridgemark Estates water supply quality (Sunnyslope Water District well nos. 5 and 8) is summarized in the following table:

Table 3: Water Supply Quality for Selected Constituents – Ridgemark Estates

Constituent	Grand State Control	Janes Krigener
TDS <sup>a,b</sup>	816	mg/L
Chloride <sup>b</sup>	103	mg/L
Sodium <sup>b</sup>	105	mg/L
Nitrate <sup>c</sup>	16.5	mg/L as NO <sub>3</sub>
	(3.7)	(as N)

#### Notes:

- a) Total Dissolved Solids
- b) Average of semiannual water supply data between March 1996 and September 2003
- c) Average of nitrate data for Sunnyslope County Water District Well nos. 5 and 8 between May 1995 and September 2003

#### **BASIN PLAN**

- 45. The Water Quality Control Plan, Central Coast Basin (Basin Plan) was adopted by the Regional Board on November 19, 1989, and approved by the State Water Resources Control Board (State Board) on August 16, 1990. The Regional Board approved amendments to the Basin Plan on February 11, 1994, and September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the Basin Plan.
- 46. The Water Quality Control Plan for the Central Coast Region (Basin Plan) designates the existing and anticipated beneficial uses of groundwater in the vicinity of the wastewater treatment and disposal facility to include:
  - a) Domestic and municipal water supply;
  - b) Agricultural water supply; and
  - c) Industrial water supply.
- 47. The Basin Plan specifies water quality objectives for certain groundwater basins, which are intended to serve as a baseline for evaluating water quality management in the basin. The objectives are, at best, representative of gross areas only, and are as follows for the Tres Pinos sub-area of the Pajaro River groundwater basin:

Table 4: Median Groundwater Objectives for the Pajaro River sub-basin

TDS	1000
Cl	150
Sulfate	250
Boron	1.0
Sodium	150
Nitrate as N	5

Excerpted from Table 3-8, page III-16 of the Basin Plan

- 48. The Basin Plan designates existing and anticipated beneficial uses of the San Benito River that could be affected by the discharge to include:
  - a) Municipal and Domestic Supply;
  - b) Agricultural Water Supply;
  - c) Industrial Service Supply;
  - d) Groundwater Recharge;
  - e) Water Contact Recreation;
  - f) Non-Contact Water Recreation;
  - g) Wildlife Habitat;
  - h) Warm Freshwater Habitat;
  - i) Spawning, Reproduction, and/or Early Development;
  - i) Freshwater Replenishment;
  - k) Commercial and Sport Fishing.
- 49. For receiving waters with designated beneficial uses of municipal and domestic water supply, the Basin Plan establishes the primary drinking water maximum contaminant levels (MCLs), listed at Title 22 of the California Code of Regulations, Sections 64431 (inorganic compounds) and 64444 (organic compounds), as applicable water quality objectives.
- 50. The Basin Plan specifies water quality objectives for certain surface waters, which are intended to serve as a baseline for evaluating water quality management in the basin. The objectives are, at best, representative of gross areas only, and are based on preservation of existing quality or water quality enhancement believed attainable following control of point sources. Water quality objectives are as follows for the San Benito River sub-area of the Parajo River sub-basin.

Table 5: Surface Water Quality Objectives for the Pajaro River sub-basin

Parameter 1944		
COCK LONDING THE		
Total Dissolved Solids	1400	
Chloride	200	
Sulfate	350	
Boron	1.0	
Sodium	250	

Excerpted from Table 3-7, page III-13 of the Basin Plan

## MONITORING PROGRAM

- 51. Monitoring and Reporting Program No. R3-2004-0065 is a part of the proposed Order. The Monitoring Program requires routine water supply, influent, effluent, groundwater, and facility monitoring to verify compliance and ensure protection of groundwater quality.
- 52. Monitoring reports are due quarterly; January, April, July, and October. An annual report summarizing the year's events and monitoring is due in January.

#### ENVIRONMENTAL ASSESSMENT

53. These waste discharge requirements are for an existing facility and are exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et. seq.) in accordance with Section 15321, Article 19, Chapter 3, Division 6, Title 14 of the California Code of Regulations.

#### **Total Maximum Daily Load**

54. Total maximum daily load (TMDL) allocations will be developed for impaired surface waters in the Pajaro River watershed including the San Benito River. The Pajaro River impairments are due to excessive nutrients, siltation, and fecal coliform. The San Benito River impairments are due to siltation/sedimentation and excessive levels of fecal coliform. TMDL documents will allocate responsibility for constituent loading throughout the Pajaro River and San Benito

River watersheds. Draft TMDL documents are anticipated to be publicly available by December 2004 for siltation. During development of the TMDL source assessment and implementation plan, if Regional Board staff find constituent contributions from waste discharged may adversely impact beneficial uses or exceed water quality objectives, TMDL documents may require changes in waste discharge requirements. Waste discharge requirements may be modified to implement applicable TMDL provisions and recommendations.

# **EXISTING ORDERS/GENERAL FINDINGS**

- 55. The discharge was previously regulated by Waste Discharge Requirements Order No. 89-58, adopted by the Regional Board on April 14, 1989. The Regional Board has regulated this discharge since 1973.
- 56. Since the Discharger's wastewater flows are less than one MGD, storm water discharges from the facility are not subject to the State Water Resources Control Board's General Industrial Activities Storm Water Permit, which requires development and implementation of a Storm Water Pollution Prevention Plan and Best Management Practices.
- 57. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance.
- 58. On August 10, 2004, the Regional Board notified the Discharger and interested parties of its intent to issue waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.
- 59. After considering all comments pertaining to this discharge during a public hearing on

- December 3, 2004, this Order was found consistent with the above findings.
- 60. Any person affected by this action of the Board may petition the State Water Board to review the action in accordance with Section 13320 of the California Water Code and Title 23 of the California Code of Regulations, Section 2050. The State Water Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

IT IS HEREBY ORDERED, pursuant to authority in Sections 13263 and 13267 of the California Water Code, that the Sunnyslope County Water District, its agents, successors, and assigns, may discharge waste at the above-described Facility providing compliance is maintained with the following:

Throughout these requirements footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows (requirements without footnotes are BPJ unless otherwise noted):

Best Professional Judgment of Regional
Water Quality Control Board Staff
The Discharger's Report of Waste Discharge
Title 40 Code of Federal Regulations
Central Coast Regional Water Quality Control
Plan
Title 22 CCR, Division 4, Chapter 3, Water
Reclamation Criteria
PC Porter-Cologne Water Quality Control Act
(California Water Code)

# A. DISCHARGE PROHIBITIONS

- Discharge of treated wastewater to areas other than disposal areas shown in Attachment "A", is prohibited unless otherwise approved by the Executive Officer to meet requirements for additional disposal capacity as required herein.
- Discharge of any wastes including overflow, bypass, seepage, collection system spills or overflows, or from transport, treatment, storage, or disposal systems to adjacent drainageways or adjacent properties not listed in this Order is prohibited.

- 3. Bypass of the treatment facility and discharge of untreated or partially treated wastes directly to the designated disposal area is prohibited.
- 4. Bypass of the treatment facility and discharge of untreated or partially treated wastes is prohibited. PC
- Discharges of sludges, residues, or any other wastes into surface waters or into any area where it may be washed into surface water is prohibited.
- Discharge of any waste, except in compliance with this Order or other applicable waste discharge requirements is prohibited.

#### **B. SPECIFICATIONS**

#### **Effluent Limitations**

- 1. Total wastewater flows to both facilities shall not exceed a 30-day running average dry weather (May through October) flow of 0.3 MGD and a 30-day running average wet weather (November through April) flow of 0.31 MGD. Requests for additional capacity will only be considered following successful implementation of facility improvements resulting in improved treatment performance and adequate disposal capacity as documented by facility performance data. BPJ
- Wastewater discharged to designated land disposal areas shall not exceed the following limitations according to the prescribed schedule:

Table 6: Phased Effluent Limitations for Salt Constituents

Constituents			
A Zajisa Bijara			
No interim limits			<del></del>
January 30, 2008	1,500	300	300
January 30, 2010	1,200	200	200

Notes:

a) 30-day average

Table 7: Phased Effluent Limitations for Nutrients

1 vaci ionas			
Einiatata (neleus)			
No interim limits	<u></u>		
January 30, 2008	10	10	
January 30, 2010	5	5	

Notes:

a) 30-day average

b) Total ammonia as nitrogen

Table 8: Phased BOD and TSS Effluent Limitations

Effective Date	Limitatio keddy	
No interim limits		
January 30, 2008	60	60
January 30, 2010	30	30

Notes:

a) 30-day average

 Effluent discharged to the disposal ponds shall not have a pH less than 6.5 or greater than 8.4. BP

#### **Groundwater Limitations**

- 4. The discharge shall not cause nitrate concentrations in the groundwater affected by disposal activities to exceed 10 mg/l (as N) or shall not cause a statistically significant increase of nitrate concentrations in underlying groundwater, whichever is more stringent.
- Wastewater discharged to the disposal ponds shall not cause groundwater to contain tasteor odor-producing substances in concentrations that adversely affect beneficial uses.
- Discharge shall not cause the median concentration of coliform organisms in groundwater over any seven-day period to be more than 2.2/100 ml.

- 7. The discharge shall not cause a statistically significant increase of mineral or organic constituent concentrations in underlying groundwater, as determined by statistical analysis of samples collected from wells in the vicinity of the disposal area. BP
- 8. To protect the *municipal and domestic supply* beneficial uses of groundwater underlying the disposal ponds, treated wastewater discharged from the Facility shall not cause groundwater to: BP/BPJ/T22
  - a) exceed the Primary Maximum Contaminant Levels for organic chemicals set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444.
  - b) exceed the Primary Maximum Contaminant Levels for inorganic chemicals set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431.
  - exceed the levels for radionuclides set forth in the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 5, Section 64443.
- 9. The discharge shall not cause radionuclides to be present in groundwater in concentrations that are deleterious to human, plant, animal, or aquatic life, or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. BP

# **System Operation**

- Treatment and disposal areas shall be fenced and posted (English and Spanish) to advise the public that the Facility contains domestic wastewater.
- 11. Extraneous surface drainage shall be excluded from the wastewater treatment and disposal facilities.
- 12. All storm water contacting domestic wastewater shall be contained on the site.

- Freeboard shall exceed two feet in all designated wastewater treatment, storage, and disposal areas. BPJ
- Wastewater shall be confined to land owned or controlled by the Discharger. BPJ
- 15. All solids generated from the screening and treatment process must be reclaimed or disposed of in a manner acceptable to the Executive Officer.

# Wastewater Disposal

- 16. Effluent shall not be discharged within 100 feet of any existing water supply well.
- 17. Wastewater shall be confined within bermed areas. BPJ
- 18. Wastewater application rates shall be consistent with accepted engineering practice. BPJ
- 19. Disposal ponds shall be alternated to maximize disposal rates and permit emptying/drying for maintenance purposes.
- Disposal ponds or other designated wastewater land disposal areas shall be dried and disked or plowed at least annually.
- Designated wastewater land disposal areas shall be dried to field moisture conditions between applications.
- 22. The Facility shall be managed so as to minimize mosquito-breeding habitat. BPJ

# C. SALTS MANAGEMENT PROGRAM

- The Discharger shall maintain an ongoing salts management program with the intent of reducing mass loading of salts in treated effluent to a level that will ensure compliance with effluent limitations and not negatively impact beneficial uses of groundwater.
- Salt reduction measures shall focus on all potential salt contributors to the collection system, including water supply, and residential, commercial and industrial dischargers. The

- Discharger shall evaluate the applicability of AB 334 and implement it as appropriate and feasible to reduce salt loading from the domestic use of water softeners.
- The salt management plan shall also address the concentration of salts in the wastewater treatment process as a result of excessive hydraulic retention times.
- 4. As part of the salts management program, the Discharger shall submit an annual engineering report of salt reduction efforts. This report shall include, at a minimum:
  - a. Calculations of annual salt mass discharged to the wastewater treatment system and disposal ponds with an accompanying analysis of contributing sources:
  - Analysis of wastewater evaporation/salt concentration effects;
  - c. Analysis of groundwater monitoring results related to salt constituents;
  - d. Analysis of potential impacts of salt loading on the groundwater basin;
  - e. A summary of existing salt reduction measures; and,
  - Recommendations and time schedules for implementation of any additional salt reduction measures.
- 5. Annual salt management reports are due January 30<sup>th</sup> of each year and may be included as part of the annual monitoring report. The first annual salt management report is due January 30, 2006.

# D. LONG-TERM WASTEWATER MANAGEMENT PLAN

- 1. The Discharger shall take necessary steps to develop and implement a long-term wastewater management plan (LTWMP or plan), in accordance with the following schedule and requirements:
  - a) Within 90 days of adoption of this Order, the Discharger shall submit a workplan and time schedule for the development of a long-term wastewater

management plan. The workplan shall address evaluation of treatment system performance and disposal capacity with the intent of developing and implementing a LTWMP that will enable the facility to meet the phased effluent limitations prescribed in this Order and provide adequate treatment and disposal capacity for projected future flows. The plan should also consider recycling and reuse as alternatives to disposal. The workplan shall address the evaluation of the logistical and technical aspects of a connection to the City of Hollister wastewater collection system. Included with this workplan shall be an analysis of existing fiscal resources that are available for use in the development and implementation of the LTWMP.

b) By January 30, 2006, the Discharger shall submit the LTWMP for approval by the Executive Officer. The plan shall include the resulting wastewater treatment and disposal evaluation, with supporting data, and evaluation of the Hollister wastewater collection system alternative. The plan shall evaluate and compare the implementation of various Facility improvements versus connection to the Hollister wastewater collection system and select an alternative to be fully implemented by January 30, 2008. Cost estimates for each of the alternatives shall be included as part of the evaluation. The selected LTWMP, if not a Hollister wastewater collection system tie-in, shall ensure adequate operational and physical modifications are implemented at the facility to meet current and project wastewater flows. In particular, the land disposal facility shall be designed in accordance with standard engineering practice using field data and conservative assumptions and include a level of redundancy to facilitate safe operation and maintenance during peak flow and the 100-year return storm event. The plan shall be of a technical quality and level of detail sufficient to serve as a pre-design report for CEOA documentation and the development of final design documents

- for implementation of the selected alternative. The plan shall also document that adequate financial resources are available for completion of the plan.
- c) By January 30, 2008, the Discharger shall either complete improvements to the facility to meet the phased effluent limitations in this Order and provide adequate excess disposal capacity, or connect to the City of Hollister wastewater collection system and cease all wastewater treatment and disposal operations at the facility.
- 2) A detailed evaluation of the Hollister wastewater collection system connection is required as part of the plan. The plan will be incomplete and no other alternatives will be considered unless the Hollister wastewater collection system option is adequately evaluated.
- 3) Development of the plan shall be performed in coordination with all appropriate stakeholders to ensure steps are taken to obtain all necessary approvals and permits, and ensure compliance with all applicable regulations prior to implementation of the plan. Reclamation and reuse options for treated wastewater should be considered in the development of the plan, and the level of treatment shall be appropriate for the end use of treated wastewater and be protective of all applicable beneficial uses.
- 4) All plan documents and reports shall be prepared by, or under the supervision/review of, and be certified by a registered professional engineer registered in California and possessing applicable experience in wastewater engineering and planning.

# E. GENERAL PROVISIONS

- Order No. 89-58, "Waste Discharge Requirements for Sunnyslope County Water District, Ridgemark Estates Subdivision," adopted by the Regional Board on April 14, 1989, is hereby rescinded.
- 2. The Discharger shall comply with "Monitoring and Reporting Program (MRP) No. R3-2004-

0065, as specified by the Executive Officer. The Executive Officer is authorized to revise the Monitoring and Reporting Program at any time during the Permit term.

- 3. All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality acceptable to the Executive Officer, may subject the discharger to enforcement action pursuant to Section 13268 of the California Water Code.
- 4. The Discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements," dated January 1984.
- 5. Physical facilities shall be designed and constructed according to accepted engineering practices and shall be capable of full compliance with this Order when properly operated and maintained. Operation and maintenance of the wastewater system shall conform to the Operations and Maintenance Plan, which shall be periodically reviewed, and, if appropriate, revised. The Operations Plan is subject to review by the Executive Officer, who shall be provided a current copy within ten days of any significant revision.
- 6. All discharges from the Facility shall comply with lawful requirements of the municipalities, counties, irrigation districts, drainage districts, and other local agencies regarding discharges of waste to land and surface waters within their jurisdiction.
- 7. By January 30<sup>th</sup> of each year, the Discharger shall submit an engineering technical report to the Executive Officer that evaluates the performance and capacity of the wastewater treatment and disposal system. The report shall contain a hydraulic balance analysis of facility inputs and outputs including influent flow, precipitation, infiltration/percolation,

- and evaporation for both facilities and shall quantify disposal capacity of the facility based on actual operating data. The reports shall be prepared by, or under the supervision/review of, and be certified by a registered professional engineer registered in California and possessing applicable experience in wastewater engineering and planning. The first annual engineering technical report is due January 30, 2006.
- 8. By February 28, 2005, the Discharger shall submit a groundwater assessment workplan. The workplan shall evaluate and propose locations for additional groundwater monitoring wells in the vicinity of RM-I, RM-II and pond 6 to evaluate background and downgradient conditions.
- The Discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or waste management activities that may result in noncompliance with this Order.
- 10. This Order may be reopened to address any changes in State or Federal plans, policies, or regulations that would affect the quality requirements for the discharges.
- 11. In the event of any change in control or ownership of land or facilities presently owned or utilized by the Discharger, the Discharger shall notify the succeeding owner(s) or operator(s) of the existence of this Order by letter, a copy of which shall be forwarded to the Regional Board.
- 12. The Discharger shall file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code given a material change in the character, location, or volume of the discharge. Changes or modification to the Facility as a result of LTWMP implementation may require a Report of Waste Discharge submittal and update of the Permit. Material changes warranting submittal of a Report of Waste Discharge include, but are not limited to, the following:

- a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
- b) Significant change in disposal method, e.g., change from a land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
- c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
- d) Increase in flow beyond that specified in the waste discharge requirements.
- 13. The Regional Board retains the authority to amend the time schedules for any or all of the effluent limitations or Long-Term Wastewater Management Plan compliance deadlines if it determines delays are due to circumstances beyond the Discharger's control.
- I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Coast Region, on December 3, 2004.

Roger W. Briggs, Executive Officer

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