### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

### ORDER NO. R5-2002-0140

# WASTE DISCHARGE REQUIREMENTS FOR SKYVIEW TERRACE MOBILE HOME PARK SKYVIEW TERRACE ASSOCIATES PLACER COUNTY

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

- 1. Skyview Terrace Associates (hereafter Discharger) is a California limited partnership, which owns and operates the Skyview Terrace Mobile Home Park. The Discharger submitted a Report of Waste Discharge (ROWD) on 29 August 2001, and supplemental information in March 2002 and on 22 April 2002, for the revision of Waste Discharge Requirements (WDRs) Order No. 5-00-059.
- 2. Skyview Terrace Mobile Home Park (STMHP) is situated on approximately 49.2 acres and the Discharger estimates the STMHP has capacity for 136 mobile home spaces. The STMHP is contiguous with several private residential properties. STMHP is approximately 20 minutes east of US Highway 80 traveling on Forest Hill Road. The street address is 21200 Todd Valley Road located in Placer County as shown in Attachment A, which is attached hereto and made part of this Order. The property (Assessor's Parcel Number 255-010-010-000) is located in the NE ¼ of Section 8, T13N, R10E, MDB&M.
- 3. WDRs Order No. 5-00-059, adopted by the Board on 17 March 2000, prescribes requirements for discharges of domestic wastewater from the mobile homes at STMHP. These WDRs are neither adequate nor consistent with plans and policies of the Board.

# **Existing Facility and Discharge**

- 4. The existing STMHP wastewater treatment system was originally designed and permitted to accommodate 130 mobile home units (increased to 135 in 1984) with an average occupancy of 2 persons per unit. The previously permitted design flow for the system was 39,000 gallons per day (gpd). This flow was based on an average wastewater disposal of 150 gpd per person.
- 5. Wastewater is directed to an underground collection system which gravity drains to three sequential facultative ponds. A flow meter measures influent flow to Pond 1. Pond 1 has a 5-horse power aeration unit. Wastewater gravity drains through a control valve to Pond 2. Pond 2 has a small sprinkler surface aerator system and gravity drains through two control valves to a wet well pump station. The wet well is used to transfer wastewater uphill to Pond 3. The wet well inlet valves are controlled manually from the surface, one of which is several feet underground and the other is within Pond 2.

- 6. Due to stuck valves in March of 1999, the wet well was modified in February 2000 such that its overflow elevation was raised up to be higher than the levees for both Ponds 1 and 2.
- 7. Pond 3 has a sprinkler system to provide surface aeration and agitation. Pond 3 is significantly higher in elevation than Ponds 1 and 2 as can be seen from Attachment A. Back flow prevention measures are incorporated to prevent Pond 3 from siphoning into the wet well and overflowing to Peachstone Gulch.

#### Sanitary Sewer System

- 8. The STMHP sanitary sewer system does not include any lift stations. Wastewater flows by gravity to the flow meter located at the influent structure to Pond #1. The treatment system is equipped with external power connections such that an emergency electrical generator capable of powering the treatment system can be used.
- 9. The Discharger's sanitary sewer system collects wastewater using sewers, pipes, pumps, and/or other conveyance systems and directs this raw sewage to the wastewater treatment ponds. A "sanitary sewer overflow" is defined as a discharge to ground or surface water from the sanitary sewer system at any point upstream of the wastewater treatment ponds. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, highlines, etc.) may be part of a sanitary sewer system and discharges to these facilities are not considered sanitary sewer overflows, provided that the waste is fully contained within these temporary storage/conveyance facilities.
- 10. Sanitary sewer overflows may consist of varying mixtures of domestic sewage; this mixture can vary depending on the pattern of resident usage. The chief causes of sanitary sewer overflows include grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, storm or groundwater inflow/infiltration, lack of capacity, and contractor caused blockages.
- 11. Sanitary sewer overflows often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen demanding organic compounds, oil and grease, and other pollutants. Sanitary sewer overflows can cause temporary excedences of applicable water quality objectives, pose a threat to public health, adversely affect aquatic life, and impair the public recreational use and aesthetic enjoyment of surface waters in the area.
- 12. The Discharger is expected to take all necessary steps to adequately maintain, operate, and prevent discharges from its sanitary sewer collection system. This Order requires the Discharger to prepare and implement a Sanitary Sewer System Operation, Maintenance, Overflow Prevention, and Response Plan.

#### **Planned Changes in Discharge**

13. As a result of pond overtopping observed by Regional Board staff in March of 1999, Order No. 5-00-059 required the Discharger to complete a water balance for the STMHP wastewater treatment system. An influent flow meter and pond staff gauges were installed (April 2000) to respectively monitor monthly sewage flow and pond effluent inventory. The following influent flow data was recorded in 2001:

Month	Collong par day	A ora fact
<u>Month</u>	<u>Gallons per day</u>	<u>Acre-feet</u>
April	19,283	1.775
May	18,307	1.686
June	16,143	1.486
July	17,042	1.569
August	NA	NA
September	15,521	1.429
October	16,997	1.565
November	NA	NA
December	22,831	2.172
Average	18,041	
Rainfall est.	9,820	
Total volume measur	ed for 7 months	11.682

#### Influent flow of 2001

- 14. The ROWD describes annual influent volume of 21.8 acre-feet or approximately 19,462 gpd averaged daily flow for one year. From the Dischargers ROWD, the water balance indicates 1.5 acre-feet surplus for a one in 100-year precipitation year. The Discharger has chosen to use leachfield disposal method to dispose of the surplus. Hydraulic disposal capacity required to dispose of the surplus is calculated to be 1,600 gpd based on 300 disposal days within the year.
- 15. The leachfield ground surface slope is estimated to be approximately 24 percent and the corrected percolation rates averaged 8.0 minutes per inch (mpi). A conservative slower design percolation rate of 25 mpi was used to incorporate a safety factor into the leachfield design. A vertical assimilation (application) rate of 1.0-gallon per day per square foot was used.
- 16. Based on the application rate and 300 disposal days per year at 1,600 gpd, 540 feet of disposal trench will be required and configured into six 90 foot lines to accommodate the effluent disposal. The leach lines will use a shallow trench design with pressure dosed drip emitters.

- 17. As a result of recent inspections, wet well control valve failures, and review of Self Monitoring Reports, staff is concerned that groundwater quality in the area may be affected by the operation of this facility. Of particular concern are the 2001 monitoring results from monitoring well #2 and #3, which shows a history of elevated total coliform in the groundwater (see Finding 21 below).
- 18. Regional Board Order No. 5-00-059 required that groundwater monitoring wells to be installed and monitored for the purpose of evaluating the impact of the wastewater system on groundwater quality. Well No. 1, near Pond #3 is very shallow and does not allow sampling of the groundwater in the dry months of the year. Well #3 is a replacement well next to Pond #3. Well #2 is a new well next to Pond #2.

### **Site-Specific Conditions**

- 19. The Soil Survey of Placer County (U.S.D.A. Soil Conservation Service, 1980) shows the STMHP property to be located with in the (180) Rubble Land and (159) Josephine loam, with 15 to 30 percent slopes. Soil mantles were performed to depths ranging between 6 to 8 feet and were found suitable for a shallow trench pressure dosed disposal system.
- 20. Surface water flow in the vicinity of Pond #3 and the leachfield is to Todd Creek and in the vicinity of Ponds #1 & #2 is to Peachstone Gulch, both of which are tributary to the Middle Fork of the American River. The beneficial uses of the Middle Fork American River are domestic, municipal, and agricultural supply; recreation; aesthetic enjoyment; groundwater recharge; fresh water replenishment; hydroelectric power generation and preservation and enhancement of fish, wildlife, and other aquatic resources. The beneficial uses of the underlying groundwater are domestic, industrial, and agricultural supply.

#### **Groundwater Considerations**

21. Past history had demonstrated elevated total coliform in the groundwater next to the ponds. Below is a table of groundwater data collected from the year 2001:

	Units	Dec 00	Mar 01	May 01	Jul 01	Oct 01
Well #2						
Coliform Total	MPN	NS	11	23	<2.0	<2.0
Coliform Fecal	MPN	NS	<2.0	<2.0	<2.0	<2.0
Electrical Cond	$\mu$ mhos/cm	NS	1970	1110	1000	940
Nitrogen	mg/l	NS	1.6	ND	ND	ND
pH	pH units	NS	6.8	6.8	6.7	6.7
Water Depth	Feet	NS	8.3	3.2	8.0	19.7
Well Total Depth =	=25.5 Feet					

	Units	Dec 00	Mar 01	May 01	Jul 01	Oct 01
Well #3						
Total Coliform	MPN	>1600	<2.0	23	11	>1600
Fecal Coliform	MPN	30	<2.0	2	<2.0	23
Electrical Cond	µmhos/cm	415	229	346	425	440
Nitrogen	mg/l	ND	ND	ND	ND	ND
pH	pH units	6.5	6.4	6.4	6.6	6.0
Water Depth	Feet	4.5	4.5	5.4	6.2	5.8
Well Total Depth=	=15.5 Feet					

Note: NS = No Sample and ND = Non Detect

22. In March 2001, 4.0 mg/l Biochemical Oxygen Demand was measured in the groundwater sample collected from Well #2. It appears from the groundwater data collected that further investigation is required. This Order requires the Discharger to evaluate the existing groundwater data and determine if additional data is required to complete a water quality evaluation or if an impact to water quality has already occurred. In the event an impact to water quality has been determined, this Order requires the Discharger to submit a Corrective Action Plan and an Implementation Time Schedule.

#### **Groundwater Degradation**

- 23. State Water Resources Control Regional Board (State Board) Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation Policy") requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) and shall not unreasonably affect beneficial uses.
- 24. These waste discharge requirements do not allow degradation of groundwater beneath the STMHP wastewater treatment system or the leachfield disposal area. The Discharger is required to monitor the groundwater under this leachfield disposal area and if the monitoring data indicate that the discharge of waste to the leachfield disposal area is causing groundwater to contain waste constituents in concentrations statistically greater than background water quality, then the Discharger may be required to submit a report and time schedule for compliance with Resolution 68-16. Upon review of such report, the Regional Board may revise this Order, including the groundwater limitations

### **Treatment and Control Practices**

- 25. This wastewater treatment facility provides treatment and control of the discharge that incorporates:
  - a. Technology for secondary treatment;
  - b. Disposal of wastewater subsurface on fallow land;
  - c. Has backup power available for aerators in case of power failure;
  - d. Resident education on conserving the water resources by park management;
  - e. Maintaining an operation and maintenance (O&M) manual; and
  - f. Staffing to assure proper operation and maintenance.
- 26. The facility treats wastewater to secondary standards and is increasing disposal capacity with subsurface disposal. Because a municipal well is located within 150 feet of the disposal site, groundwater monitoring is required at the subsurface disposal site.
- 27. This Order does not allow for degradation of groundwater quality.

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

- 28. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth *Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
- 29. The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
- 30. The Basin Plan encourages water recycling.
- 31. The Basin Plan establishes numerical and narrative water quality objectives for surface and groundwater within the basin, and recognizes that water quality objectives are achieved primarily through the Regional Board's adoption of waste discharge requirements and enforcement orders. Where numerical water quality objectives are listed, these are limits necessary for the reasonable protection of beneficial uses of the water. Where compliance with narrative water quality objectives is required, the Regional Board will, on a case-by-case basis, adopt numerical limitations in orders, which will implement the narrative objectives to protect beneficial uses of the waters.

- 32. The Basin Plan identifies numerical water quality objectives for waters designated as municipal supply. These are the maximum contaminant levels (MCLs) specified in the following provisions of Title 22, California Code of Regulations: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) of Section 64449. The Basin Plan's incorporation of these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that the Regional Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
- 33. The Basin Plan contains narrative water quality objectives for chemical constituents, tastes and odors, and toxicity. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants or animals. The chemical constituent objective requires that groundwater shall not contain chemical constituents in concentrations that adversely affect beneficial uses. The tastes and odors objective requires that groundwater shall not contain tastes or odors producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
- 34. Section 13241 of the Water Code requires the Regional Board to consider various factors, including economic considerations, when adopting water quality objectives into its Basin Plan. Water Code Section 13263 requires the Regional Board to address the factors in Section 13241 in adopting waste discharge requirements. The State Board, however, has held that a Regional Board need not specifically address the Section 13241 factors when implementing existing water quality objectives in waste discharge requirements because the factors were already considered in adopting water quality objectives. These waste discharge requirements implement adopted water quality objectives. Therefore, no additional analysis of Section 13241 factors is required.
- 35. The United States Environmental Protection Agency (EPA) has promulgated biosolids reuse regulations in 40 CFR 503, *Standard for the Use or Disposal of Sewage Sludge*, which establishes management criteria for protection of ground and surface waters, sets application rates for heavy metals, and establishes stabilization and disinfection criteria.
- 36. The Regional Board is using the Standards in 40 CFR 503 as guidelines in establishing this Order, but the Regional Board is not the implementing agency for 40 CFR 503 regulations. The Discharger may have separate and/or additional compliance, reporting, and permitting responsibilities to the EPA.
- 37. On 18 July 2002, in accordance with the California Environmental Quality Act (CCR, Title 14, Section 15261 et. seq.), the Central Valley Regional Water Quality Control Board certified a Mitigated Negative Declaration for addition of a leachfield disposal area to increase effluent hydraulic disposal capacity to accommodate a one in one hundred storm event.

- 38. The Discharger has incorporated mitigation measures for the construction and maintenance and operation of the new wastewater treatment leachfields, which cause the effects to be less than significant or have no impact. These measures include, but are not limited to, regulated construction hours, best available treatment technology given site specific conditions, setbacks from water courses, property lines, and wells. The location is protected with respect to 100-year annual flood events, and ground water monitoring is incorporated for first line protection of water quality, and the implementation of the Monitoring and Reporting Program contained herein.
- 39. The action to update waste discharge requirements for the existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301.
- 40. Section 13267(b) of the California Water Code provides that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports".
- 41. The technical reports required by this Order and the attached "Monitoring and Reporting Program No. R5-2002-0140" are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.
- 42. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to CWC Section 13801, apply to all monitoring wells.
- 43. State regulations that prescribe procedures for detecting and characterizing the impact of waste constituents from waste management units on groundwater are found in Title 27. While the wastewater treatment facility is exempt from Title 27, the data analysis methods of Title 27 are appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order.

- 44. The discharge authorized herein and the treatment and storage facilities associated with the discharge, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, California Code of Regulations (CCR), Section 20005 et seq. (hereafter Title 27). The exemption, pursuant to Section 20090(a) of Title 27, is based on the following:
  - a. The waste consists primarily of domestic sewage and treated effluent;
  - b. The waste discharge requirements are consistent with water quality objectives; and
  - c. The treatment and storage facilities described herein are associated with a community type wastewater treatment facility.
- 45. Pursuant to California Water Code Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

# **Public Notice**

- 46. The Regional Board considered all the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, in establishing the following conditions of discharge.
- 47. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 48. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order No. 5-00-059 is rescinded and that, pursuant to California Water Code (CWC) sections 13263 and 13267, Skyview Terrace Associates, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions".]

# A. Discharge Prohibitions:

- 1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
- 2. By-pass or overflow of untreated or partially treated waste is prohibited.
- 3. Discharge of untreated or partially treated waste to groundwater is prohibited.

- 4. The application of wastewater to the subsurface disposal fields at rates that would create a nuisance as defined CWC 13050 is prohibited.
- 5. Surfacing of wastewater from any leachfield is prohibited.
- 6. Discharge of sewage from a sanitary sewer system at any point upstream of the wastewater ponds is prohibited. Discharge of treated wastewater from the STMHP wastewater treatment system, other than into the approved subsurface land application area, is prohibited.
- 7. Discharge of waste classified as 'hazardous,' as defined in Sections 2520 & 2521(a) of Chapter 15, or 'designated,' as defined in Section 13173 of the CWC, is prohibited.
- 8. Discharge of wastewater from source(s) other than from existing buildings within STMHP and a maximum of 135 mobile home units is prohibited.
- 9. Use of the subsurface land application area for roads, storage, or any kind of construction activity is prohibited.
- 10. Use of the subsurface land application area as grazing pasture for animals producing milk for human consumption is prohibited. In addition, the use of fodder and fiber crops produced in the land application area for feed for animals producing milk for human consumption is prohibited.

# **B.** Discharge Specifications:

- 1. The annual average dry weather flow shall not exceed 20,000 gpd. The flow rate limit shall be applied to the flow entering the headworks.
- 2. The maximum monthly average discharge flow shall not exceed 25,000 gpd.
- 3. The maximum average daily flow to the subsurface land irrigation system shall not exceed 1,600 gpd.
- 4. Neither the treatment nor the discharge shall cause a pollution or nuisance as defined by the CWC, Section 13050.
- 5. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and subsurface disposal areas.
- 6. As a means of complying with Discharge Specifications Nos. B.3 and B.4 above, the dissolved oxygen concentration, in the upper one-foot of the pond water, shall not be less than 1.0 mg/l.

- 7. Discharger shall maintain a 100-foot buffer from the property line to the STMHP subsurface land irrigation system.
- 8. The discharge to subsurface land irrigation system shall remain underground at all times.
- 9. Pond effluent applied to the subsurface land irrigation system shall not exceed the following monthly average limits:

<u>Constituent</u>	<u>Units</u>	Monthly Average			
BOD <sub>5</sub> <sup>1</sup>	mg/l	40			
Total Suspended Solids	ml/l	40			
Oil and Grease	mg/l	30			
<sup>1</sup> Five day Biochemical Oxygen Demand					

- 10. The waste discharge shall remain in the designated disposal areas at all times.
- 11. The discharge shall not cause degradation of any water supply.
- 12. The discharge shall not cause concentrations of any materials that are deleterious to animal, aquatic, human or plant life in any surface water or drainage course outside of the designated disposal area.
- 13. Only residential household domestic waste may be discharged to the STMHP collection, treatment, and disposal system. All other wastes shall be disposed off-site.
- 14. The pond system and subsurface land irrigation system shall have sufficient capacity to accommodate allowable wastewater flow design seasonal precipitation, seasonal ancillary inflow, and infiltration during floods, storms or a wet season using a return period of 100 years. Design seasonal precipitation shall also be based on the total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
- 15. Ponds shall be maintained with a minimum of two feet of freeboard as measured from the pond's lowest overflow point.
- 16. On or about October 1 of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specification Nos. 14 and 15.
- 17. The ponds shall not have a pH less than 6.5 or greater than 8.5.
- 18. Public contact with wastewater shall be precluded through subsurface disposal irrigation management practices, fences, and signs.

19. Signs with proper wording of sufficient size shall be placed around areas where potential contact exposure may exist to alert the public of the disposal practice.

# C. Sludge Disposal:

- 1. Collected screenings, biosolids, grease and oil, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Title 27 and approved by the Executive Officer.
- 2. Biosolids removed from the pond bottoms shall be disposed of in a manner that is consistent with Title 27 and approved by the Executive Officer.
- 3. Any proposed change in biosolids use or disposal practice from a previously approved practice shall be reported to the Executive Officer and U.S. Environmental Protection Agency Regional Administrator at least 90 days in advance of the change.
- 4. Use and disposal of sludge shall comply with existing Federal and State laws and regulations, including permitting requirements and technical standards included in 40 CFR part 503.

If the State Water Resources Control Board and the Regional Water Quality Control Boards are given the authority to implement regulations contained in the 40 CFR part 503, this Order may be reopened to incorporate appropriate time schedules and technical standards. The Discharger must comply with the standards and time schedules contained in 40 CFR part 503 whether or not they have been incorporated into this Order.

# D. Ground Water Limitations:

- 1. The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality.
- 2. Groundwater beneath the STMHP collection, treatment, and disposal system shall not exhibit a pH of less than 6.5 or greater than 8.5 pH units.
- 3. STMHP collection, treatment, and disposal system shall not impart to groundwater taste, odor, toxicity, or color that creates nuisance or impairs any beneficial use.

#### E. Provisions:

All of the following Discharger reports shall be submitted pursuant to Section 13267 of the California Water Code. Technical reports submitted by or for the Discharger shall be prepared and stamped by the appropriate registered professional required by the California Business and

Professions Code. The Discharger shall certify all reports required by this Order per the attached *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, General Reporting Requirements B.3. This attachment and its individual paragraphs are commonly referenced as the *Standard Provisions*.

- 1. The Discharger shall comply with the Monitoring and Reporting Program (MRP) No. R5-2002-0140, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 2. The Discharger shall comply with the most recent edition of the *Standard Provisions*, which are attached hereto and by reference made a part of this Order.
- 3. By **31 October 2002**, the Discharger shall submit a technical report evaluating the impact of the STMHP collection, treatment, and disposal system on water quality using existing data. If the technical report determines that addition data is required, the technical report shall address the need to collect more data and provide an implementation time schedule to collect the required data to complete the technical report.
- 4. If the technical report in Provision E.3 makes findings of groundwater degradation, a Corrective Action Plan with an Implementation Time Schedule shall be submitted to the Regional Board by **31 December 2002**.
- 5. Before construction, the Discharger shall submit a county permit copy to the Regional Board showing evidence that the domestic wastewater treatment and disposal system meets all Placer County regulations and ordinances or submit a statement of non-applicability.
- 6. By **29 November 2002**, the Discharger shall submit a *Sanitary Sewer System Operation*, *Maintenance, Overflow Prevention, and Response Plan* (SSS Plan) that describes the actions designed to prevent, or minimize the potential for sanitary sewer overflows. The Discharger shall maintain the SSS Plan in an up-to-date condition and shall amend the SSS Plan whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sanitary sewer system or sewer facilities) that materially affects the potential for sanitary sewer overflows, or whenever there is a sanitary sewer overflow. The Discharger shall ensure that the up-to-date SSS Plan is readily available to sewer system personnel at all times and that sewer system personnel are familiar with it.
  - a. At a minimum, the Operation and Maintenance portion of the plan shall contain or describe the following:
    - i) Detailed maps of the sanitary sewer system, identifying sewer mains, manholes, and lift stations;

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

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

- 13. The Discharger shall report promptly any material change or proposed change in the discharge character, location, or volume and/or the treatment train and/or the wastewater facility treatment components.
- 14. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
- 15. The Board will review this Order periodically and will revise requirements when necessary.

I, THOMAS R. PINKOS, Acting Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 19 July 2002.

THOMAS R. PINKOS, Acting Executive Officer

GWL 07/16/02 gwl\H:\h\Word\WDRs\_Placer\SkyviewTerrace\_2002wdr2.doc

AMENDED

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2002-0140 SKYVIEW TERRACE MOBILE HOME PARK SKYVIEW TERRACE ASSOCIATES PLACER COUNTY

WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2002-0140 SKYVIEW TERRACE MOBILE HOME PARK SKYVIEW TERRACE ASSOCIATES PLACER COUNTY

Skyview Terrace Mobile Home Park (STMHP) has been operating since 1963 under the previous name of Todd Valley Trailer Court. It is located in Todd Valley about 3 ½ miles southwest of Foresthill at 21200 Todd Valley Road.

In 1982 STMHP expanded from 78 to 130 (increased to 135 in 1984) mobile home units, and an increased its discharge volume from 23,000 gpd to 39,000 gpd. The WDRs were recently revised in March 2000. The revision did not allow for expansion, however it did require installation of replacement monitoring wells, flow meter, staff gauges, water balance, and other technical reports designed to assess the condition of the wastewater collection, treatment, and disposal system.

The park has enough spaces for 136 mobile home units. This Order does not allow for an expansion in the number of mobile home units. The maximum is 135 units.

Wastewater is directed to an underground collection system which gravity drains to three sequential facultative ponds. The ponds have varying degrees of surface aeration. Pond 1 has a 5 hp surface aerator and gravity drains to Pond 2. Pond 2 has surface spray aerators and gravity drains to a wet well pump station used to transfer wastewater to Pond 3. Pond 3 is approximately 100 feet higher in elevation than Pond 2. Pond 3 utilizes surface spray aerators.

The wet well inlet valves are several feet subsurface. One is underground and the other underwater in Pond 2. They are controlled manually from the surface. From Pond 3 effluent is pressure dosed to six 90-foot (540 total linear feet) near surface drip irrigation leach lines.

It has been observed that the wet weather flow at this facility is increased due to Inflow and Infiltration. STMHP has conducted some investigation of the collection system.

Board staff received a complaint in March 1999 that the wet well was overflowing and discharging wastes to Peachstone Gulch. Staff observed the wet well was overflowing into a recently constructed catchment basin with a pump returning wastes back to Pond 2. During the same inspection it was observed that Pond 3 was discharging to Todd Creek by over-topping a levee and through a hole in the side of the levee presumably created by a burrowing animal. A Notice of Violation was issued and the problems have since been corrected.

In September 1999, surrounding property owners and park residents made numerous odor complaints about the wastewater treatment facility. Upon inspection of the facility, significant odors were detected. A Notice of Violation was issued and subsequently the Discharger had a 10 hp mechanical surface aerator installed in Pond 1 and retained a consultant to develop an Operations and Maintenance manual and help operate the ponds.

A historic mining hydraulic relief "Tunnel" passing underneath Pond 3 was used in lieu of a third monitor well. This practice was discontinued due to the lack of knowledge or control over the origin of the water flowing into the Tunnel. The Tunnel, natural drainage, and storm water runoff from Ponds 1 and 2 flows directly into Peachstone gulch.

Order No. 5-00-059 required additional monitoring wells to be installed and sampled to evaluate groundwater impacts. Review of the 2001-groundwater monitoring data has prompted the Regional Board to require the Discharger to complete a technical report assessing the STMHP discharge on groundwater quality. This Order requires the Discharger to submit a technical report to assess wastewater treatment system impacts on water quality and provide a corrective action plan and implementation time schedule if needed.

Surface water drainage from Ponds 1 and 2 is to Peachstone Gulch. Surface water drainage from Pond 3 is to Todd Creek, both are tributaries of the Middle Fork of the American River.

gwl\H:\h\Word\WDRs\_Placer\SkyviewTerrace\_2002inf2.doc07/16/02

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

# MONITORING AND REPORTING PROGRAM NO. R5-2002-0140 FOR

### SKYVIEW TERRACE MOBILE HOME PARK SKYVIEW TERRACE ASSOCIATES PLACER COUNTY

This monitoring and reporting program (MRP) incorporates requirements for monitoring of the collection system, three wastewater ponds, pump station, leachfield, groundwater, and the general grounds that encompass the entire collection, treatment, and disposal system, and is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP until a revised MRP is issued by the Executive Officer. Specific sample station locations shall be approved by Regional Board staff prior to implementation of sampling activities. Sample collection stations shall be established such that the samples collected are representative of the nature and volume of the material(s) sampled.

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

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

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

# **POND #1 MONITORING**

Influent to Pond #1shall be measured for the following constituents according to the following schedule:

Constituent	Units	Sample Type	Sample Frequency
Flow	gpd	Continuous	Monthly

Constituent	Units	Sample Type	Sample Frequency
Dissolved Oxygen	mg/l	Grab	Monthly
Electrical Conductivity	µmhos/cm	Grab	Monthly
рН	pH units	Grab	Monthly
$BOD_5^1$	mg/l	Grab	Quarterly
$TSS^2$	mg/l	Grab	Quarterly
Nitrates as N	mg/l	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/l	Grab	Quarterly
Fecal Coliform <sup>3</sup>	MPN/100 ml	Grab	Quarterly
Total Coliform <sup>3</sup>	MPN/100 ml	Grab	Quarterly

<sup>1</sup> 5-day, 20°C Biochemical Oxygen Demand
<sup>2</sup> Total Suspended Solids

<sup>3</sup> The number of dilutions may need to be adjusted, five dilutions minimum

#### PONDS #2 AND #3 MONITORING

Ponds #2 & #3 shall be monitored for the following constituents according to the following schedule:

Constituent	Units	Sample Type	Sample Frequency
Free Board	feet, +0.1	Grab	Monthly
Dissolved Oxygen	mg/l	Grab	Monthly
Electrical Conductivity	µmhos/cm	Grab	Monthly
pH	pH units	Grab	Monthly
Fecal Coliform <sup>3</sup>	MPN/100 ml	Grab	Quarterly
Total Coliform <sup>3</sup>	MPN/100 ml	Grab	Quarterly

The number of dilutions may need to be adjusted, five dilutions minimum

#### LEACHFIELD INFLUENT MONITORING

The Discharger shall monitor the leachfield influent for the following constituents according to the following schedule:

Constituent	Units	Sample Type	Sample Frequency
Flow	and	Continuous	Monthly <sup>1</sup>
	gpd		Monthly
pH	pH units	Grab	Monthly
Electrical Conductivity	µmhos/cm	Grab	Monthly <sup>1</sup>
BOD <sub>5</sub>	mg/l	Grab	Quarterly
Nitrates	mg/l as N	Grab	Quarterly

#### WASTE DISCHARGE REQUIREMENTS ORDER NO. R5-2002-0140 SKYVIEW TERRACE MOBILE HOME PARK SKYVIEW TERRACE ASSOCIATES PLACER COUNTY

Total Suspended Solids	mg/l	Grab	Quarterly
Oil and Grease	mg/l	Grab	Quarterly

After the first year of data has been collected these are to be sampled Quarterly

### LEACHFIELD MONITORING

All leachfield facilities including distribution pipeline, distribution lines and boxes, diversion trenches, effluent disposal trenches, and other appurtenant monitoring systems associated with the leachfield water level measuring tubes(s), shall be inspected on a monthly basis. Observations made during these inspections shall be recorded on a monthly basis.

Inspections of the leachfield facilities will be comprised of a physical evaluation of the disposal site (leachfield area) to determine whether waste is being contained beneath the ground surface. The ground in the immediate vicinity and surrounding the disposal site shall be inspected to determine the presence of effluent on the ground surface. The inspection report shall include any findings of springs or surfacing effluent, which would indicate a failure to the system.

A written report of the conditions observed for the system shall be prepared following each inspection. Such written description shall include name of the person making the entry, the condition of all the items listed in the above paragraphs, and shall identify any maintenance work necessary on the physical aspects of the system.

And the following measurements shall be in addition to and compliment the above visual leachfieldmonitoring program:

Constituent	Units	Type of Sample	Sampling Frequency
Water Level Below Surface in All System	Inches	Grab	Monthly
Risers Flow	mgd	Continuous	Monthly

#### **GROUNDWATER MONITORING**

Prior to construction, plans and specifications for groundwater monitoring wells shall be submitted to Board staff for review and approval. Each monitoring well sample shall include at least the following:

Units	Sample Type	Sample Frequency
fact $\downarrow 0.1$	Grah	Quartarly
		Quarterly
•		Quarterly
pH units	Grab	Quarterly
mg/l	Grab	Quarterly
mg/l as N	Grab	Quarterly
MPN/100 ml	Grab	Quarterly
MPN/100 ml	Grab	Quarterly
	feet, ±0.1 µmhos/cm pH units mg/l mg/l as N MPN/100 ml	feet, ±0.1 Grab µmhos/cm Grab pH units Grab mg/l Grab mg/l as N Grab MPN/100 ml Grab

Constituent	Units	Sample Type	Sample Frequency			
<sup>3</sup> The number of dilutions may need to be adjusted, five dilutions minimum						
REPORTING						

All Discharger reporting specified herein shall be submitted pursuant to Section 13267 of the California Water Code.

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

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all groundwater Monitoring Reports shall be prepared under the direct supervision of an appropriate registered professional and signed by the registered professional.

# A. Monthly Reports

Monthly Reports for the pond monitoring and other sampling performed monthly shall be submitted to the Regional Board by the 1<sup>st</sup> day of the second month following sampling. Monthly Reports for the months of March, June, September, and December may be submitted as part of the Quarterly Monitoring Report, if desired. Monthly monitoring reports shall include the following:

- 1. Observation logs, resident complaints, and continuous, daily, weekly, and monthly monitoring conducted during the month;
- 2. A scaled map showing relevant structures and features of the facility, the locations of the sampling stations, observation areas, and any other sampling stations.
- 3. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;
- 4. If requested by staff, copies of laboratory analytical report(s); and
- 5. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program

# **B.** Quarterly Reports

The Discharger shall establish a quarterly groundwater sampling schedule such that samples are obtained approximately every three months. Quarterly Monitoring Reports shall be submitted to the

Regional Board by the 1<sup>st</sup> day of second month following sampling May, August, November, and **February** each year. The Quarterly Report shall include the following:

- 1. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities. The narrative shall be sufficiently detailed to verify compliance with the WDRs, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of the casing volume; and total volume of water purged.
- 2. A narrative discussion of the analytical results for all media and locations monitored, including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).
- 3. A comparison of monitoring data to the discharge specifications, groundwater limitations and surface water limitations, and explanation of any violation of those requirements.
- 4. Summary data tables of historical and current water table elevations and analytical results.
- 5. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations.
- 6. Copies of laboratory analytical report(s).

# C. Annual Monitoring Report

The Fourth Quarter Report (**due by 30 January of each year**) shall also serve as an Annual Monitoring Report. At a minimum, the Annual Monitoring Report shall include the following:

- 1. The contents of a regular Quarterly Report (i.e., monitoring results for the last groundwater and surface water monitoring event of the previous calendar year);
- 2. If requested by staff, tabular and graphical summaries of all monitoring data obtained during the previous year;
- 3. Information on the disposal of biosolids;
- 4. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;
- 5. A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells; and

6. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

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

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

Based on results of the groundwater-monitoring program after a minimum of two years, the Discharger may request a reduction in the constituents monitored, sample frequency, and/or locations monitored. If such reductions are warranted, this MRP may be revised by the Executive Officer.

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

Ordered by:

THOMAS R. PINKOS, Acting Executive Officer

<u>19 July 2002</u> Date

GWL 7/19/02 gwl\H:\h\Word\WDRs\_Placer\SkyviewTerrace\_2002mrp.doc