CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2009-0062

WASTE DISCHARGE REQUIREMENTS
FOR
SYSCO FOOD SERVICES OF SACRAMENTO, INC.
SUTTER COUNTY

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

1. Sysco Food Services of Sacramento, Inc. (hereafter referred to as Discharger) submitted a Report of Waste Discharge (RWD), dated 10 April 2008, to update existing Waste Discharge Requirements (WDRs) Order No. 5-01-204. The Order addresses a wastewater treatment facility (WWTF) at the Discharger's food distribution center in Sutter County. A revised RWD was submitted on 4 August 2008.

2. The Discharger is the owner of the property on which the food distribution center operates. The facility is on Assessor's Parcel Number 35-220-014 at 7062 Pacific Avenue, Pleasant Grove (Section 27, T11N, R4E MDB&M). The site location is presented on Attachment A, which is attached hereto and made part of the Order by reference.

3. The Discharger desires to update the facility WDRs because the existing system is difficult to operate and costly to maintain. A simpler system will provide adequate wastewater treatment and groundwater protection.

Existing Facility and Discharge

4. The facility is a non-processing food distribution center that receives, stores, and redistributes packaged food products. A site plan for the facility is presented on Attachment B, which is attached hereto and made part of this Order by reference. The 47 acre distribution center provides cold storage, freezer storage, dry warehouse space, administration offices, an employee cafeteria, and a truck wash.

5. The facility was constructed in 2001 and an on-site wastewater treatment facility has treated the site's wastewater since that time. Because the site is remotely located from dining establishments, one meal a day is prepared and served to employees on-site. Other than the on-site meal preparation, there is no commercial preparation of food for retail sale or other food processing activities

6. The total volume of wastewater discharged is anticipated to be approximately 10,000 gallons per day (gpd). The flow consists of approximately 6,800 gpd of domestic wastewater and 3,200 gpd of truck wash wastewater. The waste streams are combined and discharged to the wastewater treatment system. The truck wash wastewater is pretreated prior to being discharged. Average flow rates reported in self-monitoring reports for 2007 and 2008 are presented below:

Year	Units	Total Flow	Domestic Wastewater	Truckwash Wastewater
2007	gpd	4,775	4,266	512
2008	gpd	4,134	3,532	602

Existing Wastewater Treatment System

7. Approximately 120 day-shift and 50 night-shift employees work at the facility year-round. Domestic wastewater flows originate primarily from restrooms and hand wash basins; food preparation and cleanup also produce domestic wastewater.

8. Wastewater discharged to the existing wastewater treatment system is treated using a package plant that includes activated sludge, filtration, and disinfection using ozone. Treated wastewater is presently discharged to subsurface emitters which dose zones within a three acre dispersal area. Annual averages of treated wastewater quality are presented in the table below: The location of the dispersal areas is presented on Attachment B. The dispersal area is covered with turf.

Constituent	Units	2005	2006	2007
pH	std.	7.5	7.4	7.5
BOD	mg/L	6.8	5.9	28.4
EC	umhos/cm	957	998	989
TDS	mg/L	582	549	481

BOD denotes Biochemical Oxygen Demand. EC denotes Electrical Conductivity. TDS denotes Total Dissolved Solids.

9. The existing wastewater treatment system is difficult to operate and has routinely exceeded the effluent limits for total suspended solids, nitrate, and ammonia. The limits included in WDRs Order No. 5-01-204 were based on the technology and forecast effluent water quality rather than protective standards for groundwater quality.

10. Digested biosolids and grit accumulated within the package plant and associated aerobic sludge digestion tank are periodically pumped and disposed of by a licensed septage hauler.

Truck Wash System

11. A truck wash is operated at the facility to wash Sysco vehicles. The RWD states the truck wash only cleans the exterior of trucks. No cleaning of tank trailer interiors or bulk storage containers is performed at the site. However, information in the project file indicates liquid food containers sometimes break in the trailers and the material is washed out to the truck wash pretreatment system. That practice has resulted in odors associated with the pretreatment system.

12. The truck wash system utilizes a mixture of fresh well water and treated recycled truck wash water. The recycled truck wash water is used in the soap wash cycle, and the

fresh water is used for the rinse cycles. The Discharger forecasts the truck wash system will produce a maximum of 2,600 gallons per day (gpd).

13. Wastewater generated by the truck wash is pretreated before being discharged to the wastewater treatment system. The treatment includes an oil and sand gravity separator, a dissolved air floatation tank, and dual media filters with disposable oil-absorbent anthracite-bentonite media. A portion of the treated wastewater is recycled back to the truck wash feed water. Solids generated in the treatment process are disposed of off-site and the media in the filters is changed approximately once a year. A pretreatment schematic is presented on Attachment C1, which is attached hereto and made part of the Order by reference.

14. A summary of annual average wastewater quality from the truck wash pretreatment system is presented below:

Constituent	Units	2005	2006	2007
pH	std.	7.8	7.8	7.6
EC	umhos/cm	508	916	682
TSS	mg/L	ND (1.0)	3.7	22
TDS	mg/L	366	477	218
O&G	mg/L	ND (10)	ND (1.0)	ND (10)
TPH-D	ug/L	ND (0.5)	0.29	0.15
TPH-G	ug/L	ND (50)	0.07	0.038
BTEX	ug/L	ND (1.0)	ND (0.001)	ND (0.001)

EC denotes Electrical Conductivity. TSS denotes Total Settleable Solids. TDS denotes Total Dissolved Solids. O&G denotes Oil and Grease. TPH-D denotes Total Petroleum Hydrocarbons as Diesel. TPH-G denotes Total Petroleum Hydrocarbons as Gasoline. BTEX denotes Benzene, Toluene, Ethyl Benzene, and Xylenes.

Replacement Wastewater Treatment System

15. Because the treatment plant has been difficult and costly for the Discharger to operate, they are proposing a simpler method of treatment. The proposed treatment will continue to include the truck wastewater pretreatment. The combined wastewater flow will be discharged to a 15,000 gallon septic tank, a recirculating gravel filter, a free water surface constructed wetland, and percolation/evaporation (P/E) ponds. The anticipated wastewater quality after treatment and before discharge to the P/E ponds is presented in the table below:

Constituent	Units	Concentration
BOD	mg/L	20
TSS	mg/L	20
Total Nitrogen	mg/L	10
TDS	mg/L	650

BOD denotes Biochemical Oxygen Demand. TSS denotes Total Settleable Solids. TDS denotes Total Dissolved Solids

16. According to the RWD, the system will treat 10,000 gallons of total wastewater flow. The RWD included a water balance that showed disposal capacity for 10,000 gpd during the 100-year return annual precipitation. The water balance reflects the low infiltration rate of the site soils.

17. A wastewater treatment schematic is presented on Attachment C2, which is attached hereto and made part of the Order by reference.

18. Septage from the septic tank and solids from the truck wash facility will be periodically pumped and disposed of by a licensed septage hauler.

19. The new treatment equipment will be constructed on top of a berm that surrounds the property. If the surrounding area becomes flooded, reduced disposal via the percolation ponds would be expected. Based on the forecast elevation of flood water, the ponds will not be inundated.

Wastewater Collection System

20. A sanitary sewer system collects wastewater and consists of sewer pipes, manholes, and/or other conveyance system elements that direct raw sewage to the treatment facility. 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 treatment facility. Temporary storage and conveyance facilities (such as wet wells, regulated impoundments, tanks, 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. Sanitary sewer overflow is also defined in State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*.

21. Sanitary sewer overflows consist of varying mixtures of domestic and commercial wastewater, depending on land uses in the sewage collection system. The chief causes of sanitary sewer overflows include grease blockages, root blockages, debris blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, storm or groundwater inflow/infiltration, lack of capacity, and/or contractor caused blockages.

22. 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 exceedance 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.

23. The Discharger is expected to take all necessary steps to adequately maintain, operate, and prevent discharges from its sanitary sewer collection system.

Site-Specific Conditions

24. The wastewater treatment plant will be constructed at an elevation of approximately 29 feet above mean sea level (MSL), with pond berm tops at 30 feet, and the area around the plant is relatively flat with drainage to the North Main Canal, tributary to discharges to the Sacramento River.

25. The wastewater treatment plant is within the 100-year floodplain. A 2003 Letter including the Map Determination issued by Federal Emergency Management Agency (FEMA) indicates that flood depths at the site may be up to 27 feet during the 100-year event. As stated above, the wastewater system and evaporation/percolation pond berms will be constructed above the forecast flood elevation.

26. Surrounding land uses are primarily agricultural. The RWD reports the immediate area around the facility has a long history or irrigated agriculture, predominantly rice. Other crops that could be grown in the vicinity are dry-land wheat, safflower, and corn. Farmers obtain irrigation water from the Natomas Central Mutual Water Company or from wells.

27. Annual precipitation in the vicinity averages approximately 20 inches. The 100-year total annual precipitation is approximately 42 inches. The reference evapotranspiration rate is approximately 50.2 inches per year.

Groundwater Quality

28. Source water for the site is from an on-site well. The well was sampled on 26 December 2007; a summary of the water quality is presented below:

Parameter	Units	Concentration
Hardness	mg/L	90
Chloride	mg/L	26.5
Nitrate as N	mg/L	ND (0.1)
pH	mg/L	8.1
Electrical Conductivity	umhos/cm	363
Sodium	mg/L	36.4
Sulfate	mg/L	0.7
Total Dissolved Solids	mg/L	177

29. The water supply is moderately hard. The Discharger operates small reverse osmosis systems at points of use (e.g. drinking water fountains). No water softening is performed at the facility.

30. Groundwater monitoring wells were installed to monitor groundwater quality at the former dispersal area. The wells were installed on 27 June 2001. A summary of the well construction details is provided below:

Well	Sand Interval (ft. bgs)	Screen Interval (ft. bgs)
MW-1	21-36	25-35
MW-2	21-35	25-35
MW-3	23-36.5	25.5-36.6
MW-4	23-37.5	25-36
MW-5	24-38	27-38

31. Groundwater was encountered at a depth of approximately 21 feet below the ground surface. Groundwater appears to flow consistently to the east/northeast (approximately N80E). However, nearby agricultural activities may affect flow directions and gradients.

32. Average groundwater quality data from the time period January 2005 through December 2006 is presented in the table below. Electrical conductivity was measured monthly; all other constituents were monitored quarterly. (Note that the existing dispersal area is not in the same location as the proposed percolation ponds). The data is summarized below:

Analyte	Units	MW-1	MW-2	MW-3	MW-4	MW-5
EC	umhos/cm	969	1,020	1,045	1,077	1,001
TDS	mg/L	693	719	761	725	606
NO_3 as N	mg/L	9.3	15.9	9.6	6.8	7
O&G	mg/L	ND	ND	ND	ND	ND
TPH-D	ug/L	ND	ND	ND	ND	ND
TPH-G	ug/L	ND	ND	ND	ND	ND
MTBE	ug/L	ND	ND	ND	ND	ND

EC denotes Electrical Conductivity. TDS denotes Total Dissolved Solids. NO_3 as N denotes Nitrate as Nitrogen. O&G denotes Oil and Grease. TPH-D denotes Total Petroleum Hydrocarbons as Diesel. TPH-G denotes Total Petroleum Hydrocarbons as Gasoline. MTBE denotes Methyl t-butyl ether.

33. Well MW-1 is located approximately 500 feet upgradient of the existing dispersal area. Well MW-4 is also likely upgradient of the dispersal area but it is located close enough to the dispersal area that it could be influenced by the wastewater application.

34. Based upon soil tests performed at the site and in a geotechnical laboratory, site soil is generally high in clay content. On-site percolation tests and laboratory tests demonstrated that the soil exhibits very low permeability.

    a. During the initial site development, soil conditions were investigated and described in a 28 November 2000 Holdredge and Kull report titled *Soil Test Results for Proposed Wastewater Disposal Field*. The report described infiltration rates from 160 minutes/inch to no significant infiltration.

    b. A second investigation of soil conditions was performed and described by Brown and Caldwell in the 14 April 2008 *Report of Waste Discharge*. Soil samples were collected and analyzed for hydraulic conductivity. Hydraulic conductivity ranged from approximately 1,100 minutes/inch to 4,000 minutes/inch.

Basin Plan, Beneficial Uses, and Water Quality Objectives

35. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.

36. Surface water drainage is to the Sacramento River. The beneficial uses of the Sacramento River are municipal and domestic supply; agricultural supply; industrial supply; recreation; freshwater habitat; migration; spawning; wildlife habitat; and navigation.

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

38. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objectives for total coliform organisms

39. The Basin Plan's narrative water quality objective for chemical constituents, at a minimum, requires waters designated as domestic or municipal supply to meet the Maximum Contaminant Level (MCLs) specified in Title 22 of the California Code of Regulations (CCR), Section 60001 et seq. (hereafter Title 22). The Basin Plan recognizes that the Regional Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

40. The narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses.

41. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in municipal supply groundwater. The applicability of this objective to groundwater designated as municipal supply has been affirmed by State Water Board Order No. WQO-2003-0014 and by subsequent decisions of the Sacramento County Superior Court and California Court of Appeal, 3rd Appellate District.

42. The Water Quality Control Plan for the Tulare Lake Basin, Second Edition, contains salt management requirements that have been successfully implemented for several decades. The Tulare Basin Plan establishes several salt management requirements, which are considered Best Practicable Treatment and Control (BPTC), including:

a. The incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum EC shall not exceed the EC of the source water plus 500 umhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.

b. Discharges to areas that may recharge good quality groundwater shall not exceed an EC of 1,000 umhos/cm, a chloride content of 175 mg/L, or a boron content of 1.0 mg/L.

These salt management requirements are considered best practicable treatment or control (BPTC).

Antidegradation Analysis

43. State Water Resources Control Board Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that.

a. The degradation is consistent with the maximum benefit to the people of the State;

b. The degradation will not unreasonably affect present and anticipated future beneficial uses;

c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives; and

d. The discharger employs best practicable treatment or control (BPTC) to minimize degradation.

44. Degradation of groundwater by some waste constituents released with discharge from a wastewater treatment facility after effective source control, treatment, and control is consistent with maximum benefit to the people of the State. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and therefore sufficient reason to accommodate growth and groundwater degradation provided terms of the Basin Plan are met.

45. Constituents of concern that have the potential to degrade groundwater include salts (e.g., electrical conductivity, sodium, and chloride), nutrients, and coliform organisms, as discussed below:

a. The EC of the effluent currently averages approximately 989 umhos/cm. This is slightly higher than the Tulare Lake Basin Plan's established effluent limit of 500 umhos/cm over the source water. The higher than usual increase in EC is the result of water conservation practices in the facility and also the lack of diluting wastewater flows such as showers or washing machines typical of domestic (household) flows. The source water plus 500 umhos/cm as a limit was established after a full evaluation of BPTC for discharges in the Tulare Lake Basin.

Circumstances and conditions with respect to treatment and control of salinity in the Sacramento-San Joaquin River Basin are similar to those of the Tulare Lake Basin. Therefore, the discharge will likely not impair the beneficial uses of groundwater due to increased salinity.

b. The EC effluent limitations presented in Section C Effluent Limitations, allow an annual average limit and a monthly maximum limit. This was included because the Discharger is using a constructed wetland to provide denitification; evapoconcentration of fixed dissolved solids will occur during dry months, and dilution will occur in wet months. Because the EC of the shallow groundwater at the site is approximately 1,000 umhos/cm, the annual average effluent limit was set at that value. The monthly EC effluent limit is slightly higher to allow for the use of a constructed wetland in wastewater treatment.

c. For nutrients such as nitrate, the potential for unreasonable degradation depends on the quality of the treated effluent and nitrification/denitrification processes to convert the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. Based on the anticipated wastewater effluent quality and the background groundwater quality, nitrate is not expected to degrade groundwater further than the existing background conditions.

d. For coliform organisms, the potential for exceedance of the Basin Plan's numeric water quality objective depends on the ability of vadose zone soils below the effluent storage/disposal ponds and saturated soils within the shallow water bearing zone to provide adequate filtration. Although disinfection would reduce the potential threat, the use of sodium hypochlorite would also increase the salinity of the effluent and create trihalomethanes. Therefore, at this time there is no reason to require disinfection.

46. The RWD included an antidegradation analysis that addressed salinity. It stated the TDS concentration of the treated effluent will be higher than that of the irrigation water used in the surrounding areas, but the loading rate on a per acre basis will be lower than that of adjacent agricultural areas (the calculation includes all of the acres at the Discharger's parcel). The RWD estimates TDS loading rates to be: a minimum of 650 lbs/ac applied to agricultural acres, and a minimum of 366 lbs/ac applied to the Sysco parcel.

47. The revised WDRs will relax some wastewater effluent limitations from the limits contained in the previous WDRs Order No. 5-01-204. The reasons to allow relaxation of the effluent limits are discussed below:

a. A BOD concentration of 20 mg/L in the effluent will be protective of groundwater quality and should not produce odors. At the flow rate of 10,000 gpd, approximately 1.7 pounds of BOD per day will be discharged to the EP Ponds.

b. The nitrate concentration limit will be relaxed to 10 mg/L which is consistent with the Primary Drinking Water standard set by U.S. EPA and background groundwater concentrations at Well MW-1 (upgradient well).

c. Total coliform organisms is not included as a limit in the tentative WDRs because the wastewater will be discharged to percolation ponds. The ponds will be constructed large enough to contain all the wastewater and stormwater that enters the system. The RWD included a water balance that used the 100-year return annual precipitation amount. Spillage of wastewater from the ponds should not occur. Filtration of pathogens will occur as the wastewater percolates through the fine grained soil materials.

d. TDS concentrations in treated wastewater and shallow groundwater are forecast to be approximately equal. Effluent concentrations from the existing treatment system in the past three years have ranged from 582 to 481 mg/L and groundwater concentrations are approximately 693 to 725 mg/L (based on MW-1 and MW-4).

Treatment and Control Practices

48. The Discharger currently provides treatment and control of the discharge that incorporates:

a. Alarm and backup power systems to prevent bypass or overflow.

b. Secondary treatment of the wastewater.

c. An Operation and Maintenance (O&M) manual.

49. As noted above, it is not clear whether the WWTP and P/E ponds pose a significant threat to groundwater quality, and the level of degradation that complies with Resolution No. 68-16 has not been fully evaluated. Therefore, it maybe appropriate for the Discharger to implement a salinity control program and evaluate additional BPTC measures if unreasonable groundwater degradation has, or will, occur. Completion of these tasks will ensure that BPTC and the highest water quality consistent with the maximum benefit to the people of the State will be achieved.

50. This Order establishes effluent and groundwater limitations for the WWTF that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.

Other Regulatory Considerations

51. Stormwater discharge from the site is regulated by the Regional Water Board under NPDES General Permit No. CAS 00001, WDID 5S51I017176.

52. 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 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".

53. The technical reports required by this Order and the attached "Monitoring and Reporting Program No. R5-2009-0062" are necessary to assure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

54. 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.

55. 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.

56. The Regional Water Board is using the Standards in 40 CFR 503 as guidelines in establishing this Order, but the Regional Water 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.

57. 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 has been determined as conditionally 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.

58. 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 of domestic wastewater and truck wash wastewater treated to remove petroleum hydrocarbons.

b. Residual sludge will be disposed of off-site at an appropriate permitted facility.

c. The Regional Water Board has prepared these WDRs and the WDRs are consistent with water quality objectives.

d. The discharge is in compliance with the applicable water quality control plan.

e. The wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

59. 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.

60. The Board has considered anti-degradation pursuant to State Board Resolution No. 68-16 and finds that the proposed discharge is consistent with those provisions. If the discharge causes or threatens to cause degradation of water quality, then the Discharger may be required to cease the discharge, implement source control, change the method of disposal, or take other action.

CEQA Issues

61. The action to adopt waste discharge requirements for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14 CCR, Section 15301.

62. An Environmental Impact Report (EIR) was prepared for the project in accordance with the CEQA when the property was first developed. The Sutter County Board of Supervisors approved the project on 19 September 2000 and a Notice of Determination was filed by Sutter County on 20 September 2000. The EIR indicated that the wastewater treatment facility, recycled water irrigation and biosolids application practices may have the following significant impacts on water quality:

a. An onsite wastewater disposal system could result in degradation of water quality and/or pose a health risk, if not properly designed and maintained.

b. Continued and prolonged use of on-site wastewater disposal and water supply systems may lead to potential water quality and supply problems.

c. Surface water quality could be impacted as a result of urban runoff pollutants and first-flush roadway contaminants that contain oil, grease and heavy metals. In addition, groundwater quality may be affected in the event that contaminated surface runoff is stored in detention basins and allowed to enter the aquifer.

d. Construction activities can result in the degradation of surface water quality.

63. The Board has reviewed the EIR and determined that compliance with the waste discharge requirements (WDRs) and mitigation measures described in the EIR will mitigate the significant impacts on water quality listed in Finding No. 62 to less than significant levels. Specific mitigation measures corresponding to the list above, are addressed below:

    a. The Discharger shall utilize a wastewater package treatment plant approved by Sutter County and will receive WDRs from the Board. Sutter County has recognized the Regional Water Board as lead agency for supervision of the wastewater treatment system at the site.

    b. As required by Sutter County General Plan Policy 3.3-C, the project shall connect to new public system(s) for sewage treatment and disposal and water supply when they become available. The Discharger contacted the public agency that is expected to provide service in the future. There are no plans to provide service in the foreseeable future.

    c. The Discharger shall obtain the appropriate National Pollutant Discharge Elimination System (NPDES) permit for Industrial activities from the Board. The project shall include an onsite detention pond with a water quality treatment component consistent with Reclamation District 1000's guidelines and criteria. The proposed ditches within the buffer shall be designed to enhance water quality treatment. Best Management Practices and Source Control shall be implemented for the project. The Discharger has complied with Reclamation District 1000's requirements by obtaining an NPDES permit for stormwater discharges.

    d. The Discharger shall file a Notice of Intent with the Board to comply with the terms of the NPDES General Permit to Discharge Storm Water Associated with Construction Activity. The Discharger has obtained this permit.

Public Notice

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

65. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

66. All comments pertaining to the discharge were heard and considered in a public meeting.

IT IS HEREBY ORDERED that, pursuant to Sections 13263 and 13267 of the California Water Code, Order No. 5-01-204 is rescinded and Sysco Food Services of Sacramento, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]

A. Discharge Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.

2. Bypass or overflow of untreated or partially treated waste is prohibited.

3. Neither the treatment nor the discharge shall cause a nuisance or condition of pollution as defined by the California Water Code, Section 13050.

4. Discharge of waste classified as hazardous, as defined in Sections 2521(a) of Title 23, CCR, Section 2510, et seq., (hereafter Chapter 15, or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.

5. The discharge shall not cause the degradation of any water supply.

6. Surfacing of wastewater from the recirculating sand filter, percolation pond walls, or the stormwater pond walls is prohibited.

7. Discharge of wastewater except as described in this order is prohibited.

8. The use of non-biodegradable detergents, solvents, cleansers, degreasers or any other compounds with the potential for discharge into the wastewater treatment or disposal system is prohibited.

9. The discharge of any wastewater other than that originating on-site from domestic or truck wash water sources is prohibited.

10. Application of biosolids, septage, or other wastewater derived solids to the facility, except as designed in the wastewater treatment system, is prohibited.

B. Discharge Specifications:

1. The monthly average daily discharge to the system shall not exceed 10,000 gallons per day.

2. The Discharger shall not take the existing wastewater treatment system out of service without first submitting the reports required by Provisions No. G.1.c and G.1.d, and

receiving written approval to begin operating the new wastewater system from the Executive Officer.

3. Until the Discharger obtains written authorization to begin operating the new wastewater system, the Discharger shall continue to monitor the existing system consistent with Monitoring and Reporting Program No. 5-01-204.

4. As required by Sutter County General Plan Policy 3.3-c and the approved EIR, connection to a public sewage treatment facility when available shall be performed as soon as practicable.

5. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas, including the truck wash pretreatment system.

6. The treatment plant effluent shall not have a pH of less than 6.5 or greater than 8.5.

7. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge.

8. The oil and grease separator shall have the necessary capacity to provide adequate detention time to remove scum and settlable solids from the wastewater flow.

9. The truck wash pretreatment system shall be maintained to prevent detectable petroleum hydrocarbons from discharging to the wastewater system.

10. All portions of the wastewater treatment and disposal system shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

11. The conveyance, treatment, and disposal systems shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with the historical rainfall patterns.

12. By **1 October every year**, available storage capacity shall at least equal the volume necessary to comply with Discharge Specifications Nos. 10 and 11.

13. The Discharger shall maintain an active burrowing rodent control program at all wastewater treatment and disposal ponds. Burrowing animals shall not be allowed to exist in the vicinity of the wastewater system. Any animal burrows discovered within 25 feet of any wastewater treatment or disposal pond shall be repaired within 30-days.

C. Effluent Limitations:

1. Because the constructed wetland will not be established when initially constructed, interim wastewater limits are provided for the first year of operation. Discharge of effluent to the percolation ponds in excess of the following limits is prohibited:

		Concentration Limits Effective Date			
		Upon Adoption		30 June 2010	
Parameter	Units	Monthly Max.	Average Annual [6]	Monthly Max.	Average Annual [6]
BOD_5	mg/L	20	20	20	20
Total Dissolved Solids	mg/L	800	650	800	650
Electrical Conductivity	umhos/cm	1,250	1,000	1,250	1,000
Total Suspended Solids [1]	mg/L	20	20	20	20
Total Nitrogen (as N) [2]	mg/L	18.5	15	12.5	10
TPH - Oil & Grease	mg/L	ND (1.0) [3,4]	ND (1.0) [3,4]	ND (1.0) [3,4]	ND (1.0) [3,4]
TPH - Diesel	ug/L	ND (50) [3,4]	ND (50) [3,4]	ND (50) [3,4]	ND (50) [3,4]
TPH - Gasoline	ug/L	ND (50) [3,4]	ND (50) [3,4]	ND (50) [3,4]	ND (50) [3,4]
BTEX [4]	ug/L	ND (0.5) [3]	ND (0.5) [3]	ND (0.5) [3]	ND (0.5) [3]

1. TSS shall be determined using a Whatman glass fiber filter with a nominal pore size of about 1.58 um, or equivalent.
2. The sum of all forms of nitrogen.
3. ND denotes not detectable, detection limit in parentheses.
4. Silica gel cleanup may be used in the analysis.
5. BTEX denotes benzene, toluene, ethyl benzene, and xylenes.
6. Average annual shall be calculated as described in the Monitoring and Reporting Program.

D. Water Recycling Requirements:

1. Public contact with wastewater shall be controlled through use of fences, cautionary signs, and/or other appropriate means.
2. The following setback/buffer zones shall be provided:

Setback Definition	Distance (ft.)	Source
Wastewater system and percolation ponds from a water supply well	150	Title 22 Sec. 60310
Property Line	25	Basin Plan
Drainage Course	25	Basin Plan
Flood Irrigated Crops	50	Sutter County
Pressurized water supply line	10	Sutter County
Property Line	10	Sutter County
Upgradient drainage courses	25	Sutter County
Downgradient drainage courses	50	Basin/Sutter
Downgradient cuts or banks	50	Basin/Sutter

Basin Plan indicates the requirement is included in the Guidelines for Land Development, attached to the Basin Plan. Sutter County indicates the requirement is from the Sutter County Onsite Sewage

Treatment and Disposal ordinance. Basin/Sutter indicates the requirement is present in both documents.

3. Wastewater shall be managed to provide complete containment within the disposal areas with no surfacing of wastewater or treated wastewater outside the P/E ponds.

E. Solids Disposal Requirements:

1. Collected screenings, grit, sludge, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste,* as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.

2. Storage, use and disposal of sewage sludge shall comply with existing Federal, State, and local laws and regulations, including permitting requirements and technical standards included in 40 CFR Part 503 and the Statewide General Order for the Discharge of Biosolids (Water Quality Order No. 2000-10-DWQ) (or any subsequent document which replaces Order No. 2000-10-DWQ).

3. Sludge and other solids shall be removed from the treatment system as needed to ensure optimal plant operation and adequate hydraulic capacity.

4. Disposal of biosolids at a permitted municipal solid waste landfill or at a permitted publicly owned treatment works is acceptable. No matter where the biosolids are taken, the Discharger must comply with all sampling and analytical requirements of the entity that accepts the waste.

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

F. Groundwater Limitations:

1. The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentration statistically greater than background water quality, except for coliform bacteria. The total coliform bacteria count shall not exceed 2.2 MPN/100 ml over any 7-day period.

G. Provisions:

1. All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code.

    a. By **10 September 2009**, the Discharger shall submit a Groundwater Monitoring Workplan prepared in accordance with, and including the items listed in, the first section of Attachment D: *"Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results."* The workplan shall describe a proposed expansion to the existing groundwater monitoring network specifically designed to determine if groundwater quality is degraded as a result of the wastewater disposal at the new wastewater treatment and disposal system. The monitoring wells shall be designed to yield samples representative of the uppermost portion of the first saturated interval underlying the site. If the Discharger wishes to remove some of the wells from the groundwater monitoring network, that shall also be described in the workplan.

    b. By **9 December 2009**, the Discharger shall submit a Monitoring Well Installation Report prepared in accordance with, and including the items listed in, the second section of Attachment D: *"Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results."* The report shall describe the installation and development of the new monitoring wells and explain any deviation from the approved workplan.

    c. **Prior to any discharge to the new wastewater treatment plant**, the Discharger shall submit an Operations and Maintenance (O&M) Manual designed for use by plant operations personnel. The O&M Manual shall describe the system in its entirety (including site maps and system plans); normal operations; detailed instructions and schedules for all required system inspections, testing, and maintenance; a trouble-shooting guide; a master equipment list; equipment specifications; and vendor names for equipment repair and replacement.

    d. **At least 30-days prior to any discharge to the new wastewater treatment plant**, the Discharger shall provide written certification that the system described in this Order has been constructed in its entirety and is fully functional. Discharge to the system for testing purposes during construction and preparation for start-up is excluded from this requirement.

    e. **If requested by the Executive Officer** as a result of wastewater salinity, the Discharger shall develop and implement a Salinity Reduction Program. A salinity Reduction Program will consist of identifying sources of salinity in the facility, determining means to reduce, eliminate, or segregate high salinity wastewater streams, and employee education.

2. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto

and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."

3. At least 90 days prior to termination or expiration of any lease, contract, or agreement involving the disposal or reclamation areas, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.

4. The Discharger shall submit to the 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 reported, then the Discharger shall state the reasons for noncompliance and shall provide a schedule to come into compliance.

5. The Discharger shall use the best practicable cost-effective control techniques currently available to comply with discharge limits specified in this order.

6. The Discharger shall report promptly to the Board any material change or proposed change in the character, location, or volume of the discharge.

7. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, then the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.

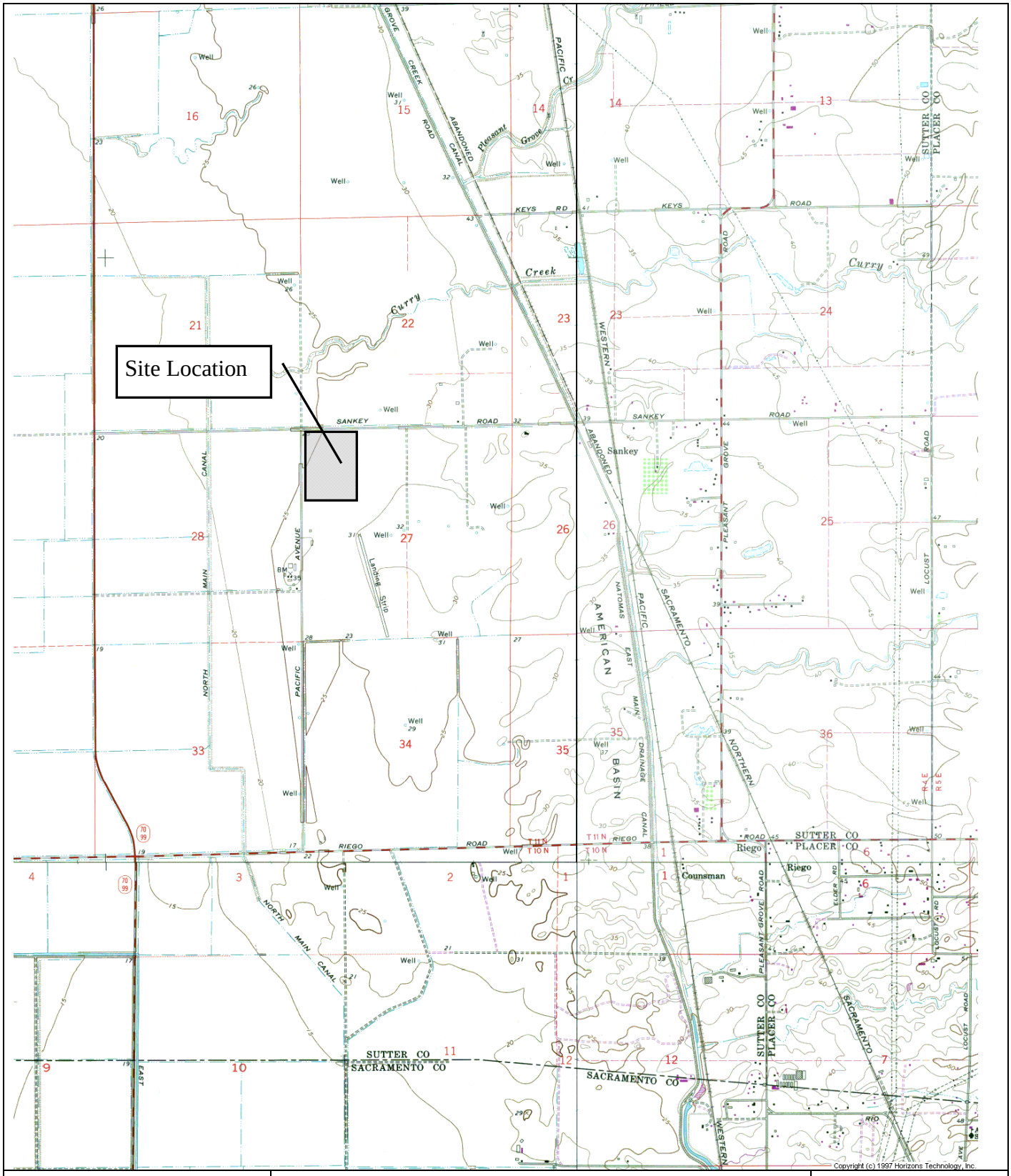
8. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

9. 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.

10. The Board will review this Order periodically and may revise requirements when necessary.

I, PAMELA C. CREEDON, 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 12 June 2009.

PAMELA C. CREEDON, Executive Officer



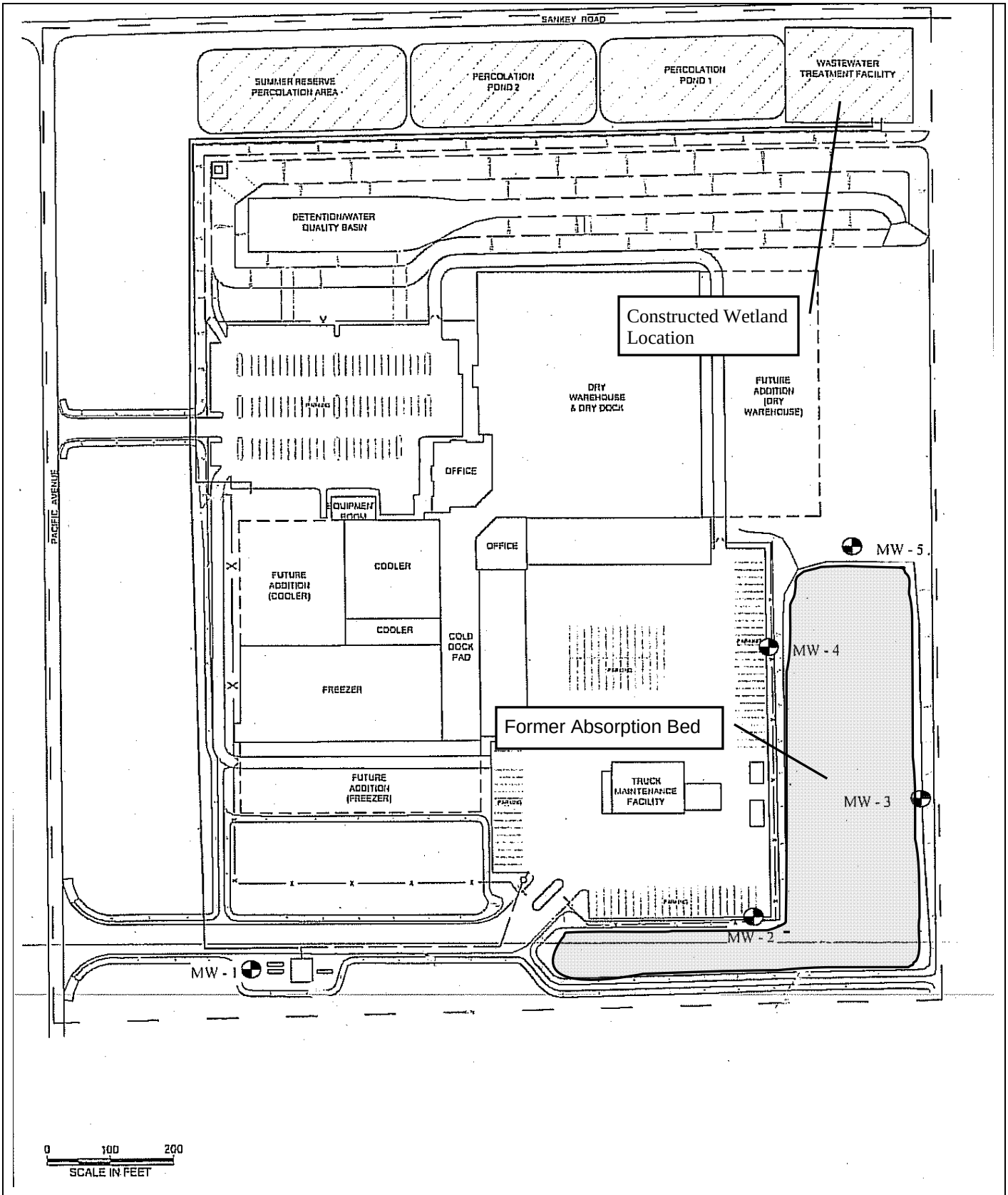
DRAWING REFERENCE:
U.S.G.S.
VERONA
TOPOGRAPHIC MAP
7.5 MINUTE QUAD

SITE LOCATION MAP

SYSCO FOOD SERVICES OF SACRAMENTO, INC.
7062 PACIFIC AVENUE
PLEASANT GROVE, SUTTER COUNTY

N
W E
S

approx. scale
1 in. = 3,400 ft.



REFERENCE:

FIGURE 4-2
AUGUST 08 RWD
BROWN & CALDWELL

SITE PLAN

SYSCO FOOD SERVICES OF SACRAMENTO, INC.
7062 PACIFIC AVENUE
PLEASANT GROVE, SUTTER COUNTY

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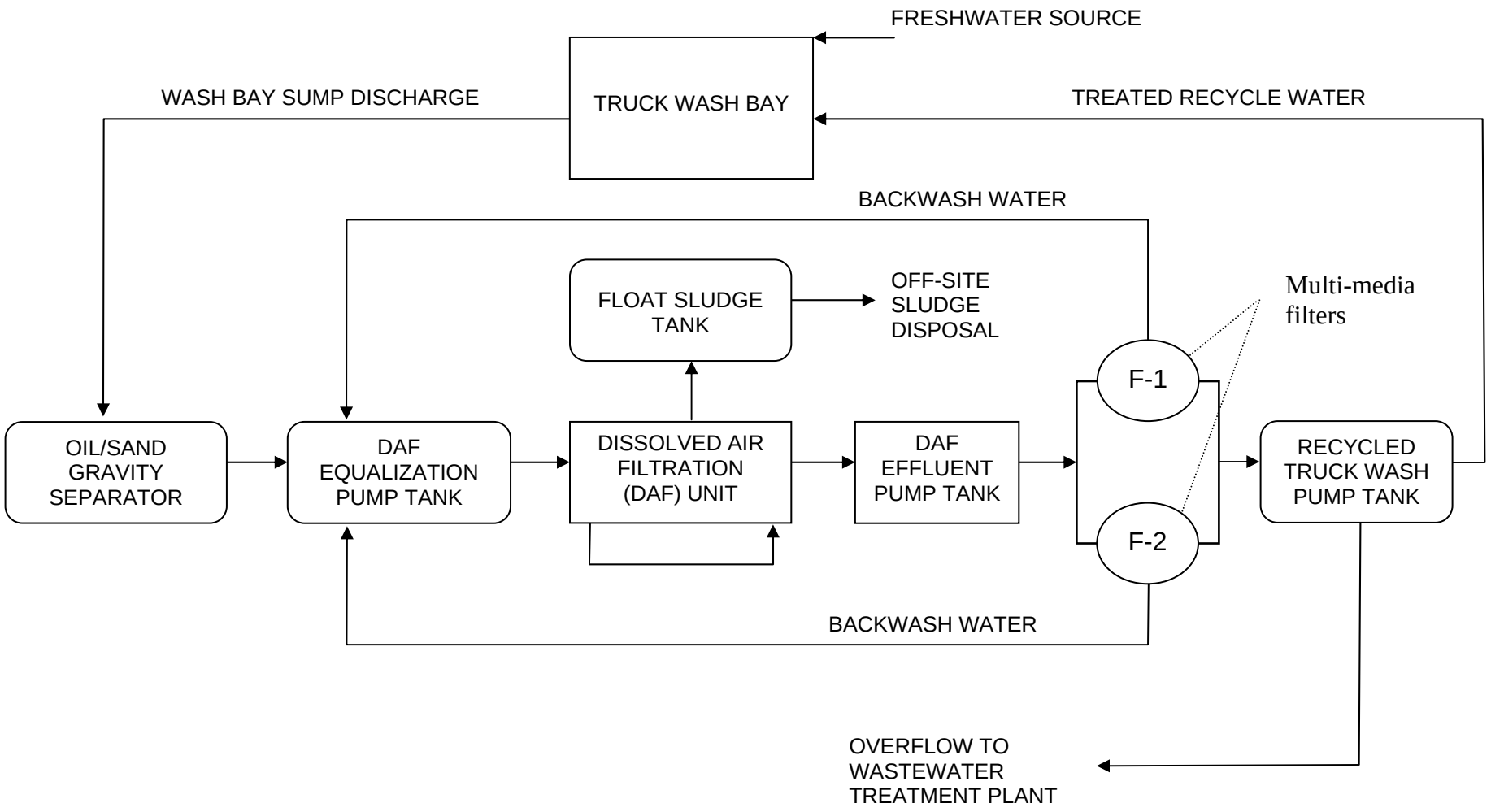
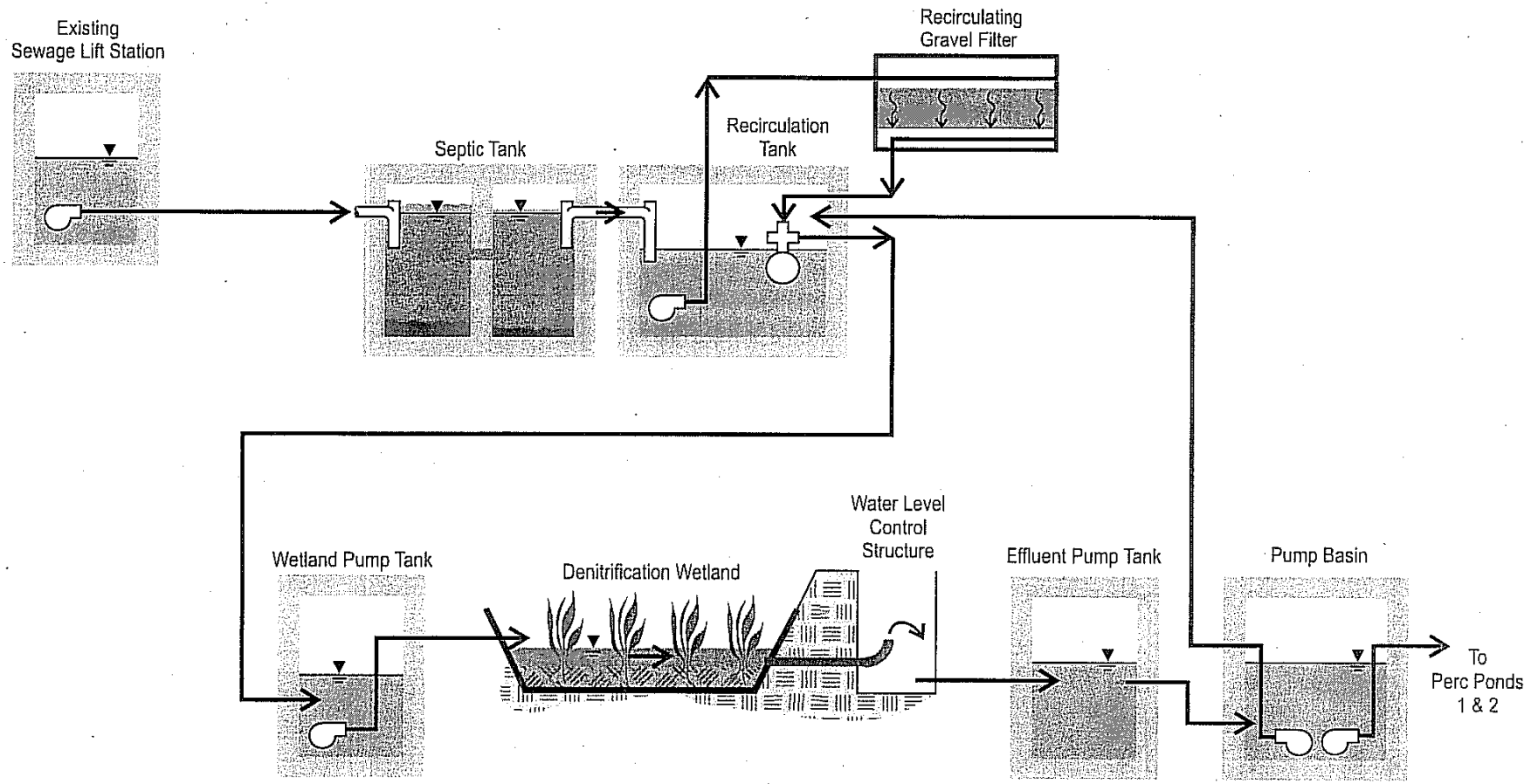


Reference: Figure 3-1, August 2008 RWD Brown and Caldwell	**TRUCK WASH PRETREATMENT SYSTEM SCHEMATIC** SYSCO FOOD SERVICES OF SACRAMENTO, INC. 7062 PACIFIC AVENUE PLEASANT GROVE, SUTTER COUNTY	



Reference: Figure 4-1 August 2008 RWD Brown and Caldwell	**WASTEWATER TREATMENT SYSTEM SCHEMATIC** SYSCO FOOD SERVICES OF SACRAMENTO, INC. 7062 PACIFIC AVENUE PLEASANT GROVE, SUTTER COUNTY	

Linda Adams
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Valley Region

Karl E. Longley, ScD, P.E., Chair

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Arnold Schwarzenegger
Governor

ORDER NO. R5-2009-0062
ATTACHMENT D
REQUIREMENTS FOR MONITORING WELL INSTALLATION WORKPLANS AND MONITORING WELL INSTALLATION REPORTS

Prior to installation of groundwater monitoring wells, the Discharger shall submit a workplan containing, at a minimum, the information listed in Section 1, below. Wells may be installed after staff approve the workplan. Upon installation of the monitoring wells, the Discharger shall submit a well installation report which includes the information contained in Section 2, below. All workplans and reports must be prepared under the direction of, and signed by, a registered geologist or civil engineer licensed by the State of California.

SECTION 1 - Monitoring Well Installation Workplan and Groundwater Sampling and Analysis Plan

The monitoring well installation workplan shall contain the following minimum information:

A. General Information:
- Purpose of the well installation project
- Brief description of local geologic and hydrogeologic conditions
- Proposed monitoring well locations and rationale for well locations
- Topographic map showing facility location, roads, and surface water bodies
- Large scaled site map showing all existing on-site wells, proposed wells, surface drainage courses, surface water bodies, buildings, waste handling facilities, utilities, and major physical and man-made features

B. Drilling Details:
- On-site supervision of drilling and well installation activities
- Description of drilling equipment and techniques
- Equipment decontamination procedures
- Soil sampling intervals (if appropriate) and logging methods

C. Monitoring Well Design (in narrative and/or graphic form):
- Diagram of proposed well construction details
  - Borehole diameter
  - Casing and screen material, diameter, and centralizer spacing (if needed)
  - Type of well caps (bottom cap either screw on or secured with stainless steel screws)
  - Anticipated depth of well, length of well casing, and length and position of perforated interval
  - Thickness, position and composition of surface seal, sanitary seal, and sand pack
  - Anticipated screen slot size and filter pack

D. Well Development (not to be performed until at least 48 hours after sanitary seal placement):
- Method of development to be used (i.e., surge, bail, pump, etc.)

Parameters to be monitored during development and record keeping technique
Method of determining when development is complete
Disposal of development water

E. Well Survey (precision of vertical survey data shall be at least 0.01 foot):
Identify the Licensed Land Surveyor or Civil Engineer that will perform the survey
Datum for survey measurements
List well features to be surveyed (i.e. top of casing, horizontal and vertical coordinates, etc.)

F. Schedule for Completion of Work

G. Appendix: Groundwater Sampling and Analysis Plan (SAP)
The Groundwater SAP shall be included as an appendix to the workplan, and shall be utilized as a guidance document that is referred to by individuals responsible for conducting groundwater monitoring and sampling activities.

Provide a detailed written description of standard operating procedures for the following:
- Equipment to be used during sampling
- Equipment decontamination procedures
- Water level measurement procedures
- Well purging (include a discussion of procedures to follow if three casing volumes cannot be purged)
- Monitoring and record keeping during water level measurement and well purging (include copies of record keeping logs to be used)
- Purge water disposal
- Analytical methods and required reporting limits
- Sample containers and preservatives
- Sampling
  - General sampling techniques
  - Record keeping during sampling (include copies of record keeping logs to be used)
  - QA/QC samples
- Chain of Custody
- Sample handling and transport

SECTION 2 - Monitoring Well Installation Report

The monitoring well installation report must provide the information listed below. In addition, the report must also clearly identify, describe, and justify any deviations from the approved workplan.

A. General Information:
Purpose of the well installation project
Brief description of local geologic and hydrogeologic conditions encountered during installation of the wells
Number of monitoring wells installed and copies of County Well Construction Permits
Topographic map showing facility location, roads, surface water bodies
Scaled site map showing all previously existing wells, newly installed wells, surface water bodies, buildings, waste handling facilities, utilities, and other major physical and man-made features.

B. Drilling Details (in narrative and/or graphic form):
On-site supervision of drilling and well installation activities
Drilling contractor and driller's name
Description of drilling equipment and techniques
Equipment decontamination procedures
Soil sampling intervals and logging methods
Well boring log
- Well boring number and date drilled
- Borehole diameter and total depth
- Total depth of open hole (same as total depth drilled if no caving or back-grouting occurs)
- Depth to first encountered groundwater and stabilized groundwater depth
- Detailed description of soils encountered, using the Unified Soil Classification System

C. Well Construction Details (in narrative and/or graphic form):
Well construction diagram, including:
- Monitoring well number and date constructed
- Casing and screen material, diameter, and centralizer spacing (if needed)
- Length of well casing, and length and position of perforated interval
- Thickness, position and composition of surface seal, sanitary seal, and sand pack
- Type of well caps (bottom cap either screw on or secured with stainless steel screws)

E. Well Development:
Date(s) and method of development
How well development completion was determined
Volume of water purged from well and method of development water disposal
Field notes from well development should be included in report

F. Well Survey (survey the top rim of the well casing with the cap removed):
Identify the coordinate system and datum for survey measurements
Describe the measuring points (i.e. ground surface, top of casing, etc.)
Present the well survey report data in a table
Include the Registered Engineer or Licensed Surveyor's report and field notes in appendix

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2009-0062

FOR
SYSCO FOOD SERVICES OF SACRAMENTO, INC.
WASTEWATER TREATMENT FACILITY
SUTTER COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the wastewater treatment facility (WWTF) influent, effluent, wastewater treatment and storage ponds, percolation/evaporation (P/E) ponds, groundwater, and biosolids disposal. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Regional Water Board staff shall approve specific sampling locations prior to any sampling activities. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

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

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

INFLUENT MONITORING

The Discharger shall monitor influent wastewater in accordance with the following. Samples shall be representative of the influent to the septic tank (the sample may be collected from the sewage lift station). Grab samples are considered representative of the influent. Influent monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gpd	Flow Meter	Daily	Monthly
BOD	mg/L	Grab	Monthly	Monthly
Total Suspended Solids	mg/L	Grab	Monthly	Monthly
Electrical Conductivity	umhos/cm	Grab	Monthly	Monthly

BOD denotes biochemical oxygen demand.

EFFLUENT MONITORING

The Discharger shall monitor effluent wastewater in accordance with the following. Samples shall be representative of the effluent discharged to the percolation/evaporation ponds. Grab samples are considered representative. Effluent monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
BOD	mg/L	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Electrical Conductivity	umhos/cm	Grab	Monthly	Monthly
Total Suspended Solids	mg/L	Grab	Monthly	Monthly
Sodium	mg/L	Grab	Monthly	Monthly
Chloride	mg/L	Grab	Monthly	Monthly
pH	Std.	Grab	Monthly	Monthly
Total Nitrogen (as N)	mg/L	Grab	Monthly	Monthly
TPH - Oil & Grease	mg/L	Grab	Monthly	Monthly
TPH - Diesel	mg/L	Grab	Monthly	Monthly
TPH - Gasoline	mg/L	Grab	Monthly	Monthly
BTEX	mg/L	Grab	Monthly	Monthly

Simple and flow weighted averages of TDS, EC, and Total Nitrogen must be reported as described in MRP Section A.2 and C.3.

BOD denotes Biochemical Oxygen Demand. TPH denotes Total Petroleum Hydrocarbons. BTEX denotes benzene, toluene, ethyl benzene, and xylenes. TSS shall be determined using a Whatman glass fiber filter with a nominal pore size of about 1.58 um, or equivalent. Total Nitrogen is the sum of all forms of nitrogen. Silica gel cleanup may be used in the TPH analyses.

POND MONITORING

The Discharger shall monitor all ponds at the wastewater system in accordance with the following. Samples shall be collected from permanent monitoring locations that will provide samples representative of the wastewater in each pond. Freeboard shall be measured vertically from the water surface to the lowest elevation of the pond berm, and shall be measured to the nearest 0.10 feet. Pond monitoring shall include, at a minimum, the following:

Constituent/Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Freeboard	0.1 feet	Measurement	Weekly	Monthly
Pond berm condition [1]	--	Observation	Weekly	Monthly
Burrowing Animals [2]	--	Observation	Weekly	Monthly
Dissolved Oxygen [3]	mg/L	Grab	Monthly	Monthly

1. Pond berm condition shall include observations of all the wastewater treatment and percolation/evaporation ponds as well as the stormwater pond sidewalls.
2. The presence or absence of burrowing animals or animal burrows shall be noted.
3. Samples shall be collected opposite each pond inlet at a depth of one foot between 0700 and 0900 hours.

GROUNDWATER MONITORING

Effective immediately, the Discharger shall establish a quarterly sampling schedule for groundwater monitoring, with samples obtained approximately every three months.

These monitoring requirements apply to all the existing monitoring wells, as well as those constructed after issuance of this MRP. The Discharge may propose changes to the monitoring well network in the Groundwater Monitoring Well Workplan, required by the WDRs.

Prior to well purging, groundwater elevations shall be measured. Depth to groundwater shall be measured to the nearest 0.01 feet. Water table elevations shall be calculated and used to determine groundwater gradient and direction of flow. The monitoring wells shall be purged of at least three well volumes or until temperature, pH, and electrical conductivity have stabilized. Samples shall be collected and analyzed using approved EPA methods. Groundwater monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Depth to Groundwater	0.01 feet	Measurement	Quarterly	Quarterly
Groundwater Elevation	0.01 feet	Calculated	Quarterly	Quarterly
Gradient	feet/feet	Calculated	Quarterly	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly	Quarterly
pH	pH units	Grab	Quarterly	Quarterly
Electrical Conductivity	umhos/cm	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms [1]	MPN/100 ml	Grab	Quarterly	Quarterly
Standard Minerals [2]	mg/L	Grab	Annually	Annually

1. Using a minimum of 15 tubes or three dilutions.
2. Standard Minerals shall include, at a minimum, the following elements/compounds: boron, bromide, calcium, chloride, fluoride, magnesium, phosphate, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness as $CaCO_3$.

BIOSOLIDS MONITORING

The Discharger shall keep records regarding biosolids generated by the treatment processes, including any analytical test results; the quantity of biosolids removed for disposal; the quantity of biosolids removed from the ponds and disposed. Records shall be stored onsite and available for review during inspections.

If biosolids are transported off-site for disposal, then the Discharger shall include records identifying the hauling company, the amount of biosolids transported, the date removed from the facility, the disposal facility name and address, and copies of all analytical data required by the entity accepting the waste. These records shall be submitted as part of the Annual Monitoring Report.

REPORTING

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 Water Board.

A. Monthly Monitoring Reports

Monthly Monitoring Reports shall be submitted to the Regional Water Board by the **1st day of the second month following sampling** (i.e. the January Report is due by 1 March). Each report shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the monthly monitoring reports shall include:

1. Influent monitoring, effluent monitoring, and pond monitoring.

2. A comparison of monitoring data to the discharge specifications and effluent limitations, disclosure of any violations of the WDRs, and an explanation of any violation of those requirements. Data shall be presented in tabular format. Average concentrations of effluent shall be calculated for TDS, EC, and total nitrogen. The calculations shall include the following:

    a. On a month to month basis beginning each year in January the simple arithmetic average value shall be calculated. (The sum of all the concentration data shall be divided by the number of months data was collected). If for any reason, more than one data point is available for any month, that data shall be averaged before use in the running average calculation. No data shall be excluded from the calculation without a written explanation from the analytical laboratory.

3. Copies of current calibration logs for all field test instruments.

4. Copies of laboratory analytical report(s).

5. A summary pond condition inspection report that includes dates of inspection, problems identified, repairs recommended, repairs completed, and dates of completion.

B. Quarterly Monitoring Reports

The Discharger shall submit quarterly monitoring reports to the Regional Water Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year.

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

The Quarterly Monitoring Report shall include the following:

1. Results of groundwater monitoring.

2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the 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 casing volume; and total volume of water purged.

3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends, if any.

4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).

5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements.

6. Summary data tables of historical and current water table elevations and analytical results.

7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum.

8. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

An Annual Report shall be prepared as the fourth quarter monitoring report. The Annual Report shall include all monitoring data required in the monthly/quarterly schedule. The Annual Report shall be submitted to the Regional Water Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of the regular quarterly monitoring report for the last quarter of the year.

2. Analytical results for all water supply and other annual monitoring.

3. Calculation of the flow weighted average for TDS, EC, and total nitrogen for the calendar year using the following formulas. The data shall be presented in a table for review.

Flow Wt. Average = the sum of monthly contributions from each month

$$\textit{Monthly Contribution} = (\textit{Concentration}_{mo})(\textit{Flow}_{mo})/(\textit{Flow}_{yr})$$

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

5. An evaluation of the performance of the WWTF, including discussion of capacity issues, infiltration and inflow (I/I) rates, nuisance conditions, and a forecast of the flows anticipated in the next year.

6. A statement that addresses the dual media filtration status and how many times the filters were replaced during the calendar year.

7. 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.

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

9. A summary of information on the disposal of biosolids as described in the "Biosolids Monitoring" section.

10. A summary of the type and quantity of detergents used at the truck wash facility. The description shall include a Material Safety Data Sheet (or an Internet address where it is provided), a statement on the biodegradation of the detergent, and an estimate of the amount of detergent used (can be from purchasing records).

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

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

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

12 June 2009
Date

TRO: 5/18/09

INFORMATION SHEET

ORDER NO. R5-2009-0062
SYSCO FOOD SERVICES OF SACRAMENTO, INC.
WASTEWATER TREATMENT FACILITY
SUTTER COUNTY

Background

Sysco Food Services of Sacramento, Inc. owns and operates a wastewater treatment facility at 7062 Pacific Avenue, Pleasant Grove that treats domestic wastewater and truck wash wastewater that originates at the Sysco facility in Sutter County. The total anticipated wastewater flow rate is approximately 10,000 gallons per day (gpd). The area is not served by a regional wastewater collection and treatment system.

The facility was constructed in 2001 and has discharged wastewater under WDRs Order No. 5-01-204. The Discharger desires to update the facility WDRs because the existing wastewater system is difficult to operate and costly to maintain. A simpler system will provide adequate wastewater treatment and groundwater protection.

The facility is a 47-acre non-processing food distribution center that receives, stores, and redistributes packaged food products. Due to the remote location of the facility, an employee cafeteria is provided that prepares one meal per day. Approximately 120 day-shift and 50 night-shift employees work at the facility year-round. Domestic wastewater flows originate from restrooms, hand wash basins, food preparation, and cleanup. Other than the on-site meal preparation, there is no commercial preparation of food for retail sale or other food processing activities.

The Report of Waste Discharge (RWD) states approximately 10,000 gallons per day will be discharged; however, review of self-monitoring reports submitted by the discharger for 2007 and 2008 indicate the wastewater flow is substantially lower - averaging less than 5,000 gpd. The domestic wastewater portion of the total flow consisted of more than 85-percent of the total flow. The RWD estimates in the future the domestic wastewater portion will make up approximately 68-percent of the total flow. Waste streams are combined and discharged to the wastewater treatment system but the truck wash wastewater is pretreated prior to being discharged.

Existing Wastewater Treatment System

Wastewater discharged to the existing wastewater treatment system is treated using a package plant that includes activated sludge, filtration, and disinfection using ozone. Treated wastewater is presently discharged to subsurface emitters which dose zones within a three acre dispersal area. The Discharger has experienced trouble operating and maintaining the wastewater system and has selected a less sophisticated, but protective of groundwater quality, method to treat the wastewater.

Truck Wash Wastewater System

A truck wash is operated at the facility to wash the exterior of Sysco vehicles. The system uses a mixture of fresh well water and treated recycled truck wash water. Truck wash wastewater is pretreated before being discharged to the facility wastewater treatment system. Pretreatment includes an oil and sand gravity separator, a dissolved air floatation tank, and

dual media filters with disposable oil-absorbent anthracite-bentonite media. The media in the filters is changed approximately once a year.

Replacement Wastewater Treatment System

Because the treatment plant has been difficult and costly for the Discharger to operate, they are proposing a simpler method of treatment. The proposed treatment will continue to include the truck wastewater pretreatment. The combined wastewater flow will be discharged to a 15,000 gallon septic tank, a recirculating gravel filter, a free water surface constructed wetland, and percolation/evaporation (P/E) ponds. Septage from the septic tank and solids from the truck wash facility will be periodically pumped and disposed of by a licensed septage hauler.

The new wastewater treatment system will be in a different location on the facility. As a result, the groundwater monitoring wells that were installed to monitor the existing wastewater treatment system will no longer be useful. Some replacements will be necessary.

Groundwater Conditions

Source water for the site is from an on-site well that provides good quality, but moderately hard water. The Discharger operates small reverse osmosis systems at points of use to correct the hardness. No water softening is performed at the facility.

Groundwater monitoring wells were installed at the former dispersal area. The first groundwater was encountered approximately 21 feet below the ground surface (bgs). Based on the electrical conductivity, the source water (363 umhos/cm) is significantly better than the first encountered shallow groundwater (969 umhos/cm in the background well). The groundwater downgradient of the absorption beds is only slightly lower quality than upgradient of the absorption beds.

Because the Discharger is changing the location of the wastewater disposal area, additional groundwater monitoring wells are required in the order. The existing upgradient well is probably suitable for continued use, the Discharger my elect to properly destroy some of the other site monitoring wells. Such work will be described in a groundwater monitoring workplan prior to implementation.

Soil Conditions

Soil tests performed at the site indicate very low permeability. The report described infiltration rates from 160 minutes/inch to no significant infiltration. A second investigation of soil conditions reported hydraulic conductivity values from approximately 1,100 minutes/inch to 4,000 minutes/inch.

Antidegradation Analysis

The antidegradation directives of State Water Board Resolution No. 68-16, “Statement of Policy with Respect to Maintaining High Quality Waters in California,” or “Antidegradation Policy” requires that waters of the State that are better in quality than established water quality objectives be maintained “consistent with the maximum benefit to the people of the State.”

Waters can be of high quality for some constituents or beneficial uses and not others. Policy and procedures for complying with this directive are set forth in the Basin Plan.

The Tulare Lake Basin Plan's salt management requirements have been successfully implemented for several decades. The Regional Water Board encourages proactive management to control addition of salt through use, and has established a guideline for allowable incremental salinity increase of 500 umhos/cm over the electrical conductivity of the source water in the Sacramento River and San Joaquin River Basins. When appropriate to assure compliance with a groundwater limitation for any constituent, more restrictive limitations on salt constituents added through use may be established by the Regional Water Board. The electrical conductivity (EC) of the effluent currently averages approximately 989 umhos/cm. This is slightly higher than the Tulare Lake Basin Plan's established effluent limit of 500 umhos/cm over the source water. The higher than usual increase in EC is the result of water conservation practices in the facility and also the lack of diluting wastewater flows such as showers or washing machines typical of domestic (household) wastewater flows. This 500 umhos/cm limit was established after a full evaluation of best practicable treatment and control (BPTC) for discharges in the Tulare Lake Basin. Circumstances and conditions with respect to treatment and control of salinity in the Sacramento-San Joaquin River Basin are similar to those of the Tulare Lake Basin. Therefore, the discharge will likely not impair the beneficial uses of groundwater due to increased salinity.

Degradation of groundwater by some of the typical waste constituents released with discharge from a wastewater system after effective source control, treatment, and control is consistent with maximum benefit to the people of the State provided terms of the Basin Plan are met. Constituents of concern that have the potential to degrade groundwater include salts (primarily EC, sodium, and chloride), nutrients and coliform organisms, as discussed below:

- The RWD included an antidegradation analysis that addressed salinity. It stated the total dissolved solids (TDS) concentration of the treated effluent will be higher than that of the irrigation water used in the surrounding areas, but the loading rate on a per acre basis will be lower than that of adjacent agricultural areas (the calculation includes all of the acres at the Discharger's parcel). The RWD estimates TDS loading rates to be: a minimum of 650 lbs/ac applied to agricultural acres, and a minimum of 366 lbs/ac applied to the Sysco parcel.

- For nutrients such as nitrate, the potential for unreasonable degradation depends on the quality of the treated effluent and nitrification/denitrification processes to convert the effluent nitrogen to nitrate and the nitrate to nitrogen gas before it reaches the water table. Based on the anticipated wastewater effluent quality and the background groundwater quality, nitrate is not expected to degrade groundwater further than the existing background conditions. However, because the constructed wetland will provide the organic material (carbon) needed for denitfification, that process will not be in full effect until the wetland has grown enough to produce adequate litter material to support the process. An interim effluent limit is provided in the order.

- For coliform organisms, the potential for exceedance of the Basin Plan's numeric water quality objective depends on the ability of vadose zone soils below the effluent storage/disposal ponds and saturated soils within the shallow water bearing zone to provide adequate filtration. Although disinfection would reduce the potential threat, the use of sodium hypochlorite would also increase the salinity of the effluent and create trihalomethanes. Therefore, at this time there is no reason to require disinfection.

The existing wastewater treatment system is difficult to operate and has routinely excceded the effluent limits for total suspended solids, nitrate, and ammonia. The limits included in WDRs Order No. 5-01-204 were based on the technology and forecast effluent water quality rather than protective standards for groundwater quality. The revised WDRs will relax some wastewater effluent limitations from the limits contained in WDRs Order No. 5-01-204. The reasons to allow relaxation of the effluent limits are discussed below:

- The effluent limitations presented in Section C Effluent Limitations, allow an annual average limit and a monthly maximum limit. This was included because the Discharger is using a constructed wetland to provide denitification; evapoconcentration of FDS will occur during dry months, and dilution will occur in wet months. Because the shallow groundwater at the site is approximately 1,000 umhos/cm, the annual average effluent limit was set at that value. The monthly effluent limit is slightly higher to allow for the use of a constructed wetland in wastewater treatment.

- A BOD concentration of 20 mg/L in the effluent will be protective of groundwater quality and should not produce odors. At the flow rate of 10,000 gpd, approximately 1.7 pounds of BOD per day will be discharged to the EP Ponds.

- The nitrate concentration limit will be relaxed to an annual average of 10 mg/L which is consistent with the Primary Drinking Water standard set by U.S. EPA and background groundwater concentrations at Well MW-1 (upgradient well). A monthly maximum limit of 12.5 mg/L is included in the order (until 30 June 2010 the limits are 18.5 and 15.0 mg/L). As discussed above, an interim ntirogen limit will be imposed for the first year.

- Total coliform organisms will not be included as a limit in the tentative WDRs because the wastewater will be discharged to percolation ponds. The ponds will be constructed large enough to contain all the wastewater and stormwater that enters the system. Spillage of wastewater from the ponds should not occur. Filtration of pathogens will occur as the wastewater percolates through the fine grained soil materials.

- TDS concentrations in treated wastewater and shallow groundwater are forecast to be approximately equal. Effluent concentrations from the existing treatment system are approximately 600 mg/L and groundwater concentrations are approximately 700 to 724 mg/L (based on MW-1 and MW-4). An annual average limit of 650 mg/L and a monthly maximum of 800 mg/L are included in the WDRs.

Treatment and Control Practices

The Discharger currently provides treatment and control of the discharge that includes: alarm and backup power systems to prevent bypass or overflow, secondary treatment of the wastewater, and an Operation and Maintenance (O&M) manual.

As noted above, it is not clear whether the wastewater treatment plant and P/E ponds pose a significant threat to groundwater quality, and the level of degradation that complies with Resolution No. 68-16 has not been fully evaluated. Therefore, it may be appropriate for the Discharger to implement a salinity control program and evaluate additional BPTC measures if unreasonable groundwater degradation has, or will, occur. If required, completion of these tasks will ensure that BPTC and the highest water quality consistent with the maximum benefit to the people of the State will be achieved.

The order establishes effluent and groundwater limitations for the wastewater system that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.

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

Discharges of domestic sewage and treated effluent can be treated and controlled to a degree that will not result in unreasonable degradation of groundwater. For this reason, they can be conditionally exempted from Title 27. Treatment and storage facilities for sludge that are part of the wastewater system are considered exempt from Title 27 under section 20090(a), provided that the facilities not result in a violation of any water quality objective. However, residual sludge (for the purposes of the proposed Order, sludge that will not be subjected to further treatment by the wastewater system) is not exempt from Title 27. Solid waste (e.g., grit and screenings) that results from treatment of domestic sewage and industrial waste also is not exempt from Title 27. This residual sludge and solid waste are subject to the provisions of Title 27.

Accordingly, the discharge of effluent and the operation of treatment or storage facilities associated with a wastewater treatment plant can be allowed without requiring compliance with Title 27, but only if the resulting groundwater degradation is in accordance with the Basin Plan.

Effluent Limits
Effluent limits are included in the order. Because the constructed wetland will not be established when initially constructed, interim wastewater limits are provided for the first year

of operation. It is anticipated that wastewater quality will be slightly worse in the first year of operation because the constructed wetland will not have been established. The effluent limitations are protective of groundwater quality with the possible exception of nitrogen concentrations. The higher wastewater concentration limits are only allowed the first year of operation and is not considered to be a significant threat to groundwater quality over that time. The TDS/EC limits are designed to limit the wastewater quality to concentrations that should not impact groundwater quality. Petroleum hydrocarbons, which may be present in untreated truck wash wastewater are required to be non-detectable in the wastewater treatment system effluent. Monthly maximum concentrations and flow weighted annual average concentration limits have been included for TDS, EC, and total nitrogen. The approach will allow evaluation of the wastewater impact to include the variation that will occur due to evapoconcentration and dilution.

The proposed Order prescribes groundwater limitations that implement water quality objectives for groundwater from the Basin Plan. The limitations require that the discharge not cause or contribute to exceedance of these objectives or natural background water quality, whichever is greatest.

The Monitoring and Reporting Program is designed to verify compliance with effluent limitations, groundwater limitations, and operational requirements of the WDRs.

TRO: 4/7/09