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

DRAFT MONITORING AND REPORTING PROGRAM NO. R3-2005-0074

Waste Discharger Identification No. 3 270113001 Proposed for Consideration at May 13, 2005 Meeting

For

CITY OF SOLEDAD WASTEWATER TREATMENT FACILITIES MONTEREY COUNTY

Reporting responsibilities are specified in Sections 13225(a) and 13267(b) of the California Water Code. This Discharge Monitoring and Reporting Program is issued in accordance with Provision E.2 of Regional Board Order No. R3-2005-0074.

WATER SUPPLY MONITORING

1. Representative samples of water supplies impacting the City's wastewater treatment facilities shall be collected and analyzed for the constituents and at the frequency specified below:

Parameter/Constituent ^{a,b,c}	Units	Sample Type	Minimum Sampling and Analyzing Frequency
General Minerals ^d	mg/l	Grab	Annually (September)

Notes:

- c) Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.
- d) General Mineral analysis shall include the following constituents: Calcium, Magnesium, Sodium, Sulfate, Carbonate, Bi-Carbonate, Chloride, Total Hardness, Total Alkalinity, Total Dissolved Solids, pH, Electrictal Conductivity, Boron, Iron, and Nitrate (as N).

FACILITY MONITORING

1. Daily inspections shall be made of the wastewater treatment and disposal pond areas. During the inspection, notes shall be kept of any violations of waste discharge requirements. A log of these inspections shall be maintained and a summary of observations made during the inspections shall be submitted with each quarterly monitoring report.

a) Sampling results for the Department of Health Services may be submitted to satisfy these requirements.

b) Data shall be reported as individual concentrations for each water supply well sampled and calculated as flow weighted averages to represent as delivered water supply quality.

INFLUENT MONITORING

1. Representative samples of the influent shall be collected and analyzed for the parameters/constituents and at the frequencies specified in the following table for both City of Soledad wastewater treatment facilities:

Parameter/Constituent ^{a,b}	Units	Sample Type ^a	Minimum Sampling and Analyzing Frequency
Flow Volume	GPD	Metered	Daily
Maximum Daily Flow	GPD	Metered	Monthly
Average Daily Flow	GPD	Calculated	30-day Running Average
BOD ₅	mg/l	24 hr Composite	Monthly
Settleable Solids	mg/l	24 hr Composite	Monthly
Total Suspended Solids	mg/l	24 hr Composite	Monthly
pH	-	Grab	Weekly
Total Dissolved Solids	mg/l	24 hr Composite	Monthly
Sodium	mg/l	24 hr Composite	Monthly
Chloride	mg/l	24 hr Composite	Monthly
Nitrate (as Nitrogen)	mg/l	24 hr Composite	Monthly
Total Nitrogen (as Nitrogen)	mg/l	24 hr Composite	Monthly
Sulfate	mg/l	24 hr Composite	Quarterly (March & September)
Boron	mg/l	24 hr Composite	Quarterly (March & September)

Notes:

a) Composite samples shall be flow weighted. Monthly 24 hr composite samples shall be collected on a Monday through Sunday rotating schedule and subsequent sampling events shall be separated by at least 16 days and no greater than 30 days.

Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.

TREATMENT AND DISPOSAL POND MONITORING

1. Representative sampling measurements shall be taken in each treatment and disposal pond for the parameters/constituents and at the frequency specified below:

Parameter/Constituent ^{a,b}	Units	Sample Type ^a	Minimum Sampling and Analyzing Frequency
рН	-	Grab	Weekly
Dissolved Oxygen (DO)	mg/l	Grab	Weekly
Sludge Depth ^b	feet	Measured	Once/3 years (September 2005, 2008,)

Notes:

a) Grab sample for pH and DO shall be collected at one-foot depth from at least three representative locations within each treatment and disposal pond.

b) Sludge depth shall be measured within the first two treatment ponds at each facility. A sufficient number of measurements shall be taken to provide representative estimates of sludge volumes within each pond.

EFFLUENT MONITORING

1. Representative samples of wastewater being discharged shall be collected and analyzed for the parameters/constituents and at the frequencies specified in the following table:

		Sample	Minimum Sampling and	
Parameter/Constituent ^{a,b}	Units	Туре	Analyzing Frequency	
pH	-	Grab	Weekly	
BOD ₅	mg/l	Grab	Monthly	
Total Suspended Solids	mg/l	Grab	Monthly	
Total Dissolved Solids	mg/l	Grab	Monthly	
Sodium	mg/l	Grab	Monthly	
Chloride	mg/l	Grab	Monthly	
Nitrite (as Nitrogen)	mg/l	Grab	Monthly	
Nitrate (as Nitrogen)	mg/l	Grab	Monthly	
Ammonia (as Nitrogen)	mg/l	Grab	Monthly	
Total Kjeldahl Nitrogen (as N)	mg/l	Grab	Monthly	
Total Nitrogen (as Nitrogen)	mg/l	Grab	Monthly	
Boron	mg/l	Grab	Quarterly (Mar., Jul., Sept., Dec.)	
Sulfate	mg/l	Grab	Quarterly (Mar., Jul., Sept., Dec.)	
Aluminum	mg/l	Grab	Annually (September)	
Antimony	mg/l	Grab	Annually (September)	
Arsenic	mg/l	Grab	Annually (September)	
Barium	mg/l	Grab	Annually (September)	
Berylium	mg/l	Grab	Annually (September)	
Cadmium	mg/l	Grab	Annually (September)	
Chromium	mg/l	Grab	Annually (September)	
Copper	mg/l	Grab	Annually (September)	
Cyanide	mg/l	Grab	Annually (September)	
Flouride	mg/l	Grab	Annually (September)	
Lead	mg/l	Grab	Annually (September)	
Mercury	mg/l	Grab	Annually (September)	
Nickel	mg/l	Grab	Annually (September)	
Selenium	mg/l	Grab	Annually (September)	
Thalium	mg/l	Grab	Annually (September)	
Zinc	mg/l	Grab	Annually (September)	
VOCs	mg/l	Grab	Once/5 Years (September 2005, 2010,)	
PCBs	mg/l	Grab	Once/5 Years (September 2005, 2010,)	
Pesticides	mg/l	Grab	Once/5 Years (September 2005, 2010,)	

Notes:

a) Effluent samples shall be collected from locations representative of final effluent being discharged to land and the subsurface.

b) Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.

2. Monthly evaporation and infiltration/percolation volumes shall also be estimated monthly for each facility by conducting a hydraulic balance using available facility flow data and facility area specific evaporation rates as determined by the pan evaporation method and using appropriate pan coefficients.

GROUNDWATER MONITORING

1. Representative samples of groundwater shall be collected from shallow wells upgradient and downgradient of disposal areas. To ascertain compliance with waste discharge requirements in establishing new, or verifying existing upgradient and downgradient monitoring wells, the monitoring network shall be supported by sufficient, as determined by the Executive Officer, geologic and hydrogeologic documentation. Samples of groundwater shall be collected and analyzed for the constituents and at the frequencies specified in the following table:

Parameter/Constituent ^a	Units	Sample Type	Minimum Sampling and Analyzing Frequency
Depth to Groundwater	feet	Measured	Quarterly (Dec., March, June, Sept.)
pH	-	Grab	Quarterly (Dec., March, June, Sept.)
Total Dissolved Solids	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Sodium	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Chloride	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Nitrite (as N)	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Nitrate (as N)	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Total Kjeldahl Nitrogen (as N)	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Total Nitrogen (as N)	mg/l	Grab	Quarterly (Dec., March, June, Sept.)
Boron	mg/l	Grab	Semiannually (March & September)
Sulfate	mg/l	Grab	Semiannually (March & September)

Notes:

 a) Sampling for specific analytes may be reduced or discontinued upon Discharger request and Executive Officer approval for parameters/constituents for which additional data provides no benefit.

SOLIDS/BIOSOLIDS MONITORING

- 1. The following information shall be submitted with the Annual Report required by Standard Provision C.16:
 - a) Annual depth measurements (with a map) and the average depth of solids in the first two ponds of each facility with an estimate of the total volume of solids within each pond.
 - b) Annual biosolids removed in dry tons and percent solids.
 - c) If appropriate, a narrative description of biosolids dewatering and other treatment processes, including process parameters. For example, if drying beds are used, report depth of application and drying time. If composting is used, report the temperature achieved and duration.
 - d) A description of disposal methods, including the following information related to the disposal methods used at the facility. If more than one method is used, include the percentage of annual biosolids production disposed by each method.
 - i. For landfill disposal include: 1) the Regional Board WDR numbers that regulate the landfills used, 2) the present classifications of the landfills used, and 3) the names and locations of the facilities receiving biosolids.
 - ii. For land application include: 1) the location of the site(s), 2) the Regional Board's WDR numbers that regulate the site(s), 3) the application rate in lbs/acre/year (specify wet or dry), and 4) subsequent uses of the land.

2. A representative sample of residual solids (biosolids) as obtained from the last point in the handling process (i.e., in the drying beds just prior to removal or from pond bottom) shall be analyzed for the constituents in the table below prior to being reclaimed/disposed. The sample shall be documented to show it is representative of biosolids from the facility. All constituents shall be analyzed for total concentrations for comparison with the Total Threshold Limit Concentration (TTLC). The Waste Extraction Test (WET) shall be performed on any constituent when the total concentration of the waste exceeds ten times the Soluble Threshold Limit Concentration (STLC) for that substance.

Parameter/Constituent ^a	Units	Sample Type	Minimum Sampling and Analyzing Frequency ^b
Quantity	Tons or yds ³	Measured during removal	Each load
Moisture Content	%	Grab	Prior to transport/disposal
Nitrate (as N)	mg/kg	Grab	Prior to transport/disposal
Total Phosphorus	mg/kg	Grab	Prior to transport/disposal
рН	pH units	Grab	Prior to transport/disposal
Grease & Oil	mg/kg	Grab	Prior to transport/disposal
Arsenic	mg/kg	Grab	Prior to transport/disposal
Antimony	mg/kg	Grab	Prior to transport/disposal
Barium	mg/kg	Grab	Prior to transport/disposal
Beryllium	mg/kg	Grab	Prior to transport/disposal
Boron	mg/kg	Grab	Prior to transport/disposal
Cadmium	mg/kg	Grab	Prior to transport/disposal
Cobalt	mg/kg	Grab	Prior to transport/disposal
Copper	mg/kg	Grab	Prior to transport/disposal
Chromium, VI & Total	mg/kg	Grab	Prior to transport/disposal
Lead	mg/kg	Grab	Prior to transport/disposal
Mercury	mg/kg	Grab	Prior to transport/disposal
Molybdenum	mg/kg	Grab	Prior to transport/disposal
Nickel	mg/kg	Grab	Prior to transport/disposal
Selenium	mg/kg	Grab	Prior to transport/disposal
Silver	mg/kg	Grab	Prior to transport/disposal
Thallium	mg/kg	Grab	Prior to transport/disposal
Tin	mg/kg	Grab	Prior to transport/disposal
Vanadium	mg/kg	Grab	Prior to transport/disposal
Zinc	mg/kg	Grab	Prior to transport/disposal
Pesticides ^c	mg/kg	Grab	Prior to transport/disposal ^c
Organic Lead ^c	mg/kg	Grab	Prior to transport/disposal ^c
PCBs ^c	mg/kg	Grab	Prior to transport/disposal ^c

Notes:

a) Characterization required by disposal facility may be submitted in place of this list.

b) If no need for sludge/biosolids removal occurs during a given year, the Discharger will have no obligation for biosolids monitoring. Reporting in this case shall explain the absence of this monitoring.

c) Sampling for pesticides, organic lead and PCBs is only required at least once every 5 years prior to transport or disposal

REPORTING

- 1. <u>Monitoring reports are required quarterly, by the 30th of January, April, July, and October</u>, and shall contain all data collected or calculated over the previous three months. Data shall be tabulated in a logical and coherent format and be accompanied by laboratory analytical data sheets.
- 2. <u>By January 30th of each year</u> the Discharger shall submit an annual monitoring report Pursuant to Standard Provisions and Reporting Requirements, General Reporting Requirement C.16 which states:

By January 30 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. The Discharger shall discuss the compliance record and corrective actions taken, or which may be needed, to bring the discharger into full compliance. The report shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall inform the Board of the date of the Facility's Operation and Maintenance Manual (including contingency plans as described in Provision A.24), of the date the manual was last reviewed, and whether the manual is complete and valid for the current facility. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with effluent limits and provide a summary of performance relative to Section B, General Monitoring Requirements.

- 3. **By January 30th of each year** the Discharger shall submit an engineering technical report as specified in provision E.7 of Order No. R3-2005-0074 that evaluates the performance and capacity of the wastewater treatment and disposal system.
- 4. <u>By January 30th of each year</u> the Discharger shall submit a Salt Management Program report as specified in Salt s Management Program C.5 of Order No. R3-2005-0074.
- 5. If the Discharger monitors any pollutant designated more frequently than is required by this Monitoring and Reporting Program, the results of such monitoring shall be included in the monitoring reports.

PROVISIONS

- 1. All monitoring shall be performed at both of the City's wastewater treatment facilities
- 2. All monitoring must be conducted according to test procedures established by 40 Code of Federal Regulations Part 136, entitled, "Guidelines Establishing Test Procedures for Analysis of Pollutants." All sampling analyses shall be conducted at the lowest practical quantitation limits achievable under U.S. EPA specified methodology. In cases where effluent limits are set below the lowest achievable practical quantitation limits, constituents not detected at the practical quantitation limit will be considered in compliance with effluent limitations.
- 3. All samples collected shall be tracked and submitted under chain of custody and analyzed by a laboratory certified by California Department of Health Services for the specified analysis.
- 4. This Monitoring and Reporting Program may be revised at any time during the Order term, as necessary, under the authority of the Executive Officer.

IMPLEMENTATION

This monitoring and reporting program shall be implemented immediately. However the Discharger will be allowed a two month grace period to procure equipment and establish new sampling protocols and sampling locations for monthly influent and effluent monitoring. Monthly influent and effluent monitoring shall commence no later than July 13, 2005.

ORDERED BY

Executive Officer

Date

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