

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0053

WASTE DISCHARGE REQUIREMENTS

FOR
CITY OF GALT AND
ROMAN CATHOLIC BISHOP OF SACRAMENTO
GALT WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

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

1. The City of Galt (City) submitted a Report of Waste Discharge (RWD), dated 30 November 2001, and applied for a permit renewal to discharge waste under the National Pollutant Discharge Elimination System (NPDES) from the City of Galt wastewater treatment plant. The wastewater treatment plant treats and disposes of domestic wastewater generated in the City of Galt, Sacramento County. The treatment plant and reclamation areas are in Section 9, T5N, R6E, MDB&M, as shown on Attachment A, which is attached hereto and made part of this Order by reference.
2. The discharge is currently regulated by Waste Discharge Requirements Order No. 97-111, adopted on 20 June 1997. Between 1 May and 31 October, effluent is reclaimed for irrigation of approximately 150 acres of land surrounding the facility. The City is required to operate and maintain land application areas in order to maintain adequate capacity to handle effluent volumes discharged from the wastewater treatment plant. In addition, the City is required to develop, implement, and maintain a current land management plan. Because the current flows at the wastewater treatment plant exceed the land application capacity, the City entered into a lease with the Roman Catholic Bishop of Sacramento (RCB), effective 20 March 2003, for the use of approximately 180 acres for additional reclamation usage. Order No. 97-111 is not adequate because it does not cover the additional land leased from the RCB. This Order regulates the reclaimed water discharge to the leased land.
3. The City of Galt will operate and maintain the 180-acre reclamation area. The RCB owns the 180 acres (Assessor's Parcel Numbers 148-0010-020-0000 and 148-0010-021-0000). These entities shall hereafter be referred to individually or jointly as "Discharger". The City is responsible for maintaining compliance with this Order. The RCB is not responsible for the reclamation operations, however, is ultimately responsible if enforcement actions against the City are ineffective or would be futile, or that enforcement is necessary to protect public health or the environment.

Reclaimed Water Discharge

4. Disinfected secondary effluent will be reclaimed to irrigate 180 acres of fodder crops on the leased land adjacent to the wastewater treatment plant.

5. Effluent will be applied by flood irrigation at agronomic rates for both nitrogen and water application. Perimeter berms will be used to keep the reclaimed water within the reclamation area during irrigation.
6. The Discharge authorized by this Order is intended to be temporary, pending adoption of a renewed permit for the Galt wastewater treatment plant.

Groundwater Degradation

7. State Water Resources Control Board (State Board) Resolution No. 68-16 (hereafter Resolution 68-16 or the "Antidegradation Policy") requires the Regional Board in regulating the discharge of waste to maintain high quality waters of the State (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives).
8. Some degradation of groundwater beneath the reclamation area is consistent with Resolution 68-16 provided that:
 - a. The degradation is confined within a specified boundary;
 - b. The Discharger minimizes the degradation by fully implementing, regularly maintaining, and optimally operating best practicable treatment and control (BPTC) measures;
 - c. The degradation is limited to waste constituents typically encountered in municipal wastewater as specified in the groundwater limitations in this Order; and
 - d. The degradation does not result in water quality less than that prescribed in the Basin Plan.
9. Some degradation of groundwater by some of the typical waste constituents released with discharges from a municipal wastewater utility after effective source control, treatment, and control is consistent with maximum benefit to the people of California. The technology, energy, water reclamation, and waste management advantages of municipal utility service far exceed any benefits derived from a community otherwise reliant on numerous concentrated individual wastewater systems, and the impact on water quality will be substantially less. Degradation of groundwater by constituents (e.g., toxic chemicals) other than those specified in the groundwater limitations in this Order, and by constituents that can be effectively removed by conventional treatment (e.g., total coliform bacteria) is prohibited. When allowed, the degree of degradation permitted depends upon many factors (i.e., background water quality, the waste constituent, the beneficial uses and most stringent water quality objective, source control measures, waste constituent treatability).
10. This Order establishes interim groundwater limitations for the wastewater reclamation facility 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. This Order contains tasks for

assuring that BPTC and the highest water quality consistent with the maximum benefit to the people of the State will be achieved. Accordingly, the discharge is consistent with the antidegradation provisions of Resolution 68-16. Based on the results of the scheduled tasks, the Regional Board may reopen this Order to reconsider groundwater limitations and other requirements to comply with Resolution 68-16.

Water Reclamation

11. State Board Resolution No. 77-1, *Policy with Respect to Water Reclamation in California*, encourages reclamation projects that replace or supplement the use of fresh water, and *The Water Recycling Law* (California Water Code (CWC) Sections 13500-13529.4) declares that utilization of reclaimed water is of primary interest to the people of the State in meeting future water needs.
12. The California Department of Health Services (DHS) has established statewide water reclamation criteria in Title 22, California Code of Regulations (CCR), Section 60301 et. seq. (hereafter Title 22). DHS revised the water reclamation criteria contained in Title 22 on 2 December 2000. The Discharger will treat to secondary standards and disinfect the secondary effluent per Title 22 requirements. Currently, the Discharger has not completed a Title 22 Engineer's Report that reflects the operation of the reclamation system as it presently exists. The Discharger is required to complete a comprehensive Title 22 Engineer's Report, in accordance with DHS guidelines.
13. A 1988 Memorandum of Understanding between DHS and the State Board on the use of reclaimed water establishes basic principles relative to the two agencies and the regional boards. The Memorandum allocates primary areas of responsibility and authority between the agencies and provides for methods and mechanisms necessary to assure ongoing, continuous future coordination of activities relative to use of reclaimed water.

Basin Plan, Beneficial Uses, and Regulatory Considerations

14. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. These requirements implement the Basin Plan.
15. Surface water drainage is to Laguna Creek, a tributary of the Cosumnes River. The beneficial uses of the Cosumnes River are municipal and domestic supply; agricultural irrigation, agricultural stock watering supply; water contact recreation, other noncontact water recreation; warm freshwater aquatic habitat, cold freshwater aquatic habitat, warm fish migration habitat, cold fish migration habitat, warm spawning habitat, and wildlife habitat.
16. The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, and industrial process supply.

17. The Basin Plan establishes numerical and narrative water quality objectives for surface and groundwater within the basin, and recognizes that water quality objectives are achieved primarily through the Regional Board's adoption of waste discharge requirements and enforcement orders. Where numerical water quality objectives are listed, these are limits necessary for the reasonable protection of beneficial uses of the water. Where compliance with narrative water quality objectives is required, the Regional Board will, on a case-by-case basis, adopt numerical limitations in orders, which will implement the narrative objectives to protect beneficial uses of the waters of the State.
18. The Basin Plan contains narrative water quality objectives for chemical constituents, tastes and odors, and toxicity. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, or animals. The chemical constituent objective requires that groundwater shall not contain chemical constituents in concentrations that adversely affect beneficial uses. The tastes and odors objective requires that groundwater shall not contain tastes or odors producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
19. Section 13241 of the CWC requires the Regional Board to consider various factors, including economic considerations, when adopting water quality objectives into its Basin Plan. CWC Section 13263 requires the Regional Board to address the factors in Section 13241 in adopting waste discharge requirements. The State Board, however, has held that a Regional Board need not specifically address the Section 13241 factors when implementing existing water quality objectives in waste discharge requirements because the factors were already considered in adopting water quality objectives. These waste discharge requirements implement adopted water quality objectives. Therefore, no additional analysis of Section 13241 factors is required.
20. The City of Galt filed a Notice of Determination (NOD) in accordance with the California Environmental Quality Act (CEQA)(Public Resources Code 21100, et. seq.) for the agreement between the City of Galt and the RCB relating to the lease of land for reclaimed water usage from the Galt wastewater treatment plant. The NOD specifies the following general mitigation measures related to water quality:
 - a. Periodic disking/ripping should be undertaken to increase infiltration rates.
 - b. A tailwater return system shall be in place to prevent surface runoff from irrigated lands.
 - c. Additional soil investigations should be conducted.

Compliance with this Order implements these mitigation measures.

21. 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 discharging, or who proposes to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the

quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports 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.”

The monitoring and reporting program required by this Order and the attached Monitoring and Reporting Program No. R5-2003-0053 are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

22. 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, CCR, Section 20380 et. seq. (hereafter Title 27). The exemption, pursuant to Title 27, Section 20090(a), is based on the following:
 - a. The waste consists primarily of domestic sewage and treated effluent;
 - b. The waste discharge requirements are consistent with water quality objectives; and
 - c. The reclaimed water does not need to be managed according to 22 CCR, Division 4.5, Chapter 11, as a hazardous waste.
23. Pursuant to California Water Code Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

Public Notice

24. All 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.
25. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe reclamation requirements and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
26. The Board, in a public meeting, heard and considered all comments pertaining to the proposed reclamation permit.
27. Any person adversely affected by this action of the Board may petition the State Board to review the action. The petition must be received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

IT IS HEREBY ORDERED that, pursuant to Sections 13263 and 13267 of the California Water Code, the City of Galt and the Roman Catholic Bishop of Sacramento, and their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. Reclaimed Water Prohibitions

1. The discharge of reclaimed water to surface waters or surface water drainage courses is prohibited.
2. Discharge of waste classified as 'hazardous' under Section 2521, Chapter 15 of Title 23 or 'designated', as defined in Section 13173 of California Water Code is prohibited.
3. Public contact with reclaimed water is prohibited.
4. Application of reclaimed water in a manner or location other than that described herein is prohibited.
5. Discharge of biosolids to land regulated by this Order is prohibited

B. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.
2. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the property owned by the Discharger.
3. The Discharger shall treat the wastewater such that it complies with Title 22, Section 60301.225 ("Disinfected Secondary-23 Recycled Water").

C. Water Reclamation Specifications

1. Discharge of recycled water to surface waters or surface water drainage courses is prohibited.
2. The discharge shall remain in the designated reclamation area at all times.
3. Use of reclaimed water shall be limited to surface irrigation of fodder, fiber, or seed crops. Irrigated crops shall not be used for human consumption (either direct or indirect). Additional reclamation uses may be approved by the Executive Officer.
4. Reclaimed water use shall meet the criteria contained in Title 22, Division 4, CCR (Section 60301 et. seq.).

5. Public contact with the reclaimed water shall be precluded through such means as fences, signs, and other acceptable alternatives.
6. Reclaimed water for irrigation shall be managed to minimize erosion, runoff, and movement of aerosols from the disposal area.
7. Direct or windblown spray shall be confined to the designated disposal area and prevented from contacting drinking water facilities.
8. Areas irrigated with reclaimed water shall be managed to prevent breeding of mosquitoes. More specifically,
 - a. Tail water must be returned and all applied reclaimed water and any additional supplement irrigation water must infiltrate completely within a 48-hour period.
 - b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.
 - c. Low pressure and unpressurized pipelines and ditches accessible to mosquitoes shall not be used to store reclaimed water.
9. Stormwater runoff from the irrigated fields shall not be discharged to any surface water drainage course within 30 days of the last application of reclaimed water, unless authorized by another Order adopted by the Regional Board.
10. There shall be no irrigation or impoundment of reclaimed water within 150 feet of any domestic water well.
11. All reclaimed water equipment, pumps, piping, valves, and outlets shall be appropriately marked to differentiate them from potable facilities, and these shall be of a type, or secured in a manner, that permits operation by authorized personnel only.
12. Conspicuous warning signs indicating that reclaimed water is in use shall be posted at least every 500 feet, with a minimum of a sign at each corner of the parcels and at access road entrances.
13. Supplementing reclaimed water by connection with a domestic drinking water source or irrigation or industrial wells requires an air gap separation device.
14. Application of reclaimed water shall be at agronomic rates considering the crop, soil, climate, and irrigation management system. The nutrient loading of the disposal area, including the nutritive value of organic and chemical fertilizers, applied biosolids, and of the reclaimed water, shall not exceed the crop demand.

15. Use of reclaimed water shall not cause pollution or a nuisance as defined by Section 13050 of the California Water Code.

D. Groundwater Limitations

Release of waste constituents from any portion of the reclamation area shall not, in combination with other sources:

1. Adversely impact beneficial uses or exceed water quality objectives of groundwater.
2. Cause groundwater to contain any waste constituents in concentrations statistically greater than the current background concentrations. This Limitation may be modified as specified in Provision G.1.
3. Cause any increase in total coliform organisms in groundwater to exceed a most probable number of 2.2/100 ml over any seven-day period.

E. Provisions

1. To determine compliance with the Groundwater Limitations, the groundwater monitoring network shall include one or more background monitoring wells and a sufficient number of designated monitoring wells to evaluate performance of best practicable control technology (BPCT) measures and determine if the discharge has degraded groundwater. These include monitoring wells downgradient of every treatment, storage, and disposal unit that does or may release waste constituents to groundwater. The monitoring wells shall be installed, developed, a Groundwater Well Installation Report submitted to the Regional Board, and groundwater monitoring shall commence by **1 July 2003**. The Groundwater Monitoring Well Installation Report shall be prepared by a Registered Geologist, Certified Engineering Geologist, or a Civil Engineer registered by the State of California and shall contain the information listed in Attachment B, "*Items to be Included in a Monitoring Well Installation Workplan and a Monitoring Well Installation Report of Results.*" All monitoring wells shall comply with the appropriate standards as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981), and any more stringent standards adopted by the Discharger or county pursuant to CWC Section 13801.

After one year of monitoring, the Discharger shall characterize natural background quality of monitored constituents in a technical report, to be submitted by **1 September 2004**. For each groundwater monitoring parameter/constituent identified in the Monitoring and Reporting Program, the report shall present a summary of monitoring data, calculation of the concentration in background monitoring wells, and comparison of background groundwater quality to that in wells used to monitor the facility. Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), and shall be based on data from at least four consecutive quarterly (or more frequent) groundwater monitoring

events. For each monitoring parameter/constituent, the report shall compare measured concentrations for compliance monitoring wells with the calculated background concentration.

If the monitoring shows that any constituent concentrations are increased above background water quality, the Discharger shall submit a technical report describing the evaluations results and critiquing each evaluated component with respect to BPTC and minimizing the discharge's impact on groundwater quality. In no case shall the discharge be allowed to exceed a water quality objective. This Order may be reopened and additional groundwater limitations added.

2. Pursuant to Title 22, Section 60323, the Discharger shall prepare a Title 22 Engineer's Report that reflects the proposed reclamation uses and operation. The report shall be prepared in accordance with DHS guidelines, as listed in Attachment C. The report shall be submitted to DHS and the Regional Board for review and approval. The report shall be completed in conformance with the following schedule.

<u>Task</u>	<u>Compliance Date</u>
Submit Workplan and Time Schedule	1 August 2003
Submit Draft Report	1 June 2004
Submit Final Report	1 November 2004

3. In accordance with California Business and Professions Code Sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain the professional's signature and/or stamp of the seal.
4. The Discharger shall comply with Monitoring and Reporting Program No. R5-2003-0053, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
5. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
6. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with discharge limits specified in this order.
7. As described in the Standard Provisions, the Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the

discharge.

8. The Discharger shall submit to the Regional Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board in writing when it returns to compliance with the time schedule.
9. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
10. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or reclamation areas or off-site reuse of effluent used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Regional Board in writing of the situation and of what measures have been taken or are being taken to assure full compliance with this Order.
11. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or recession of this Order.
12. 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.
13. The Regional Board will review this Order periodically and will revise requirements when necessary.

I, THOMAS R. PINKOS, 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 24 April 2003.

THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2003-0053

FOR
CITY OF GALT AND
ROMAN CATHOLIC BISHOP OF SACRAMENTO
GALT WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

This Monitoring and Reporting Program (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.

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 grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration logs are maintained as required in Standard Provisions..

LAND APPLICATION AREA MONITORING

Monitoring of the land application areas shall be conducted daily and the results shall be included in the monthly monitoring report. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. Effluent monitoring results shall be used in calculations to ascertain loading rates at the application areas. Monitoring of the land application areas shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow ^{1,2}	Gallons	Continuous	Daily	Monthly
Rainfall	Inches	Measurement	Daily	Monthly
Acreage Applied ^{1,2}	Acres	Calculated	Daily	Monthly
Application Rate ^{1,2}	gal/acre•day	Calculated	Daily	Monthly
BOD Loading Rate ^{1,2}	lbs/acre•day	Calculated	Weekly	Monthly
Total Nitrogen Loading Rate ^{1,2}	lbs/ac/month	Calculated	Monthly	Monthly

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids Loading Rate ^{1,2}	lbs/ac/month	Calculated	Monthly	Monthly

¹ For each land application area

² Land application areas shall be identified

GROUNDWATER MONITORING

Prior to construction, plans and specifications for ground water monitoring wells shall be submitted to Regional Board staff for review and approval. Wells shall comply with requirements of the Department of Water Resources. Groundwater monitoring shall commence by **1 July 2003**. Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged at least three well volumes until pH and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Samples shall be collected using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sample Frequency</u>
Groundwater Elevation	Feet	Measurement	Quarterly
Total Dissolved Solids	mg/l	Grab	Quarterly
Ammonia, as Nitrogen	mg/l	Grab	Quarterly
Nitrate, as Nitrogen	mg/l	Grab	Quarterly
pH	pH Units	Grab	Quarterly
Electrical Conductivity @ 25°C	µmhos/cm	Grab	Quarterly
Total Coliform Organisms	MPN/100 ml	Grab	Quarterly
Title 22 Metals	mg/l	Grab	Quarterly

At least once per month during the irrigation season, the entire irrigated area shall be inspected on the morning following an irrigation event to identify any equipment malfunction or other circumstances that might allow irrigation runoff to leave the irrigation area and/or create ponding conditions that violate the Waste Discharge Requirements. A daily log of these inspections shall be kept at the facility and made available for review upon request.

REPORTING

Monitoring results shall be submitted to the Regional Board by the **first day** of the second month following sample collection. Quarterly and annual monitoring results shall be submitted by the **first day of the second month following each calendar quarter, semi-annual period, and year**, respectively.

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In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

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 Engineer or Geologist and signed by the registered professional.

The Discharger may also be requested to submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision B.3.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

24 April 2003
(Date)

INFORMATION SHEET

ORDER NO. R5-2003-0053
CITY OF GALT AND ROMAN CATHOLIC BISHOP OF SACRAMENTO
GALT WASTEWATER RECLAMATION FACILITY
SACRAMENTO COUNTY

FACILITY INFORMATION

The City of Galt owns and operates a wastewater collection, treatment, and disposal system, and provides sewerage service to the City of Galt. Treated municipal wastewater is discharged to Laguna Creek, a water of the United States and a tributary to the Cosumnes River, and into ponds which are used for irrigation. Between 1 May and 31 October, effluent is reclaimed for irrigation of approximately 150 acres of pastureland surrounding the facility. The discharge to Laguna Creek and the 150 acres of pastureland is regulated by Waste Discharge Requirements Order No. 97-111, adopted on 20 June 1997.

The City is required to operate and maintain land application areas in order to maintain adequate capacity to handle effluent volumes discharged from the wastewater treatment plant. In addition, the City is required to develop, implement, and maintain a current land management plan. Because the current flows at the wastewater treatment plant exceed the land application capacity, the City entered into a lease with the Roman Catholic Bishop of Sacramento (RCB), effective 20 March 2003, for the use of approximately 180 acres for the additional reclamation usage. Order No. 97-111 is not adequate because it does not cover the additional land leased from the RCB. This Order regulates the reclaimed water discharge to the leased land.

BENEFICIAL USES

The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. These requirements implement the Basin Plan.

Surface water drainage is to Laguna Creek, a tributary of the Cosumnes River. The beneficial uses of the Cosumnes River are municipal and domestic supply; agricultural irrigation, agricultural stock watering supply; water contact recreation, other noncontact water recreation; warm freshwater aquatic habitat, cold freshwater aquatic habitat, warm fish migration habitat, cold fish migration habitat, warm spawning habitat, and wildlife habitat.

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

ANTIDEGRADATION

The antidegradation directives of Section 13000 of the California Water Code require 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. Policies and procedures for complying with this directive are set forth in the Basin Plan (including by reference State Board Resolution No. 68-16, “Statement of Policy With Respect to Maintaining High Quality Waters in California,” or “Antidegradation” Policy).

Resolution 68-16 is applied on a case-by-case, constituent-by-constituent basis in determining whether a certain degree of degradation can be justified. It is incumbent upon the Discharger to provide technical information for the Board to evaluate that fully characterizes:

- All waste constituents to be discharged;
- The background quality of the uppermost layer of the uppermost aquifer;
- The background quality of other waters that may be affected;
- The underlying hydrogeologic conditions;
- Waste treatment and control measures;
- How treatment and control measures are justified as best practicable treatment and control;
- The extent the discharge will impact the quality of each aquifer; and
- The expected degradation to water quality objectives.

In allowing a discharge, the Board must comply with CWC section 13263 in setting appropriate conditions. The Board is required, relative to the groundwater that may be affected by the discharge, to implement the Basin Plan and consider the beneficial uses to be protected along with the water quality objectives essential for that purpose. The Board need not authorize the full utilization of the waste assimilation capacity of the groundwater (CWC 13263(b)) and must consider other waste discharges and factors that affect that capacity.

Certain waste constituents in municipal wastewater are not fully amenable to waste treatment and control and it is reasonable to expect some impact on groundwater. Some degradation for certain constituents is consistent with maximum benefit to the people of California because the technology, energy, water recycling, and waste management advantages of municipal utility service to the state far outweigh the environmental impact damage of a community that would otherwise be reliant on numerous concentrated individual wastewater systems. Economic prosperity of local communities is of maximum benefit to the people of California, and therefore sufficient reason to accommodate increases in wastewater discharge provided terms of reasonable degradation are defined and met.

The proposed Order authorizes some degradation consistent with the maximum benefit to the people of the State.

Groundwater monitoring has not been implemented at the site to date to establish the most appropriate groundwater limits. Reasonable time is necessary to gather specific information about the site to make informed, appropriate, long-term decisions. This proposed Order, therefore, establishes interim groundwater limitations to assure protection of the beneficial uses of groundwater of the State pending the completion of certain tasks and provides time schedules to complete specified tasks. The Discharger is expected to identify, implement, and adhere to BPTC as individual practices are reviewed and upgraded in this process. During this period, degradation may occur from certain constituents, but can never exceed water quality objectives (or background water quality should it exceed objectives) or cause nuisance.

RECLAMATION

The California Department of Health Services (DHS) has established statewide water reclamation criteria in Title 22, CCR, Section 60301 et. seq. (hereafter Title 22). DHS revised the water reclamation criteria contained in Title 22 on 2 December 2000. The Discharger will treat to secondary standards and disinfect the secondary effluent per Title 22 requirements. Currently, the Discharger has not completed a Title 22 Engineer's Report that reflects the operation of the reclamation system. The Discharger is required to complete a comprehensive Title 22 Engineer's Report, in accordance with DHS guidelines.

This Order includes water reclamation specifications to implement provisions of Title 22, and to comply with the Water Code.

MONITORING

This permit requires the Discharger to routinely monitor and report wastewater loading of certain constituents on land application areas. Groundwater monitoring in the vicinity of the land application areas are required in order to evaluate the facility's impact on groundwater in the area. Groundwater monitoring requires sample analysis for specific constituents of concern.