U.S. Environmental Protection Agency Region IX San Francisco, CA

6

STAFF REPORT AND FACT SHEET FOR SPECIAL MEETING OF NOVEMBER 19, 2004 Prepared on October 29, 2004

#### ITEM NUMBER:

SUBJECT: Reissuance of National Pollutant Discharge Elimination System (NPDES) Permit No. CA0048160 and Waste Discharge Requirements for the Goleta Sanitary District Wastewater Treatment Facility, Santa Barbara County, Order No. R3-2004-0129

#### **KEY INFORMATION**

Treatment System Location:	Unincorporated areas of Santa Barbara County (treatment plant); unincorporated areas of Santa Barbara County and City of Goleta (collection system)		
Type of Discharge:	Municipal wastewater (domestic, commercial, light industrial)		
Total Design Capacity:	9.0 million gallons per day (MGD), average dry-weather flow		
Secondary Treatment			
Design Capacity:	4.4 MGD		
Current Flow:	Approximately 4 MGD (daily average for 2002 and 2003)		
Treatment:	Split-stream process consisting of primary and secondary treatment with		
	chlorination/dechlorination of blended primary and secondary effluent.		
Disposal:	Discharge to the Pacific Ocean through a 5,912-ft. outfall/diffuser system		
Reclamation:	Up to 3.3 MGD reclaimed for landscape irrigation		
Existing Orders:	NPDES Waste Discharge Requirements Order No. 96-21; Water Reclamation		
	Requirements Order No. 91-03		

#### SUMMARY

The Goleta Sanitary District (hereafter District, Permittee, or Discharger) owns and operates a wastewater collection, treatment, and disposal system (a Publicly Owned Treatment Works, or POTW) to provide sewerage service to the newlyincorporated City of Goleta, portions of Santa Barbara County, the University of California at Santa Barbara, and the City of Santa Barbara Municipal Airport, serving a population of approximately 74,000. The wastewater treatment facility effluent is discharged through a 5,912-foot outfall/diffuser system to the Pacific Ocean.

Waste Discharge Requirements Order No. 96-21 was scheduled to expire in July 2001, but has been administratively extended to date and currently serves as the National Pollutant Discharge Elimination System (NPDES) permit for discharges of blended primary and secondary treated municipal wastewater from the District to the Pacific Ocean.

On January 23, 2001, the Discharger applied to the U.S. Environmental Protection Agency, Region IX (EPA) and the Regional Board to continue to discharge treated wastewater subject to a variance from secondary treatment standards pursuant to Clean Water Act Section 301(h). The application proposed to expand the permitted daily flow from 7.64 mgd to 9.0 mgd.

At its July 12, 2002 meeting, the Regional Board declined to concur with the proposed 301(h) Permit. Instead, the Board adopted Resolution No.

R3-2002-0077 denying Clean Water Act section 401 certification and denying concurrence with the 301(h) Permit, finding, among other things, the proposed discharge did not comply with the Clean Water Act. The Resolution required the District to submit a modified NPDES permit application to the Regional Board by December 12, 2002. On August 8, 2002, the District filed a petition with the State Board. On January 22, 2003, the District's petition was deemed dismissed by operation of law. On December 4, 2003, the District submitted an application for an NPDES permit, Section 301(h) waiver and Section 401 water quality certification with a proposed flow limit of 7.64 mgd. On May 7, 2004, the District stated that it had determined that it would be in the best interests of its constituents to propose an amendment to its pending application to convert to secondary treatment and to further explore how such an amendment might be structured.

The proposed Order updates WDRs Order No. 96-21 to include regulatory changes, and to incorporate the District's proposal to upgrade the facility to full secondary treatment within ten years of permit issuance.

# HISTORY SINCE 2002 PROPOSED ORDER

On April 19, 2002, the Regional Board convened a joint hearing with EPA. The purpose of the hearing was to consider concurrence for a 301(h) waiver granted by EPA in a federally issued NPDES permit. After a motion to adopt waste discharge requirements concurring with the 301(h) variance failed, the majority of the Regional Board passed a motion directing staff to prepare findings denying concurrence of the 301(h) waiver. The Regional Board then continued the hearing to allow staff time to prepare draft findings.

Additional written and oral testimony was provided before and during the Regional Board's July 12, 2002 meeting. The Regional Board voted at that meeting to adopt the following findings:

a. Clean Water Act section 401 Certification of the federal NPDES permit was denied.

- b. Concurrence with the federal NPDES permit 301(h) variance was denied because the tentative federal draft permit was not certified in accordance with state law specified by Title 23 of the California Code of Regulations, Sections 3855 et seq.
- c. Concurrence with the federal NPDES permit 301(h) variance was denied.

On July 12, 2002, Regional Board considered and then adopted Resolution No. R3-2002-0077. The Resolution required the District to submit a modified NPDES application to the Regional Board by December 12, 2002.

On August 8, 2002, the District filed a timely petition with the State Water Resources Control Board, requesting review of Resolution R3-2002-0077. On October 15, 2003, the State Board adopted Order WQO 2003-0015, which stated that the deadline for final action upon the District's petition was October 17. 2003 and that, because the State Board anticipated taking final action on the matter after October 17, 2003 (the expiration of the regulatory timeframe set forth in 23 C.C.R. \$2050.5), the State Board would review Regional Board resolution No. R3-2002-0077 on its own motion. (Subdivision (a) of the Water Code section 13320 authorizes the SWRCB to review actions of a Regional Water Quality Control Board on its own motion at any time.)

On December 13, 2002, the Regional Board considered and then adopted Revised Resolution No. 2002-0077, requiring the Discharger to submit a modified NPDES permit application to the Regional Board within 45 days after the State Board issued a decision agreeing with Resolution R3-2002-0077.

On December 8, 2003, the District submitted a NPDES permit application and application for a Clean Water Act Section 301(h) variance and Section 401 water quality certification. The application proposed a reissued Order retain a flow rate limit of 7.64 MGD, instead of the previously proposed 9.0 MGD.

On December 30, 2003, the Regional Board denied Section 401 certification without prejudice.

On January 22, 2004, the SWRCB adopted a motion rescinding Order WQO 2003-0015. In a letter dated February 4, 2004, the State Board advised the District that "In view of the SWRCB's action rescinding Order WQO 2003-0015, and the fact that the deadline for acting on GSD's petition has passed, GSD's petition is deemed to be denied by operation of law as of January 22, 2004, and Regional Board Resolution No. R3-2202-0077 remains in effect." In a footnote, the State Board noted that: "By letter dated October 13, 2003, Goleta asked the SWRCB to hold Goleta's petition to review the Regional Board resolution in abeyance. The State Board took no action upon the request to hold the petition in abeyance."

On January 28, 2004 the District requested the Regional Board proceed with the processing of its December 2003 NPDES application.

On February 18, 2004, the District requested a 60day extension before the Regional Board processed the modified NPDES application requirement of Revised Resolution No. 2002-0077.

On February 20, 2004, the District filed a Petition for Writ of Mandate in Santa Barbara County Superior Court (the "Petition"), and amended the petition on April 21, 2004.

On March 2, 2004, the District requested the Regional Board not process the pending application and stated that if the District decided not to propose a conversion schedule by May 7, 2004, the District would ask the Regional Board to recommence its processing of the application.

On March 19, 2004, the Regional Board revised Resolution No. R3-2002-0077 to require the Discharger to submit a modified NPDES permit application by May 7, 2004.

On May 7, 2004, the District stated that it had determined that it would be in the best interests of its constituents to propose an amendment to its pending application to convert to secondary treatment and to further explore how such an amendment might be structured. The District is expected to submit this amendment prior to the hearing.

## DISCUSSION OF SETTLEMENT

The Discharger and Regional Board staff have been engaged in settlement discussions since early May 2004. The proposed settlement would take effect upon the Regional Board's issuance of concurrence with a 301(h) variance, Section 401 water quality certification and joint issuance of proposed waste discharge requirements with EPA. The Regional Board's Executive Officer will sign the Settlement Agreement prior to the hearing if Regional Board staff and the District agree to all terms. Therefore, as stated in the October 6, 2004 public notice, all comments on the settlement agreement were required to be received by the Regional Board prior to November 5, 2004.

After the Regional Board issues the proposed Order and the State Board resolves any third-party challenges regarding 301(h) waiver issues, the District will dismiss its lawsuit. The District proposes a ten-year conversion schedule to full secondary treatment ("Conversion Period") and Regional Board staff will recommend approval to the Regional Board, assuming staff and the Discharger agree upon other settlement terms. The settlement would include a schedule of agreedupon milestones for the Discharger to complete during the ten-year process. These milestones will be included in the settlement agreement and permit findings. The Regional Board can enforce the milestones by seeking penalties in an agreed-upon amount, or by asking a court to order the District to meet the schedule.

The settlement agreement will continue in effect only if the adopted Order includes findings stating that that (i) Subject to the provisions of the Settlement Agreement regarding Regional Board discretion and new evidence of plant impacts (defined below), the Settlement Agreement contemplates that the Regional Board will concur in or issue the First and Second 5-Year Permits in order to effect the District's obligation to complete the upgrade of its treatment facility to full secondary treatment standards within a ten-year period, (ii) based on the administrative record, including population growth projections through 2014, known environmental and cumulative impacts of the District's existing wastewater treatment facilities, and evidence submitted by the District of the time needed for upgrading the plant, the conversion schedule is appropriate, and (iii) at the end of the Conversion Period, once the District has converted to secondary treatment of effluent from the Plant, the Regional Board expects to issue an NPDES permit imposing effluent limitations based on secondary treatment as defined in 40 C.F.R. Part 133, or any more stringent requirements the Regional Board determines are necessary to comply with State or Federal law. These findings will be added to the draft Order after the District signs the settlement agreement, which is expected to occur November 1 or 2, 2004. The settlement agreement and the revised Order will be provided to interested parties after the District signs the agreement. To receive an email copy of the revised Order and settlement agreement or to verify that you are on the interested parties list, please contact tstanley@rb3.swrcb.ca.gov or call Todd Stanley at (805) 542-4769.

The settlement agreement will include the following milestones.

#### Task

**Date of Completion**<sup> $\underline{1}$ </sup>

Submittal of Detailed Conversion. Plan and Timeline to Contract Users		January 1, 2005
Coordination of Conversion Concepts with Contract Users		June 30, 2005
Issuance of Request for Environmental and Consulting Engineering Proposals		December 31, 2005
Award of Environmental and Consulting Engineering Contracts		June 30, 2006
Facilities Plan	ning:	
1.	Submit Draft Facilities Plan	December 31, 2006
2.	Submit Final Facilities Plan	June 30, 2008
Environmenta	l Review and Permitting:	
1.	Complete and Circulate Draft CEQA Document	June 30, 2008
2.	Certification of Final CEQA document	January 31, 2009
3.	Submit proof of application for all necessary permits	January 31, 2009
4.	Obtain all necessary permits	January 31, 2011
Financing:		
1.	Complete Draft Plan for Project Design & Construction Financing	January 30, 2007
2.	Complete Final Plan for Project Financing	March 31, 2008
3.	Submit proof that all necessary financing has been secured,	December 31, 2010
	including compliance with Proposition 218	
Design and Co	onstruction:	
1.	Initiate Design	June 30, 2008
2.	30% Design	December 31, 2008
3.	60% Design	November 30, 2009
4.	90% Design	March 31, 2010
5.	100% Design	September 30, 2010
6.	Issue Notice to Proceed with Construction	April 30, 2011
7.	Construction Progress Reports	Quarterly (w/ SMRs)
8.	Complete Construction and Commence Debugging	
	and Startup ("ShakeDown")	April 30, 2014
9.	Achieve Full Compliance w/ Secondary Requirements	November 1, 2014

<sup>&</sup>lt;sup>1</sup> Any due date falling on a Saturday, Sunday or State holiday shall be due on the next working day. The District shall submit proof of completion of each task within 30 days after the due date for completion.

The District will agree to pay stipulated penalties if it misses one of the milestones in the final schedule, unless "force majeure" applies. Force majeure means that the District missed a milestone due to an event beyond the reasonable control of the District, its contractors, or any entity controlled by the District that delays or prevents the performance of any obligation under this Agreement despite the District's reasonable good faith efforts to fulfill the obligation. The following events (in addition to other events that fit the above definition) would constitute force majeure: (i) fire, strike, war, insurrection, terrorism, natural disaster, civil or military authority, civil disturbance; (ii) to the extent they are beyond the District's reasonable control, government restriction on or prohibition of the task(s) set forth in the compliance schedule, lawsuits, court orders, injunctions, delays by other agencies with approval authority relating to or permitting of the conversion of the District's treatment facilities to secondary treatment, and site conditions discovered during construction if the District exercised reasonable diligence, but did not foresee such site condition prior to the commencement of construction; (iii) the Regional Board's failure to issue the first or second permit described above within a stated period of time; and (iv) the State Board's failure to act within a stated period of time on a third-party petition to the State Board of the first or second permit, if the permit in question is consistent with the provisions discussed above. If a force majeure event occurs, the District must take all reasonable measures to prevent or minimize the delay resulting from the event. If the Regional Board's Executive Officer does not agree that force majeure applies, the Regional Board can seek stipulated penalties administratively (through an administrative civil liability proceeding) or in court. The District would have to prove that force majeure applied, if applicable.

The amount of stipulated penalties would be \$200 per day, with higher penalties for missing the final completion date (November 1, 2014). The penalties for missing the completion date would be \$500 per day for the first 180 days; \$1000 per day for the next 185 days, and \$2000 per day after one year. The agreement would provide that penalties accrued during the first permit term would be suspended (forgiven) if the District "catches up"

with the schedule by the time the second permit is issued, or if the Regional Board does not issue a second permit that allows the District the full Conversion Period. Similarly, if the District issues the Notice to Proceed to its construction contractor by the due date (April 30, 2011), then any penalties accrued up to that point would be forgiven. If the District claims that force majeure applies but the Regional Board finds that it does not apply, the District may file a petition to the State Board. However, the Regional Board and District will agree to request abevance of the petition so that the State Board need not review the petition until after the applicable "catch-up" date. If the District is not satisfied with the State Board's action on any such petition, the District can then challenge an assessed penalty in court. The intent of these provisions is to allow the Regional Board to ensure that the upgrade is completed by the end of the Conversion Period.

Under the Clean Water Act, an NPDES permit (and therefore Section 401 certification and 301(h) waiver concurrence) cannot have a term in excess of five years. Therefore, USEPA and the Regional Board will review the record in five years to determine whether, in their discretion, the BOD and TSS limits and conversion schedule are appropriate. Unless there is a change in the law or new evidence of Plant impacts, the Regional Board's Executive Officer will recommend keeping the existing limits and schedule in place so that the District can complete the upgrade and the parties can avoid further litigation. "New evidence of plant impacts" means evidence in addition to what is already contained in the record, and would include information of actual or projected (2010-2014) effluent flows that are significantly higher than current projections and/or that could exceed permitted limits, new evidence showing that the facility does not meet the requirements for a 301(h) waiver, or a change in the law. The Executive Officer will provide a written description of any new evidence that is the basis for not recommending renewed 301(h) waiver.

The second permit will be issued as a 301(h)modified permit or, if the record does not support a 301(h) waiver, an NPDES permit with a five-year time schedule order or cease and desist order. The settlement agreement will continue in force if either of these permits are issued. If for any reason the Regional Board does not continue the BOD and TSS limits and conversion schedule in the renewed permit, the settlement agreement would have no further effect and the Discharger would not have to pay any stipulated penalties that accrued during the term of the first permit.

The District has agreed to the following treatment enhancements if the settlement is finalized. These enhancements will be part of the settlement agreement, but will not be terms of the permit:

- During the Conversion Period. If the a. District's effluent 30-day average mass emissions for TSS or BOD measured over the three-month period of June, July, and August of each year exceed eighty-five percent (85%) of the mass emissions limit set forth in the District's current 301(h) Permit, the District will enhance its treatment process by use of polymers or other available technologies of equal or lesser cost (taking into account capital, operations and maintenance costs) and equal or better effectiveness ("Enhanced Treatment") in an effort to reduce mass emissions to eighty-five percent (85%) of the Permit limit.
- b. 30-day average mass emissions for TSS and BOD will be re-evaluated in June of each year following the commencement of Enhanced Treatment to determine if emissions continue to exceed the Enhanced Treatment trigger of eighty-five percent (85%) without Enhanced Treatment. If the 30-day average mass emissions for TSS or BOD in June exceed ninety (90%). Enhanced Treatment will continue until tested again in June of the following year. If the 30-day average mass emissions for TSS or BOD in June are greater than eighty-five percent (85%) but less than ninety (90%), testing will continue through July and August to determine whether the three month average weekly mass emissions for TSS or BOD exceed eighty-five percent (85%) of the Permit limit. If the 30-day average mass emissions for TSS or BOD for the three-month period of June, July, and August do not exceed the eighty-five percent (85%) Enhanced Treatment trigger, Enhanced

Treatment may be discontinued until the Enhanced Treatment trigger is exceeded again in the future, as determined by a subsequent three-month test during June, July, and August.

- c. If the use of Enhanced Treatment fails to achieve 30-day average mass emissions at or below the Enhanced Treatment triggers for any six-month period, the District shall investigate and apply, with the approval of the Regional Board's Executive Officer, other technologies of equal or lesser cost (taking into account capital, operations and maintenance costs) and equal or better effectiveness if any such technologies are readily available and are capable of achieving at least eighty-five percent (85%) of the permitted mass emissions limits.
- d. The Enhanced Treatment triggers set forth above are not effluent discharge limits and, if exceeded, will not be considered a violation and will not subject the District to civil liabilities, fines, penalties or other enforcement action. If the District exceeds an Enhanced Treatment trigger and is therefore required to commence or continue Enhanced Treatment, the District will not be considered to have committed a violation and will not be subject to civil liabilities, fines, penalties or other enforcement action if such Enhanced Treatment fails to bring effluent 30-day average mass emissions for TSS or BOD, as measured above, below eighty-five percent (85%) of the mass emissions limit set forth in the District's current 301(h) permit.
- e. Stipulated penalties may apply if the Discharger does not complete the Enhanced Treatment requirements. However, if the Enhanced Treatment is unsuccessful in achieving the above reduction, that would not violate the settlement agreement or subject the Discharger to penalties.
- f. The monitoring and reporting plan for the District's permits during the Conversion Period will require the District to provide adequate data to allow the Regional Board to

determine compliance with Enhanced Treatment Requirements.

The District has indicated that it may challenge provisions of the proposed Order other than the provisions related to secondary treatment. If so, the conversion schedule will remain in place even if unrelated permit provisions are changed by the State Board or a court.

## BACKGROUND

### Introduction

In order to meet the stringent requirements of section 301(h) of the Act, the Discharger must demonstrate the discharge does not impair the ocean's beneficial uses, as specified in this Region's Water Quality Control Plan (Basin Plan) and the California Ocean Plan. Some of these beneficial uses include marine habitat, shellfishing, and body-contact recreation. Receiving water monitoring must indicate the existence of a balanced population of representative organisms, thereby demonstrating protection of the marine habitat beneficial use. Also, receiving water monitoring must not detect elevated bacterial concentrations in the ocean to demonstrate protection of shellfishing and recreational beneficial uses.

The Discharger treats the wastewater to an advanced primary standard. The Discharger also has 4.4 mgd secondary treatment capacity. Pursuant to the Act, the Discharger monitors representative samples of organisms living within, on, and near the seafloor for changes caused by the discharge. By means of its pretreatment program, the Discharger seeks to ensure toxic wastes are removed from commercial and industrial sources prior to being discharged into the collection system. To minimize overflows and inflow and infiltration, the Discharger conducts an ongoing collection system maintenance and renovation program.

### Authority

Section 402 of the Act gives EPA the authority to issue NPDES permits for wastewater discharges to navigable waters and to prescribe conditions for such permits necessary to carry out the Act's provisions. Section 301(b)(1)(B) of the Act requires publicly owned treatment works (POTWs) to meet effluent limitations (ELs) based on secondary treatment as defined by the EPA Administrator. The Administrator has defined secondary treatment in terms of three parameters: biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), and pH.

On December 27, 1977, Congress amended the Act to include section 301(h), which provides that an NPDES permit which modifies federal secondary treatment requirements may be issued if the applicant: 1) discharges into oceanic or saline, well-mixed estuarine waters, and 2) demonstrates, to the satisfaction of the Administrator, that the modifications will meet those requirements specified in section 301(h). Modified Waste Discharge Requirements Order No. 96-21 and NPDES Permit No. CA0048160, waiving secondary treatment requirements, was issued to the Discharger on July 26, 1996. This permit expired on July 26, 2001.

The State of California administers an approved NPDES permit program, and issues orders for discharges to waters within State jurisdiction. Authority to grant a variance and issue a modified NPDES permit under section 301(h) of the Act is, however. limited to EPA's Regional Administrator. State concurrence on the issuance of a modified permit is required by section 301(h) of the Act and issuance of a Clean Water Act section 401 water quality certification. The Regional Board will consider issuance of waste discharge requirements for the Goleta treatment plant under the authority of the California Water Code. If the Board adopts the proposed waste discharge requirements, this will constitute concurrence by the State regarding the issuance of a 301(h) modified NPDES permit (in accordance with the Memorandum of Understanding between the State of California and EPA, Region IX regarding 301(h) variances, dated May 2, 1984) and section 401 certification.

The Act's section 301(h) conditionally waives the requirement for municipal wastewater treatment plants to comply with secondary standards before discharging wastewater to the ocean. The

Discharger has the burden of showing that the discharge will comply with all requirements for a 301(h) waiver. Secondary standards may be waived for biochemical oxygen demand (BOD), total suspended solids (TSS), and pH. In accordance with federal regulations (40 CFR 125.57), as a condition of the waiver, the discharge must not interfere with the attainment or maintenance of that water quality which assures the protection and propagation of a balanced, indigenous population of fish, shellfish and other wildlife. To demonstrate a balanced population is present, the Discharger must monitor a representative sample of indigenous organisms. In addition, the Discharger must establish and enforce a pretreatment program to control industrial wastes and toxic wastes from industrial and nonindustrial sources.

The 301(h) waiver requires the Discharger to provide at least primary or equivalent treatment to the wastewater before discharging it to the Pacific Ocean. That is, the Discharger must remove from the influent stream, as a 30-day average, at least 30% of the BOD and 75% of the TSS before discharging the treated wastewater to the Pacific Ocean. Goleta Sanitary District's discharge substantially exceeds these treatment levels. For 2003 BOD removal averaged 75 %; TSS removal averaged 84 %.

Wastewater treatment plant. The Discharger owns and operates the Goleta municipal wastewater treatment plant. The plant's primary treatment design capacity is 9.0 MGD (average dry weather flow) and 9.7 MGD (peak seasonal dry weather flow); secondary treatment design capacity is 4.4 MGD (constant flow). The Goleta plant uses a split-stream process of physical and biological treatment. All wastewater flows through primary clarifiers. All wastewater up to 4.4 MGD then flows through secondary treatment facilities. including biofiltration, solids-contact, and secondary clarification. Flow greater than 4.4 MGD passes through primary only and is then blended with secondary-treated wastewater. The wastewater is then disinfected by chlorination/dechlorination prior to ocean discharge. Biosolids are anaerobically digested, and stored in stabilization basins, air-dried, and used to condition soils.

Waste discharge requirements. The existing and proposed Orders govern the discharge's quality by means of effluent and receiving water limitations. The limitations are based on federal regulations and the December 2001 Water Quality Control Plan for Ocean Waters of California (Ocean Plan). Based on the Act's section 301(h), the Order specifies effluent limits (ELs) for BOD and TSS. ELs found in Table 2.a of the proposed Order are based on the Ocean Plan's Table A pollutants. which are major wastewater constituents and properties, including grease-andoil, settleable solids, turbidity, pH, and acute toxicity. Table 2.b of the proposed Order specifies limits for the Table B pollutants, which are metals and organic compounds toxic to aquatic life and hazardous to human health. To ensure the discharge undergoes maximum disinfection, at least five mg/L of total chlorine residual is required at the end of the chlorine contact chamber. As a secondary control on the bacteria discharged to the ocean, the discharge may contain no more than 2.400 Most Probable Number (MPN)/100 milliliters (mL) (EL 2.d).

To protect the shellfishing and body-contact recreation beneficial uses, the proposed Order also specifies Receiving Water Limitations for total and fecal coliform bacteria.

Proposed Order No. R3-2004-0129 requires the Discharger to continue to monitor the effluent and receiving water at the locations and frequencies specified in the existing Order No. 96-21. Staff routinely conducts annual random, unannounced sampling inspections to validate the results of the Discharger's self-monitoring. Analytical results of staff sampling event indicate compliance with effluent limits.

**301(h) waiver from secondary standards.** Many species of bacteria feed on organic material, such as human body wastes. To break down the wastes, bacteria must extract oxygen from the surroundings: the creeks, rivers, and the oceans in which they live. Bacteria use much more oxygen to break down untreated or partially treated wastewater than wastewater from which most solids and dissolved organic compounds have been removed. Discharges of partially treated wastewater to creeks and rivers can quickly In the 1960's, federal law required cities and states to remove solids from municipal wastewater before discharging the wastewater to surface waters. However, municipalities continued to discharge high levels of dissolved organic material. Bacterial action on the dissolved compounds often removed most of the oxygen from the waters receiving the discharge. With no dissolved oxygen remaining, many creeks, rivers and ocean areas were rendered uninhabitable for aquatic life for great distances from the point of discharge.

Based on this and other factors, in 1972 Congress passed the Clean Water Act, which required Publicly Owned Treatment Works (POTWs) to treat their wastewater discharges to secondary To achieve secondary treatment, standards. bacteria held in reactor tanks break down most of the dissolved organics remaining after primary solids settling. Wastewater treated to secondary standards usually does not cause significant effects in the receiving water. Wastewater treated to secondary standards contains, on average, less than 30 mg/L of BOD and 30 mg/L of Total Suspended The Goleta POTW currently Solids (TSS). discharges an average of 60 mg/L BOD and 43 mg/L TSS, based on monthly averages from January 2002 through December 2003.

In 1977, Congress added section 301(h) of the Act, which allows for a case-by-case review of treatment requirements in accordance with a set of environmentally stringent criteria. Section 301(h) allows waiving secondary treatment requirements for BOD, TSS and pH, conditioned on the Discharger's monitoring the ocean for adverse effects on wildlife populations and other factors discussed above.

EPA prepared a Tentative Decision Document (TDD) dated January 17, 2002, that concluded the discharge would satisfy Section 301(h). EPA may update the TDD to reflect the reduced flow limits of the revised draft permit (from 9.0 mgd to 7.64 mgd). Regional Board staff will recommend

granting a 301(h) variance so that the Discharger can upgrade its facility to achieve full compliance with secondary treatment standards as provided by the conversion schedule, pursuant to the pending settlement agreement. This recommendation is contingent upon a final settlement that includes an enforceable conversion schedule.

# CHANGES TO THE ORDER

Significant changes to proposed Order No. R3-2004-0129 from the existing Order No. 96-21 include the following:

**Local Wastewater Collection Entities**: Four public agencies directly participate with the District by owning capacity rights (rights to a fixed percentage of the treatment and outfall operations). The Agencies are University of California - Santa Barbara, Goleta West Sanitary District, City of Santa Barbara Municipal Airport, and certain facilities of Santa Barbara County.

While the District actually owns the facility, the participating agencies contribute their proportionate share of all treatment plant costs.

The Goleta West Sanitary District, the City of Santa Barbara Municipal Airport, the University of California at Santa Barbara, and the County of Santa Barbara Public Works Department have been removed from coverage under this proposed Order and will be regulated under a different Order (proposed Order No. R3-2004-0130).

Wastewater Collection System Management Plan: Requirements for the development and implementation of a Wastewater Collection System Management Plan were added to the Permittee's revised Order. The Regional Board has adopted the same or similar requirements for other municipal waste discharges. Proposed Monitoring and Reporting Program No. R3-2004-0129, Attachment 1, Section XI, presents a time schedule for collection system management plan development and implementation. This requirement is recommended to facilitate an organizational structure encompassing all facets of wastewater collection system management and operation.

This requirement is also proposed for local wastewater collection agencies tributary to the Discharger's treatment facility (proposed WDR Order No. R3-2004-0130). As the District owns and operates a wastewater collection system, it would not be appropriate to require such a plan only from tributary wastewater collection entities, which are typically responsible for smaller systems.

It is intended that the *Wastewater Collection Overflow Prevention and Response* and *Infiltration/Inflow and Spill Prevention* requirements of the Order will be incorporated into the Wastewater Collection System Management Plan as the latter is developed and implemented.

See Section D of the Order, *Wastewater Collection System Requirements*, and MRP Section XI.

WastewaterCollectionSystemOverflowPreventionandResponse:OrderSectionD,WastewaterCollectionSystemRequirements, alsoincludes requirements for wastewater collectionsystemoverflowpreventionandresponse.ThislanguageisconsistentwithlanguageadoptedbytheRegionalBoard for othermunicipalwastewaterdischarges.

Wastewater collection system overflow reporting and recordkeeping requirements are included in MRP Sections XII and XIII. These requirements are included to clarify the Regional Board's overflow reporting policy as issued on July 26, 1995. Reporting requirements for the Governor's Office of Emergency Services are also included in MRP Section XIII.

**Ocean Plan Update**: The 2001 California Ocean Plan was adopted by the State Water Resources Control Board on November 16, 2000, and subsequently approved by USEPA on December 3, 2001 (effective date). Order and MRP Nos. R3-2004-0129 have been updated throughout in accordance with the revised Ocean Plan.

The proposed Order contains additional Ocean Plan receiving water limitations beyond those discussed above. These limitations prohibit the discharge from causing floating particulates and grease and oil to be visible, or discoloration, on the ocean surface; or a significant increase in sulfides on and near bottom sediments.

The proposed Order also continues a Toxicity Reduction Evaluation (Evaluation) requirement in case persistent violations of the toxicity limitations occur. If the discharge consistently exceeds an EL based on toxicity objectives of the Ocean Plan's Table B, an evaluation is required. The evaluation shall include all reasonable steps to identify the source of the toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level. The requirement specified in the proposed Order also establishes the time schedule for implementing the Evaluation.

Mass Emission Rate Limits: To clarify the application of these limits, the definition and application of mass emission rate limits was promoted from the Standard Provisions to Sections B.3 and B.4 of the Order.

Receiving Water Enterococcus Limits: The California Code of Regulations (CCR), Title 17, Section 7958, establishes the minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas. Similar standards exist in the Ocean Plan, although they are not identical to those in the CCR. It is staff's understanding that the State Board intends to rectify the discrepancies between the standards in late 2004 or early 2005. Staff's review of both standards resulted in the addition of the enterococcus limits from 17 CCR. Total and fecal coliform receiving water limitations were found to be practically equivalent between the two sets of standards. See Order Section C.2, Receiving Water Limitations.

**Biosolids Standard Language**: 40 CFR 503 requires that producers of biosolids meet certain reporting, handling, and disposal requirements. As the EPA has not delegated the authority to implement the federal sludge program to the State of California, the enforcement of biosolids requirements applying to the Discharger remains under EPA's jurisdiction at this time. EPA, not this Regional Board, will oversee compliance with 40 CFR Part 503. Standard language provided by EPA has been incorporated as Order Section F, and MRP Section III to clearly disclose the permittee's responsibilities regarding biosolids disposal.

California Water Code (CWC) §13263.6(a). This section was added to the CWC by the enactment of SB709 (Migden). The section requires the Regional Board to prescribe ELs as part of the waste discharge requirements for a Publicly Owned Treatment Works (POTW) for all substances that the most recent chemical release data reported to the State Emergency Response Commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. Sec.11023) (EPCRKA) indicate as discharged into the POTW, "for which the state board or the regional board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective."

The reporting requirement for Section 313 of the EPCRKA applies to owners and operators of facilities that: 1) have ten or more employees, 2) are in Standard Industrial Classification (SIC) codes 20-39, and 3) manufacture, import, process, or otherwise use a listed toxic chemical in excess of specified threshold quantities.

This Regional Board has adopted numeric water quality objectives in the Water Quality Control Plan for the Central Coast Basin for constituents specified in the Effluent Monitoring section of MRP No. R3-2004-0129.

**Stormwater**. Water Quality Order No. 97-03-DWQ (NPDES General Permit No. CAS000001) regulates the discharge of storm water from the facility.

# CHANGES TO THE DRAFT ORDER SINCE THE DRAFT MAILING

1. Staff recommends deleting Discharge Prohibition No. A.3 because of its redundancy with Prohibition A.4 of the NPDES Standard Provisions. Discharge Prohibition No. A.3 read, "Discharge of any wastes including overflow, bypass, and seepage from transport, treatment or disposal systems is prohibited".

Prohibition A.4 of the NPDES Standard Provisions reads, "Bypass and overflow of untreated and partially treated waste is prohibited." Discharge Prohibition A.3 and Standard Provision A.4 accomplish the same goal.

This recommendation is consistent with the NPDES permits for the City of Pismo Beach, the South San Luis Obispo County Sanitation District (each adopted September 10, 2004), and the City of Santa Barbara (adopted October 22, 2004).

 Section D.1.b of the Ocean Plan states, "Waste discharge requirements shall require the discharger to conduct sanitary surveys when so directed by the Regional Board. Waste discharge requirements shall contain provisions requiring the discharger to control any controllable discharges identified in a sanitary survey."

Staff recommends modifying Receiving Water Limitation C.4 as follows:

"Measurement of enterococcus density shall be conducted at all stations where measurement of total and fecal coliforms is required. If Receiving Water Limitations C.1 or C.2 is consistently exceeded, or the following enterococcus densities are exceeded, the Discharger shall conduct or participate in a bacterial assessment <u>(sanitary survey)</u> approved by the Executive Officer to identify the source(s) of bacteria:"

Then, after the table of limitations in C.4:

"When a sanitary survey identifies a controllable source of indicator organisms associated with a discharge of sewage, the Discharger shall take action to control the source. The Discharger shall conduct sanitary surveys when so directed by the Regional Board or the Executive Officer." This recommendation also provides for the Regional Board's delegation of authority to the Executive Officer to direct the Discharger to conduct sanitary surveys.

3. During a telephone conversation on October 28, 2004, the District requested clarification on whether mandatory minimum penalties apply to sanitary sewer overflows.

In response, staff recommends adding the following statement to Finding No. 36, "Overflows from wastewater collection systems (sanitary sewer overflows) are subject to discretionary administrative civil liability, but are not subject to mandatory minimum penalties.

## **COMPLIANCE HISTORY SINCE 2002**

Staff review of Discharger monitoring reports, Regional Board files, and the State Water Information Management System (or SWIM, our database for violations and enforcement) indicates that the Discharger has complied with the requirements of Order No. 96-21.

Staff has noted no violations during facility inspections conducted each year since 2002.

From May 2002 to May 2004, nine sanitary sewer overflows were reported. The untreated sewage spill estimates ranged from 100 to 1,500 gallons, with six spills below 1,000 gallons, and three spills equal to or above 1,000 gallons. All but one of the spills were caused by line blockages, with a pump station electrical failure as the exception. Portions of some overflows discharged to surface waters, and others were contained and cleaned up to the degree practicable.

The Executive Officer issued Mandatory Minimum Complaint No. R3-2004-0003 on December 11, 2003, for a total chlorine residual violation which occurred on January 7, 2001. The District waived its right to a public hearing and paid the \$3,000 penalty.

Proposed Order No. R3-2004-0129 contains specific requirements to address the overall management of wastewater collection systems to assist the Discharger in potentially reducing the occurrence of such events (see Order Section D, Wastewater Collection System Requirements).

The Discharger conducts receiving water/ocean monitoring. No receiving water limitations are known to have been exceeded from 2002 to 2004 as a result of the discharge of treated wastewater from the Discharger.

## ENVIRONMENTAL SUMMARY

The issuance of waste discharge requirements and Section 401 water quality certification for this discharge is exempt from provisions of the California Environmental Quality Act (Division 13 of the Public Resources Code, commencing with Section 21000, et. seq.), in accordance with 14 California Code of Regulations Section 15301 (existing facilities). The issuance of NPDES permits is exempt from CEQA pursuant to California Water Code Section 13389.

# STAFF CONTACT INFORMATION

Regional Board staff Todd Stanley: (805) 542-4769 or <u>tstanley@rb3.swrcb.ca.gov</u>.

# SCHEDULED PUBLIC HEARING AND PUBLIC COMMENTS

A public hearing is scheduled on November 19, 2004, at the Regional Board's offices, 895 Aerovista Place, Suite 101, San Luis Obispo, CA **93401**. The Regional Board will hear and consider all comments pertaining to the District's waste discharge to the Pacific Ocean. Interested parties must submit comments in writing no later than November 5, 2004. However, in order to allow Regional Board staff to prepare written responses to comments, interested parties are requested to provide comments as early as possible. Written comments on the agenda materials will be accepted in accordance with the Regional Board meeting notice. Speakers should plan to summarize key points within three minutes. For scheduling purposes, please notify staff two weeks prior to the meeting of a request for presentations planned for longer than three minutes (subject to Board Chair approval). For further instructions, please see our most recent posted Agenda at:

http://www.swrcb.ca.gov/rwqcb3/Board/Meetings/ 2004meetings.htm, or contact the above staff.

### **COMMENTS AND RESPONSES**

Pending.

# ATTACHMENTS

- 1. Draft Waste Discharge Requirements Order No. R3-2004-0129, and Monitoring and Reporting Program No. R3-2004-0129.
- 2. October 6, 2004 Regional Board public hearing notice letter
- 3. October 6, 2004 USEPA / Regional Board Joint Notice of Proposed Action

 $\label{eq:linear} S:\PDES \ acidities\ act a Barbara \ Co\Goleta\ emit\ acid a Co\Goleta\ emit\ acid\ acid a Co\Goleta\ emit\ acid a Co\Goleta\ emit$