California Regional Water Quality Control Board

Los Angeles Region

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October 14, 2010

Maggie Healy, Acting Director
Recreation and Community Service Department
City of Redondo Beach
320 Knob Hill
Redondo Beach, CA 90277

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
NO. 7009 0820 0001 6812 0691

Dear Ms. Healy:

WASTE DISCHARGE REQUIREMENTS – CITY OF REDONDO BEACH, SEASIDE LAGOON (NPDES NO. CA0064297, CI NO. 8034)

Our letters dated February 18, 2010, July 14, 2010, September 21, 2010, and September 30, 2010, transmitted the tentative Waste Discharge Requirements (WDRs) and revised tentative WDRs, respectively for renewal of your National Pollutant Discharge Elimination System (NPDES) permit.

Pursuant to Division 7 of the California Water Code, this Regional Water Board at a public hearing held on October 7, 2010, reviewed the revised WDRs, considered all factors in the case, and adopted the proposed NPDES permit with changes.

The adopted Order (Order R4-2010-0185) expires on September 10, 2015. Section 13376 of the California Water Code requires that an application/Report of Waste Discharge for a new permit must be filed at least 180 days before the expiration date.

The "Monitoring and Reporting Program" requires you to implement the monitoring program on the effective date of this Order (November 6, 2010). (Your first monitoring report for the period from November 6, 2010 to December 31, 2010, is due by March 1, 2011). Monitoring reports should be sent to the Regional Water Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Water Board per these requirements, please include a reference to Compliance File CI-8034 and NPDES No. CA0064297, which will assure that the reports, are directed to the appropriate file and staff. Please do not combine your discharge monitoring reports with other reports, such as Work Plan for Special Study report. Submit each type of report as a separate document.

We are sending the paper copy of the permit to the Discharger only. For those on the mailing list or other interested parties who would like access to a copy of the order, please go to the Regional Water Board's website at:

http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/by_permits_tools.shtml.

If you have any questions, please contact Mazhar Ali at (213) 576-6652.

Sincerely,

Cassandra D. Owens, Chief
Industrial Permitting Unit

Enclosures

cc: Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality
Mr. William Paznokas, Department of Fish and Game, Region 5
Department of Health Services, Sanitary Engineering Section
California State Parks and Recreation
California Coastal Commission, South Coast Region
Water Replenishment District of Southern California
Los Angeles County, Department of Public Works, Waste Management Division
Mr. Gary Yamamoto, DPH, Division of Drinking Water and Environmental Management
Mr. Mike Witzansky, Director, Dept. of Public Works, City of Redondo Beach
Mr. Mike Shay, City engineer, City of Redondo Beach
Dr. Mark Gold, Heal the Bay
Mr. Tom Ford, Santa Monica BayKeeper
Mr. David Beckman, Natural Resources Defense Council
Mr. Jae Kim, TetraTech

EXHIBIT 3

Item 15 Response to Comments

City of Redondo Beach
Seaside Lagoon
Tentative Order No. R4-2010-00XX
NPDES Permit No. CA0064297, CI No. 8034

Agency/ Letter	#	Comment	Agree	Disagree	Reply	Action Taken
Letter dated September 29, 2010 from Maggie Healy of City of Redondo Beach Re: Comments on September 21, 2010 Revised Tentative Waste Discharge Requirements, City of Redondo Beach, Seaside Lagoon (NPDES No. CA0064297, CI No. 8034						
	1	While the City greatly appreciates the Board's revisions reflected in the September 21, 2010 version of the 2010 Order, the City continues to have serious concerns regarding the 2010 Order. Specifically, the City Council of the City of Redondo Beach has expressed serious concern that if there is no movement on the Total Suspended Solids ("TSS") limitations contained in the 2010 Order, it may not make sense for the City to spend its limited funds on the additional proposed Work Plan and Special Study, if closure of the Seaside Lagoon would be the end result of the adoption of the 2010 Order. We sincerely hope the Board will take our comments into consideration prior to adopting the new 2010 Order.		X	Comments on the TSS effluent limitations are outside the scope of this limited comment period. Our September 21, 2010 letter transmitting the Revised Tentative WDRs to the City specifically stated that written submission pertained only to changes denoted by underline or strikethrough. Those changes related to the deletion of metals limits and the requirement for a Special Study; not changes to the TSS limits. Nevertheless, staff has taken the City's comments regarding the TSS limitations into consideration. However, the mission of the Regional Board is to preserve and enhance the quality of California's water resources for the benefit of present and future generations. Therefore, any decisions made regarding the contaminant concentrations permissible in any discharge must support that mission. In early 2000, during a review of the then current TSS limitations included in individual NPDES permits, staff became aware that the TSS daily maximum limitation was high relative to the technology based limits included in the permits for the publicly owned treatment works (POTW) facilities. Further, investigation yielded evidence that the daily maximum limit routinely included in industrial permits exceed criteria documented to result in adverse effects to	None required.

Agency/ Letter	#	Comment	Agree	Disagree	Reply	Action Taken
					aquatic life in the receiving waters. This information, along with the narrative objective for TSS included in the Basin Plan and evidence and recommendations in USEPA's Gold Book, has been used to develop an appropriately protective numeric limit for TSS. That limit has been consistently and systematically implemented into industrial permits as they are renewed.	
	2	**The City Requests That The Board Remove The Requirement To Monitor For Metals, Except As Set Forth In The Work Plan** The City appreciates that the Board deleted new effluent limitations for metals. Nevertheless, the 2010 Order still includes onerous requirements in Tables E2, E-3 and E-4 that the City monitor for metals on a monthly basis **in addition to** the requirements set forth in section VI.C.2 related to a "Work Plan for Special Study". The requirement for monitoring includes 1) antimony; 2) arsenic; 3) cadmium; 4) copper; 5) nickel; 6). selenium; 7) silver; 8,) thallium; and 9) zinc ("Metals"). Requiring the City to conduct such monitoring would constitute a significant additional expense in addition to the monetary commitments the Board is requesting in conjunction with the Work Plan. and Special Study pursuant to section VI.C.2 The City requests that the Board remove the requirement to monitor for such Metals,	X		The monitoring required in the tables referenced will be required throughout the term of the permit. The City may utilize the sample results from the special study which complies with the NPDES permit requirements to comply with the permit requirements. For example, if you are monitoring the influent for arsenic monthly and the special study requires you to monitor arsenic weekly you may use one of the weekly samples collected to satisfy the monthly sampling requirement included in table E-2. Staff has included a footnote stipulating this procedure.	A new footnote has been added to 3 tables in the MRP to allow the data from the Special Study to be used to satisfy the permit monitoring requirement.

Agency/ Letter	#	Comment	Agree	Disagree	Reply	Action Taken
		other than as requited in the Work Plan and Special Study. If metals are included in the permit, this monitoring, requirement would be added at that time.				
	3	**The Board Has Not provided Adequate Support For Setting The TSS Effluent Limitation At 75 mg/L** The Board is asking the City for a significant financial commitment in connection with the proposed Work Plan and Special Study contained at section VLC.2 of the 2010 Order. The City remains concerned, however, about such an expensive undertaking when the TSS limitations on the permit will subject the City to significant penalties for noncompliance. This danger was demonstrated most recently in connection with the Notice of Violation and resultant Directive for Administrative Civil Liability sent to the City on September 15, 2010. In the Board's Response to the City's Comments ("Response"), the Board asserts that the existing limits for TSS were based, among other things, on its "best professional judgment ;("BPJ): (See page 13 of the Board's 'Response to Comments, September 21, 2010) Board staff even acknowledges the fact that it inadvertently omitted the BPJ rationale for the existing daily maximum limit of 75 mg/L." Id. The	--	--	Comments on the TSS effluent limitations are outside the scope of this limited comment period. Our September 21, 2010 letter transmitting the Revised Tentative WDRs to the City specifically stated that written submission pertained only to changes denoted by underline or strikethrough. Those changes related to the deletion of metals limits and the requirement for a Special Study; not changes to the TSS limits. Nevertheless, Regional Board staff believes it is necessary to address some of the allegations raised. First, the City's challenge to the existing TSS limit is untimely. The TSS daily maximum effluent limitation of 75 mg/L referenced was initially included in Order No. R4-2005-0016. That permit was issued by the Regional Board as part of the March 3, 2005 Consent Calendar. At that time, the City of Redondo Beach did not request further clarification regarding the modification in the TSS limit (including the rationale behind the modification), nor request any changes to the limit. In addition, the City never challenged any aspect of the 2005 permit in a petition to the State Water Resources Control Board. Accordingly, the TSS daily maximum limit of 75 mg/L is considered an existing limit. Although, upon renewal, the City may ask that the TSS limit be relaxed and provide sufficient support for that request, the City has the burden of showing that such a modification will not violate anti-backsliding and antidegradation requirements. To date, the City has not provided such data to the Regional Board.	To provide greater clarification, a more-specific finding regarding the basis for the TSS daily maximum limit has been added to the permit and Fact Sheet.

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		Board's Response does not, however, sufficiently explain the rationale for setting TSS limitation at 75 mg/L. The Response merely states that "BPJ is a method used to develop technology based NPDBS permit conditions using all reasonably available and relevant data. Authorization for BPJ limits is found under Section 402(a) (1) of the Clean Water Act and under 40 CFR 125.3." Board staff must provide a response that clearly explains how the TSS limitation of 75 mg/l is a result of its BPJ. It is not clear what the scientific basis was for reaching the conclusion that the TSS limitation should be 75 mg/L, as opposed to the original 150 mg/L limitation. Furthermore, the Board must cite and make available all the reasonably available and relevant data (as well as the specific page citations) it used to develop the TSS limitation. A mere passing mention of the Gold Book is not a sufficient explanation of the Board's BPJ rationale for the TSS limitation. (See attached statement from Dr. D.L. Marlin for further discussion on this issue.) The City respectfully requests copies of all documents and data, with citations to such documents, that Board staff used to conclude that the TSS limitation of 75 mg/L was indeed a result of its Best Professional Judgment and that such analysis was conducted **at the time** the limitation was originally decreased from 150 mg/L to 75 mg/L.			Second, the City has only recently questioned the limit (as part of the recent enforcement action taken against the City) and asserted that it was arbitrarily established. Regional Board staff disagree with this allegation. The TSS daily maximum limit specified in the 2005 Permit for Seaside Lagoon is correct. In its prior response to comments, Regional Board staff acknowledged that the Fact Sheet for that 2005 permit inadvertently omitted the basis for the daily maximum limit for TSS. It includes one reference for the TSS limit, an E, which references the existing permit. The permit, however, includes a limit for the monthly average and daily maximum concentrations for TSS. The monthly average limit (50 mg/L) was based on the existing permit. However, the daily maximum limit of 75 mg/L was based on best professional judgment (BPJ) in interpreting the narrative water quality objective in the Board's Water Quality Control Plan (Basin Plan). The agenda package for the 2005 permit, which was provided to and considered by the Board during the March 3, 2005 hearing, appropriately includes both references (i.e., the previous order reference for the monthly average TSS concentration and the BPJ reference for the daily maximum concentration). While staff acknowledge the inadvertent omission of the rationale in the Fact Sheet, the limit itself nevertheless remains valid. Staff developed the daily maximum effluent limit for TSS based on the narrative water quality objective included in the Basin Plan for Solid, Suspended, or Settleable Materials. That objective states "Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses." This narrative objective was translated into a numeric effluent limit in the City's 2005 permit. Since the Basin Plan does	

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		To date, the City has not been provided with any documents demonstrating that the original lowering of the TSS limitation "from 150 mg/L to 75 mg/L was intentional. Instead, the lowering of the TSS limitation appears to be arbitrary. The Ninth Circuit provided that in issuing permits on a case-by-case basis using its Best Professional Judgment, the "EPA does not have unlimited discretion in establishing permit effluent limitations. EPA's own regulations implementing this section enumerate the statutory factors that must be considered in writing, permits." *National Resources Defense Council, Inc. v. EPA,* 863 F.2d 1420, 1425 (9th Cir. *1988)(citing 40 C.F.R.§125.3(c). (d)* and 51 Fed. Reg at 24915 ("In developing the BPJ permit conditions, [the EPA] Regions are required to consider a number of factors, enumerated in [33 U.S.C. § 1314(b)]...."). The Ninth circuit also noted that, "[i]n addition, courts reviewing permits issued on a BPJ basis hold EPA to the same factors that must be considered 'in establishing the national effluent limitations." See, e.g, *Trustees of Alaska v. EPA*, 749,F.2d 549., 553 (9th Cir, 1984) (EPA must consider statutorily enumerated factors in its BPJ determination of effluent limitations). Accordingly, the Board should analyze each of the statutorily enumerated factors (including but net limited to 40 CF:R. § 125.3 and 33 U.S.C § '1314(b)) in the Board's BPJ determination of the TSS limitation. If such analysis has been completed, the Board's response should cite to			not contain a numeric objective for TSS, Regional Board staff looked to the U.S. Environmental Protection Agency's (USEPA) Quality Criteria for Water (known as the "Gold Book") as guidance. The Gold Book contains criteria for solids (suspended and settleable) and turbidity. In the Gold Book, USEPA notes that "In a study downstream from the discharge of a rock quarry where inert suspended solids were increased to 80 mg/L, the density of macroinvertebrates decreased by 60 percent...". This indicates that suspended solids concentrations of 80 mg/L in the receiving water resulted in adverse affects to aquatic life. Since the Gold Book indicates that TSS at a concentration of 80 mg/L yielded adverse effects to aquatic life, it was clear to Regional Board staff that the 150 mg/L limit include in the City's 2005 permit was not protective of the aquatic life beneficial use. In an effort to ensure that the impacts to the receiving water did not adversely impact the aquatic life in King Harbor, staff utilized its best professional judgment to establish the 75 mg/L concentration as the daily maximum effluent limit for the City's 2005 permit. BPJ is a method used to develop NPDES permit limits using all reasonably and available data. Authorization for BPJ limits is found under Section 402(a)(1) of the Clean Water Act and under 40 CFR 125.3. As described above, this analysis for TSS occurred in 2000. Subsequently, staff began to implement the 75 mg/L TSS concentration for the daily maximum limit in individual industrial permits as they were renewed. A number of similar permits include the TSS daily maximum limit of 75 mg/L, some of them were adopted as early as 2001. Staff has attached the following documentation regarding the basis of the TSS limit, as well as documentation that the limit has been implemented in other similar Orders.	

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		the specific documents (and the specific page numbers) that include such analysis. Currently, the record does not sufficiently document or explain the BPJ rationale for the TSS limitation.			1. Pages from the Bain Plan including the narrative criteria for solids. 2. Pages from the Gold Book with the analysis for Solids. 3. Limits Comparison Table from Item 9, Seaside Lagoon, March 9, 2005 Agenda Package 4. Stellar Biotechnologies, Order No. 01-075, Page 4 5. BP West Coast Products LLC, Order R4-2005-0065, Page F-28. 6. Al Larson Boat Shop, Order R4-2007-0030, Page 12.	
	4	The City continues to believe that the actions of the Regional Water Quality Control Board for the San Francisco Bay Region in connection with Order. No. 2006-0038 provide support for the idea that the Board should waive monitoring for compliance with TSS at Seaside Lagoon. (See also study entitled *"Evaluation of .the Accuracy and Reliability of EPA Test Method 160.2 to Measure Total Suspended Solids in Effluent from Marine Sand Processing Facilities, June 1, 2005")* In *fact, as* demonstrated by documentation previously submitted by the City in its original comments dated August 30, 2010, the concentrations of TSS in King Harbor are higher than the concentration in the discharge from Seaside Lagoon		X	Comments on the TSS effluent limitations are outside the scope of this limited comment period. Our September 21, 2010 letter transmitting the Revised Tentative WDRs to the City specifically stated that written submission pertained only to changes denoted by underline or strikethrough. Those changes related to the deletion of metals limits and the requirement for a Special Study; not changes to the TSS limits. Nevertheless, in response to assertions that the concentrations of TSS in Seaside Lagoon are lower than the concentrations in King Harbor, which provides the influent and is the receiving water for discharges from the Lagoon, staff has implemented intake credits for TSS discharges from the Lagoon. The intake credits essentially allow the Discharger to discharge up to the maximum concentration of TSS detected in the intake water. If the maximum TSS concentration detected in the intake water for that day is 80 mg/L, then the Discharger will be in compliance if discharges from the Lagoon on that day are 80 mg/L or less. Consequently, the City of Redondo	None required.

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					Beach will not be held accountable for the TSS concentrations in the intake water. Method 160.2 is the EPA approved method for analyzing TSS. This method is applicable to drinking, surface and saline waters. For samples with high dissolved solids, the filter must be thoroughly washed to remove dissolved material and to minimize potential interference.	
	5	Based on the foregoing, the City requests that the Board set the TSS limitation at 150 mg/L as was contained in the City's prior permit. At a minimum, the Board should set the TSS limitation at 120 mg/L as contained in the current Time 'Schedule Order ("TSO"), which the City understands will remain in effect until September of 2013.		X	See response to comment 3 above.	None required.
	6	**The City Is Unclear As To The Reference To A TSS Limitation Of 60 mg/L In The Fact Sheet** The Fact Sheet contains an average monthly effluent limitation for TSS of 60 mg/L. (Table F-6). The 2010 Order instead contains a level of 50 mg/L. (Table 6, p. 17.) The City requests clarification as to the reference to a TSS limitation of 60 mg/L in Table F-6 of the Fact Sheet.	X		The 60 mg/L TSS limit included in Table F-6 was a typographical error. The number has been updated to 50 mg/L which is the appropriate monthly average limitations.	Limit has been updated to read 50 mg/L.
	7	**The City Requests Clarification As To The Work Plan For Special Study**	X		The language proposed by the City does not differ significantly from the language staff has included in the permit except for the inclusion of TSS in the Special Study.	Language has been modified on

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		The City requests .a modification to language contained at section VI.C.2 related to a "Work Plan for Special Study),'(page 26), as well as the same language contained in E-11, F-23 and F-4D 'and any other places where such language occurs, as fellows: "2. Work Plan for Special Study, a. The City of Redondo Beach's Work Plan for the Seaside Lagoon is due to the Regional Water Board on February 7, 2011, for Executive Officer approval. The objective of the Work Plan is to refine data collection related to sampling location, timing and. other logistics in order to have the best data set for arsenic, cadmium, copper; nickel selenium, silver, thallium, zinc and total suspended solid (TSS) to determine reasonable potential, intake credits, and other permit provisions. Elements of the Work Plan are to include: • expanded monitoring program (weekly sampling at a minimum) for the metals list above and TSS in the influent and effluent • expanded sampling methods to include grab and composite sampling, • expanded sampling locations to include influent and effluent,			Staff agrees with the City's proposal to include TSS and has modified the language according.	Page F23. The language provided by the City was included on pages F-40 and E-11.

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		• examination of sampling and laboratory protocols to insure adequate QA/QC; • examination of variability of TSS as applied to intake credits."				
	8	E. Conclusion In conclusion, the City respectfully requests that the Board consider 'changing the TSS limitation contained in the 2010 Order The City Council discussed this matter at its meeting on September 21, 2010 and expressed distinct concerns about the current proposed TSS 'limitation of 75 mg/L.. As demonstrated by the recent Directive for Administrative Civil Liability sent to the City On September 15, 2010, the City is exposed. to significant penalties if the effluent from Seaside Lagoon exceeds the levels established in the 2010 Order. The City requests that the Board keep in mind the unique facility provided to the public at Seaside Lagoon., as well as the fact that Seaside Lagoon only operates three month's out of the year, thus limiting any alleged impacts to the environment.		X	Comments on the TSS effluent limitations are outside the scope of this limited comment period. Our September 21, 2010 letter transmitting the Revised Tentative WDRs to the City specifically stated that written submission pertained only to changes denoted by underline or strikethrough. Those changes related to the deletion of metals limits and the requirement for a Special Study; not changes to the TSS limits. However, the Los Angeles Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters, including aquatic life. Also see Response to Comments 1 and 3 above.	None required.
	9	The City notes that it has been provided with		X	Regional Board staff disagree with this assertion. As the	None

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		a scant four business days to comment on the revised version of the 2010 Order. This short time frame has prejudiced the City in that it was unable to fully analyze all of the issues presented and to obtain additional declarations from environmental professionals that might have been helpful in supporting the City's position herein.			City is fully aware, Regional Board staff released the Revised Tentative WDRs on September 21, 2010 for a limited public comment period in response to comments previously raised by the City concerning the metals limits. On September 20, 2010, representatives of the City and Regional Board staff met at the Regional Board office to discuss the City's comments. At that time, Regional Board staff informed the City that it agreed with its comments relating to the metals limits and that staff was going to delete the metals limits from the permit and require a Special Study. Also at that time, Regional Board staff notified the City that staff was going to release the new changes for a short and limited public comment period. Since the changes were made in response to comments raised by the City, such a public comment period was not legally required as they were a logical outgrowth of comments received. Nevertheless, as a courtesy, Regional Board staff released the Revised Tentative WDRs for a one-week limited comment period so that the City and other interested persons had the opportunity to review and comment on the changes. Our September 21, 2010 letter transmitting the Revised Tentative WDRs to the City specifically stated that written submission pertained only to changes denoted by underline or strikethrough. Those changes related to the deletion of metals limits and the requirement for a Special Study; not changes to the TSS limits. Since there were only a few changes, and most of the changes were what the City had requested, Regional Board staff believes that the City did have time to fully analyze the changes and does not agree that the City was prejudiced in any way. Further, as noted above, comments on the TSS effluent limitations are outside the scope of this limited comment period. Thus, the City's inability to obtain additional	required.

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					declarations from environmental professionals concerning the TSS limit (such as the one submitted by D.L. Marrin, Ph.D.) would have been outside the scope of this limited comment period. Of course, the City is free to make oral comments on TSS at the hearing on this matter and may bring environmental professionals it feels could support its position.	

EXHIBIT 4

redondo BEACH

Recreation and Community Services Department | 320 Knob Hill, Redondo Beach, California 90277, www.redondo.org | tel 310 318-0610, fax 310 316-6467

September 29, 2010

VIA MESSENGER

Mr. Samuel Unger, Executive Officer
Mr. Mazhar Ali
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Re: Comments on September 21, 2010 Revised Tentative Waste Discharge Requirements, City of Redondo Beach, Seaside Lagoon (NPDES No. CA0064297, CI No. 8034)

Dear Messrs. Unger and Ali:

The City of Redondo Beach (the "City") appreciates this opportunity to comment on the September 21, 2010 Revised Tentative Waste Discharge Requirements for the Seaside Lagoon in the City of Redondo Beach, Tentative Order No. R4-2010-xxxx, NPDES No. CA0064297 ("2010 Order"). The City also greatly appreciates the time the Regional Water Quality Control Board, Los Angeles Region (the "Board"), took to meet with representatives of the City on September 20, 2010.

While the City greatly appreciates the Board's revisions reflected in the September 21, 2010 version of the 2010 Order, the City continues to have serious concerns regarding the 2010 Order. Specifically, the City Council of the City of Redondo Beach has expressed serious concern that if there is no movement on the Total Suspended Solids ("TSS") limitations contained in the 2010 Order, it may not make sense for the City to spend its limited funds on the additional proposed Work Plan and Special Study, if closure of the Seaside Lagoon would be the end result of the adoption of the 2010 Order. We sincerely hope the Board will take our comments into consideration prior to adopting the new 2010 Order.

A. The City Requests That The Board Remove The Requirement To Monitor For Metals, Except As Set Forth In The Work Plan

The City appreciates that the Board deleted new effluent limitations for metals. Nevertheless, the 2010 Order still includes onerous requirements in Tables E-2, E-3 and E-4 that the City monitor for metals on a monthly basis **in addition to** the requirements set forth in section VI.C.2 related to a "Work Plan for Special Study".

The requirement for monitoring includes 1) antimony; 2) arsenic; 3) cadmium; 4) copper; 5) nickel; 6) selenium; 7) silver; 8) thallium; and 9) zinc ("Metals"). Requiring the City to conduct such monitoring would constitute a significant additional expense in addition to the monetary commitments the Board is requesting in connection with the Work Plan and Special Study pursuant to section VI.C.2. The City requests that the Board remove the requirement to monitor for such Metals, other than as required in the Work Plan and Special Study. If metals are included in the permit, this monitoring requirement would be added at that time.

B. The Board Has Not Provided Adequate Support For Setting The TSS Effluent Limitation At 75 mg/L

The Board is asking the City for a significant financial commitment in connection with the proposed Work Plan and Special Study contained at section VI.C.2 of the 2010 Order. The City remains concerned, however, about such an expensive undertaking when the TSS limitations on the permit will subject the City to significant penalties for noncompliance. This danger was demonstrated most recently in connection with the Notice of Violation and resultant Directive for Administrative Civil Liability sent to the City on September 15, 2010.

In the Board's Response to the City's Comments ("Response"), the Board asserts that the existing limits for TSS were based, among other things, on its "best professional judgment" ("BPJ"). (See page 13 of the Board's Response to Comments, September 21, 2010.) Board staff even acknowledges the fact that it "inadvertently omitted the BPJ rationale for the existing daily maximum limit of 75 mg/L." Id. The Board's Response does not, however, sufficiently explain the BPJ rationale for setting the TSS limitation at 75 mg/L. The Response merely states that "BPJ is a method used to develop technology-based NPDES permit conditions using all reasonably available and relevant data. Authorization for BPJ limits is found under Section 402(a)(1) of the Clean Water Act and under 40 CFR 125.3." Board staff must provide a response that clearly explains how the TSS limitation of 75 mg/L is a result of its BPJ. It is not clear what the scientific basis was for reaching the conclusion that the TSS limitation should be 75 mg/L, as opposed to the original 150 mg/L limitation.

Furthermore, the Board must cite and make available all the reasonably available and relevant data (as well as the specific page citations) it used to develop the TSS limitation. A mere passing mention of the Gold Book is not a sufficient explanation of the Board's BPJ rationale for the TSS limitation. (See attached statement from Dr. D.L. Marrin for further discussion on this issue.) The City respectfully requests copies of all documents and data, with citations to such documents, that Board staff used to conclude that the TSS limitation of 75 mg/L was

indeed a result of its Best Professional Judgment and that such analysis was conducted **at the time** the limitation was originally decreased from 150 mg/L to 75 mg/L. To date, the City has not been provided with any documents demonstrating that the original lowering of the TSS limitation from 150 mg/L to 75 mg/L was intentional. Instead, the lowering of the TSS limitation appears to be arbitrary.

The Ninth Circuit provided that in issuing permits on a case-by-case basis using its Best Professional Judgment, the "EPA does not have unlimited discretion in establishing permit effluent limitations. EPA's own regulations implementing this section enumerate the statutory factors that must be considered in writing permits." *National Resources Defense Council, Inc. v. EPA,* 863 F.2d 1420, 1425 (9th Cir. 1988) (citing 40 C.F.R. § 125.3(c), (d) and 51 Fed. Reg. at 24915 ("In developing the BPJ permit conditions, [the EPA] Regions are required to consider a number of factors enumerated in [33 U.S.C. § 1314(b)]...."). The Ninth Circuit also noted that, "[i]n addition, courts reviewing permits issued on a BPJ basis hold EPA to the same factors that must be considered in establishing the national effluent limitations." See, e.g., *Trustees for Alaska v. EPA*, 749 F.2d 549, 553 (9th Cir. 1984) (EPA must consider statutorily enumerated factors in its BPJ determination of effluent limitations). Accordingly, the Board should analyze each of the statutorily enumerated factors (including but not limited to 40 C.F.R. § 125.3 and 33 U.S.C § 1314(b)) in the Board's BPJ determination of the TSS limitation. If such analysis has been completed, the Board's response should cite to the specific documents (and the specific page numbers) that include such analysis. Currently, the record does not sufficiently document or explain the BPJ rationale for the TSS limitation.

The City continues to believe that the actions of the Regional Water Quality Control Board for the San Francisco Bay Region in connection with Order No. R2-2006-0038 provide support for the idea that the Board should waive monitoring for compliance with TSS at Seaside Lagoon. (See also study entitled "*Evaluation of the Accuracy and Reliability of EPA Test Method 160.2 to Measure Total Suspended Solids in Effluent from Marine Sand Processing Facilities, June 1, 2005*".) In fact, as demonstrated by documentation previously submitted by the City in its original comments dated August 30, 2010, the concentrations of TSS in King Harbor are higher than the concentration in the discharge from Seaside Lagoon.

Based on the foregoing, the City requests that the Board set the TSS limitation at 150 mg/L as was contained in the City's prior permit. At a minimum, the Board should set the TSS limitation at 120 mg/L as contained in the current Time Schedule Order ("TSO"), which the City understands will remain in effect until September of 2013.

C. The City Is Unclear As To The Reference To A TSS Limitation Of 60 mg/L In The Fact Sheet

The Fact Sheet contains an average monthly effluent limitation for TSS of 60 mg/L. (Table F-6.) The 2010 Order instead contains a level of 50 mg/L. (Table 6, p. 17.) The City requests clarification as to the reference to a TSS limitation of 60 mg/L in Table F-6 of the Fact Sheet.

D. The City Requests Clarification As To The Work Plan For Special Study

The City requests a modification to language contained at section VI.C.2 related to a "Work Plan for Special Study" (page 26), as well as the same language contained in E-11, F-23 and F-40 and any other places where such language occurs, as follows:

"2. Work Plan for Special Study.

a. The City of Redondo Beach's Work Plan for the Seaside Lagoon is due to the Regional Water Board on February 7, 2011, for Executive Officer approval. The objective of the Work Plan is to refine data collection related to sampling location, timing and other logistics in order to have the best data set for arsenic, cadmium, copper, nickel, selenium, silver, thallium, zinc and total suspended solid (TSS) to determine reasonable potential, intake credits, and other permit provisions. Elements of the Work Plan are to include:

- expanded monitoring program (weekly sampling at a minimum) for the metals list above and TSS in the influent and effluent,
- expanded sampling methods to include grab and composite sampling,
- expanded sampling locations to include influent and effluent,
- examination of sampling and laboratory protocols to insure adequate QA/QC;
- examination of variability of TSS as applied to intake credits."

E. Conclusion

In conclusion, the City respectfully requests that the Board consider changing the TSS limitation contained in the 2010 Order. The City Council discussed this matter at its meeting on September 21, 2010 and expressed distinct concerns about the current proposed TSS limitation of 75 mg/L. As demonstrated by the recent Directive for Administrative Civil Liability sent to the City on September 15, 2010, the City is exposed to significant penalties if the effluent from Seaside Lagoon exceeds the levels established in the 2010 Order. The City requests that the Board keep in mind the unique facility provided to the public at Seaside Lagoon, as well as the fact that Seaside Lagoon only operates three months out of the year, thus limiting any alleged impacts to the environment.

The City reserves all of its rights to assert arguments at the October 7, 2010 hearing on this matter. The City further intends to preserve all of its rights to challenge the 2010 Order, including, but not limited to, the matters set forth in this letter and the City's prior comment letter dated August 30, 2010, as well as all information presented orally at the hearing on this matter. The City notes that it has been provided with a scant four business days to comment on the revised version of the 2010 Order. This short time frame has prejudiced the City in that it was unable to fully analyze all of the issues presented and to obtain additional declarations from environmental professionals that might have been helpful in supporting the City's position herein.

The City is committed to working with the Board in order to achieve our mutual goals and looks forward to engaging in a constructive dialogue as to these issues at the October 7, 2010 hearing.

Very truly yours,

Maggie Healy
City of Redondo Beach

Attachments: Statement of Dr. D. L. Marrin

cc: Cassandra D. Owens, Chief Industrial Permitting Unit
David Hung

1269385-3

DECLARATION

Declaration

DECLARATION OF D. L. MARRIN, Ph.D.

1. I am a part-time employee of Dudek. I have personal knowledge of the facts set forth in this Declaration and, if called as a witness, could and would testify competently to such facts under oath.

2. I am a scientist, consultant, and former adjunct professor whose areas of expertise include biogeochemistry, marine/freshwater ecology, and the behavior of organic and inorganic pollutants in surface and ground water.

3. I hold degrees in the biological and environmental sciences from the University of California and in water resources from the University of Arizona.

4. As part of the revised National Pollution Discharge Elimination System ("NPDES") permit for Seaside Lagoon, the Regional Water Quality Control Board ("RWQCB") determined that its BPJ (best professional judgment) called for a discharge limitation of 75 mg/L for the daily maximum concentration of TSS.

5. In doing so, the RWQCB referenced the Environmental Protection Agency's ("EPA") Gold Book and, specifically, the need to protect benthic communities in the receiving water.

6. An earlier Red Book (to which the Gold Book refers with respect to TSS discharges) cites a 1970 study that documented a 60% decrease in benthic invertebrate populations downstream from a rock quarry when TSS concentrations exceeded 80 mg/L.

7. This 40 year-old study, which was conducted on a freshwater stream (as opposed to a coastal marine bay such as King Harbor), appears to serve as a criterion in setting the maximum daily TSS limit for effluent from Seaside Lagoon.

8. The fate and transport of suspended solids, as well as the sensitivity of benthic organisms to the setting of those solids, may be different in freshwater streams than in saltwater bays.

9. It is not clear whether more recent ecosystem-specific studies (i.e. those conducted in coastal bays or harbors) where considered in setting the TSS discharge limit.

10. Whereas variations in maximum daily TSS limits that have been set for other ocean outfalls in California appear to depend, in part, on the origin of the effluent (i.e., type of facility), the degree to which characteristics of the specific rece4iving waters and biota are conside3red in setting those maximum limits is more difficult to discern.

11. Utilizing the data from studies conducted in marine environments similar to those of King Harbor would seem to be important in setting TSS discharge limits for Seaside Lagoon.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 28th day of September, 2010.

D.L. Marrin Digitally signed by D.L. Marrin
DN: cn=D.L. Marrin, o, ou, email=dmarrin@dudek.com, c=US
Date: 2010.09.29 09:13:04 -07'00'

D. L. Marrin, Ph.D.

A

California Regional Water Quality Control Board

Los Angeles Region

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September 21, 2010

Maggie Healy, Acting Director
Recreation and Community Service Department
City of Redondo Beach
320 Knob Hill
Redondo Beach, CA 90277

Dear Ms. Healy:

RESPONSE TO COMMENTS AND REVISED TENTATIVE WASTE DISCHARGE REQUIREMENTS (WDR) – CITY OF REDONDO BEACH, SEASIDE LAGOON (NPDES NO. CA0064297, CI NO. 8034)

Our letter dated July 14, 2010, transmitted the revised-tentative Order for renewal of your permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES). Attached hereto is a Response to Comments Table, and revised version of the WDR. The major modifications incorporated are listed below:

1. Delete new effluent limitations for metals.
2. Include findings that describe the small data set, and the variability of the data. The finding also includes the framework that will be utilized to obtain additional data required to evaluate reasonable potential and the applicability of intake credits or other permit conditions as necessary.
3. Added a reopener that specifies that the permit will be reopened during the 1st quarter of 2013, March 31, 2013, at the latest, if the Special Study results necessitate changes to the permit.
4. Added a section to provide the framework for completion of the special study.

In accordance with administrative procedures, this Board at a public hearing to be held on October 7, 2010, at 9:00 A.M., at the City of Simi Valley, Council Chambers, 2929 Tapo Canyon Road, Simi Valley, California, will consider the enclosed revised tentative requirements and comments submitted in writing regarding any and all portions thereof. The Board will hear any testimony pertinent to this discharge and the revised tentative requirements. It is expected that the Board will take action at the hearing; however, as testimony indicates, the Board, at its discretion, may order further investigation.

Written submissions pertaining to this changes only, which are denoted by underline for additions and strikethrough for deletions) included in the revised tentative must be submitted to the Regional Board staff no later than 12:00 Noon. on September 29, 2010, in order to be evaluated by Board staff and included in the Board's agenda folder. Timely submittal of written

comments is encouraged to ensure that all comments are accurately and fully included in the administrative record, that Board staff is able to provide timely review, and that Regional Board members have sufficient time to give full consideration to the comments and issues raised. The Regional Board chair may exclude from the record written materials received after this date. (See Cal. Code Regs., tit. 23, § 648.4.)

If you have any questions, please contact Mazhar Ali at (213) 576-6652.

Sincerely,

Cassandra D. Owens, Chief
Industrial Permitting Unit

Enclosures

cc: See mailing list

MAILING LIST

Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
Mr. William Paznokas, Department of Fish and Game, Region 5
Department of Health Services, Sanitary Engineering Section
California State Parks and Recreation
California Coastal Commission, South Coast Region
Water Replenishment District of Southern California
Los Angeles County, Department of Public Works, Waste Management Division
Mr. Gary Yamamoto, DPH, Division of Drinking Water and Environmental Management
Mike Witzansky, Director, Dept. of Public Works, City of Redondo Beach
Mr. Mike Shay, City engineer, City of Redondo Beach
Dr. Mark Gold, Heal the Bay
Mr. Tom Ford, Santa Monica BayKeeper
Mr. David Beckman, Natural Resources Defense Council

B

Response to Comments

The City of Redondo Beach
Seaside Lagoon
Tentative Order No. R4-2010-XXXX
NPDES Permit No. CA0064297, CI No. 8034

#	Comment	Agree	Disagree	Reply	Action Taken
Letter dated August 30, 2010 from Ms. Maggie Healy, Acting Director – Recreation & Community Services, City of Redondo Beach					
1	The City requests a continuance of the October 7, 2010, hearing date and the opportunity to submit further comments based on additional testing. The City respectfully seeks one year to study the presence of heavy metals in influent and effluent water at Seaside Lagoon, particularly because the City's preliminary heavy metals monitoring results suggest that heavy metals levels in local ocean water far exceed the limits proposed in the 2010 Order.		X	The current permit (Order No. R4-2005-0016) expired on February 10, 2010. The terms and conditions of the current Order as per 40 CFR Part 122.6 remain in effect until the Regional Board adopts a new permit. The Regional Board is required to review and renew the permit in a timely fashion. Therefore, your request for continuance is denied. However, the permit has been revised to provide time to study metals concentrations in the influent and effluent. The study will provide the required data to determine reasonable potential and the applicability of intake credits or other permit conditions as necessary. The renewed permit may be re-opened on or before March 31, 2013 if data from this study justifies a change to the exiting	None necessary

#	Comment	Agree	Disagree	Reply	Action Taken
				permit.	
2	Heavy metals should not be included in the permit. The City is particularly concerned with the inclusion in the 2010 Order of effluent limitations for the following heavy metals: 1) arsenic; 2) cadmium; 3) copper; 4) nickel; 5) selenium; 6) silver; 7) thallium; and 8) zinc (hereinafter collectively referred to as "Heavy Metals"). These Heavy Metals have not historically been included in the Seaside Lagoon NPDES Permit.	X		The effluent limitations must protect the beneficial uses of the receiving water (King Harbor). The process of developing water quality criteria includes analysis of the contaminant concentrations detected to determine levels that are protective of human health and the environment. A Reasonable Potential Analysis (RPA), based on procedures outlined in the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) was conducted on the sampling data submitted by the City. The analysis of the data indicates reasonable potential for eight metals to cause or contribute to an exceedance of applicable water quality criteria. However, Regional Board staff acknowledges that the data set is very small, five data points. Since the data set is small and in most cases only one sample exceeded the applicable water quality criteria and there is uncertainty regarding the representativeness of the samples for conducting reasonable potential analysis, and calculating possible interim limitations and/or intake credits. Regional	Effluent limits for metals have been deleted from the permit. A requirement for the Work Plan is included in the revised-tentative WDR, MRP and the Fact Sheet.

#	Comment	Agree	Disagree	Reply	Action Taken
				Board staff agree that additional sampling is required. The revised tentative permit will be modified to include a requirement for the City of Redondo Beach to conduct a special study, initiated with the requirement for a work plan to be developed and submitted to the Regional Board for review and approval by the Executive Officer. After Executive Officer approval, the Discharger will implement the work plan. Reasonable Potential Analysis will be performed on the data submitted under the study to determine which metals, if any, require limitations as well as the possibility of intake credits or interim effluent limitations.	
2.a	Background regarding City's preliminary heavy metal testing. By way of background, there are four bodies of water that were the subjects of the City's preliminary monitoring: 1) Effluent that is discharged from the Seaside Lagoon; 2) Influent that is discharged into the Seaside Lagoon, 3) Ocean water that, during periods when the AES power plant is operating, provides the source of water for the Seaside Lagoon influent, and 4) King Harbor water that, during periods when the AES Power Plant is not operating, provides the	--	--	Since the issuance of the tentative permit the City of Redondo Beach has conducted additional sampling. The data, submitted as an attachment to the comments, continues to demonstrate considerable variability. Some of the graphs suggest that the Lagoon is actually removing metals from the intake water. Since the facility operations does not include any of treatment it is not likely that the use of the water in the Lagoon is resulting in a reduction in the amount of metals present.	None necessary.

#	Comment	Agree	Disagree	Reply	Action Taken
	source of water for the Seaside Lagoon influent. Samples were taken from the four locations two times per week from July 12, 2010 through August 27, 2010. Each of the four locations was sampled in the morning between 8:00 a.m. to 11:00 a.m. A fifth sample was taken from Location A in the afternoon approximately seven hours after the first sample. This sample was taken to compensate for the lag time between when water enters the lagoon and when it leaves the Lagoon.				
2.b	The Heavy Metals monitoring results, did not demonstrate that Seaside Lagoon was adding any Heavy Metals to the effluent. The monitoring results for concentrations of Heavy Metals in the Seaside Lagoon's influent and effluent indicate there is a substantial amount of temporal variability (i.e., standard deviations as high as 114% and 92% of the mean concentration for individual metals sampled in the influent and effluent, respectively). Not only did water samples collected from the same locations on different days frequently display large differences in metal concentrations, but effluent water samples	X		The procedures for determining the need for effluent limits is prescribed in Section 1.4.1 of the SIP. The monitoring data collected for metals showed temporal variability in the collected influent and effluent sample results. The water samples collected from the same locations on different days displayed large differences in metal concentrations and effluent samples collected at different times during the same day also displayed considerable variability. The City will be required to conduct additional sampling as part of a Special Study that will provide a more robust and representative data	See Response to Comment #2.

#	Comment	Agree	Disagree	Reply	Action Taken
	collected at different times during the same day also displayed considerable variability. This observation suggests that additional consideration of the sampling schedule is warranted. Further investigating the correlation between influent and effluent metal concentrations could reveal the timing of sample collection from the two locations that could be most accurately applied to influent credits when this method of complying with effluent limitations is applicable. In addition to the variability in metals concentrations observed for the Seaside Lagoon's influent and effluent water, the preliminary data indicate similar standard deviations for Heavy Metals sampled at shallow depths within King Harbor and overlying the AES Power Plant's ocean intake. Moreover, mean values for some of the Heavy Metals are higher in the harbor or ocean water than in either the Seaside Lagoon's influent or effluent water. This observation absolutely warrants further			set. The objectives of the Work Plan and the associated Special Study are to: 1. develop and implement an accelerated monitoring plan (weekly sampling, at a minimum) for measuring metals in the influent and effluent, 2. refine sampling protocols (grab versus composite) 3. refine data collection points, 4. refine data collection timing in order to have the best data set for determining reasonable potential, intake credits and other permit provisions, 5. examine sampling and laboratory protocols to insure adequate QA/QC. A focus on gathering more representative samples of the influent and effluent will provide some assurance that an accurate measure of the metal concentrations is occurring. The required Work Plan as specified in the Special Provisions Section of the MRP may include a component with composite sampling to average the detected metal concentrations over the entire discharge day.	

#	Comment	Agree	Disagree	Reply	Action Taken
	investigation			The need for effluent limitations for metals as well as the possible application of intake credits will be evaluated using the sampling results provided from the study. Statistical analyses will be performed on the monitoring data, and if necessary, the permit will be reopened for Board's consideration.	
2.c	Additional reasons for excluding heavy metals in the permit Pursuant to a previously issued TSO, in 2007, the City commissioned CDM to conduct a study identifying a cause of TSS exceedences in the Seaside Lagoon. This October 1, 2007 CDM report, concluded that effluent TSS was highly correlated with influent TSS and that the suspended solids were most likely dominated by inorganic particulates. The low turbidity and TOC levels measured in water samples supported their conclusion. Considering the tendency of metals to adsorb to particulate matter in the water column, it is possible that effluent Heavy Metals concentrations are similarly correlated with influent metals concentrations. As such,	- -	- -	Please see Response to Comment above for the need to collect additional data to characterize the discharge and to determine the best way to account for discharge variability. Effluent limits contained in NPDES permits have to be expressed as total metals. The CTR's preamble (Federal Register Volume 65, No. 97, Thursday, May 18, 2000, pg. 31690) states the fact that the U.S. EPA's NPDES regulations require limits in permits for metals to be expressed as total recoverable, clarifies why this is a scientifically preferable solution, refers to the use of metals translators and the U.S. EPA's metals translator guidance	See Response to Comment #2.

#	Comment	Agree	Disagree	Reply	Action Taken
	researching and documenting the concentrations of influent metals would seem to be an important prerequisite for setting effluent standards. At minimum, the 2010 Order should be revised to be limited to an analysis of only dissolved metal concentrations. The proposed effluent limitations call for the analysis of total recoverable metals, which includes both dissolved and particulate bound metals. As the particulate-bound metals are influenced by the variable TSS concentrations, dissolved metal concentrations may be a more stable indicator for monitoring purposes. Whereas both soluble and adsorbed metals have been shown to affect marine organisms, soluble metals are generally considered more bioavailable. This fact is yet another reason why the Regional Board should continue the October 7, 2010 hearing to allow for additional testing to determine whether the inclusion of Heavy Metals in the 2010 Order truly is warranted			document, and provides guidance for California Regional Water Quality Control Boards to use the metals translators. To conduct an RPA, effluent concentrations must be compared meaningfully to water quality objectives (WQOs). Since NPDES permit limits must be expressed as total recoverable metals, effluent data need to be expressed as total recoverable metals for compliance monitoring. Therefore, it is more efficient to convert the dissolved WQOs to total metals using appropriate translators, as described in Section 1.4.1 of the SIP.	
3	Evidence shows that TSS testing in saline environment is not reliable. The Regional Board should continue the			This comment references the general permit adopted by the San Francisco Regional Board, (Order No. R2-2008-0011) Discharges of	

#	Comment	Agree	Disagree	Reply	Action Taken
	October 7, 2010 hearing on the 2010 Order because evidence shows that TSS testing in a saline environment is not reliable because salinity interferes with the results. In Order No. R2-2006-0038, hereto, the Regional Water Quality Control Board for the San Francisco Bay region ("San Francisco Board") rescinded the waste discharge requirement for TSS from two NPDES permits (NPDES Permit Nos. CA0030139 and CA0030147) based on evidence (in a study entitled *"Evaluation of the Accuracy and Reliability of EPA Test Method 160.2 to Measure Total Suspended Solids in Effluent from Marine Sand Processing Facilities, June 1, 2005")* that showed that the analytical method for TSS is not reliable for saline samples because salinity interferes with the results. Based on the evidence, the San Francisco Board found that it was appropriate to waive monitoring for compliance of TSS not only in the General Permit for that particular discharger's facilities, but in other facilities that process sand from saline environments in the Bay Area region. TSS testing in a saline environment is not reliable because salinity interferes with the			Process Wastewater from Aggregate Mining, Sand Washing and Sand Offloading Facilities. Following is a description of the Marine Sand Washing operations and the Aggregate Mining Facilities described in that permit: "Sand dredged from various locations in San Francisco Bay is transported by barges and offloaded by conveyor belts to these facilities. Wet sand is stock piled at the facility on the ground or stored in settling ponds. The majority of the reclaimed sand is screened and sold for construction uses. Discharges from sand washing facilities normally consist of a combination of bay water that has drained from sand piles during drying and water used for sand washing. The discharged water has less TSS than the dredged water." The TSS requirement has been waived for these facilities. Aggregate Mining Facilities: "The San Francisco Regional Board general permit covers Aggregate Mining Facilities. These facilities are generally aggregate mining and processing facilities, which produce various grades of aggregates for construction." The monthly average TSS discharge limit included	

#	Comment	Agree	Disagree	Reply	Action Taken
	results. Accordingly, the TSS testing in Seaside Lagoon, King Harbor or the Pacific Ocean just outside Seaside Lagoon is also unreliable because Seaside Lagoon, King Harbor and the Pacific Ocean are saline environments. It behooves the Regional Board to further investigate this issue and reevaluate the requirement for TSS monitoring for saline environments such as the Seaside Lagoon and King Harbor.			in Order R2-2008-0011 is 30 mg/L which is more stringent than the TSS limit in the current Order (50 mg/L for monthly average) or the tentative permit. Within the comments the City referred to a report titled "*Technical Report, Evaluation of the Accuracy and Reliability of EPA Test Method 160.2 to Measure Total Suspended Solids (TSS) in Effluent from Marine Sand Processing Facilities*", prepared by Barry Keller (PhD, RG, CHG) in 2005 for Hanson Aggregates Marine Sand Processing Facilities (hereafter referred to as the Hanson Report). • The Report cited evaluates the precision and accuracy of the test method used on effluent from Hanson Aggregates sand washing facilities only. It did not evaluate the precision and accuracy of the test method with marine samples in general. There are statements throughout the report that clearly indicate this. In addition, the author refers to small particle size, in addition to salinity, as being a potential factor for variability. In the second paragraph on page 10, they loosely	

#	Comment	Agree	Disagree	Reply	Action Taken
				suggest that salinity may play a role; however, the study was not designed to isolate salinity as a variable. It would be inaccurate to apply the results of this study to marine samples in general. Furthermore, since physiochemical dissimilarities of sand washing effluent and Seaside Lagoon effluent may exist, the results of the Hanson study are not transferable to the Seaside Lagoon Facility. • As indicated in method 160.2, salinity is known to cause interference; however, extra filter washing can minimize the potential interference. The Hanson Report describes variability in filter washing techniques that occur among personnel and laboratories, which may cause high or low bias of results; however, this aspect of the method was not tested or evaluated and is therefore, theoretical. • When the San Francisco Regional Water Board waived the TSS monitoring in the General Permit for Aggregate Mining, Sand Washing, and Sand Offloading Facilities (R2-2008-011), it required the Facility to work towards developing an acceptable	

#	Comment	Agree	Disagree	Reply	Action Taken
				method for monitoring TSS in the Sand Washing effluents. The General Permit under Special Conditions, section C.10.d requires Hanson to conduct a special study to characterize TSS in the discharge using alternative methods and to develop filter rinsing protocols "*to remove dissolved solids to a level where Method SM2540 will yield TSS results reliable for use in permit compliance monitoring*". Regional Board staff does not believe that the Hanson study invalidates TSS monitoring of Seaside Lagoon effluent using Method 160.2.	
4	The proposed intake credits do not address the City's concerns. While the City appreciates the availability of intake water credits for pollutants that already exist in the intake water, unfortunately, the intake water credits do not sufficiently address the City's concerns regarding the feasibility of complying with the 2010 Order. The City's understanding of the intake credits is that if the influent water exceeds a given permit limitation, the City would only receive credit to the extent of the value of the influent. This means the City could not			The City was given intake credit to account for the concentration of TSS present in the intake water. The proposed study will provide information regarding the best sampling protocols, locations, and/or timing in order to have the best data set for determining the applicability of intake credits for TSS. In the interim, the Seaside Lagoon facility will be operating under a (Time Schedule Order) TSO that was issued on May 5, 2010. The TSO includes interim effluent limitations for TSS of 120 and 60 mg/L for daily maximum and monthly average limitations, respectively.	

#	Comment	Agree	Disagree	Reply	Action Taken
	contribute even one mg/L of a given pollutant to the effluent. This is especially alarming given that TSS testing in saline environments is highly variable and, thus, unreliable as a permit limit. In addition, the intake credit methodology does not allow for any variations in the Seaside Lagoon, King Harbor or the ocean. The intake credit should instead allow for credit for the City to discharge pollutants using an appropriate delta measurement (i.e., a measure of the proportional change between the influent water and the effluent) based on further study that accounts for water variability and testing method standard deviation. Seaside Lagoon is a unique body of water that requires practical solutions.			The definition of intake credit as it appears in Section 1.4.4of the SIP does not provide for the inclusion of a "delta measurement" in the compliance determination for the intake credit. If the contamination concentration in the intake water exceeds the water quality limitation, which is developed to protect the beneficial uses of the water body, there is no assimilative capacity of the water body for that contaminant. Consequently, it would be inappropriate to allow any discharger to discharge more of that contaminant to the water body. There is a potential for Seaside Lagoon to contribute to TSS loading from the trash and other pollutants disposed off by Lagoon users, as well as agitation of sediment from swimmers. A TSO was issued to the City that includes a requirement to develop and implement a work plan that provides the mechanism to come into compliance with the final TSS limits by September 13, 2013.	
5	The Regional Board mistakenly included the incorrect daily effluent limitations for TSS in		X	The TSS limits in the existing permit (Order No. R4-2005-0016) are correct and no mistake or	None necessary.

#	Comment	Agree	Disagree	Reply	Action Taken
	the 2005 (existing) permit The Regional Board mistakenly included an incorrect, higher daily effluent limitation for TSS in the 2005 Permit. The Fact Sheet in the 2005 Permit indicates that the Regional Board intended to set the daily effluent limitation for TSS at 150 mg/L. In the 2005 Fact Sheet, the Regional Board stated that TSS daily effluent limitation was "based on limitations specified in the City's existing permit." The existing permit's requirement for TSS was 150 mg/L, not 75 mg/L. Therefore, the City requests that the Regional Board correct the TSS effluent limitation from 75 mg/L to 150 mg/L, as set forth in the original permit. The City contends that the Regional Board made a technical mistake in the 2005 Permit by setting the TSS limitation at 75 mg/L, when the Fact Sheet indicates it should have been set at the then-existing level of 150 mg/L. It is precisely this type of typographical, technical mistake that permits the Board to modify the 2010 Order to correct the TSS effluent limitation back to 150 mg/L. More accurately, the City is not requesting a less stringent limitation for			typographical error was made. The existing permit and fact sheet are clear that the monthly average limitation is 50 mg/L and the daily maximum limitation is 75 mg/L. These existing limits were based on the TSS limits in the previous permit (Order No. 99-057) and best professional judgment (BPJ). The existing monthly average TSS limit was based on the previous permit and the daily maximum TSS value of 75 mg/L was based on best professional judgment (BPJ). Regional Board staff acknowledges that it inadvertently omitted the BPJ rationale for the existing daily maximum limit of 75 mg/L. Nevertheless, the existing daily maximum limit of 75 mg/L is correct and is specified in both the permit and the fact sheet. BPJ is a method used to develop technology-based NPDES permit conditions using all reasonably available and relevant data. Authorization for BPJ limits is found under Section 402 (a) (1) of the Clean Water Act and under 40 CFR 125.3. The Water Quality Control Plan Los Angeles Region includes narrative criteria for solid,	

#	Comment	Agree	Disagree	Reply	Action Taken
	TSS; it is merely asking for the Board to correct the typographical mistake in the 2005 Permit by setting the TSS effluent limitation back to the Regional Board's intended level of 150 *mg/L*.			suspended or settleable materials. The criteria read "Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses." The summary also indicates that excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish. The TSS daily maximum limitation of 75 mg/L included in the permit is based on the Gold Book and it is designed to protect benthic communities that live in and on the sediments on the floor of water bodies.	
6	The Regional Board is equitably estopped from imposing a TSS limitation of 75 mg/L Furthermore, because the 2005 Fact Sheet provided that the requirements for TSS were "based on limitations specified in the City's existing permit," the City relied, to its detriment, on the Regional Board's representation to this effect and believed itself to be complying with the 150 mg/L TSS limitation. Consequently, the Regional Board is now equitably estopped from imposing the 75 mg/L TSS limitation. Consequently, the		X	As noted in response to Comment 5 above, the TSS daily maximum limit of 75 mg/L is correct and was not the result of a mistake or typographical error. The 75 mg/L daily maximum limit is clearly specified in both the existing permit and fact sheet. Accordingly, the City's allegations concerning equitable estoppel are unfounded and inapplicable.	None necessary.

#	Comment	Agree	Disagree	Reply	Action Taken
	Regional Board is now equitably estopped from imposing the 75 mg/L TSS limitation. *See City of Long Beach v. Mansell*, 3 Cal. 3d 462,496-497 (1970) (California Supreme Court holding that the government may be bound by equitable estoppel): see also J.*H.McKnight Ranch, Inc. v. Franchise Tax* Board, 110 Cal.App. 4th 978, 991 (2003).				
	The 2010 tentative Order imposes requirements that are prohibitively expensive and burdensome The 2010 Order's requirements are prohibitively expensive and burdensome. This issue of the economic infeasibility of this 2010 Order is especially significant given the current economic recession, the effects of which have been extraordinarily difficult on local governmental agencies such as the City. In addition to the thousands of dollars spent on annual monitoring, the City has also spent substantial sums of money on Seaside Lagoon. For example, to comply with the 2007 TSO, the City spent approximately $158,000 on the Seaside Lagoon TSO Source Identification Report prepared by CDM		X	TSS and other specified limitations, including the monitoring requirements are for the protection of the beneficial uses of the receiving water (King Harbor). Discharge of pollutants that exceed the specified limitation in the proposed NPDES permit may cause or contribute to impairment of King Harbor and result in it's inclusion in the 303 (d) List. Three TSO's have been issued to the City (dating back to 2007) to provide the Discharger with time to come into full compliance with the final TSS limitations included in the permit. This permit also provides the requested time for the Discharges to design and conduct a study that will:	

#	Comment	Agree	Disagree	Reply	Action Taken
	(Exhibit D). Additionally, the City spent $30,000 on two separate conceptual studies regarding the feasibility of achieving zero discharge for Seaside Lagoon. The results of the studies indicated preliminary estimates of the costs to the City for a zero discharge facility in the approximate range of $8,000,000 to $12,000,000.			1. develop and implement an accelerated monitoring plan (weekly sampling, at a minimum) for measuring metals in the influent and effluent, 2. refine sampling protocols (grab versus composite) 3. refine data collection points, 4. refine data collection timing in order to have the best data set for determining reasonable potential, intake credits and other permit provisions, 5. examine sampling and laboratory protocols to insure adequate QACC. A focus on gathering more representative samples of the influent and effluent will provide some assurance that an accurate measure of the metal concentrations is occurring. The required Work Plan as specified in the Special Provisions Section of the MRP may include a component with composite sampling to average the detected metal concentrations over the entire discharge day.	

EXHIBIT 5

redondo BEACH

Recreation and Community Services Department

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Redondo Beach, California 90277
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August 30, 2010

VIA OVERNIGHT DELIVERY AND ELECTRONIC MAIL

Mr. Mazhar Ali
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, California 90013

Re: Comments on Revised Tentative Waste Discharge Requirements – City of Redondo Beach, Seaside Lagoon (NPDES No. CA0064297, CI No. 8034)

Dear Mr. Ali:

The City of Redondo Beach (the "City") appreciates this opportunity to comment on the Revised Tentative Waste Discharge Requirements for the Seaside Lagoon in City of Redondo Beach, Tentative Order No. R4-2010-xxxx, NPDES No. CA0064297 ("2010 Order"). As discussed below, the City has serious concerns regarding the legality and viability of carrying out the 2010 Order. We sincerely hope the Board will take our comments into consideration prior to adopting the new 2010 Order.

1. **THE CITY RESPECTFULLY REQUESTS A CONTINUANCE OF THE OCTOBER 7, 2010 HEARING DATE AND THE OPPORTUNITY TO SUBMIT FURTHER COMMENTS BASED ON ADDITIONAL TESTING**

The City requests a continuance of the October 7, 2010 hearing date for several reasons. Because there is currently a Time Schedule Order ("TSO") for Total Suspended Solids ("TSS") in effect until September 10, 2013, there is no urgency to conduct the October 7, 2010 hearing. For the reasons discussed in Section 2 directly below, the City respectfully seeks one year to study the presence of heavy metals in influent and effluent water at Seaside Lagoon, particularly because the City's preliminary heavy metals monitoring results suggest that heavy metals levels in local ocean water far exceed the limits proposed in the 2010 Order.

2. HEAVY METALS SHOULD NOT BE INCLUDED IN THE PERMIT

The City is particularly concerned with the inclusion in the 2010 Order of effluent limitations for the following heavy metals: 1) arsenic; 2) cadmium; 3) copper; 4) nickel; 5) selenium; 6) silver; 7) thallium; and 8) zinc (hereinafter collectively referred to as "Heavy Metals"). These Heavy Metals have not historically been included in the Seaside Lagoon NPDES Permit. It is premature to set maximum effluent concentrations for Heavy Metals without further investigation as to influent and effluent concentrations for Heavy Metals. Furthermore, there does not appear to be adequate data on the issue of Heavy Metals to determine whether it is appropriate to include metals in the permit at all.

A. Background Regarding City's Preliminary Heavy Metals Testing

City staff conducted preliminary monitoring for the eight Heavy Metals included in the 2010 Order. By way of background, there are four bodies of water that were the subjects of the City's preliminary monitoring: 1) Effluent that is discharged from the Seaside Lagoon; 2) Influent that is discharged into the Seaside Lagoon, 3) Ocean water that, during periods when the AES power plant is operating, provides the source of water for the Seaside Lagoon influent, and 4) King Harbor water that, during periods when the AES Power Plant is not operating, provides the source of water for the Seaside Lagoon influent.

The water quality of these four water bodies were analyzed by taking samples from four locations as shown on two plans, **Exhibits A and B** attached hereto. Location A, as shown on the Exhibits, samples the effluent that leaves the Seaside Lagoon just prior to entering King Harbor. The sample is taken from a vault located at the end of the 20 inch collector pipe and at the upper end of the discharge tunnel to end in King Harbor. Location B samples the influent that is pumped into the Seaside Lagoon. The samples are taken from a sampling valve that is located just downstream from the water supply pump that pumps water from the AES Power Plant outlet pipe to the Seaside Lagoon. Location C samples the ocean water just above the point where water enters the AES Power Plant inlet pipe. The sample is taken at a depth of approximately one foot. Location D samples the King Harbor water just above the point where water is discharged from the AES Power Plant outlet pipe. The sample is taken at a depth of approximately one foot.

Samples were taken from the four locations two times per week from July 12, 2010 through August 27, 2010. Each of the four locations was sampled in the morning between 8:00 a.m. to 11:00 a.m. A fifth sample was taken from Location A in the afternoon approximately seven hours after the first sample. This sample was taken to compensate for the lag time between when water enters the lagoon and when it leaves the lagoon.

Each sample was analyzed for Heavy Metals and TSS. In addition to the normal analysis described above, three samples were analyzed in triplicate.

B. Heavy Metals Monitoring Results

The Heavy Metals monitoring results, attached as **Exhibit C**, did not demonstrate that Seaside Lagoon was adding any Heavy Metals to the effluent. The monitoring results for concentrations of Heavy Metals in the Seaside Lagoon's influent and effluent indicate there is a substantial amount of temporal variability (*i.e.*, standard deviations as high as 114% and 92% of the mean concentration for individual metals sampled in the influent and effluent, respectively). Not only did water samples collected from the same locations on different days frequently display large differences in metal concentrations, but effluent water samples collected at different times during the same day also displayed considerable variability. This observation suggests that additional consideration of the sampling schedule is warranted.

Given the preliminary observations of temporal variability in the Heavy Metals concentrations detected in influent and effluent samples, more detailed analyses of current and future data (similar to those performed by CDM for TSS concentrations) may be important in selecting the values, or the range of values, that are set as effluent limitations for individual metals. Further investigating the correlation between influent and effluent metal concentrations could reveal the timing of sample collection from the two locations that could be most accurately applied to influent credits when this method of complying with effluent limitations is applicable.

In addition to the variability in metals concentrations observed for the Seaside Lagoon's influent and effluent water, the preliminary data indicate similar standard deviations for Heavy Metals sampled at shallow depths within King Harbor and overlying the AES Power Plant's ocean intake. Moreover, mean values for some of the Heavy Metals are higher in the harbor or ocean water than in either the Seaside Lagoon's influent or effluent water. This observation absolutely warrants further investigation, as the intent of the NPDES permit is to protect the receiving waters from degradation.

C. Additional Reasons For Excluding Heavy Metals In The Permit

Pursuant to a previously issued TSO, in 2007, the City commissioned CDM to conduct a study identifying a cause of TSS exceedences in the Seaside Lagoon. This October 1, 2007 CDM report, attached as **Exhibit D**, concluded that effluent TSS was highly correlated with influent TSS and that the suspended solids were most likely dominated by inorganic particulates. The low turbidity and TOC levels measured in water samples supported their conclusion. Considering the tendency of metals to adsorb to particulate matter in the water column, it is possible that effluent Heavy Metals concentrations are similarly correlated with influent metals concentrations. As such, researching and documenting the concentrations of influent metals would seem to be an important prerequisite for setting effluent standards.

The CDM report additionally cites yard drains and condensate as other possible contributors to TSS (expected to be correlated with particulate-bound metals) when the AES Power Plant is idle. The addition of anti-fouling agents or other chemicals by the active power plant could sporadically contribute metals to the lagoon influent. Also, water stagnating in the pipes is subject to evaporation, which would increase the concentration of TSS, metals, and any other non-volatile substance in the water. Investigating these variables, which may be partially or wholly responsible for the temporal variability in influent analyte concentrations, would require additional investigation.

Unlike BOD, oil and grease, temperature, bacterial indicators, and residual chlorine, the Seaside Lagoon's recreational use is unlikely to contribute Heavy Metals or other chemicals such as TCDD congeners, VOCs, or SVOCs that have been identified as analytes for compliance testing.

At minimum, the 2010 Order should be revised to be limited to an analysis of only dissolved metal concentrations. The proposed effluent limitations call for the analysis of total recoverable metals, which includes both dissolved and particulate-bound metals. As the particulate-bound metals are influenced by the variable TSS concentrations, dissolved metal concentrations may be a more stable indicator for monitoring purposes. Whereas both soluble and adsorbed metals have been shown to affect marine organisms, soluble metals are generally considered more bioavailable. This fact is yet another reason why the Regional Board should continue the October 7, 2010 hearing to allow for additional testing to determine whether the inclusion of Heavy Metals in the 2010 Order truly is warranted.

The City should only be responsible for those pollutants that Seaside Lagoon actually adds to the water. In other words, the City should not be responsible for exceedences attributable to the influent water. Our data does not suggest that Seaside Lagoon is the source of Heavy Metals in the effluent. To obtain more reliable data, at minimum, we request that the Regional Board exclude Heavy Metals from the 2010 Order and allow the City to conduct further studies for Heavy Metals.

3. EVIDENCE SHOWS THAT TSS TESTING IN A SALINE ENVIRONMENT IS NOT RELIABLE

The Regional Board should continue the October 7, 2010 hearing on the 2010 Order because evidence shows that TSS testing in a saline environment is not reliable because salinity interferes with the results. In Order No. R2-2006-0038, attached as **Exhibit F** hereto, the Regional Water Quality Control Board for the San Francisco Bay region ("San Francisco Board") rescinded the waste discharge requirement for TSS from two NPDES permits (NPDES Permit Nos. CA0030139 and CA0030147) based on evidence (in a study entitled "*Evaluation of the Accuracy and Reliability of EPA Test Method 160.2 to Measure Total Suspended Solids in Effluent from Marine Sand Processing Facilities, June 1, 2005*") that showed that the analytical method for TSS is not reliable for saline samples because salinity interferes with the results. Based on the evidence, the San Francisco Board found that it was appropriate to waive monitoring for compliance of TSS not only in the General Permit for that particular discharger's facilities, but in other facilities that process sand from saline environments in the Bay Area region.

TSS testing in a saline environment is not reliable because salinity interferes with the results. Accordingly, the TSS testing in Seaside Lagoon, King Harbor or the Pacific Ocean just outside Seaside Lagoon is also unreliable because Seaside Lagoon, King Harbor and the Pacific Ocean are saline environments. It behooves the Regional Board to further investigate this issue and reevaluate the requirement for TSS monitoring for saline environments such as the Seaside Lagoon and King Harbor.

In addition, as referenced earlier in this letter, pursuant to a previously issued TSO, the City commissioned CDM to conduct a study identifying a cause of TSS exceedences in the Seaside Lagoon. The CDM study, attached as **Exhibit D**, showed higher concentrations of TSS from King Harbor itself than the Seaside Lagoon's discharge effluent concentration. This evidence additionally supports the City's position that TSS testing is fundamentally unreliable.

Furthermore, as a matter of policy, the TSS requirements of the 2010 Order are unnecessarily restrictive. During the May 17, 2010 Regional Board Panel Hearing on Complaint No. R4-2008-0058-M to assess Mandatory Minimum Penalties against the City, even Heal the Bay requested that the Regional Board reconsider the penalties issued against the City of Redondo Beach for exceedences in TSS at Seaside Lagoon. Ms. Amanda Griesbach, a water quality microbiologist on behalf of Heal the Bay, stated that nothing could contribute to the increase in TSS other than possible sediment mixing from swimmers. The relevant portion of Ms. Griesbach's testimony from pages 81 and 82 of the May 17, 2010 Regional Board Panel hearing transcript is provided below:

"The penalties issued to the City of Redondo Beach for exceedences in total suspended solids at Seaside Lagoon should be reconsidered.

Seaside Lagoon directly pumps in seawater from King Harbor and chlorinates, dechlorinates, and then discharges back to the Harbor. Other than possible sediment mixing from swimmers, nothing in this process would contribute to an increase in TSS's.

A previously-issued TSO required the Discharger to conduct a study identifying a cause of TSS exceedences in the Lagoon. This study showed higher concentrations of TSS from the harbor itself than the Lagoon's discharge effluent concentration.

How can the Discharger be deemed responsible for contributing minimal amounts, if any, of TSS? I also noticed that the violations go back to 2003, which seems impractical to go back seven years, seeing the high turnaround rate of lab personnel and the inability to question the lab employees who actually handled and were recording these samples.

Heal the Bay's top priority lies with the protection of public health. Thus, we ask the Regional Board to focus on violations of chlorine and bacteria exceedences which may pose a public health risk. We ask the Regional Board to take these comments into consideration and focus more time on exceedences that directly affect public health. Thank you."

(**Exhibit G**, Pages 81-82 of May 17, 2010 Regional Board Panel Hearing Transcript.)

4. THE PROPOSED INTAKE CREDITS DO NOT ADDRESS THE CITY'S CONCERNS

While the City appreciates the availability of intake water credits for pollutants that already exist in the intake water, unfortunately, the intake water credits do not sufficiently address the City's concerns regarding the feasibility of complying with the 2010 Order. The City's understanding of the intake credits is that if the influent water exceeds a given permit limitation, the City would only receive credit to the extent of the value of the influent. **This means the City could not contribute even one mg/L of a given pollutant to the effluent.** This is especially alarming given that TSS testing in saline environments is highly variable and, thus, unreliable as a permit limit.

In addition, the intake credit methodology does not allow for any variations in the Seaside Lagoon, King Harbor or the ocean. The intake credit should instead allow for credit for the City to discharge pollutants using an appropriate delta measurement (*i.e.*, a measure of the proportional change between the influent water and the effluent) based on further study that accounts for water variability and testing method standard deviation. Seaside Lagoon is a unique body of water that requires practical solutions.

5. THE REGIONAL BOARD MISTAKENLY INCLUDED THE INCORRECT DAILY EFFLUENT LIMITATION FOR TOTAL SUSPENDED SOLIDS ("TSS") IN THE 2005 PERMIT

The Regional Board mistakenly included an incorrect, higher daily effluent limitation for TSS in the 2005 Permit. The Fact Sheet in the 2005 Permit indicates that the Regional Board intended to set the daily effluent limitation for TSS at 150 mg/L. In the 2005 Fact Sheet, the Regional Board stated that TSS daily effluent limitation was "based on limitations specified in the City's existing permit." (**Exhibit E**, Section 4 on page F-13 of 2005 Fact Sheet, CA0064297.) The existing permit's requirement for TSS was 150 mg/L, not 75 mg/L. Therefore, the City requests that the Regional Board correct the TSS effluent limitation from 75 mg/L to 150 mg/L, as set forth in the original permit.

It bears highlighting that the 2005 Fact Sheet confirms, **in two separate places**, that the TSS limitation should have been at the existing permit limitation level (150 mg/L). First, the first paragraph under Section 4 of page F-13 of the 2005 Fact Sheet provides: "The ***requirements in the proposed permit for TSS***, BOD oil and grease, turbidity, Fecal Coliform, Total Coliform, Enterococcus, and total residual chlorine (shown in the table below) ***are based on limitations specified in the City's existing permit***." (emphasis added). The second error occurs in the table, an excerpt of which we have recreated below, on the following page of the 2005 Fact Sheet on page F-14 (**Exhibit E**).

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Rationale
Total Suspended Solids	mg/L	50	75	*E*

Footnote 1 to the table provides that "E" stands for "existing permit limitation."

It seems highly unlikely that Regional Board would make two separate typographical errors indicating that the TSS effluent limitation was based on the existing permit limitation for 150 mg/L. The more likely explanation is that the Regional Board staff intended for the TSS limitation at the 2005 Permit renewal to be 150 mg/L and mistakenly typed in 75 mg/L instead of 150 mg/L.

Fortunately, the Regional Board has a regulatory remedy that allows it to correct its incorrect listing of TSS effluent limitation as 75 mg/L. 40 C.F.R. § 122.44(l)(i) provides for exceptions to the Clean Water Act's anti-backsliding requirement that all effluent limitations of a renewed or reissued permit must be at least as stringent as the effluent limitations in the previous Order. Specifically, 40 C.F.R. § 122.44(l)(i)(B)(2) provides that a permit may be modified to contain a less stringent effluent limitation applicable to a pollutant if the "Administrator determines that technical mistakes . . . were made in issuing the permit under section 402(a)(1)(b)."

The City contends that the Regional Board made a technical mistake in the 2005 Permit by setting the TSS limitation at 75 mg/L, when the Fact Sheet indicates it should have been set at the then-existing level of 150 mg/L. It is precisely this type of typographical, technical mistake that permits the Board to modify the 2010 Order to correct the TSS effluent limitation back to 150 mg/L. More accurately, the City is not requesting a less stringent limitation for TSS; it is merely asking for the Board to correct the typographical mistake in the 2005 Permit by setting the TSS effluent limitation back to the Regional Board's intended level of 150 mg/L.

6. THE REGIONAL BOARD IS EQUITABLY ESTOPPED FROM IMPOSING A TSS LIMITATION OF 75 MG/L

Furthermore, because the 2005 Fact Sheet provided that the requirements for TSS were "based on limitations specified in the City's existing permit," the City relied, to its detriment, on the Regional Board's representation to this effect and believed itself to be complying with the 150 mg/L TSS limitation. Consequently, the Regional Board is now equitably estopped from imposing the 75 mg/L TSS limitation. *See City of Long Beach v. Mansell*, 3 Cal. 3d 462, 496-497 (1970) (California Supreme Court holding that the government may be bound by equitable estoppel); *see also J.H. McKnight Ranch, Inc. v. Franchise Tax Board*, 110 Cal. App. 4th 978, 991 (2003).

7. THE 2010 TENTATIVE ORDER IMPOSES REQUIREMENTS THAT ARE PROHIBITIVELY EXPENSIVE AND BURDENSOME

The 2010 Order's requirements are prohibitively expensive and burdensome. This issue of the economic infeasibility of this 2010 Order is especially significant given the current economic recession, the effects of which have been extraordinarily difficult on local governmental agencies such as the City. In addition to the thousands of dollars spent on annual monitoring, the City has also spent substantial sums of money on Seaside Lagoon. For example, to comply with the 2007 TSO, the City spent approximately $158,000 on the Seaside Lagoon TSO Source Identification Report prepared by CDM (Exhibit D). Additionally, the City spent $30,000 on two separate conceptual studies regarding the feasibility of achieving zero discharge for Seaside Lagoon. The results of the studies indicated preliminary estimates of the costs to the City for a zero discharge facility in the approximate range of $8,000,000 to $12,000,000.

Furthermore, the Regional Board staff Power Point presentation showed potential penalties against the City in amounts totaling over $20 billion dollars ($20,000,000,000). (**Exhibit H**, Line 5, Page 31 of May 17, 2010 Panel Hearing Transcript.) In the May 17, 2010 Regional Board Panel Hearing on Complaint No. R4-2008-0058-M to assess Mandatory Minimum Penalties against the City, Mr. Russ Colby, an environmental scientist with the Regional Board's Enforcement Unit testified that the Seaside Lagoon's total maximum civil liability was over seven billion dollars ($7,000,000,000). (**Exhibit I**, Line 2, Page 46 of May 17, 2010 Panel Hearing Transcript.) The City simply cannot afford to be subject to such significant liabilities exceeding billions of dollars. It is absolutely critical that the Regional Board not adopt waste discharge requirements that set the City up for

inevitable failure, particularly when data results exist that show certain pollutants in local ocean water far exceed the limits proposed in the 2010 Order.

If the 2010 Order is adopted as proposed by Regional Board staff, it will be cost prohibitive for the City to comply with the 2010 Order. The unfortunate consequence will be that the excessive costs to comply with the 2010 Order likely will result in the City **permanently closing Seaside Lagoon**, a source of safe water recreation for a general public comprised of approximately 150,000 people annually, approximately 80% of which do not even reside in the City of Redondo Beach. Through the operation of Seaside Lagoon, the City of Redondo Beach provides a truly unique recreational service to the general public.

As the Regional Board well knows, the process of regulating stormwater discharges and reducing pollutants present in the waters of the United States is extremely complex. For this reason, any regulations purporting to address this problem must be developed only after extensive collaboration with the City of Redondo Beach and potentially the AES Power Plant.

As public agencies, all parties involved in the NPDES permitting process have the obligation to carry out their duties in a responsible, realistic, and reasoned manner. Requirements that tether public agencies to impractical positions are counterproductive and violate our sacred charge as representatives of the people. We urge the Regional Board to take practical measures in its efforts to improve water quality in the Southern California region.

The City is committed to working with the Regional Board in order to achieve our mutual goals and looks forward to engaging in a constructive dialogue with Regional Board staff on these issues. **I would appreciate it if you could please contact me to schedule a meeting prior to staff finalizing recommendations to the Regional Board.**

Very truly yours,

Maggie Healy
Acting Director
Recreation & Community Services

Attachments: Exhibits A-I

cc: Mr. Samuel Unger, Interim Executive Officer
Cassandra D. Owens, Chief Industrial Permitting Unit
David Hung, Chief Watershed Regulatory Section

Exhibit A

Exhibit A
Seaside Lagoon - Metals Monitoring
Sampling Location Plan

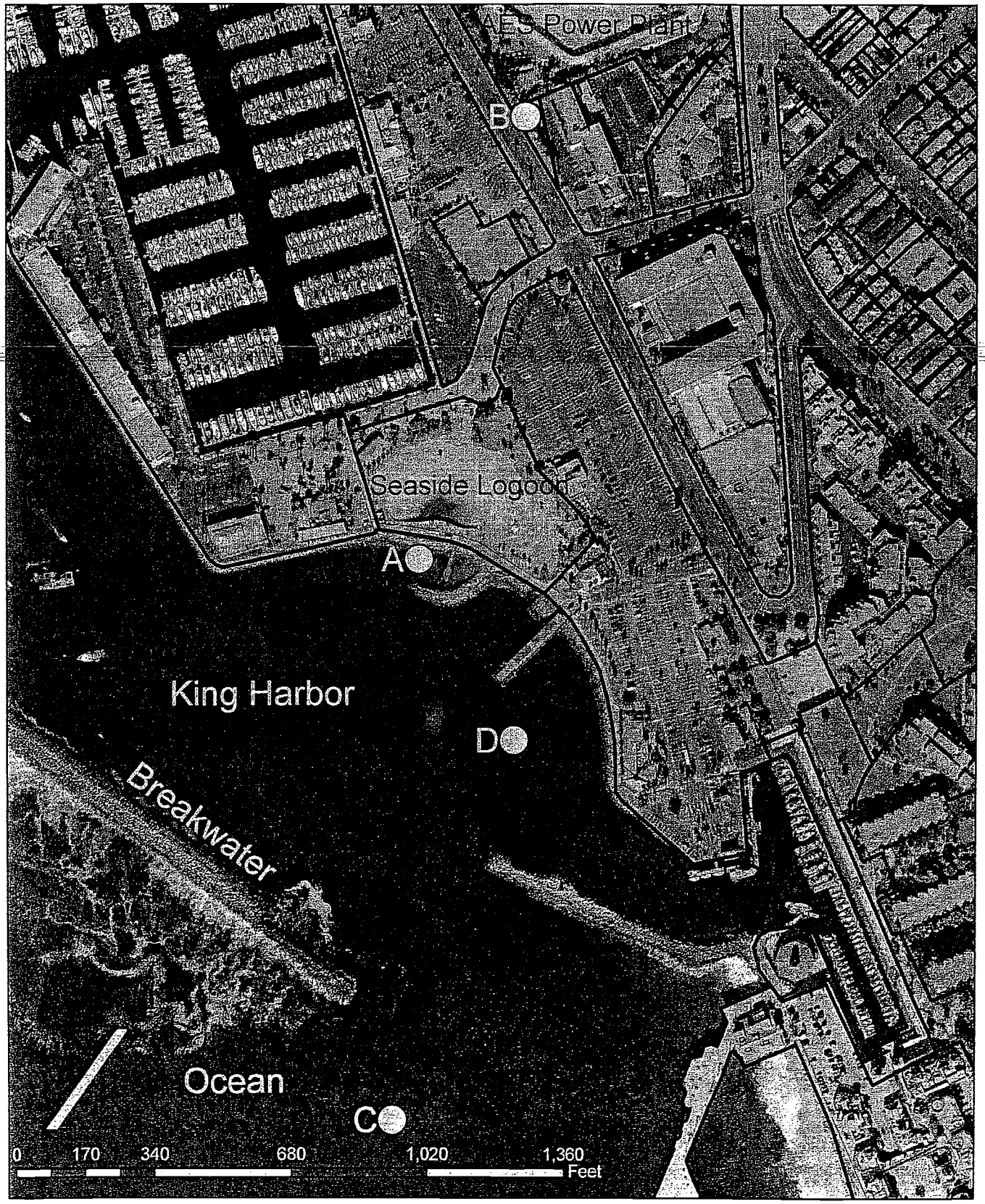


Exhibit B

EXHIBIT B

Seaside Lagoon - Metals Monitoring Sampling Location and Flow Schematic

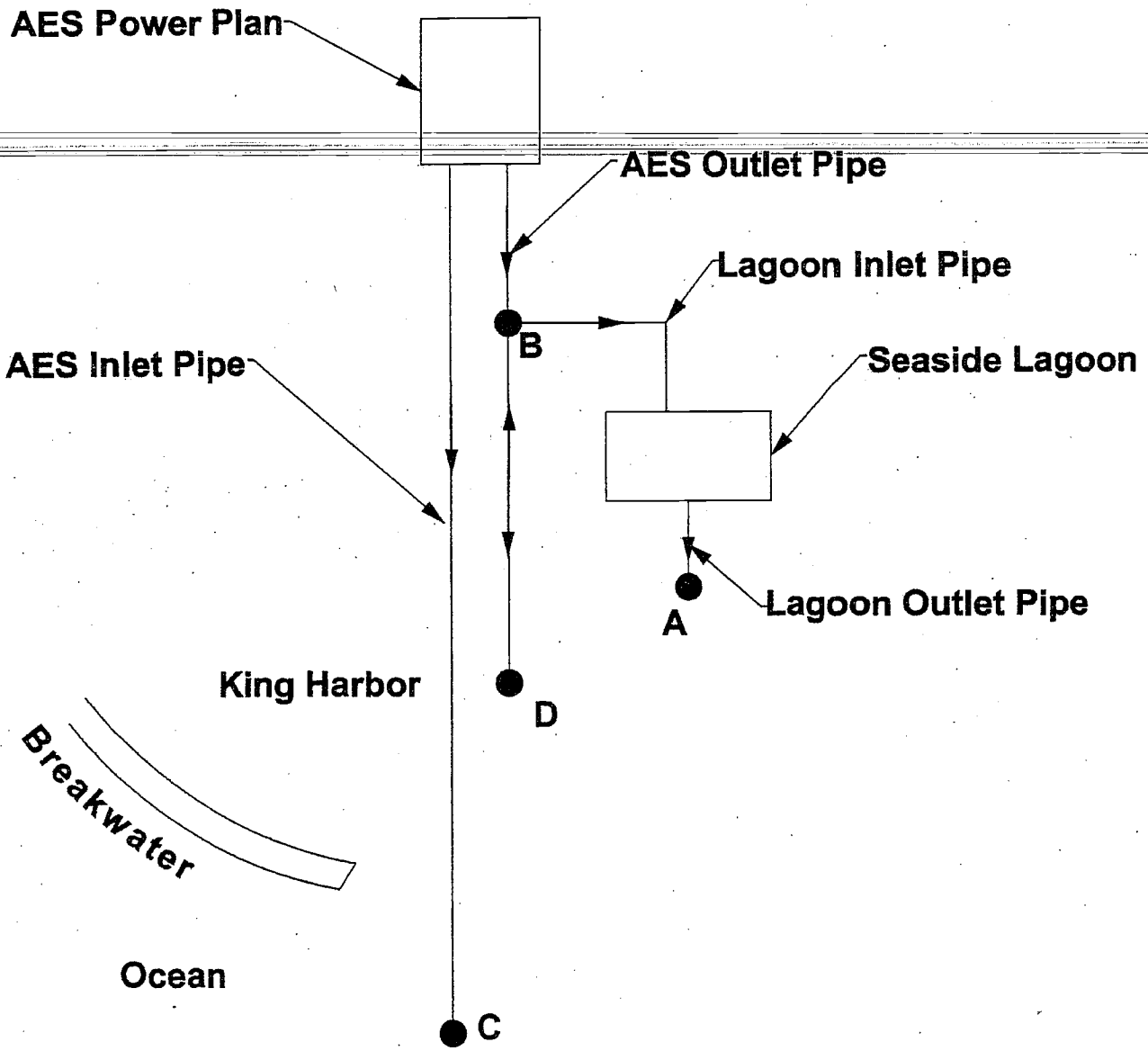


Exhibit C

Seaside Lagoon - Metal Monitoring
Analysis Results by Site

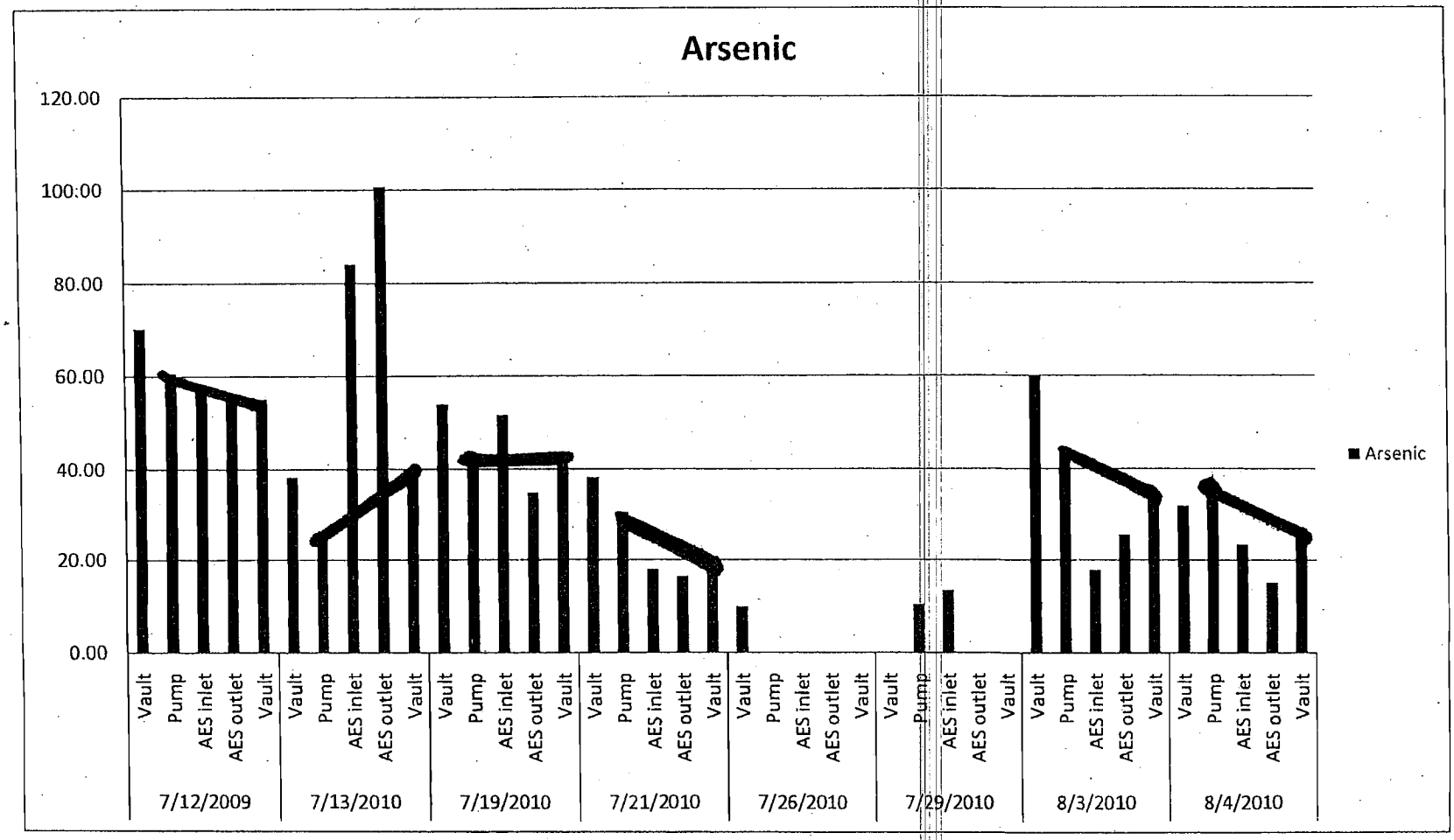
Date	Time	Location	Arsenic	Cadmium	Copper	Nickel	Selenium	Silver	Thallium	Zinc	TSS
7/12/2009	8:20 Vault	A	70.30	ND	31.45	10.30	ND	819.70	ND	308.42	28.00
7/13/2010	8:07 Vault	A	38.46	10.66	ND	ND	ND	695.30	ND	149.52	19.00
7/19/2010	10:20 Vault	A	54.12	ND	34.61	ND	ND	ND	ND	42.82	102.00
7/21/2010	8:30 Vault	A	38.36	ND	ND	12.26	ND	ND	ND	296.06	62.00
7/26/2010	8:41 Vault	A	10.00	ND	17.31	ND	ND	153.60	ND	186.08	55.00
7/29/2010	8:26 Vault	A	ND	ND	19.27	ND	ND	82.10	ND	142.95	64.00
8/3/2010	8:32 Vault	A	59.82	ND	ND	ND	ND	244.90	ND	338.48	63.00
8/4/2010	8:20 Vault	A	31.96	ND	ND	ND	ND	108.00	ND	332.31	79.00
8/11/2010	9:05 Vault	A	ND	ND	93.03	ND	129.10	ND	ND	240.20	86.00
		Average	43.29	10.66	39.13	11.28	129.10	350.60		226.32	62.00
		Standard Deviation	20.02		31.04	1.39		322.43		102.32	26.28
7/12/2010	8:34 Pump	B	60.67	ND	13.48	ND	ND	770.10	ND	60.52	38.00
7/13/2010	8:22 Pump	B	26.24	ND	ND	10.69	ND	742.40	ND	132.64	33.00
7/19/2010	10:00 Pump	B	42.56	ND	25.78	ND	ND	ND	ND	77.06	80.00
7/21/2010	8:37 Pump	B	30.69	ND	ND	ND	ND	ND	ND	101.98	57.00
7/26/2010	8:55 Pump	B	ND	ND	13.76	ND	ND	121.70	ND	170.84	48.00
7/29/2010	8:32 Pump	B	10.49	ND	21.03	ND	ND	74.20	ND	193.57	65.00
8/3/2010	8:38 Pump	B	44.35	ND	ND	ND	ND	198.40	ND	149.27	45.00
8/4/2010	8:28 Pump	B	36.27	ND	ND	ND	ND	74.00	ND	146.89	41.00
8/11/2010	9:22 Pump	B	20.70	ND	82.96	ND	71.04	16.21	ND	177.88	52.00
		Average	34.00		31.40	10.69	71.04	285.29		134.52	51.00
		Standard Deviation	15.57		29.28			326.58		45.96	14.63
7/12/2010	9:03 AES inlet	C	57.26	10.75	ND	10.47	ND	702.80	ND	42.86	29.00
7/13/2010	8:40 AES inlet	C	84.19	ND	ND	ND	ND	715.50	ND	46.06	37.00
7/21/2010	8:45 AES inlet	C	18.01	ND	16.28	ND	ND	ND	ND	577.24	63.00
7/26/2010	9:10 AES inlet	C	ND	ND	ND	ND	ND	64.60	ND	118.49	62.00
7/29/2010	8:48 AES inlet	C	13.46	ND	19.89	ND	ND	75.30	ND	1037.03	54.00
8/3/2010	8:59 AES inlet	C	17.95	ND	ND	ND	ND	128.70	ND	141.72	37.00
8/4/2010	8:43 AES inlet	C	23.33	ND	ND	8.30	ND	133.80	ND	828.58	35.00
8/11/2010	9:48 AES inlet	C	ND	ND	46.16	ND	75.24	ND	ND	178.30	32.00
		Average	35.70	10.75	27.44	9.39	75.24	303.45		371.29	43.63
		Standard Deviation	28.61		16.31	1.53		315.50		389.55	13.79

Seaside Lagoon - Metal Monitoring
Analysis Results by Site

7/12/2010	9:03	AES outlet	D	54.75	11.09	ND	ND	ND	699.40	ND	62.86	29.00
7/13/2010	8:40	AES outlet	D	100.75	20.91	45.56	10.49	ND	649.00	ND	106.18	15.00
7/19/2010	9:40	AES outlet	D	34.96	ND	ND	ND	ND	ND	ND	67.68	50.00
7/21/2010	8:42	AES outlet	D	16.55	ND	ND	ND	ND	ND	ND	82.28	55.00
7/26/2010	9:07	AES outlet	D	ND	ND	ND	ND	ND	104.50	ND	268.12	51.00
7/29/2010	8:45	AES outlet	D	ND	ND	19.52	ND	ND	93.50	ND	98.55	39.00
8/4/2010	8:40	AES outlet	D	15.21	ND	ND	ND	ND	93.10	ND	129.49	52.00
8/11/2010	9:45	AES outlet	D	ND	ND	42.31	ND	94.29	ND	ND	173.49	23.00
			Average	44.44	16.00	35.80	10.49	94.29	327.90		123.58	39.25
			Standard Deviation	35.35	6.94	14.19			316.66		68.52	15.22
7/12/2010	14:56	Vault	A	55.17	11.59	ND	ND	ND	711.00	ND	59.71	25.00
7/13/2010	14:26	Vault	A	40.02	14.16	25.15	ND	ND	722.70	ND	76.36	48.00
7/19/2010	15:09	Vault	A	43.27	ND	13.65	ND	ND	ND	ND	143.18	67.00
7/21/2010	15:09	Vault	A	20.86	ND	ND	12.31	ND	ND	ND	151.10	6.00
7/26/2010	14:45	Vault	A	ND	ND	ND	ND	ND	91.90	ND	151.00	59.00
7/29/2010	14:30	Vault	A	ND	ND	15.40	ND	ND	66.80	ND	379.04	51.00
8/3/2010	15:23	Vault	A	34.16	ND	ND	33.75	ND	116.70	ND	556.98	86.00
8/4/2010	15:47	Vault	A	26.23	ND	ND	13.20	ND	109.10	ND	924.40	56.00
			Average	36.62	12.88	18.07	19.75		303.03		305.22	49.75
			Standard Deviation	12.35	1.82	6.20	12.13		321.02		302.06	24.69

Seaside Lagoon - Metal Monitoring
Triplicate Sample Analysis

Date	Time	Location	Arsenic	Cadmium	Copper	Nickel	Selenium	Silver	Thallium	Zinc
8/9/2010	8:49 Vault	A	ND	ND	39.87	ND	78.70	33.32	ND	33.93
8/9/2010	8:49 Vault	A	ND	ND	20.13	ND	75.61	ND	ND	31.39
8/9/2010	8:49 Vault	A	ND	ND	15.27	ND	82.48	ND	ND	52.42
Average					25.09		78.93			39.25
Standard Deviation					13.03		3.44			11.48
8/9/2010	9:06 Pump	B	ND	ND	104.77	ND	70.50	ND	ND	45.58
8/9/2010	9:06 Pump	B	ND	ND	105.51	ND	71.89	ND	ND	38.00
8/9/2010	9:06 Pump	B	ND	ND	105.77	ND	74.15	ND	ND	32.84
Average					105.35		72.18			38.81
Standard Deviation					0.52		1.84			6.41
8/9/2010	16:13 Vault	A	ND	ND	ND	74.95	ND	ND	ND	43.35
8/9/2010	16:13 Vault	A	ND	ND	ND	81.24	ND	ND	ND	24.97
8/9/2010	16:13 Vault	A	ND	ND	ND	69.11	ND	ND	ND	19.24
Average						75.10				29.19
Standard Deviation						6.07				12.60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80.00
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0.00
Vault
Pump
AES inlet
AES outlet
Vault
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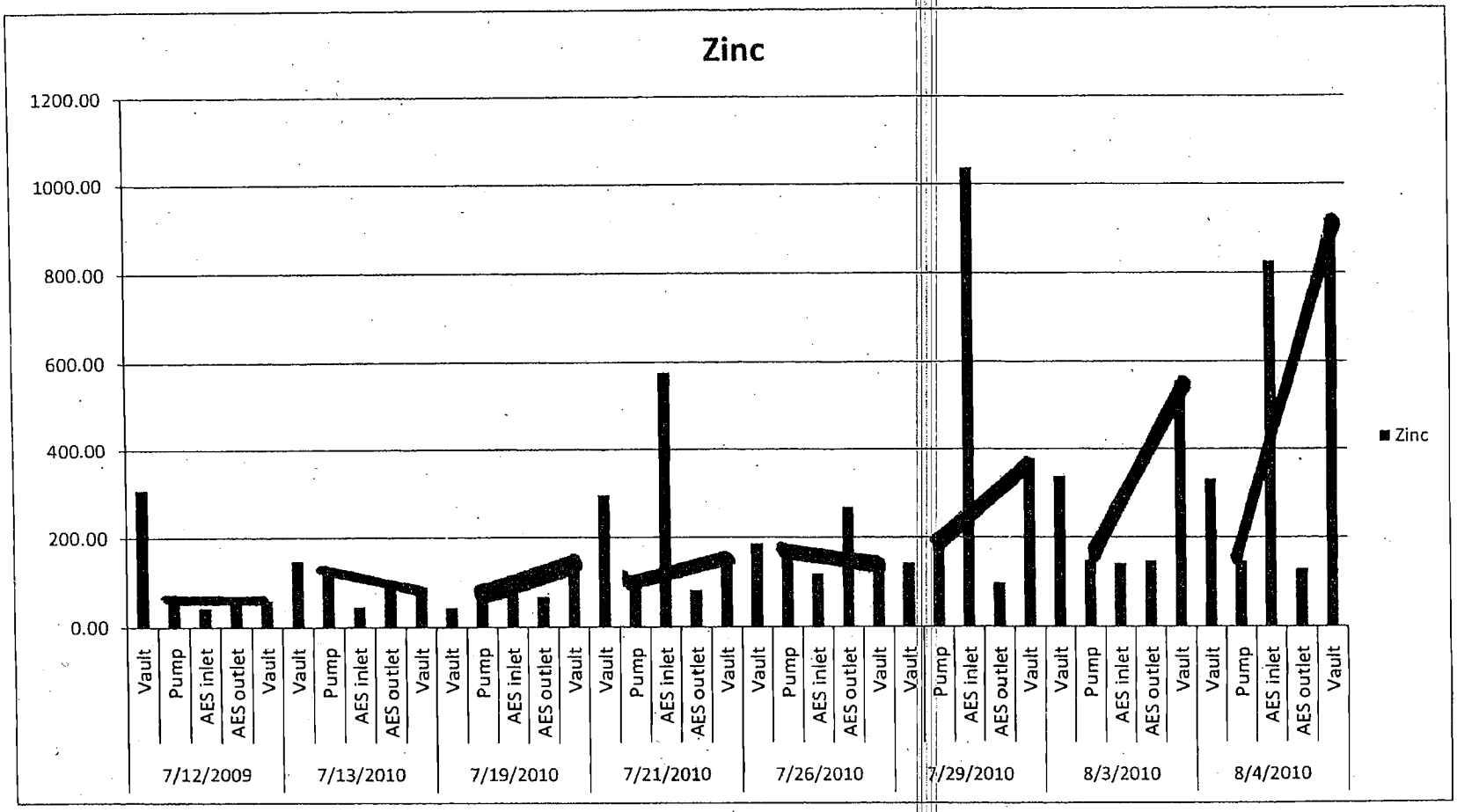
7/13/2010
7/19/2010
7/21/2010
7/26/2010
7/29/2010
8/3/2010
8/4/2010
Arsenic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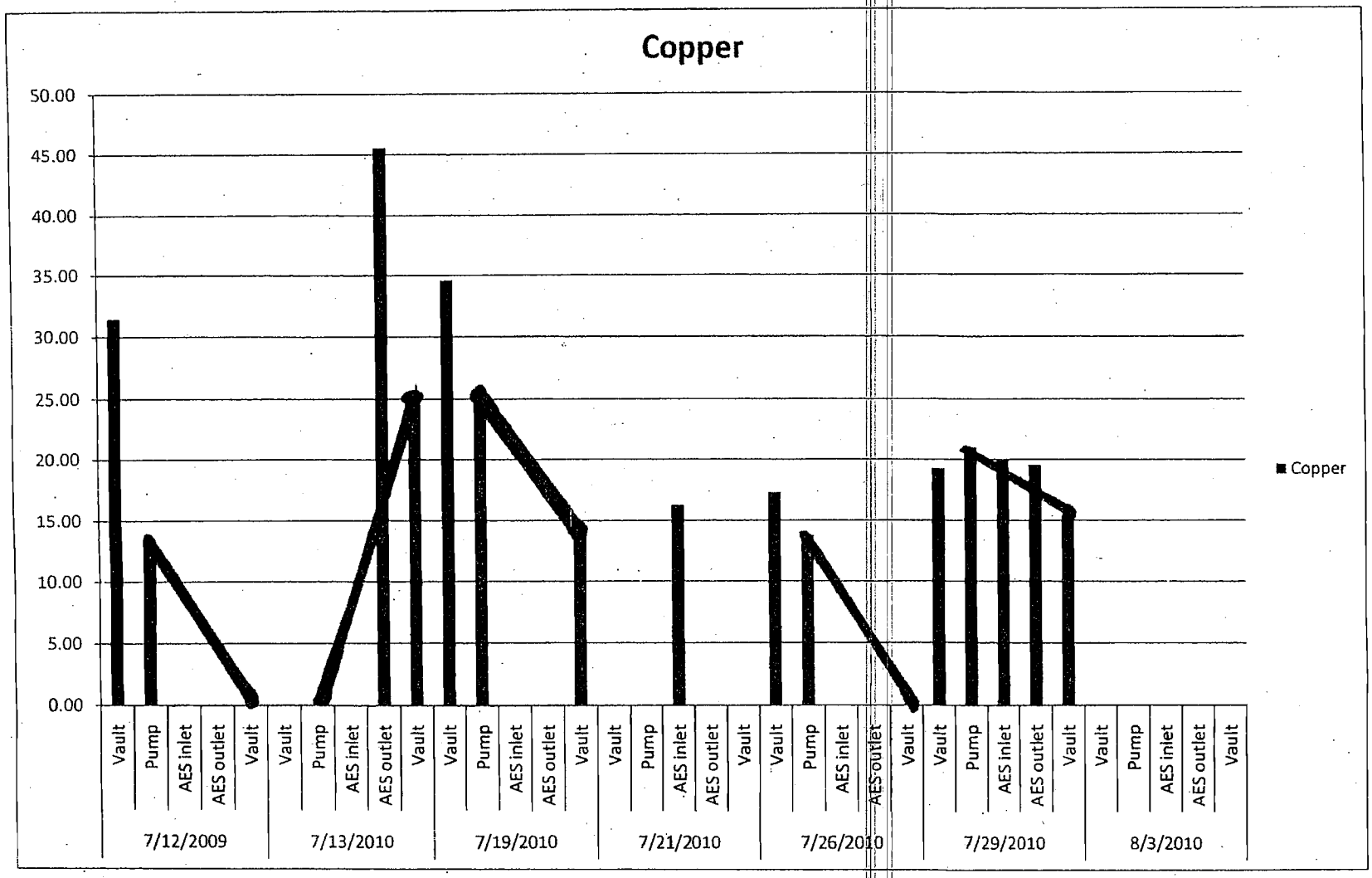
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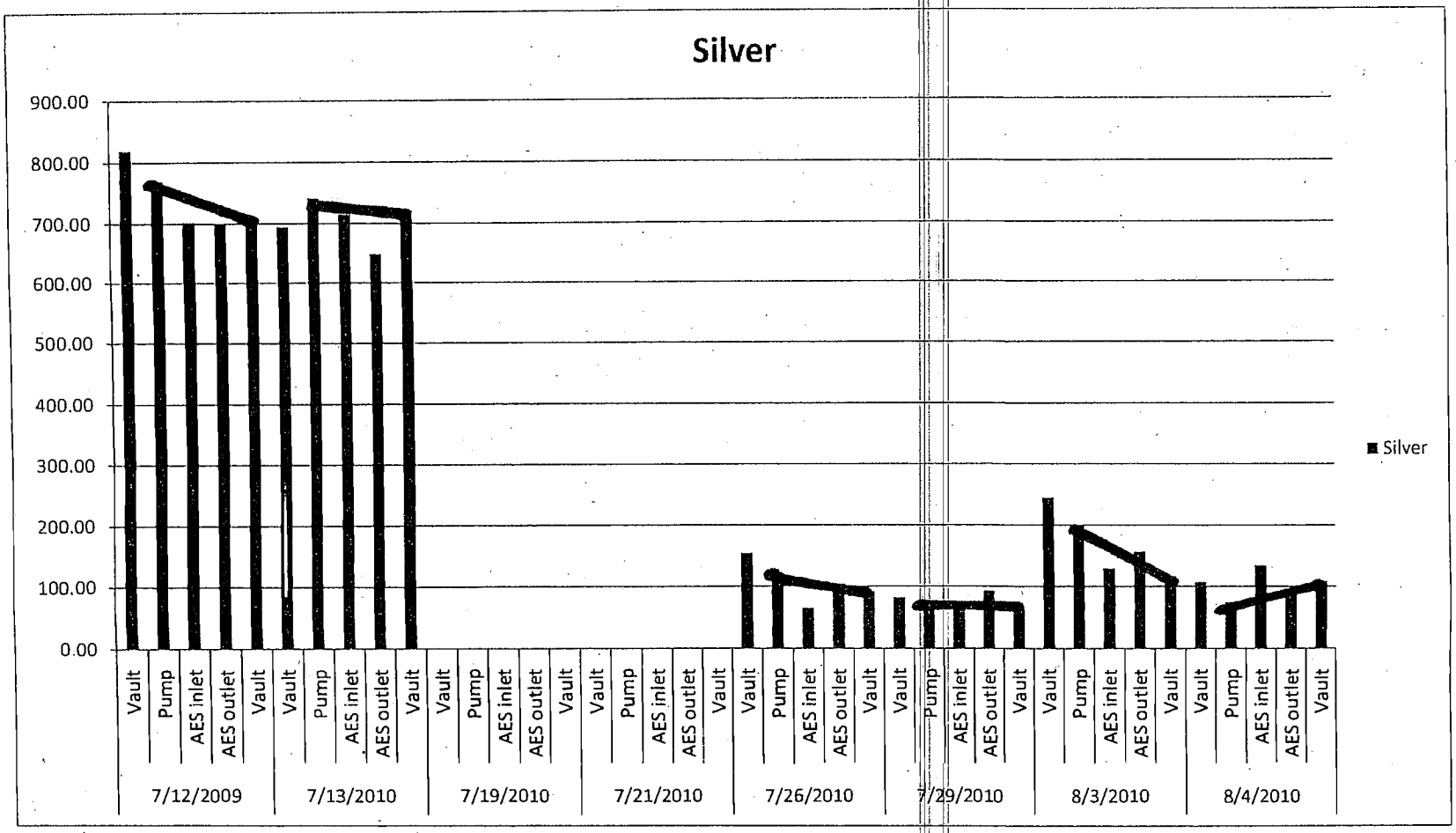
8/3/2010
Copper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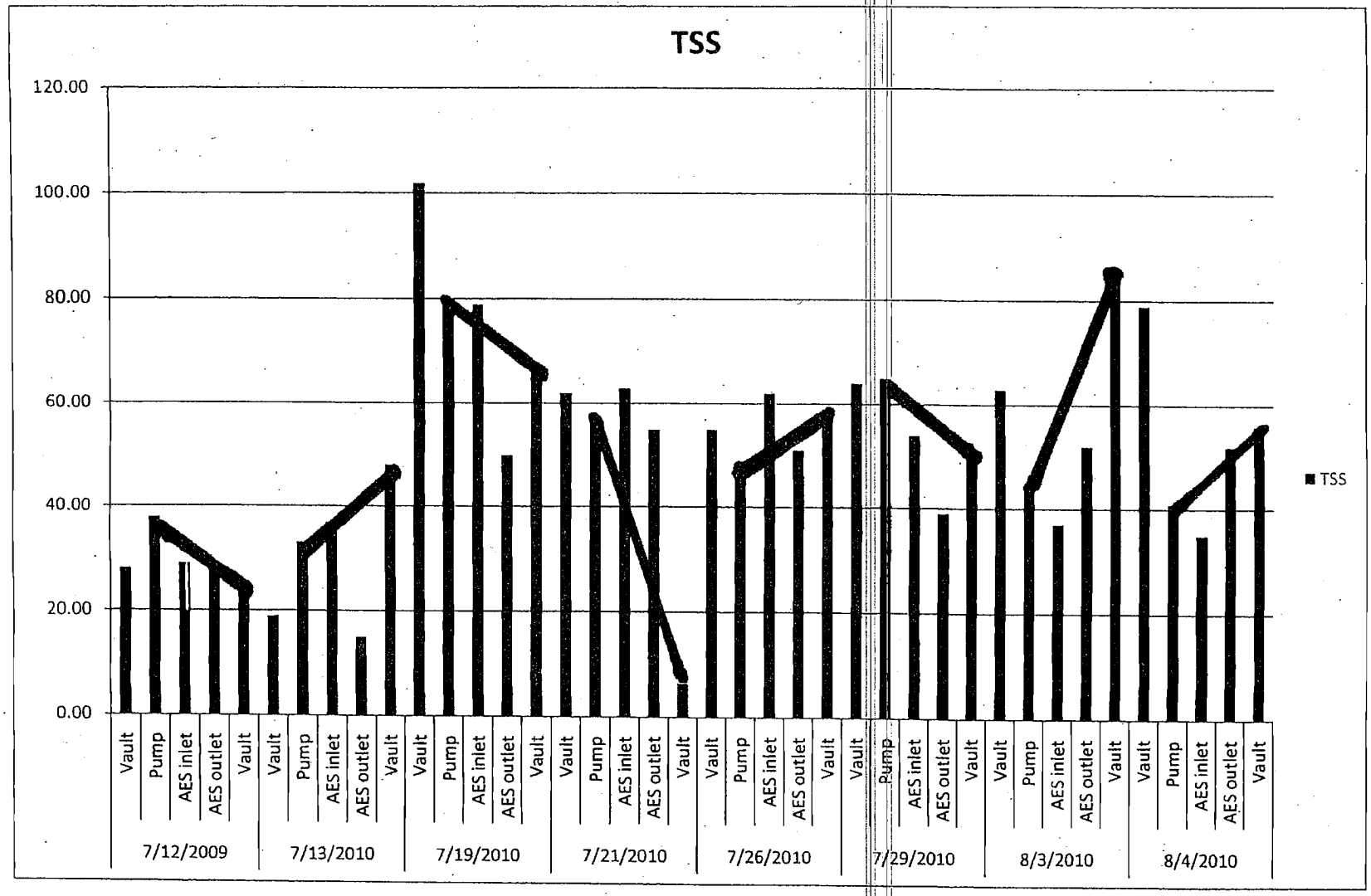
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0.00
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Pump
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AES outlet
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7/13/2010
7/19/2010
7/21/2010
7/26/2010
7/29/2010
8/3/2010
8/4/2010
TSS

Exhibit D

City of Redondo Beach

Seaside Lagoon
TSO Source Identification Report

October 1, 2007

Submitted to:

Regional Water Quality Control Board
Los Angeles Region

Prepared by: CDM

CDM

City of Redondo Beach – Seaside Lagoon TSO Source Identification Report – Draft

Contents

Executive Summary

This Source Identification Report (SIR) is prepared as part of a comprehensive effort undertaken by the City of Redondo Beach to identify potential sources of recent high BOD and TSS concentrations in the Seaside Lagoon effluent and to evaluate options to bring the effluent quality back in compliance with the applicable NPDES permit, consistent with the terms of Time Schedule Order (TSO) No. R4-2007-0024 dated April 26, 2007 issued by the California Regional Water Quality Control Board (RWQCB) - Los Angeles Region.

A Monitoring Plan intended to identify potential sources was prepared and implemented as the first step in this effort. Samples were collected at seven different sampling locations representing influent to the lagoon, water quality within the lagoon, effluent from the lagoon, and background water quality at two locations in the harbor. BOD, COD, TSS, VSS, turbidity, total and fecal coliform, DO, temperature, pH, chlorine residual, TOC, and/or SEM-EDX analyses were performed on one or more of these samples at various frequencies over the lagoon's summer 2007 operating period (Memorial day through Labor day).

Results indicate that BOD and COD concentrations in influent as well as effluent are very low, with effluent BOD well within the monthly average permit limit of 20 mg/L. These readings indicate low organic content, which is corroborated by low TOC and VSS concentrations. Effluent coliform and chlorine residuals were also well within permit limits during this period. Preliminary results indicated that effluent TSS was the only parameter that exceeded the monthly average permit limit of 50 mg/L and the daily limit of 75 mg/L during this period. Further efforts were therefore focused on identifying potential TSS sources.

Evaluation of several parameters (temperature, DO, number of swimmers, tidal backwater effects) and their correlation with TSS indicated that the lagoon influent was the most likely source of TSS in the effluent. The data shows that on average, the lagoon effluent TSS was only about 6.6 percent higher than the lagoon influent TSS, indicating that most of the effluent TSS is already present in the influent. The influent and effluent also showed statistical frequency distributions that matched closely. No significant correlation was found between effluent TSS and other parameters.

Attempts to "fingerprint" influent and effluent solids with intent to provide further support for the influent-effluent link yielded limited success because of various sampling and analytical limitations. However, scanning electron microscopy with energy dispersive x-ray spectrometry (SEM-EDX) did establish petroleum oil and several metals to be common components of both influent and effluent.

The conclusion of this Source Identification Study is that the lagoon influent is the source of the majority of the TSS in the lagoon effluent. While the data show that the lagoon does result in a small increase in the TSS (2 to 3 mg/L on average), this is insignificant compared to the baseline TSS concentration in the influent (about 40

mg/L average). Further, harbor sampling in two locations showed that the seawater that serves as both the source for the lagoon influent and receiving water for lagoon effluent has an average TSS concentration of about 45 mg/L, which is higher than the lagoon effluent TSS. The lagoon effluent therefore does not adversely impact the harbor background TSS concentration.

1.1 Background and Objective

This Source Identification Report (SIR) is prepared as part of a comprehensive effort undertaken by the City of Redondo Beach to evaluate options to bring the Seaside Lagoon effluent quality back into compliance with the applicable NPDES permit, consistent with the terms of Time Schedule Order (TSO) No. R4-2007-0024 dated April 26, 2007 issued by the California Regional Water Quality Control Board (RWQCB) - Los Angeles Region.

The ultimate objective of the City's efforts is to reestablish permit compliance. The first step towards this objective was to implement the Seaside Lagoon Monitoring Plan (Appendix A) to collect data on various water quality parameters in order to trace potential sources that may help explain recently observed high effluent Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) concentrations. The objective of the SIR is to identify potential contaminant sources based on the data collected during the implementation of the Monitoring Plan. Potential solutions that may help reestablish effluent compliance will subsequently be evaluated and described in a separate report. The sampling locations, parameters tested, and testing procedures summarized here are described in more detail in the Monitoring Plan in Appendix A. Modifications were made to the Monitoring Plan at various times based on ongoing concurrent data analysis. These modifications are described below where applicable in the "Monitoring Plan Implementation Results" section of this report.

Samples were collected at the following seven (7) sampling locations (see Figure 1):

1. Lagoon Influent Pump Discharge (1-Inf). This sample was intended to represent the lagoon influent water quality.

2. A, B, and C (2a-LOA, 2b-LOB, and 2c-LOC). In Lagoon near Overflow Structures A, B, and C. These samples were intended to represent the water quality within the lagoon.

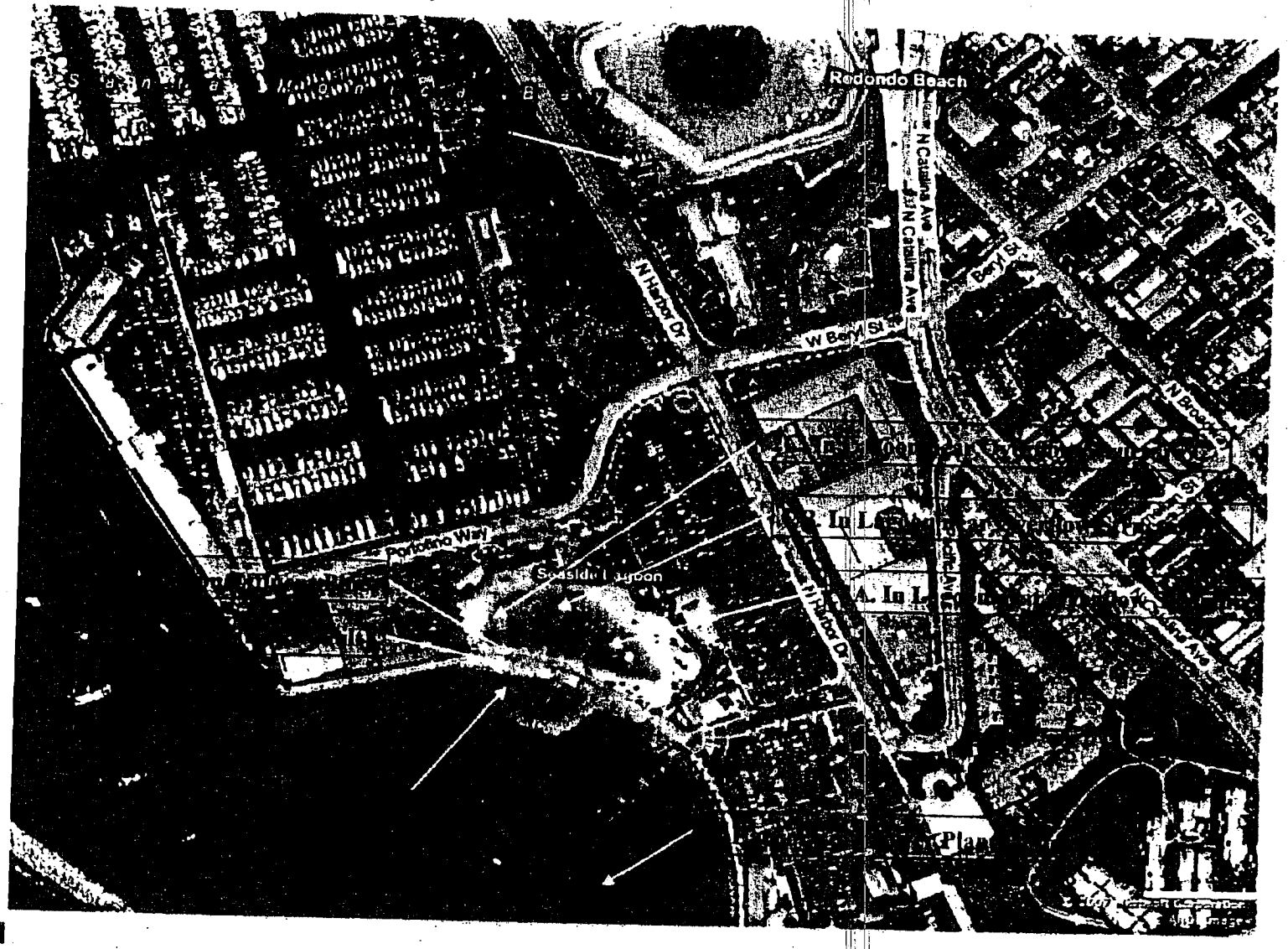
3. Lagoon Effluent Pipe (3a-Eff-Pipe). This sample was intended to represent the quality of the combined lagoon effluent. Historical data prior to this study was based on samples taken from the effluent vault and had a higher probability of being influenced by tidal backwater from the Lagoon outfall and material floating on the surface of the water. Effluent samples for this study were collected 2 to 3 feet upstream of the vault, from within the 20-inch combined effluent pipe, to mitigate the risk of contamination while still collecting a representative combined effluent sample.

4. Harbor near Power Plant Outfall (4-HPO). This sample was intended to provide a general indication of background harbor water quality in the vicinity of the discharge end of the power plant outfall pipe. This location is significant because during periods of low power plant effluent flow and/or

high tide, water from the harbor can flow back into the outfall pipe and can be pumped as influent to the Lagoon by the Lagoon Influent Pump.

5. Harbor near Lagoon Outfall (5-HLO). This sample was intended to provide a general indication of background harbor water quality in the vicinity of the discharge end of the Lagoon outfall.

Figure 1 – Seaside Lagoon Sampling Locations



CDM

The parameters tested at some or all of the above locations include BOD, Chemical Oxygen Demand (COD), TSS, Volatile Suspended Solids (VSS), turbidity, total and fecal coliform (TC and FC), Dissolved Oxygen (DO), temperature, pH, chlorine residual, and Total Organic Carbon (TOC). Heavier, fast settling sediment from the lagoon influent and effluent sample containers was also analyzed using scanning electron microscopy with energy-dispersive x-ray spectrometry (SEM-EDX).

Samples collected at the Lagoon Influent Pump Station and the Lagoon Effluent Pipe were composite samples unless otherwise noted. Samples collected at the other locations were grab samples. Temperature and pH were in-situ field measurements.

The sampling and analysis was performed by Michelson Laboratories, Commerce, California under contract with the City, except that TOC analysis was subcontracted to Weck Laboratories, Inc., City of Industry, California, and SEM-EDX analysis was subcontracted to S&N Labs, Santa Ana, California.

1.2 Monitoring Plan Implementation Results

This section describes the results of the sampling and analysis performed as part of the implementation of the Monitoring Plan. The complete dataset resulting from this sampling and analysis is provided separately in electronic format.

1.2.1 BOD and COD

Lagoon effluent BOD and COD were well within compliance limits during the sampling period. Figure 2 shows that most BOD samples collected were at or below the detection limit of 2 mg/L. The highest effluent BOD was 3.9 mg/L. All COD values were at or below the detection limit of 10 mg/L. Because all samples were consistently below the compliance limits, the sampling plan was modified to test for BOD and COD only once per week at the Lagoon Effluent Pipe location. This change went into effect during the tenth week of testing.

1.2.2 Total Coliform (TC) and Fecal Coliform (FC)

Some lagoon effluent TC and FC values exceeded compliance limits during the first few weeks when composite samples were being used (see Figure 2). Coliform sampling was changed from composite to grab to prevent potential regrowth in composite sample containers. This change began the week of July 1, 2007. Coliform concentrations were well within compliance limits for all subsequent grab samples. Enterococcus samples were also taken at the influent and effluent locations and were all at or below the detection limit of 10 MPN/100 mL, with the exception of one composite influent sample.

Figure 2 – BOD and COD

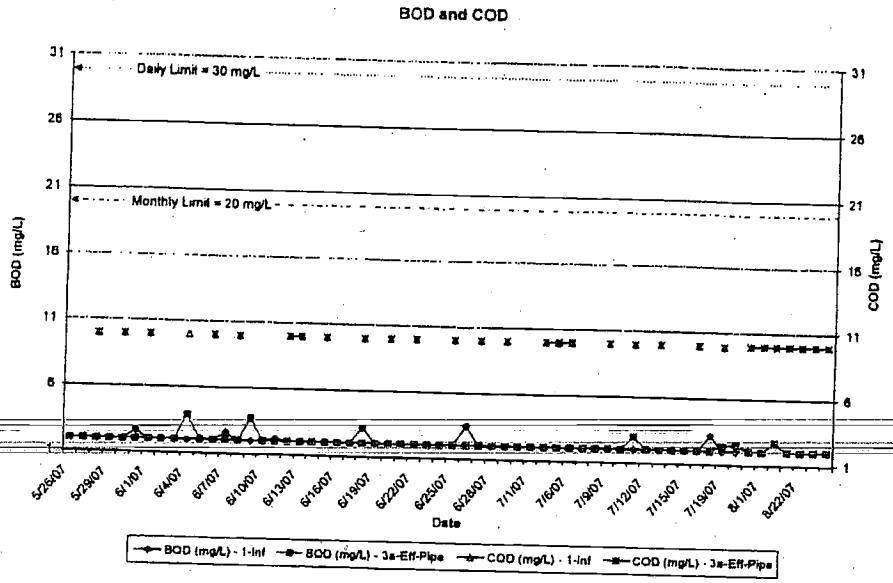
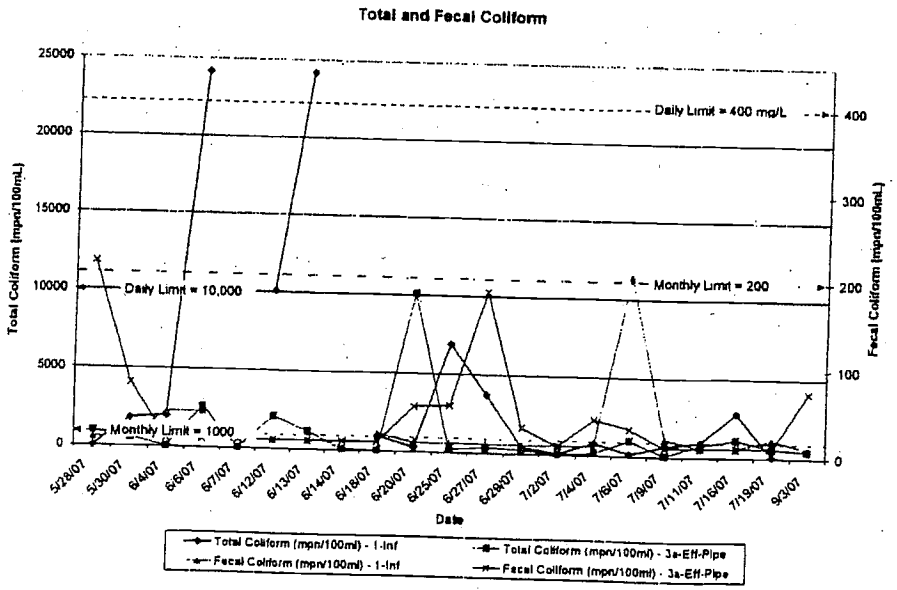


Figure 3 – Total and Fecal Coliform



1.2.3 Dissolved Oxygen

Figure 4 shows that influent DO was consistently between 5 and 8 mg/L, averaging about 6.5 mg/L, except for a single zero-DO reading. The effluent DO was more variable, averaging about 1 mg/L below the influent DO, except for several low values occurring mainly late May through early July. Correlation between DO and TSS was investigated to check if the low DO might be associated with high TSS or vice versa (see Figures 5a and 5b). There does not appear to be any correlation between DO and TSS. It should be mentioned that the DO measurements were originally intended to be in-situ readings, but the values actually recorded and reported were laboratory measurements taken from composite samples.

Figure 4 – Dissolved Oxygen

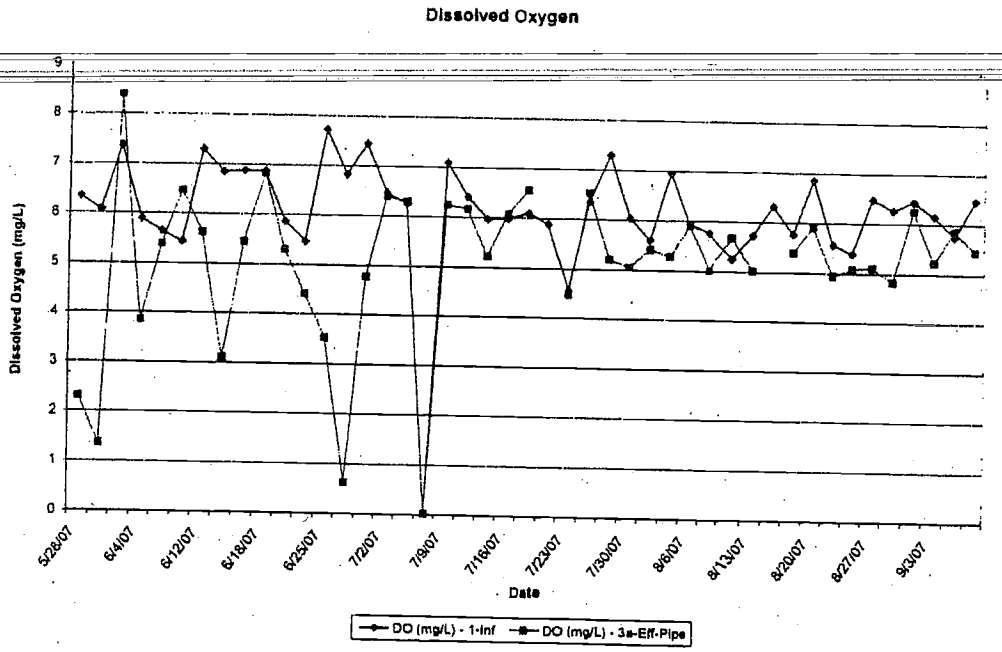


Figure 5a – DO and TSS

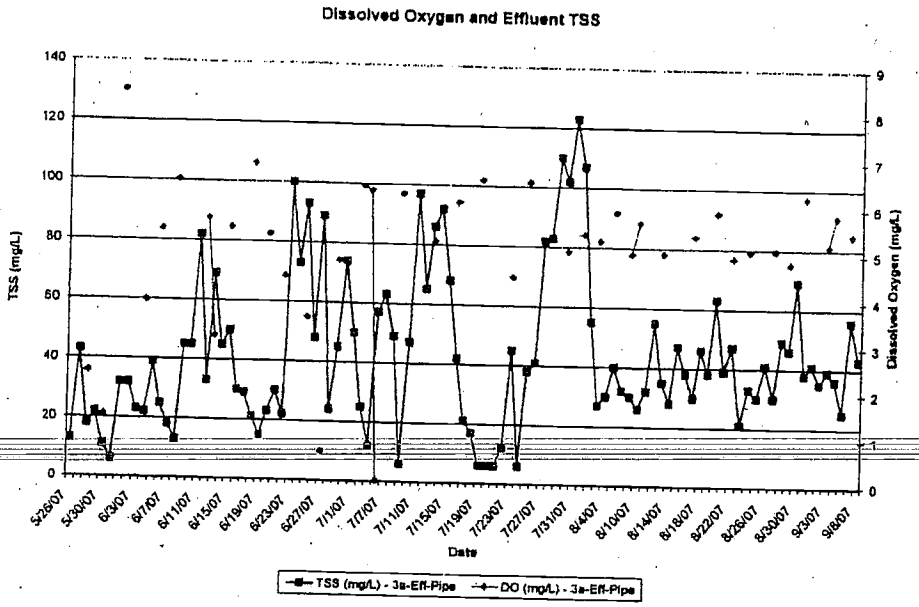
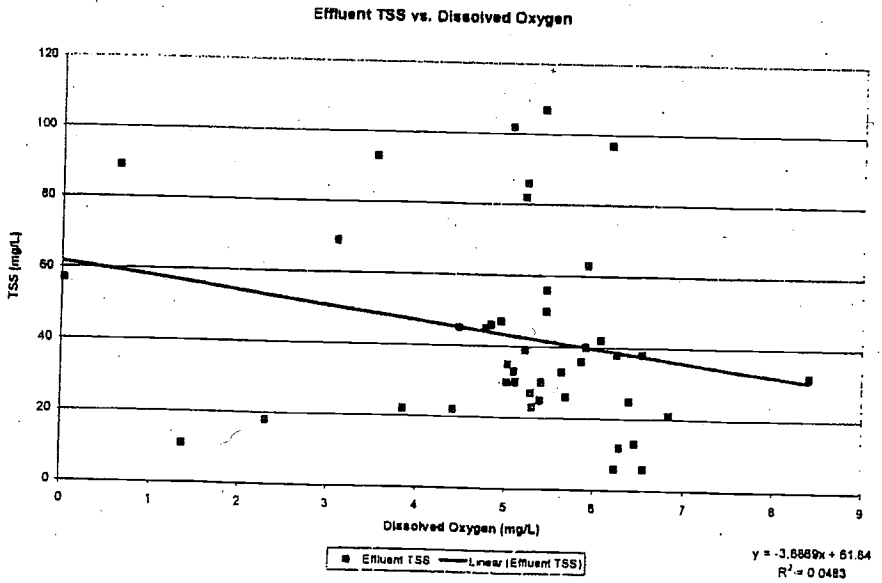


Figure 5b – TSS v/s DO



1.2.4 Total Suspended Solids

Figure 6 shows that effluent TSS concentrations at times exceeded compliance limits during the sampling performed as part of this study. However, the magnitude of the exceedances was lower than some in the past. Figure 7 shows influent and effluent TSS concentrations during the sampling period along with a 30-day moving average. Both the influent and effluent had some samples that exceeded the maximum daily compliance limit of 75 mg/L. The 30-day moving average for effluent TSS also exceeded the monthly average compliance limit of 50 mg/L by 3 mg/L or less at various times. The 30-day moving average data should be interpreted with care. While it may appear from the plots that the moving average for effluent TSS was consistently higher than influent TSS, much of this data is influenced by a short period in late June when effluent TSS significantly exceeded the influent TSS.

Figure 6 – Historical and Recent Effluent TSS

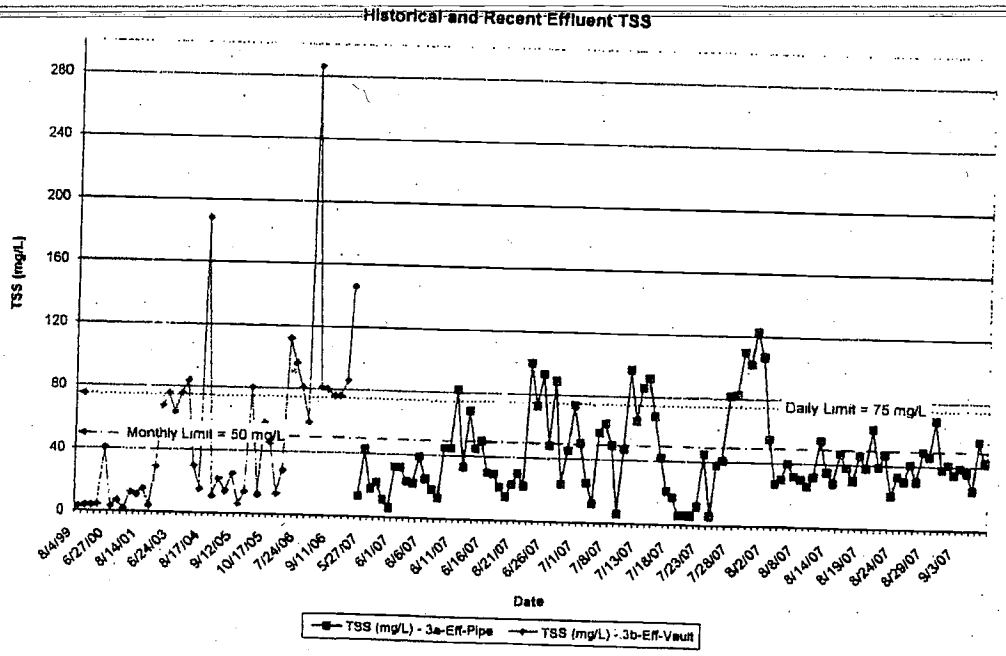
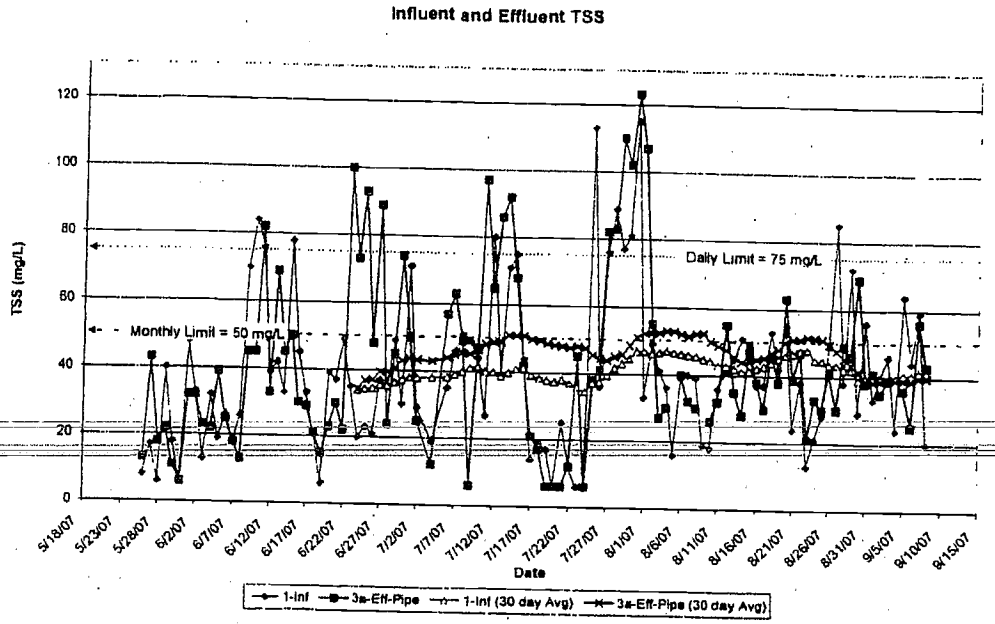


Figure 7 – Influent and Effluent TSS



Of the parameters tested under this Monitoring Plan, TSS appears to be the only parameter that presents a potential compliance issue. The remainder of this report therefore focuses on effluent TSS and identification of possible sources of effluent TSS. The analysis presented below examines TSS in the context of correlations and/or relationships with other parameters and variables, with the intent to determine the potential sources of effluent TSS values that may cause permit exceedances.

1.2.4.1 Effluent TSS and Temperature

Figures 8a and 8b show effluent TSS in relation to water temperature. There does not appear to be a significant correlation between the two parameters. A linear trend line for the graph of effluent TSS versus temperature yields a low R^2 value.

Figure 8a – Effluent TSS and Temperature

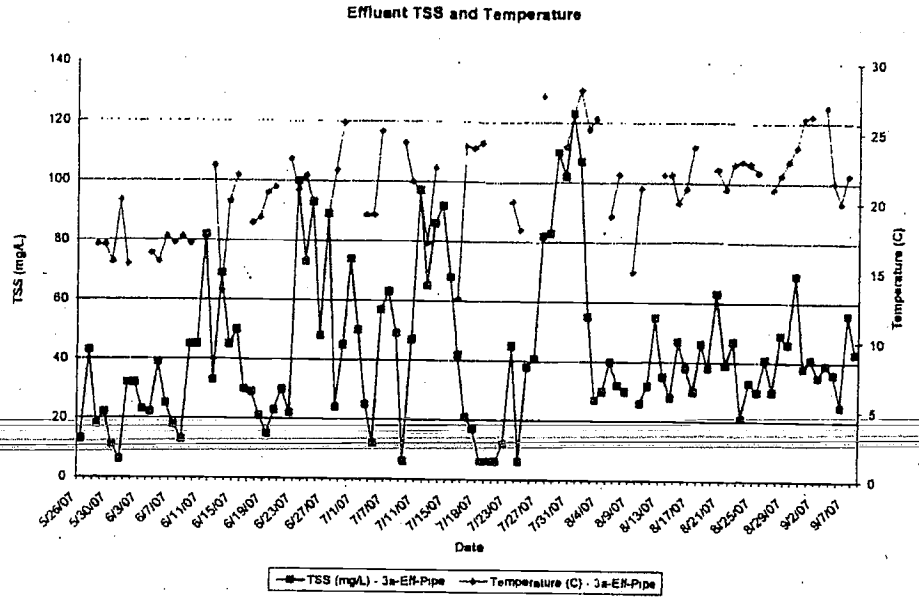
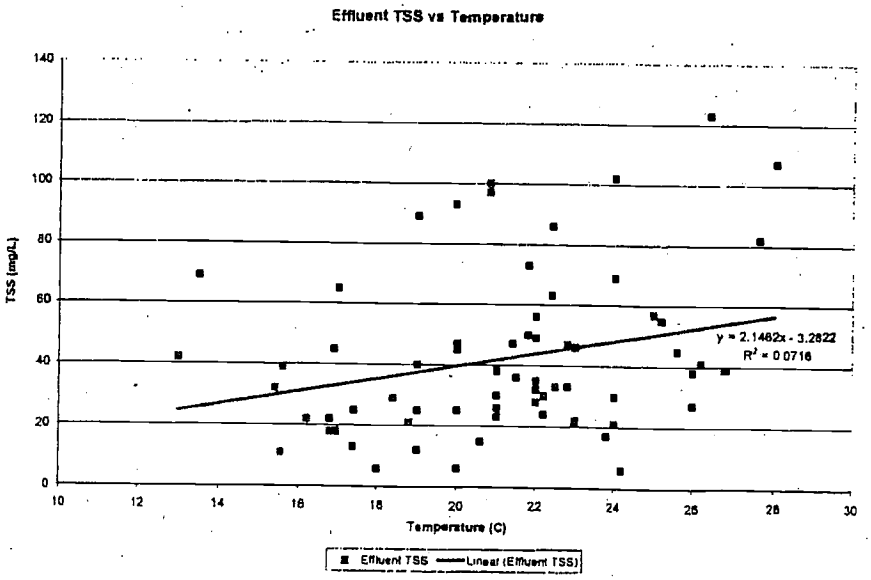


Figure 8b – Effluent TSS v/s Temperature



1.2.4.2 Effluent TSS and Number of Swimmers

Potential contribution swimmers in the Lagoon to effluent TSS investigated. The timeline graph of effluent TSS and the number of swimmers (Figure 9a) shows some correlation between the two parameters, but a scatter plot (Figure 9b) suggests that this correlation is a weak one (low R^2 value of 0.16).

The daily average number of swimmers in Figures 9a and 9b were calculated from hourly swimmer counts between 10:00 am and 5:00 pm each day. Figure 10 shows a bar chart of the hourly swimmer count.

Figure 9a – Effluent TSS and Number of Swimmers

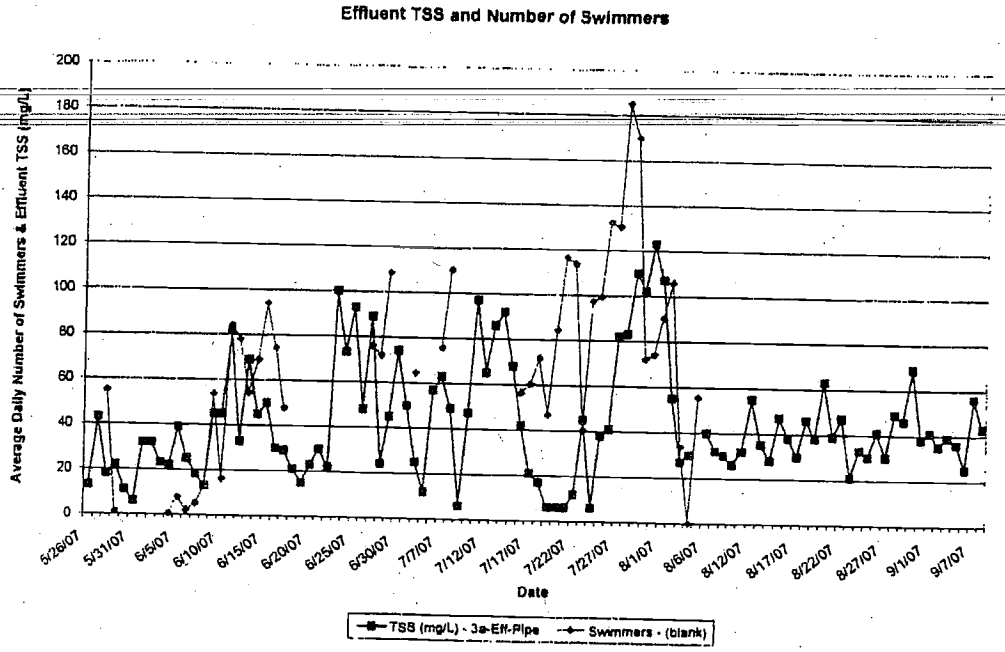


Figure 9b – Effluent TSS v/s Number of Swimmers

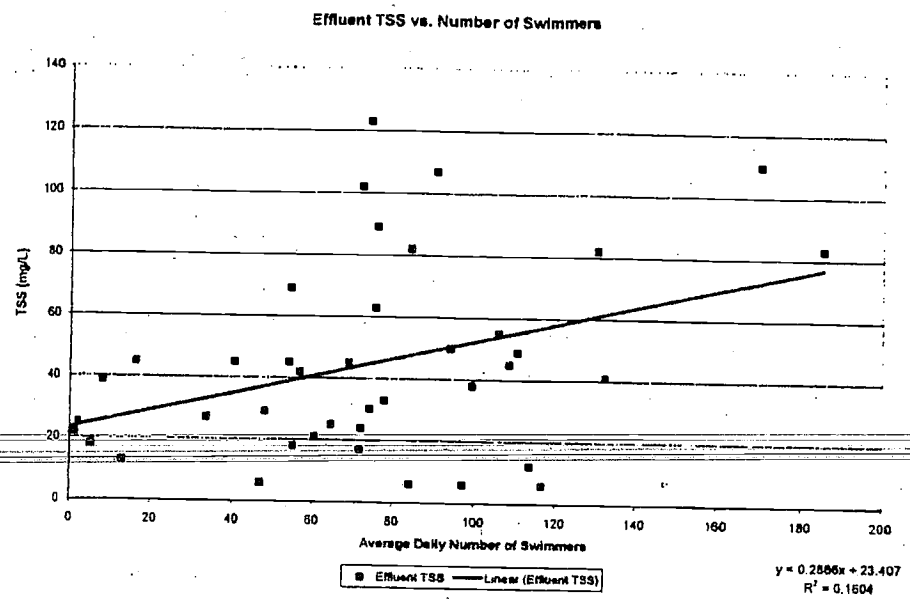
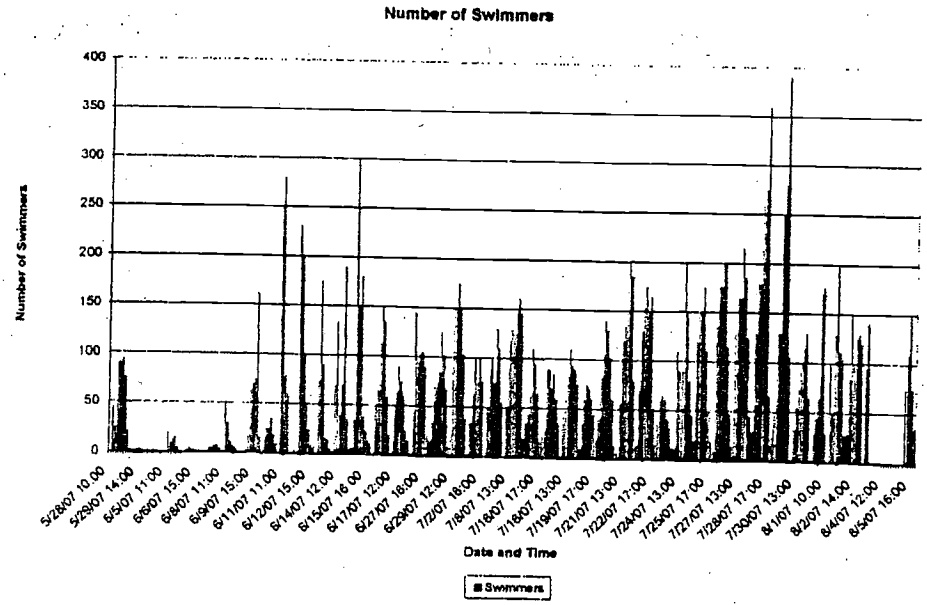


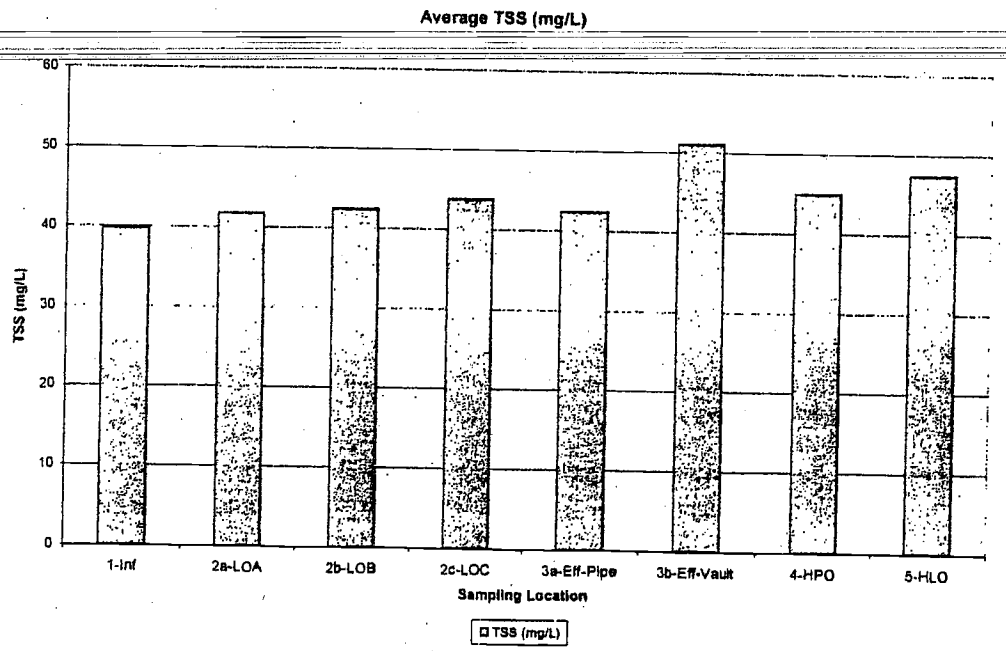
Figure 10 – Hourly Swimmer Count



1.2.4.3 Effluent TSS and Influent TSS

Figure 7 shows that effluent TSS values were generally close to influent TSS values and the peaks and valleys were approximately matched. The graph shows that effluent TSS is at various times higher and lower than the influent TSS, with the two averages appearing about equal. This is confirmed by Figure 11, which shows a bar chart of the average TSS values at all sample locations during the sampling period. The average effluent TSS was 42.4 mg/L, only about 6.6 percent higher than the average influent TSS of 39.8 mg/L. Location 3b-Eff-Vault in this graph represents historical average effluent TSS prior to this study. Samples within the lagoon were approximately equal to or slightly higher than the effluent samples. Samples in the harbor showed the highest average TSS but the averages were still below 50 mg/L.

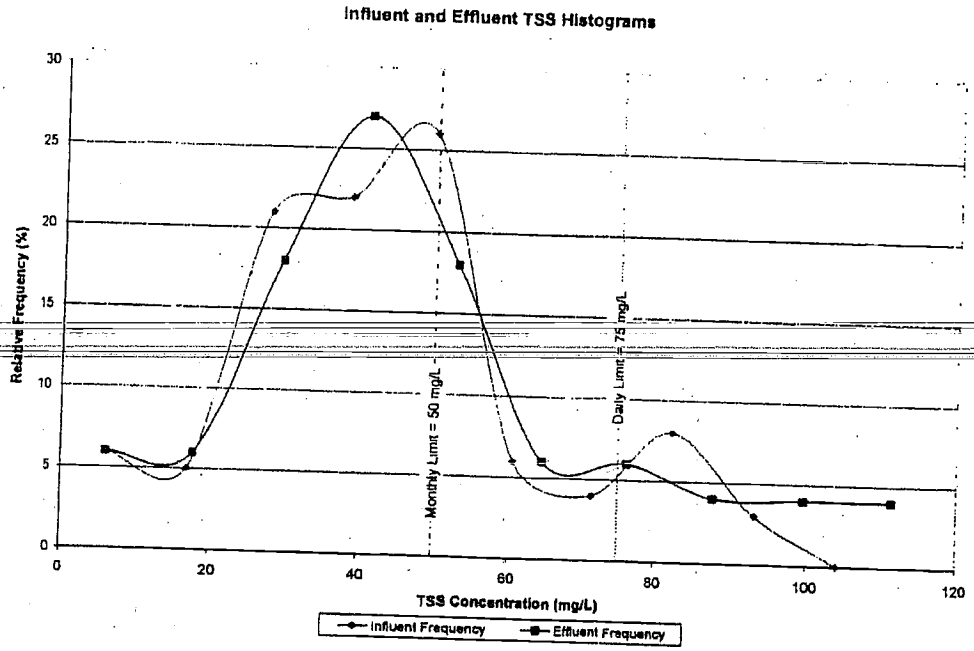
Figure 11 – Average TSS at All Locations



An attempt was made to demonstrate high effluent-to-influent TSS correlation using a scatter plot and a regression trend line. The regression, however, did not show a high correlation because of the unpredictable and variable hydraulic and mixing conditions in the lagoon, which create a variable lag between the influent and effluent TSS values. To demonstrate a higher level of influent-effluent TSS similarity beyond mere closeness of averages, histograms of influent and effluent TSS were plotted (Figure 12). The histograms show that the relative frequency distributions of influent and effluent TSS data show very similar shapes, with similar modes and areas under the curve. This provides further confirmation that influent and effluent data have

similar characteristics. This analysis strongly indicates that influent TSS is the most likely source of effluent TSS.

Figure 12 – Influent and Effluent TSS Histograms



1.2.4.4 TSS and AES Power Plant Operation

Since influent appeared to be the most likely source of effluent TSS, potential factors that might affect influent TSS were investigated. Because the lagoon influent is drawn from the Discharge 002 outfall pipe for the AES Power Plant on Harbor Drive, power plant operation was investigated as a potential factor.

Operation of the AES Power Plant may be expected to potentially affect lagoon influent water quality in one or more of the following ways:

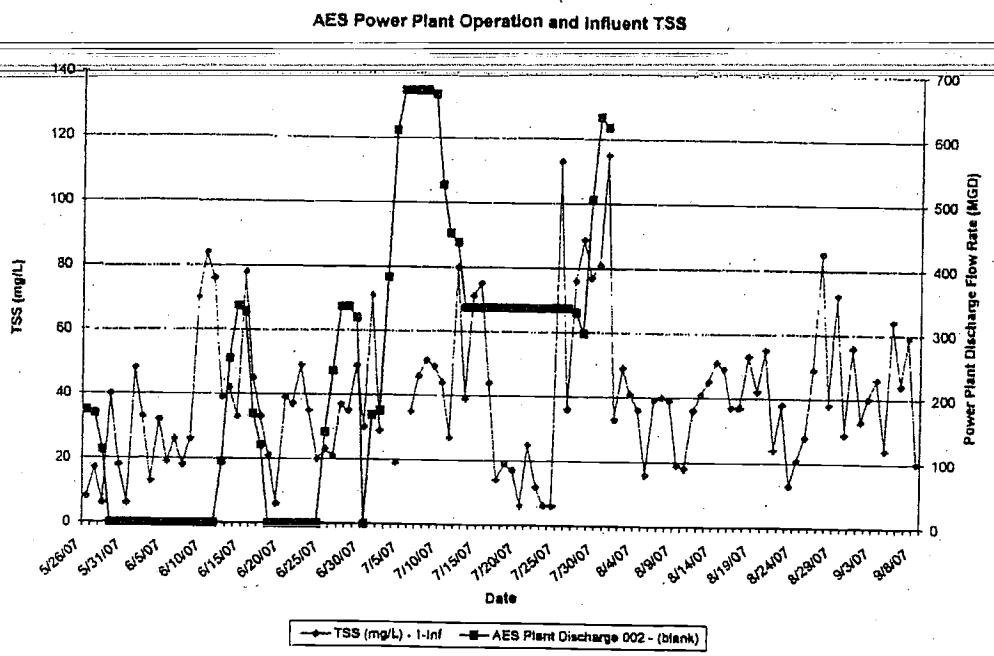
- Increase water temperature. Temperature effects are addressed in a previous section.

- Direction of flow. The power plant is a "peak-demand" generation facility and as such operates intermittently. When the plant is in operation, water flows from the ocean to the power plant via the intake pipe and from the plant to the ocean via the outfall pipe. Thus the Lagoon influent flow is the power plant intake as modified by power plant processes. When the plant is not in operation, Lagoon influent flow is tidal backwater from the discharge end of the power plant outfall, or some mixture of this and previously present power

plant effluent. The power plant also periodically reverses flow direction such that ocean water is temporarily drawn via the outfall pipe and discharged via the intake pipe.

To determine potential impact of power plant operation on Lagoon influent TSS, plant discharge flow data was obtained. Daily discharge volumes for the power plant were obtained from reports submitted by the plant to the Regional Water Quality Control Board. Figure 13 shows the discharge flow rate from the plant and influent TSS. A non-zero flow indicates that the power plant was in operation. The graph shows no discernible pattern or correlation between power plant operation and Lagoon influent TSS.

Figure 13 – AES Power Plant Operation and Influent TSS



1.2.5 VSS and TOC

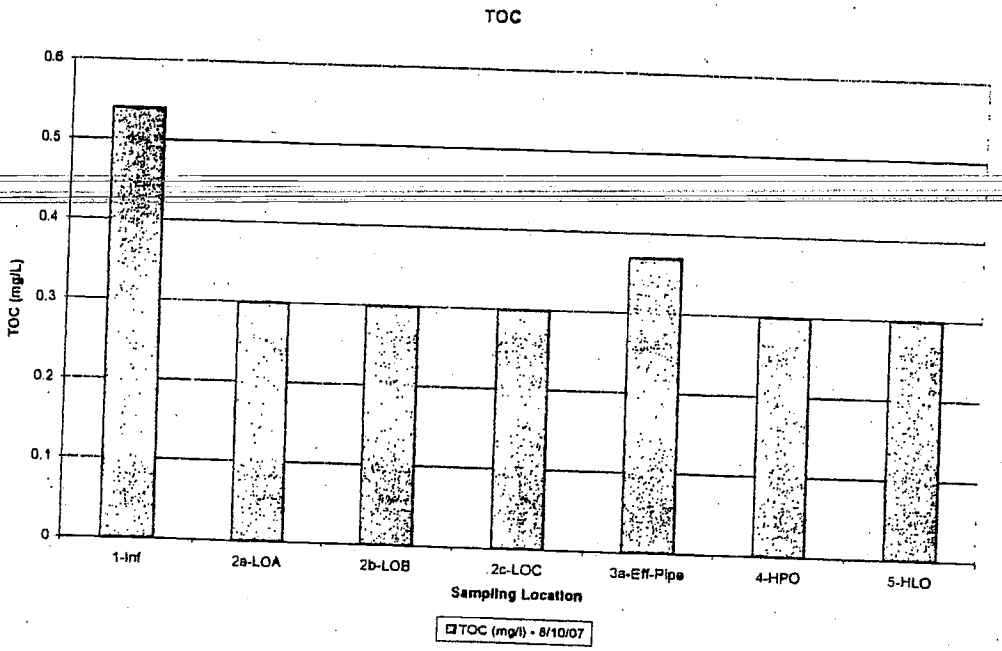
In an attempt to determine the nature and composition of the solids contributing to influent and influent TSS and get an indication of the organic fraction that could potentially provide precursors for biological growth, the Monitoring Plan was modified to include sampling for VSS and TOC at all locations.

VSS was analyzed beginning July 17, 2007. All VSS samples were at or below the detection limit of 2 mg/L. This indicates that most of the measured TSS was inert and/or inorganic. This is consistent with the low BOD and COD measurements. Since

all samples were below detection limit, sampling for VSS was discontinued after August 26, 2007.

TOC was measured once on August 10, 2007 at all sampling locations. TOC measurements were low at all locations as shown in Figure 14. This shows low organic content and low potential for biological growth, and is also consistent with low BOD, COD, and VSS values.

Figure 14 – TOC at All Locations



1.2.6 SEM-EDX

Because the data strongly indicates influent as a likely source of effluent TSS, various analytical methods were considered that might provide a "fingerprint" of the components of TSS in the influent and effluent for comparison. Methods considered included Fourier Transform Infrared (FTIR) scan, scanning electron microscopy with energy-dispersive x-ray spectrometry (SEM-EDX), particle size distribution, silt density index, and colloidal fraction. Of these, FTIR or SEM-EDX was deemed to have the most potential to provide a meaningful "fingerprint". FTIR analysis proved impractical because of the high mineral content of the solids matrix. SEM-EDX analysis detected very little organic content in the influent but more in the effluent. Petroleum oil was detected both in the influent and effluent, along with the elements Si, O, Al, Na, Cl, K, Ca, S, Mg, and Fe. Ti was found only in the effluent. Although this analysis is not a conclusive "fingerprint" identification because of many variables

involved, the large number of common elements and common presence of petroleum oil indicate significant commonality between influent and effluent.

1.3 Possible Sources Other than Lagoon Influent

The Monitoring Plan Implementation Results described above make a very strong case for Lagoon influent as the most likely source of effluent TSS. However other possible sources were also considered and evaluated. Some of these other sources and potential contributing factors have been discussed above as part of the Monitoring Plan Implementation Results section. Additional sources were identified and discussed in a workshop conducted with City personnel on July 24, 2007. These additional possible sources along with their potential contribution to effluent TSS are discussed below.

1.3.1 Algae or Plankton Formation

Algae or plankton formation were considered as possible sources of TSS. However, very low TOC and VSS concentrations indicate low organic content in the effluent and low availability of precursors for biological growth. Therefore, the potential contribution of algae or plankton formation to TSS was not considered significant.

1.3.2 Scum Layer at Lagoon Start-up

City staff has indicated that a brown foamy scum is generated at Lagoon start-up following idle periods and could indicate biological growth in the sand and could be a potential contributor to effluent TSS. The workshop group discussed the possibility of developing a protocol to sample sand and/or sediment at the bottom of and/or in the vicinity of the lagoon, extracting biological or organic solids from such samples, and "fingerprinting" such solids for comparison with effluent solids. Based on the limited success of the attempts to fingerprint influent and effluent solids, this option was not pursued further.

1.3.3 Sand Leveling

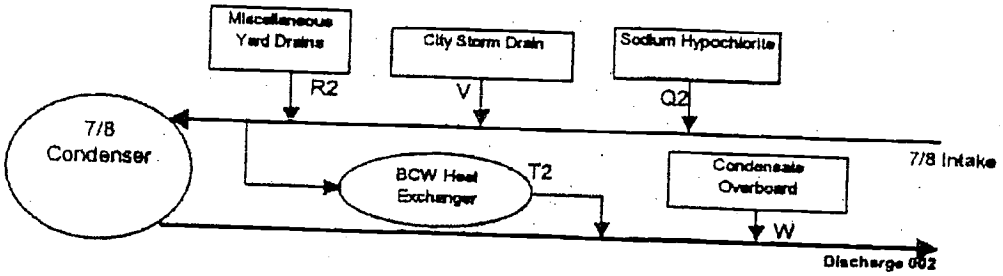
City staff also indicated that the sand is dragged for leveling about twice each season and at each Lagoon startup. This is typically done over the entire sandy area at the beginning of the season (including the lagoon area before it is filled). During the season this is only done on the dry sandy area around the lagoon. In 2007, this was done at the beginning of the summer season and once just after the 4th of July. The possibility of testing the dry sand for solids that may be transported into the Lagoon through such activity was discussed. This possibility was not pursued further because of "fingerprinting" limitations discussed above and because the probability of occurrence was considered low.

1.3.4 Power Plant Process

Because the data indicate influent to be the likely source of effluent TSS, the processes within the AES power plant were considered as a possible source of effluent TSS. A

flow schematic of the of the power plant contributions to its Discharge 002 (which serves as the intake for the Lagoon Influent Pump) is shown in Figure 15 below.

Figure 15 – AES Power Plant Discharge 002 Flow Schematic



The figure indicates that other than heating of the ocean water drawn via the intake pipe, power plant contributions include addition of sodium hypochlorite for control of biological growth, a contribution from the City storm drain, miscellaneous yard drains, and "condensate overboard", which is a periodic discharge containing mainly steam condensate slightly contaminated with seawater. Both the storm drain and the yard drains could be potential TSS contributors. However, because the average TSS concentrations in harbor sea water samples were found to be higher than TSS in the Lagoon influent samples, TSS contributions from the power plant were not considered very likely.

Power plant contributions and potential mitigation measures may be further investigated during the next phase of this project that will evaluate potential treatment and/or mitigation measures. However, power plant operations may be beyond the City's control.

1.3.5 Other Sources

Other potential effluent TSS sources considered included disintegration of objects stuck in drains, sand in lagoon effluent pipes, and back mixing of seawater in the effluent vault.

Tide data obtained from the National Oceanographic and Aerospace Administration (NOAA) was analyzed and correlated with effluent TSS. No correlation was observed, likely because of the modified effluent sampling location used in this study – in the combined effluent pipe instead of the vault.

The other sources were considered improbable and not evaluated further.

1.4 Conclusions

Based on the data and the analysis presented above, the following conclusions may be drawn:

1. Recent sampling and monitoring sows that TSS is the only parameter of concern with respect to permit limit exceedance.

2. The influent appears to be the most likely source of TSS in the effluent. The approximately 6.5 percent difference between influent and effluent TSS is within the margin of error of the analytical procedure and is therefore not significant.

3. Attempts to compare "fingerprints" of influent and effluent solids were not conclusive because of several sampling and analytical challenges but indicated several commonalities between influent and effluent solids composition. While such fingerprinting could provide further evidence in support of the TSS source, it is not essential to identifying the likely source.

4. Possible sources of the small increase in TSS from influent to effluent include swimmer activity and possibly biological growth.

Appendix A - Monitoring Plan

Seaside Lagoon
Summer 2007 Monitoring Plan

Background and Objective

This Monitoring Plan (the Plan) is prepared as part of a comprehensive effort undertaken by the City of Redondo Beach to evaluate options to bring the Seaside Lagoon Effluent Quality back into compliance with the applicable NPDES permit, consistent with the terms of Time Schedule Order (TSO) No. R4-2007-0024 dated April 26, 2007 issued by the California Regional Water Quality Control Board (RWQCB) – Los Angeles Region.

The ultimate objective of the City's efforts is to reestablish permit compliance. The objectives of the Monitoring Plan are to verify the occurrence and severity of current noncompliance episodes and to determine potential mode(s) and location(s) for entry of BOD and/or TSS into the lagoon system or generation within the system. To achieve this objective, the Plan is designed to characterize the influent, in-lagoon, and effluent water quality through sampling and laboratory analyses of selected parameters over the Summer 2007 season. In addition to water quality characterization, relevant ancillary data such as weather, tides, power plant status (operating or not), and number of visitors/swimmers to the lagoon will also be compiled.

Sampling and Laboratory Analysis

Sampling and analysis for routine compliance monitoring and reporting are currently performed by Michelson Laboratories, Commerce, California under contract with the City. This section describes special sampling, separate from the routine sampling, designed specifically to investigate potential sources or causes of recent and/or current non-compliance episodes. It is anticipated that the special sampling and analysis will also be performed by Michelson Laboratories under separate contract, given their familiarity and experience with the system.

The sampling and laboratory analysis tasks are the major focus of this Monitoring Plan and are summarized in a matrix format in Table 1. The matrix provides an at-a-glance summary of sampling locations, the type of samples to be collected (e.g. grab, composite, etc.), the sampling frequency, the parameters to be measured for each sample, and the analytical methods to be used for each parameter. Additional sampling and analysis details are described below.

Table 1 – Seaside Lagoon Sampling Matrix

Parameter	Analytical Method	1. Lagoon Influent Pump Discharge	2A. In Lagoon near Overflow Structure "A"	2B. In Lagoon near Overflow Structure "B"	2C. In Lagoon near Overflow Structure "C"	3. Lagoon Effluent Box[1]	4. Harbor - near Power Plant Outfall[2]	5. Harbor - near Lagoon Outfall[2]	Sampling Period (weeks)	Total Number of Samples
BOD_5 (mg/L)	SM 5210 B	Comp 1D				Comp 1D	Grab 3W	Grab 3W	14	202
TSS (mg/L)	EPA 160.2	Comp 1D	Grab 3W	Grab 3W	Grab 3W	Comp 1D	Grab 3W	Grab 3W	14	328
COD (mg/L)	SM 5220 C/D or Hach 8000 if acceptable to RWQCB	Comp 3W				Comp 3W			14	84
Turbidity (NTU)	EPA 180.1	Comp 2W				Comp 2W			14	56
Fecal Coliform (CFU/100 mL)	SM 9221 & 9223	Comp 2W				Comp 2W			14	56
Chlorine Residual (mg/L)	SM 4500-Cl E		Grab 3W	Grab 3W	Grab 3W	Comp 3W			14	168
Temperature (°C)[3]	EPA 170.1	In-situ 1D				In-situ 1D	In-situ 3W	In-situ 3W	14	202
Dissolved Oxygen (mg/L)[3]	EPA 360.1	In-situ 3W				In-situ 3W			14	84
pH (SU)	EPA 150.1	Comp 2W	Grab 2W	Grab 2W	Grab 2W	Comp 2W	Grab 3W	Grab 3W	14	146

Notes:

[1] Actual sample to be collected from within 20-inch pipe 2 -3 feet upstream of box

[2] Harbor water will be sampled at two locations over a single week

[3] Temperature and DO should be in-situ field measurements

nD: n times per day

nW: n times per week

Comp: Daily composite collected over the period of lagoon operation

CDM

Locations

A total of seven (7) sampling locations have been identified for this Plan. These locations are listed below. The sampling frequencies and parameters measured will vary at each location as shown in Table 1.

1. Lagoon Influent Pump Discharge. This sample is intended to represent the lagoon influent water quality and will be collected from a valve located on the pump discharge piping at the pump station on Harbor Drive. Michelson Laboratories has indicated that a valve from which samples can be drawn already exists in the discharge piping and has been used to collect samples in the past. All samples at this location (except temperature and DO field measurements) will be composite samples. A composite sampler will be placed at this pump station for the duration of the monitoring period. Because it is difficult to connect the sampler intake directly to the pressurized discharge piping of the lagoon influent pump, the sampling valve will be set to a partially open position to allow continuous discharge of a small flow. This flow will be collected in a small container which will serve as intake for the sampler. To ensure that the sample collected by the sampler is always fresh, the discharge flow rate from the sampling valve and the size of the intake container should be selected such that the container is continuously overflowing and the detention time in the container is no more than 60 seconds. The overflow from this container should be routed to the closest sanitary drain.

   The sampler discharge will be directed into a separate sample container placed on ice in an insulated box. The ice in the box should be replaced daily and should be adequate to maintain a sample temperature no higher than 4°C for 24 hours.

2. A, B, and C. In Lagoon near Overflow Structures A, B, and C. These samples are intended to represent the water quality within the lagoon and should therefore be collected near the overflow structures but upstream of the overflow weir and upstream of the sodium bisulfite addition point.

3. Lagoon Effluent Box. This sample is intended to represent the quality of the combined lagoon effluent and should therefore be collected directly from the effluent box. A composite sampler and iced sample container will be placed at this location also, similar to the influent pump station sampler. A separate inlet container is not necessary at this location since the sampler can draw directly from the effluent box. As a security measure, both the sampler and the sample container should be locked, placed inside the security fence, and chained to the fence posts.

   Discussions with Michelson Laboratories have indicated that the bottom of the effluent box may be at an elevation such that water from the harbor may periodically back up into the box depending on the tide and wave action. This presents the risk that lagoon effluent samples collected from the effluent box may be contaminated with harbor water under certain conditions. In general, this risk is not expected to be significant during periods when the lagoon is in operation

because of the positive effluent flow from the lagoon to the harbor. This risk may be further mitigated to some extent by collecting the effluent sample 2 to 3 feet upstream of the box, from within the 20-inch effluent pipe. Michelson Laboratories has indicated that they will configure the suction line of the composite sampler accordingly. To the extent possible, CDM will use harbor water quality data together with tidal information to identify conditions that represent a high risk of contamination.

4. Harbor near Power Plant Outfall. This sample is intended to provide a general indication of background harbor water quality in the vicinity of the end of the power plant outfall pipe. This location is significant because during periods of low power plant effluent flow and/or high tide, water from the harbor can flow back into the outfall pipe and can actually be pumped to the lagoon by the lagoon influent pump. Samples at this location will be collected over a single one-week period close to the beginning of the summer season. A City-provided boat will be used to access this location. The City has indicated that the discharge location can be visually identified from the upwelling of the discharge when the power plant is in operation. The samples will be collected as close to the depth of discharge as possible using a sample pump with a suction line of appropriate length.

5. Harbor near Lagoon Outfall. This sample is intended to provide a general indication of background harbor water quality in the vicinity of the end of the lagoon outfall. This location is significant because during periods of high tide, water from the harbor can back up into the lagoon effluent box and potentially contaminate lagoon effluent samples taken from this box. Samples at this location will be collected over a single one-week period close to the beginning of the summer season. This location is accessible without the use of a boat. The samples will be collected as close to the depth of discharge as possible using a sample pump with a suction line of appropriate length.

Depending on initial results, sampling of the sediment and/or sand at the bottom of the lagoon may be added to the sampling plan. This is currently not included in the sampling matrix in Table 1 because this is not anticipated to be a likely scenario. Details of sediment/sand sampling and analysis will be determined if and when it is deemed necessary.

Sample Type

The types of sample(s) to be collected at each location are indicated in Table 1. The various types are as described below.

Composite

Composite samplers will be placed at the Lagoon Influent Pump Station and the Lagoon Effluent Box. Flow weighted sampling is not necessary because the flow rate is designed to be constant at 3,200 gallons per minute (gpm). The samplers will be programmed to collect equal volumes at regular pre-defined intervals during the lagoon's operating hours. No samples will be taken when the lagoon influent pumps are shut down.

Grab

Grab samples representing instantaneous conditions will be taken at some locations as shown in Table 1. An attempt will be made to collect the grab samples at about the same time each sampling day.

In-situ

Temperature and DO will be monitored with instantaneous field measurements at the sampling locations (in-situ).

Sampling Frequency

Sampling frequencies for each combination of location and analytical parameter are listed in Table 1 as daily (1D or once per day) or "n" times per week (nW). For 3W, recommended sampling days are Tuesday, Thursday, and Saturday of each week. For 2W, recommended sampling days are Tuesday and Saturday of each week.

Parameters and Analytical Methods

Table 1 lists the analytical methods to be used for laboratory analysis of each listed parameter. The listed analytical methods are as described in 40 CFR Section 136 as required by the RWQCB in Monitoring and Reporting Program No. 8034, which is Attachment T to the City's current NPDES Permit No. CA 0064297.

Monitoring Plan Implementation and Schedule

Michelson Laboratories will be responsible for implementation of the Plan, including provision of all labor, materials, and analytical and laboratory facilities and equipment. The City will provide a boat and authorized operator for harbor sampling and will also arrange for access to all sampling locations. CDM will be available to help resolve any issues that might arise and will be responsible for ongoing data compilation, evaluation, and development of any mid-course corrections.

The sampling will begin on Saturday, May 26, 2007, and will end on Monday, September 3, 2007, both days inclusive. This represents a period of approximately 14 weeks. Harbor sampling is recommended for the week beginning Monday, June 11, 2007.

Ancillary Data

In addition to sampling for water quality, relevant ancillary data that may help identify the source or cause of non-compliance will be collected for correlation and comparative evaluation with the water quality data. The ancillary data to be collected is described below. This data will be collected and compiled by CDM with assistance from the City as appropriate, unless otherwise indicated below.

Weather

Daily minimum and maximum temperature and precipitation data will be obtained from the weather station closest to the lagoon and compiled for evaluation of possible correlation with water quality data.

Tides

Daily high and low tide times and water elevations will be obtained as available from National Oceanographic and Atmospheric Administration (NOAA) records or other sources.

Power Plant Operating Status

The operational status of the power plant (operating or not operating) will be recorded each day. The presence of emissions from the power plant stack can serve as a general indicator that the plant is operating. Michelson Laboratories will therefore record the presence or absence of emissions during the daily sampling rounds. The City will contact the power plant to confirm stack emissions as a reliable indicator of plant operation or to obtain operational status by alternate means.

Number of Lagoon Visitors

The number of daily visitors to the lagoon is recorded by the City and will be provided to CDM. In addition, the City will instruct the lifeguard(s) at the lagoon to record the approximate number of actual swimmers in the water three (3) times each day per the following template:

Date	Time	Age	0 to 25	25 to 50	50 to 75	75 to 100
May 26	10 AM	10 or Below				
		Above 10				
	2 PM	10 or Below				
		Above 10				
	6 PM	10 or Below				
		Above 10				

Exhibit E

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W. 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
CITY OF REDONDO BEACH
(SEASIDE LAGOON)

NPDES Permit No.: CA0064297
Public Notice No.: 05-004

FACILITY ADDRESS	FACILITY MAILING ADDRESS
200 Portofino Way Redondo Beach, CA 90277	302 Knob Hill Redondo Beach, CA 90277 Contact: Mile Shay Telephone: (310) 318-0661 ext. 2455

I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Seaside Lagoon Facility (Seaside Lagoon or Facility) . As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on February February 11, 2005.

B. Public Hearing

The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:	March 3, 2005
Time:	9:00 a.m.
Location:	The City of Simi Valley Council Chambers, 2929 Tapo Canyon Road, Simi Valley, California.

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is http://www.waterboards.ca.gov/losangeles/ where you can access the current agenda for changes in dates and locations.

C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of Chief Counsel
ATTN: Elizabeth Miller Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility,

and provide a name, address, and phone number.

II. Introduction

The City of Redondo Beach (hereinafter, the City or Discharger) discharges dechlorinated water from the Seaside Lagoon to King Harbor, a water of the United States. Wastes discharged from Seaside Lagoon by the City are regulated by WDRs and a NPDES permit contained in Board Order No. 99-057 (NPDES Permit No. CA0064297). Order No. 99-057 expired on June 10, 2004.

The City filed a Report of Waste Discharge and applied for renewal of its NPDES permit on April 9, 2004. The tentative permit is the reissuance of the WDRs and NPDES permit for discharges from Seaside Lagoon. A NPDES permit compliance evaluation inspection (CEI) was conducted on March 31, 2004, to observe operations and collect additional data to develop permit limitations and conditions.

III. Description of Facility and Waste Discharge

Seaside Lagoon, located at 200 Portofino Way, Redondo Beach, California, is owned and operated by the City. The Facility is a city park and consists of a 1.4 million gallon man-made saltwater lagoon, artificial beaches, children's play area, snack bar facilities, and other recreational areas. The Seaside Lagoon was constructed in 1962 and has since been open to the public for swimming from Memorial Day to Labor Day each year. At other times, the City may allow the use of the Lagoon and nearby facilities for social functions which may result in discharges into the receiving water outside the designated operational season. The surface area of the water in the Lagoon is approximately 1.2 acres with a maximum depth of 7 feet.

Water for Seaside Lagoon comes from a nearby steam generating plant (AES Redondo Beach, L.L.C., Power Plant) where seawater is used to cool turbines. The Power Plant is located at 1100 Harbor Drive, Redondo Beach. When operated at design capacity, the AES Power Plant discharges up to 898 million gallons per day (mgd) of once-through cooling water combined with small volumes of metal cleaning and low-volume wastes into the Pacific Ocean at Santa Monica Bay. This discharge is regulated under separate waste discharge requirements contained in Board Order No. 00-085. Approximately 3,200 gallons per minute (gpm), which is equivalent to 2.3 mgd (constitute approximately 0.26 % of total Power plant cooling water), of once-through cooling water is directed to the Seaside Lagoon.

To maintain the water level in the Lagoon, the City discharges roughly 3,200 gpm (approximately 2.3 mgd) of dechlorinated saltwater to King Harbor when the Lagoon is in use. The water is discharged through three overflow structures located along the northwest edge of the lagoon. The water then flows by gravity to a manhole, then to a conduit that empties into King Harbor at the shoreline (Latitude 33° 50' 38"N and Longitude 118° 23' 47"

W) embankment, Discharge Serial 001. During periods when the Lagoon is not open for public use, the Lagoon water is flushed periodically.

The water supply system is equipped with both chlorination and de-chlorination facilities. The chlorination system consists of one, 1,000-gallon storage tank, which holds 17% sodium hypochlorite, dual chemical feed pumps with manual controls, and related piping. The de-chlorination system consists of one, 1,000-gallon storage tank which holds 38% bi-sulfate, dual chemical feed pumps with manual controls, and related piping. The de-chlorination piping terminates at the overflow structures at which point the bi-sulfite solution is added to the effluent. Bi-sulfite is added at all three overflow structures.

The Discharger described a proposed Facility modification in the permit renewal application: to construct a re-circulation pipe at the overflow collector pipe (prior to the discharge vault) to direct lagoon water back to the Lagoon. A valve will be installed in the vault to stop all flow from being discharged. The de-chlorination system will be shut down and a chlorination feed pipe connected the re-circulation piping would allow chlorinated water to circulate in the lagoon and collector pipe. The modification will reduce the amount of bacteria in the discharge.

In the renewal application, the Discharger also requested that the residual chlorine effluent limitation be relaxed. It should be noted that the available effluent data indicated that the Discharger has exceeded the effluent limitation for residual chlorine on various occasions.

The Regional Board and the U.S. EPA have classified the Seaside Lagoon facility as a minor discharge.

Available Discharge Monitoring Reports (DMRs) submitted to the Regional Board include all monitoring reports for the years 1999, 2000, 2001, 2002, and 2003. The available DMR data are summarized in the following Table:

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Range of Reported Values
Flow	MGD	--	--	2.5
Temperature	°F	--	100	66 – 81
pH	S.U.	--	6.0 – 9.0	6.29 – 8.0
Total Suspended Solids (TSS)	mg/L	50	150	1.7 – 84
5-Day Biochemical Oxygen Demand ($BOD_5$20°C)	mg/L	20	30	<1 – 9

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Range of Reported Values
Oil and Grease	mg/L	10	15	<0.1 – 2.4[4]
Turbidity	NTU	50	150	0.25 – 20
Total Coliform	mpn/100 ml	1,000[1]	10,000[1]	<1 – 900
Fecal Coliform	mpn/100 ml	200[2]	--	<1 – 280
Enterococcus	mpn/100 ml	24[3]	--	<1 – >1,600
Residual Chlorine	µg/L	2	8	<10 – 1,800

1. The density of total coliform organisms shall be less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).

2. The fecal coliform density for any 30-day period, shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

3. The geometric mean enterococcus density of the discharge shall not exceed 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a 6-month period.

4. Value of <6 also reported.

A review of effluent monitoring data indicates that the Discharger may have exceeded the effluent limitation for Enterococcus in June 2002 and June 2003. Further, the available effluent monitoring data indicate that the Discharger has had multiple exceedances of the existing effluent limitations for total suspended solids (TSS) and total residual chlorine. The Regional Board issued a Notice of Violation (NOV) on May 4, 2001, addressing violations of effluent limitations for BOD and residual chlorine, for the period from July 1999 through August 2000. The City responded to the NOV in correspondence dated July 16, 2001. In the July 16, 2001, response, the City states that several laboratories were unable to detect residual chlorine accurately below 0.01 mg/L (the existing residual chlorine monthly average effluent limitation is 2 µg/L, or 0.002 mg/L) and that the monitoring location established in Order No. 99-057 is inappropriate for this facility. Further, the City requested that the residual chlorine effluent limitation be revised to 0.01 mg/L, and that the NOV be rescinded.

An Administrative Civil Liability (ACL) was issued to the City on March 29, 2002, in the amount of $51,000 for violation of the residual chlorine effluent limitation. The City responded on April 10, 2002, and submitted payment to the Regional Board and committed the preparation of a Supplemental Environmental Project, subject to Regional Board approval.

Effluent characteristics as stated by the Discharger in the permit renewal application are summarized below:

Pollutant	Units	Maximum Daily Value	Average Daily Value
Discharge Flow	mgd	2.3	2.3
pH	Std. units	6.3 – 6.6	--
Temperature	• C	27	22
$BOD_5$20 °C	mg/L	<2.0	<20
	lbs/day	<38	<38
TSS	mg/L	84	75
	lbs/day	1,611	1,438
Fecal Coliform	mpn/100 ml	280	27
Residual Chlorine	µg/L	<10	<10
	lbs/day	0.2	0.2
Oil and Grease	mg/L	<6	<6
	lbs/day	<115	<115

It should be noted that the detection limits for residual chlorine presented in the renewal application are greater than the existing effluent limitation for residual chlorine.

IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed permit are based on the requirements and authorities contained in the following:

A. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

B. Code of Regulations, Title 40 (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations for certain pollutants discharged from Seaside Lagoon.

C. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The Basin Plan contains beneficial uses and water

quality objectives for King Harbor (H.U. 405.12), an inland surface waterbody.

Existing uses: Industrial service supply; navigation; water contact recreation; non-contact water recreation; commercial and sport fishing; marine habitat; wildlife habitat; rare, threatened, or endangered species.

D. The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

E. On May 18, 2000, the U.S. Environmental Protection Agency (U.S. EPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR § 131.38]. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. The CTR also provides a schedule of compliance not to exceed 5 years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

F. On March 2, 2000, State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through National Toxics Rule (NTR) and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limitations (WQBELs) and to calculate the effluent limitations. The CTR criteria for saltwater or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this permit to protect the beneficial uses of the King Harbor.

G. 40 CFR section 122.44(d)(1)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on U.S. EPA criteria and supplemented, where necessary, by other

relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

H. State and Federal antibacksliding and antidegradation policies require that Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in sections 402(o) and 303(d)(4) of the CWA and in the Title 40 of the Code of Federal Regulations (40 CFR), section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.

I. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of King Harbor.

J. Existing waste discharge requirements contained in Board Order No. 99-057, adopted by the Regional Board on June 30, 1999. In some cases, permit conditions (effluent limitations and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet WQBELs that are developed to protect applicable designated uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of control:

A. Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

B. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

C. Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

D. New source performance standards (NSPS) that represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists for pollutants in a discharge to exceed water quality standards, WQBELs are also required under 40 CFR 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges to inland surface waters, enclosed bays, and estuaries, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by U.S. EPA through the CTR and NTR, as well as the Basin Plan.

There are several other specific factors affecting the development of limitations and requirements in the proposed permit. These are discussed as follows:

1. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

Seaside Lagoon is a saltwater public swimming facility that is fed with non-contact cooling water from a nearby power plant. Effluent limitations for Discharge Serial No. 001 in the previous permit (No. 99-057) were established for temperature, pH, fecal coliform, total coliform, enterococcus, TSS, turbidity, BOD, oil and grease, and total residual chlorine. Lagoon water (dechlorinated saltwater from the swimming area)

may contribute solids and affect turbidity of the receiving water. Water discharged from swimming areas may contain substances that affect the biochemical oxygen demand and contribute oil and grease to the receiving water. Further, chlorine is added to the source water (i.e., non-contact cooling water from the AES power plant) prior to entering Seaside Lagoon. Although lagoon water is dechlorinated prior to discharge to King Harbor, chlorine may be present in residual concentrations in the lagoon water at the point of discharge. Coliform may be present in lagoon water due to the nature of the activity at Seaside Lagoon (i.e., humans swimming in, and animals in the vicinity of, the swimming area). Therefore, coliform bacteria is considered a pollutant of concern.

In addition, discharges of certain wastewaters may cause changes in the pH and temperature of the receiving water. Discharges of swimming lagoon water may affect the pH of receiving waters. Further, although temperature may not be a pollutant of concern in this discharge, consistent with Basin Plan requirements, the proposed permit also establishes effluent limitations for temperature.

2. Technology-Based Effluent Limitations

Due to the lack of national ELGs for discharges of water from swimming facilities and the absence of data available to apply BPJ to develop numeric effluent limitations, and pursuant to 40 CFR 122.44(k), the Regional Board will require the Discharger to develop and implement a *Best Management Practices Plan* (BMPP) which should include measures to prevent pollutants from entering the lagoon. The combination of the BMPP and existing permit limitations based on past performance and reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

3. Water Quality-Based Effluent Limitations

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or U.S. EPA water quality criteria contained in the CTR and NTR). The procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the SIP.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time; saltwater

criteria apply at salinities of 10 ppt and above at locations where this occurs 95 percent or more of the time; and at salinities between 1 and 10 ppt the more stringent of the two apply. The CTR criteria for saltwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this permit to protect the beneficial uses of the King Harbor.

a. *Reasonable Potential Analysis (RPA)*

The Regional Board will conduct a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board would analyze effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each pollutant, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

i. Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

ii. Trigger 2 – If MEC<C and background water quality (B) > C, a limitation is needed.

iii. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Board to conduct the RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The Discharger reports that no CTR sampling has been conducted and there were no priority pollutant monitoring data available for review. Based on a lack of data to conduct an RPA, the Discharger is required to gather the appropriate CTR data to conduct an RPA as described in the proposed *MRP* CI-8034. The Regional Board reserves the right to reopen the permit at anytime for

amendment based on the analysis of these data.

b. Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 1.4 of the SIP. These procedures include:

i. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

ii. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

iii. Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

c. Impaired Water Bodies in 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The U. S. EPA has approved the State's 303(d) list of impaired water bodies. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development. However, the 2002 State Board's California 303(d) List does not classify King Harbor as impaired.

d. Whole Effluent Toxicity

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing permit does not contain acute toxicity limitations or monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this permit establishes acute toxicity limitations.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Based on the fact that the discharge is dechlorinated once-through, non-contact cooling water originating from the lagoon, and chlorine dissipates rapidly, the Regional Board does not believe the lagoon water discharge will contribute to chronic toxicity. Thus, no chronic toxicity limitations or monitoring requirements have been established in this proposed permit, and the Discharger is required to comply with acute toxicity limitations established in the proposed permit.

4. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR section 122.44(l) require that effluent limitations standards or conditions in reissued permits be at least as stringent as those in the existing permit. The Regional Board has determined that reasonable potential exists for the conventional and nonconventional pollutants that are regulated under the current permit; therefore, effluent limitations have been established for these pollutants. The requirements in the proposed permit for TSS, BOD, oil and grease, turbidity, Fecal Coliform, Total Coliform, Enterococcus, and total residual chlorine (shown in the table below) are based on limitations specified in the City's existing permit. The effluent limitations for pH and acute toxicity are based on the Basin Plan. The effluent limitation for temperature is based on the Thermal Plan.

Because there are no data to perform the RPA and calculate WQBELs for the priority pollutants, this permit does not establish effluent limitations for priority pollutants.

Effluent limitations are established in this permit, which are applicable to discharges of lagoon water from the NPDES Discharge Serial No. 001 (Latitude 33° 50' 38" N; Longitude 118° 23' 47" W) into King Harbor.

Pollutant	Units	Monthly Average Effluent Limitations	Daily Maximum Effluent Limitations	Rationale[1]
Temperature	°F	86		TP
pH	S.U.	6.5 – 8.5		BP
Total Suspended Solids	mg/L	50	75	E
BOD_5@20°C	mg/L	20	30	E
Oil and Grease	mg/L	10	15	E
Turbidity	NTU	50	75	E
Total Coliform	mpn/100 ml	1000	10,000	E, BP
Fecal Coliform	mpn/100 ml	200	400	E, BP
Enterococcus	mpn/100 ml	35	104	BP
Total Residual Chlorine [6]	µg/L	2	8	E
Acute Toxicity	% Survival	[2]		BP

1. TP – Thermal Plan; BP – Limitations are established in the Basin Plan; CTR, SIP – Water quality-based effluent limitations established based on the procedures in the SIP; E – Existing permit limitation.

2. For any three consecutive 96-hour static or continuous flow bioassay tests must be at least 90%, with no single test producing less than 70% survival (more information can be found in Section I.B.3.a. of the tentative permit.)

5. Monitoring Requirements

The previous *MRP* No. CI-8034 for Seaside Lagoon, required daily monitoring for total flow; weekly monitoring for residual chlorine, fecal coliform, total coliform, and enterococcus; monthly monitoring for TSS and turbidity; and annual monitoring for temperature, pH, oil and grease, and BOD during the period of operation from June through September.

Monitoring requirements are discussed in greater detail in Section III of the *MRP* No. CI-8034. As described in the *MRP*, monitoring reports must be submitted quarterly.

A Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit, and to assess the impact of the discharge to the beneficial uses of the receiving waters, this permit carries over the existing monitoring requirements for most parameters. Monitoring will include daily monitoring for total flow; weekly

monitoring for residual chlorine, Fecal Coliform, Total Coliform, and Enterococcus; monthly monitoring for TSS and turbidity; and annual monitoring for temperature, pH, oil and grease, and BOD.

The proposed permit also establishes annual monitoring for acute toxicity. Further, to provide sufficient data to conduct an RPA in the future, annual monitoring requirements for priority pollutants have been established in this permit.

The effluent monitoring program for the discharge of lagoon water (dechlorinated saltwater) from Discharge Serial No. 001 (Latitude 33° 50' 38"N and Longitude 118° 23' 47"W) is provided in Section III of the *MRP*.

b. Receiving Water Monitoring

The Discharger is required to monitor the receiving water for the CTR priority pollutants, to determine reasonable potential. Pursuant to the California Water Code, section 13267, the Discharger is required to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required, and (2) to calculate effluent limitations, if required. The SIP requires that the data be provided. Therefore, the Discharger shall conduct the following monitoring program for the receiving water for all CTR priority pollutants. The results of monitoring for reasonable potential determination shall be submitted in accordance with Section I.A of the *MRP*. Receiving water sampling shall be conducted at the same time as the effluent sampling. The receiving water monitoring location shall be outside the influence of the discharge in the receiving water (King Harbor).

Monitoring requirements for receiving water are discussed in greater detail in Section V and VI of the *MRP*.

c. *Monitoring for Reasonable Potential Determination*

The SIP states that the Regional Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

The Regional Board is requiring, as part of the *MRP*, that the Discharger conduct annual effluent monitoring for the priority pollutants (except for 2,3,7,8-TCDD) for which there are no effluent limitations established in the permit. In addition, the Regional Board is requiring that the Discharger conduct receiving water monitoring for the priority pollutants, annually, and at the same time effluent samples are collected. Further, the Discharger must analyze pH, salinity, and hardness of the receiving water concurrent with the analysis for the priority pollutants.

Exhibit F

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. R2-2006-0038

RESCISSION OF WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGER CITED HEREIN

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Regional Water Board) finds that:

1. The following Discharger has previously been issued National Pollutant Discharge Elimination System (NPDES) Permits in the orders listed below:

DISCHARGER	NPDES PERMIT NO.	ORDER NO.
Hanson Aggregates Mid-Pacific Inc.		
San Francisco Sand Yard	CA0030139	98-062
Oakland Yard	CA0030147	98-118

2. The San Francisco Sand Yard is located at 3301 Third Street in San Francisco immediately adjacent to Islais Creek Channel. The Oakland Yard is located at 4501 Tidewater Avenue in Oakland. Hanson Aggregates Mid-Pacific Inc. (hereinafter Discharger) collects sand from San Francisco Bay and transports it to these facilities by barge for washing.

3. The wash water produced by the Discharger's operation in the San Francisco Sand Yard is collected in a sedimentation basin to remove solids and particulates before discharging the wash water into Islais Creek Channel. The wash water produced at the Oakland Yard is also collected in sedimentation basins prior to discharge to Oakland Inner Harbor Channel.

4. On July 15, 1998, the Regional Water Board adopted NPDES Permit No. CA0030139, Order No. 98-062 for Tidewater Sand and Gravel Company, San Francisco Yard. On December 16, 1998, the Regional Water Board adopted NPDES Permit No. CA0030147, Order No. 98-118 for Tidewater's Oakland Yard.

5. On July 2, 1999, the Discharger purchased Tidewater Sand and Gravel Company, and on March 31, 2000, the Discharger and Tidewater merged. With the merger, the two permits transferred to the Discharger.

6. Both permits expired on July 15, 2003, and both were administratively extended.

7. On June 19, 2002, the Regional Water Board adopted Regional General NPDES Permit CAG982001, Order No. R2-2002-0063 (General Permit), for Aggregate Mining and Sand Washing Facilities to Surface Waters, with discharge limitations based on technology limits specified in the Water Quality Control Plan for the San Francisco Bay Basin. Currently, six facilities are covered by this General Permit and comply with its requirements.

8. The Discharger's sand washing operations at both its San Francisco and Oakland Yards qualify for coverage under the General Permit.

9. The Discharger has not applied for coverage under the General Permit due to concerns about compliance with the General Permit's limits for total suspended solids (TSS), settleable matter (SM), and turbidity. The Discharger's individual permits specify a less stringent limit for SM of 1 mg/l-hr as a monthly average, as compared to 0.1 ml/l-hr (monthly average) and 0.2 ml/l-hr (daily maximum) in the General Permit. The TSS limits are the same in both the individual and general permits. The Discharger's individual permits do not contain a turbidity limit, as compared to 40 NTU as a daily maximum limit in the General Permit.

10. On the issue of TSS, the Discharger has provided evidence to show that the analytical method for TSS is not reliable for saline samples, because salinity interferes with the results. Studies submitted to support this conclusion are titled "*Evaluation of the Accuracy and Reliability of EPA Test Method 160.2 to Measure Total Suspended Solids in Effluent from Marine Sand Processing Facilities, June 1, 2005*," and two addendums dated June 16, 2005 and March 24, 2006, respectively. Based on this evidence, the Regional Water Board finds that it is appropriate to waive monitoring for compliance with the TSS limits in the General Permit for the Discharger's facilities, and other facilities that process sand from saline environments in this region.

11. On the issue of SM, the discharge data (2003 to 2005) from the two facilities show that the Discharger would have just a few exceedances of the daily maximum effluent limit of 0.2 ml/l-hr, and no exceedance of the monthly average limit of 0.1 ml/l-hr specified in the General Permit. These data show that the Oakland yard has better performance than the San Francisco Sand Yard, with greater than 99 percent of the samples in compliance with the 0.2 ml/l-hr limit as compared to 87 percent for the San Francisco Sand Yard. Though currently, the Discharger cannot fully comply with the General Permit's limit for SM, the Regional Water Board finds that compliance is feasible because both facilities do comply with the limit a large percentage of the time, and would meet the limit fully if the Discharger ensures proper operation and maintenance of its existing sedimentation ponds. Other aggregate operations under the General Permit meet the SM limits.

12. The Discharger's turbidity effluent data show just two exceedances of the turbidity limit of 40 NTU, one at each facility, in the past three years (2003 to 2005). As with SM, the Regional Water Board believes it is feasible for the Discharger to achieve full compliance with the turbidity limit if the Discharger ensures proper operation and maintenance of its existing sedimentation ponds.

13. It is the Regional Water Board's intent to revisit and establish appropriate TSS requirements for marine sand washing facilities as part of the reissuance of the General Permit in 2007. The Regional Water Board may also revisit the SM and/or turbidity effluent limits, if the Discharger can demonstrate an alternate best available technology that is more appropriate for these and similar facilities.

14. Thus, it is feasible and appropriate for the Discharger's facilities to be covered under General Permit CAG982001. As such, the Discharger's individual permits are not necessary and Order Nos. 98-062 and 98-118 can be rescinded.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code, regulations, and plans and policies adopted thereunder, that:

1. The Discharger shall file Notices of Intent for coverage under General Permit CAG982001, 30 days prior to the rescission effective date.

2. Order Nos. 98-062 and 98-118 are rescinded effective September 1, 2006.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, and true and correct copy of an Order adopted by the California Regional Board Quality Control Board, San Francisco Region on June 14, 2006.

Bruce H. Wolfe
Executive Officer

Exhibit G

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGIONAL

MADELYN GLICKFELD, PANEL CHAIR

In the Matter of the)
Regional Board Public)
Meeting/24th Panel Hearing)
)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Monday, May 17, 2010

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
B4693WQLA

MS. GLICKFELD: Griesbach. Sorry about that.

MS. GRIESBACH: Good morning. My name is Amanda Griesbach and I'm a water quality microbiologist and I am commenting on behalf of Heal the Bay.

The penalties issued to the City of Redondo Beach for exceedences in total suspended solids at Seaside Lagoon should be reconsidered.

Seaside Lagoon directly pumps in seawater from King Harbor and chlorinates, dechlorinates, and then discharges back to the Harbor. Other than possible sediment mixing from swimmers, nothing in this process would contribute to an increase in TSS's.

A previously-issued TSO required the Discharger to conduct a study identifying a cause of TSS exceedences in the Lagoon. This study showed higher concentrations of TSS from the harbor itself than the Lagoon's discharge effluent concentration.

How can the Discharger be deemed responsible for contributing minimal amounts, if any, of TSS? I also noticed that the violations go back to 2003, which seems

impractical to go back seven years, seeing the high

turnaround rate of lab personnel and the inability to question the lab employees who actually handled and were recording these samples.

Heal the Bay's top priority lies with the protection of public health. Thus, we ask the Regional Board to focus on violations of chlorine and bacteria exceedences which may pose a public health risk. We ask the Regional Board to take these comments into consideration and focus more time on exceedences that directly affect public health. Thank you.

MS. GLICKFELD: That concludes public comments.

Closing statements from the City?

MR. WEBB: I'm not sure if you want me at the podium.

MS. GLICKFELD: Absolutely at the podium and on the right microphone, please. Thank you.

MR. WEBB: Though I fear I may be more persuasive --

MS. GLICKFELD: Just so you understand your time, you have about 14 minutes left on your time, so that would take you until what time? Until 11:20.

MR. WEBB: And I hope not to use all the time.

First of all, thank you for the attention that you've shown throughout this hearing. I appreciate it.

I think that this is a unique situation. I will venture that not often do you have, you know, your

Exhibit H

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGIONAL

MADELYN GLICKFELD, PANEL CHAIR

In the Matter of the Regional Board Public Meeting/24th Panel Hearing

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Monday, May 17, 2010

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
B4693WQLA

do not recognize economic benefit."

It's the very delay by Regional Water Quality Control Board in this case that prevented the swift and timely enforcement. The Prosecution staff and the tentative order leaves the time line for bringing

mandatory minimum penalties as forever.

Under that ruling, there is no outside limit. And that's of concern. It's -- you know, when the Regional Prosecution staff PowerPoint showed potential penalties in this case of 21.2 billion dollars, it causes a City of our size, let alone any City, grave concern. It causes concern among our creditors, it causes concern upon the agencies that rate our creditworthiness; and if there can be no outside limit, it's a problem.

Moreover, it's twisting a law that was designed for swift and timely enforcement, because we have to give you the staff reports. We have to self-notice and there's been no showing that we failed to do that. There is minimal investigation efforts that need to be done.

If you can go to the next slide, again, this wouldn't, in this case, assist in bringing the State's

Exhibit I

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

LOS ANGELES REGIONAL

MADELYN GLICKFELD, PANEL CHAIR

In the Matter of the Regional Board Public Meeting/24th Panel Hearing)

TRANSCRIPT OF PROCEEDINGS

Los Angeles, California

Monday, May 17, 2010

Reported by:

MARCENA M. MUNGUIA,
CSR No. 10420

Job No.:
B4693WQLA

up exceeding 1,000 gallons. Thus, the total potential maximum civil liability is over 7 billion dollars.

There were 18 serious violations under the provisions of Water Code Section 13385(h) and four violations under California Water Code Section 13385(i). Hence, the Regional Board must impose a mandatory minimum penalty amount of $66,000 for these violations.

In conclusion, the City violated California Water Code Section 13376 and Order Numbers 99-757 and R4-2005-0016 for which a mandatory minimum penalty in the amount of $66,000 must be assessed for these violations.

The Prosecution team recommends that the Panel make findings of fact and conclusions of law affirming Complaint Number R4-2008-0058-M for a mandatory minimum penalty of $66,000.

A draft Hearing Panel report, proposed order, and amended Exhibit A are included in Exhibit 5, tab 4.5, of your Hearing Panel package.

Thank you. And this concludes our presentation.

MS. GLICKFELD: Does that include all the Prosecution cases?

MS. OKAMOTO: Yes.

MS. GLICKFELD: Does the City want to cross-examine?

MR. WEBB: Yes, your Honor, we do.

EXHIBIT 6

Winston H. Hickox
Secretary for Environmental Protection

California R gional Water Quality ontrol Board

Los Angeles Region

(50 Years Serving Coastal Los Angeles and Ventura Counties)

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640
Internet Address: http://www.swrcb.ca.gov/rwqcb4

Gray Davis
Governor

(4)

March 29, 2002

Ms. Sylvia V. Glazer
Director of Public Works
City of Redondo Beach
545 N. Gertruda Avenue
Redondo Beach, CA 90277

By Fax and
Certified Mail
Return Receipt Requested
No. 7000 1530 0000 9785 8579

Dear Ms. Glazer:

COMPLAINT NO. R4-2002-0014 FOR ADMINISTRATIVE CIVIL LIABILITY FOR THE CITY OF REDONDO BEACH, SEASIDE LAGOON, 200 PORTOFINO WAY, REDONDO BEACH (NPDES No. CA0064297, Order No. 99-057, CI No. 8034).

Enclosed is Complaint No. R4-2002-0014 for Mandatory Administrative Civil Liability in the amount of $51,000 against the City of Redondo Beach for violation of Waste Discharge Requirements contained in Order No. 99-057. Also enclosed for your information is a copy of the Regional Board Revised Procedures for the Conduct of Hearing Panel Proceedings.

Unless waived, a Hearing before a Regional Board Hearing Panel will be held on this Complaint pursuant to California Water Code section 13323. Should the City of Redondo Beach choose to waive its right to a hearing, an authorized agent must sign the waiver form attached to Complaint No. R4-2002-0014 and return it to the Regional Board by April 12, 2002. If we do not receive the waiver and payment of the mandatory minimum penalty by April 12, 2002, this matter will be heard before the Hearing Panel. An agenda containing the date, time, and location of the Hearing will be mailed to you not less than ten (10) days prior to the Hearing date.

The Hearing Panel will hear the staff presentation, any evidence and argument the City of Redondo Beach wishes to present, and any comments offered by interested parties. To ensure that the Hearing Panel members are given the opportunity to fully study and consider the information the City of Redondo Beach wishes to present at the Hearing, all documentation that the City of Redondo Beach wishes to be considered must be submitted to this office at least five (5) working days prior to the date of the Hearing. The documentation must include: (a) any written comments, (b) a list identifying each witness to be called, and (c) the estimated time required by witnesses to present testimony. Failure to comply with these requirements is grounds for the Hearing Panel to refuse to admit the proposed written comments or exhibits into evidence (Title 23, California Code of Regulations, section 648.4).

The City of Redondo Beach may be allowed by the Regional Board to perform a Supplemental Environmental Project in lieu of paying a portion of the mandatory minimum penalty.

Please contact Hugh Marley at (213) 620-6375 or Lala Kabadaian at (213) 620-6370 should you have any questions.

Sincerely,

Dennis A. Dickerson
Executive Officer

Enclosures

cc: Mr. Michael Lauffer, Office of Chief Counsel, State Water Resources Control Board
Mr. Robert Sams, Office of Chief Counsel, State Water Resources Control Board
Mr. Jim Kassel, Division of Water Quality, State Water Resources Control Board
Mr. Bill Tippets, Department of Fish and Game
Ms. Vera Melnyk Vecchio, Drinking Water Field Operations Branch, State Department of Health Services

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

In the matter of:	)	Complaint No. R4-2002-0014
	)	Mandatory Minimum Penalty
CITY OF REDONDO BEACH	)	for
SEASIDE LAGOON	)	Violation of California Water Code § 13376
	)	and
	)	Order No. 99-057 (NPDES No. CA0064297)

This Complaint to assess the mandatory minimum penalty pursuant to Water Code § 13385(h) is issued to the City of Redondo Beach (hereafter referred to as the Discharger) based on a finding of violation of Waste Discharge Requirements prescribed in Board Order No. 99-057 (NPDES No. CA0064297, CI No. 8034).

The Executive Officer finds the following:

1. The Discharger operates a Seaside Lagoon (facility) at 200 Portofino Way, Redondo Beach, California. The facility is a man-made lagoon which provides water recreational services to the public. Water to the lagoon is supplied from the adjacent AES Redondo Beach, L.L.C., Power Plant cooling water discharge outfall line. The Discharger generates as much as 2.5 million gallons per day of wastewater, consisting of wastes that it discharges from this site (Latitude 33°50'38", Longitude 118°23'47"). This wastewater can contain solids, nutrients, chlorine, and other pollutants which can degrade water quality and impact beneficial uses, and which are defined as wastes under the Porter-Cologne Water Quality Control Act (Water Code § 13000 et seq.).

2. On June 30, 1999, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), adopted Order No. 99-057 which prescribes Waste Discharge Requirements to the Discharger for the discharge of treated wastes from the Seaside Lagoon. The wastes flow to King Harbor, a navigable water of the United States.

3. Order No. 99-057, Part 2, includes the following effluent limitations for total residual chlorine constituents:

Constituent	Unit of Measure	Discharge Limitations	
		Daily Maximum	Monthly Average
Residual Chlorine*	µg/L	8	2

µg/L = micrograms per liter
* Total Residual Chlorine

March 29, 2002

Any discharge containing pollutants exceeding the effluent limitations set in the Waste Discharge Requirements is prohibited by § 13376 of the California Water Code.

4. Among the provisions in the Discharger's Waste Discharge Requirements are the requirements to implement a discharge monitoring program and to prepare and submit monthly NPDES self-monitoring reports to the Regional Board.

In its monthly report for June 2000, the Discharger reported that it exceeded effluent limitations as follows:

Date	Violation Type	Constituent	Reported Value	Permit Limit	% Exceeded
6/2/00	Daily	Residual Chlorine*	310 µg /L	8 µg /L	3,775
6/9/00	Daily	Residual Chlorine*	20 µg /L	8 µg /L	150
6/14/00	Daily	Residual Chlorine*	40 µg /L	8 µg /L	400
6/22/00	Daily	Residual Chlorine*	500 µg /L	8 µg /L	6,150
6/27/00	Daily	Residual Chlorine*	70 µg /L	8 µg /L	775
6/30/00	Monthly	Residual Chlorine*	188 µg /L†	2 µg /L	9,300

µg /L = micrograms per Liter
*Total Residual Chlorine
† Not reported by the facility. Monthly average value calculated by staff based on additional data submitted by the facility's laboratory on November 20, 2001.

In its monthly report for July 2000, the Discharger's laboratory reported that the Discharger exceeded effluent limitations as follows:

Date	Violation Type	Constituent	Reported Value	Permit Limit	% Exceeded
7/5/00	Daily	Residual Chlorine*	320 µg /L	8 µg /L	3,900
7/12/00	Daily	Residual Chlorine*	860 µg /L	8 µg /L	10,650
7/17/00	Daily	Residual Chlorine*	60 µg /L	8 µg /L	650
7/31/00	Monthly	Residual Chlorine*	190 µg /L†	2 µg /L	9,400

µg /L = micrograms per Liter
*Total Residual Chlorine
† Not reported by the facility. Monthly average value calculated by staff based on additional data submitted by the facility's laboratory on November 20, 2001.

In its monthly report for August 2000, the Discharger's laboratory reported that the Discharger exceeded effluent limitations as follows:

Date	Violation Type	Constituent	Reported Value	Permit Limit	% Exceeded
8/2/00	Daily	Residual Chlorine*	460 µg /L	8 µg /L	5,650

Date	Violation Type	Constituent	Reported Value	Permit Limit	% Exceeded
8/9/00	Daily	Residual Chlorine*	30 µg /L	8 µg /L	275
8/16/00	Daily	Residual Chlorine*	30 µg /L	8 µg /L	275
8/23/00	Daily	Residual Chlorine*	60 µg /L	8 µg /L	650
8/30/00	Daily	Residual Chlorine*	3,170 µg /L	8 µg /L	39,525
8/31/00	Monthly	Residual Chlorine*	750 µg /L†	2 µg /L	37,400

µg /L = micrograms per Liter
*Total Residual Chlorine
† Monthly average value calculated by staff

In its monthly report for July 2001, the Discharger reported that it exceeded effluent limitations as follows:

Date	Violation Type	Constituent	Reported Value	Permit Limit	% Exceeded
7/12/01	Daily	Residual Chlorine*	50 µg /L	8 µg /L	525

µg /L = micrograms per Liter
*Total Residual Chlorine

Residual chlorine is specified as a Group II pollutant in Appendix A to § 123.45 of Title 40 of the Code of Federal Regulations (CFR). Pursuant to CWC § 13385(h)(2)(A) a "serious violation" is defined as any waste discharge that exceeds the effluent limitations by 40% or more for a Group I pollutant or by 20% or more for a Group II pollutant. The Discharger's discharge on June 2, June 9, June 14, June 22, June 27, June 30, July 5, July 12, July 17, July 31, August 2, August 9, August 16, August 23, August 30, August 31, 2000, and July 12, 2001 constitute serious violations under CWC § 13385.

5. On November 20, 2001, Regional Board staff contacted Mr. Richard Gossett, Laboratory Manager at CRG Marine Laboratories, to inquire about the residual chlorine data provided in the Discharger's monitoring reports. Mr. Gossett explained that the laboratory reports provided by CRG Marine Laboratories, Inc. in 1999 and 2000 for the Discharger have the total residual chlorine mistakenly reported as combined chlorine. Combined chlorine is determined by subtracting free chlorine from the total residual chlorine result. Upon reviewing the laboratory notebook, Mr. Gossett determined that this calculation was not performed during the 1999 and 2000 reporting periods. Therefore, all the combined chlorine results in the Discharger's monitoring reports during 1999 and 2000 were in fact results for total residual chlorine.

6. CWC § 13385(h) requires the Regional Board to assess a mandatory minimum penalty of three thousand dollars ($3,000) for the first serious violation in any six-month period or, in lieu of the penalty for the first serious violation require the Discharger to spend an equal amount to carry out a supplemental environmental project (SEP) or to develop a pollution prevention plan (PPP). That section also requires the assessment of additional penalties for subsequent serious violations.

7. The maximum amount of administrative civil liability pursuant to § 13385 of the California Water Code for each day of violation is $10,000 per day of violation plus $10 times the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

The Discharger IS HEREBY GIVEN NOTICE THAT:

1. The Executive Officer of the Regional Board proposes that the Discharger be assessed a mandatory minimum penalty in the amount of $51,000 for the serious violations which occurred during June, July, August 2000, and July 2001.

2. A hearing shall be conducted on this Complaint by the Regional Board or Regional Board Hearing Panel (Hearing Panel) within 60 days after service of this Complaint on the Discharger pursuant to CWC § 13323. The Discharger will be notified of the date, time and location of the Hearing. The Discharger may waive the right to a hearing. Should the Discharger choose to waive the right to a hearing, an authorized agent must sign the waiver form attached to this Complaint and return the executed waiver to the Regional Board at 320 West 4th Street, Suite 200, Los Angeles, CA 90013, to be received by the Regional Board by the close of business on April 12, 2002. If the hearing is waived, the following options are available to satisfy the civil liability:

   a. A check in the amount of $51,000 (payable to the State Water Resources Control Board Cleanup and Abatement Account) shall accompany the signed waiver or;

   b. In the event that the Discharger proposes to invest in a SEP or PPP, a letter clearly stating that the Discharger will provide a proposal for a SEP or PPP, and a check for the remaining $45,000 of the assessed administrative civil liability (payable to the State Water Resources Control Board Cleanup and Abatement Account) shall be sent along with the executed waiver and received by the Regional Board by the close of business on April 12, 2002. The SEP or PPP proposal shall be received by the Regional Board by the close of business on April 26, 2002.

   The proposal for a SEP or PPP will be subject to the approval of the Regional Board.

   Should the Regional Board not approve the Discharger's proposal for a PPP or SEP, or should the Discharger later elect not to implement the PPP or SEP, the remainder of the total Administrative Civil Liability will be due and payable within 30 days of such and event.

3. In the event that the Discharger fails to comply with the requirements of this Complaint, the Executive Officer is authorized to refer this matter to the Office of the Attorney General for enforcement

4. Notwithstanding the issuance of this Complaint, the Regional Board shall retain the authority to assess additional penalties for violations of the requirements of Discharger's Waste Discharge Requirements.

5. This enforcement action is exempt from the provisions of the California Environmental Quality Act, California Public Resources Code § 21100 et seq., in accordance with California Code of Regulations, title 14, § 15321.

Dennis A. Dickerson
Executive Officer

Dated March 29, 2002

EXHIBIT 7

California Regional Water Quality Control Board
Los Angeles Region

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Linda S. Adams
Agency Secretary

Arnold Schwarzenegger
Governor

September 15, 2010

Mr. Michael Webb
City of Redondo Beach
415 Diamond Street
Redondo Beach, CA 90277

Certified Mail
Return Receipt Requested
No.7005 1820 0001 2684 2369

DIRECTIVE FOR ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R4-2008-0058-M AGAINST CITY OF REDONDO BEACH, SEASIDE LAGOON, 200 PORTOFINO WAY, REDONDO BEACH, CALIFORNIA (ORDER NOS. 99-057 & R4-2005-0016, NPDES PERMIT NO. 0064297, CI-8034)

Dear Mr. Webb:

On February 16, 2010, the Executive Officer of the Regional Water Quality Control Board, Los Angeles Region (Regional Board) issued Administrative Civil Liability Complaint No. R4-2008-0058-M (ACLC) against City of Redondo Beach, Seaside Lagoon, in the amount of $150,000 for fifty (50) effluent violations contained in Regional Board Order Nos. 99-057 & R4-2005-0016.

On April 27, 2010, the Executive Officer sent a letter to the City of Redondo Beach modifying Exhibit "A" to twenty four (24) effluent limit violations, twenty two (22) of which are subjected to mandatory minimum penalties in the amount of $66,000.

On May 17, 2010, the ACLC was heard by a Hearing Panel of Board Members pursuant to California Water Code (CWC) § 13376. The Panel subsequently submitted to the Regional Board its report of the hearing consisting of the findings of fact, conclusions of law, and recommended an administrative civil liability of $51,000.

On September 2, 2010, the Regional Board upheld the imposition of the Panel's proposed administrative civil liability on the Permittee and issued Order on Complaint No. R4-2008-0058-M (ACLO), a copy of which is attached hereto and incorporated herein by reference, which directed payment of a total assessment of $51,000.

As noted in Finding 10 of the ACLO, the assessment is due and payable thirty (30) days after the date of adoption of the Order. A check in the amount of $51,000 (payable to the State Water Resources Control Board Cleanup and Abatement Account) must be received by the Regional Board on or before October 4, 2010.

In the event that the Permittee fails to comply with the requirements of this Directive, the Executive Officer will refer this matter to the Office of Attorney General for enforcement.

If you have any questions please contact Mr. Russ Colby at (213) 620-6373 regarding this matter.

Sincerely,

Samuel Unger

Samuel Unger, P.E.
Executive Officer

Enclosures
cc: See Attached Mailing List

Mailing List

Mr. Jeff Ogata, Office of Chief Counsel, State Water Resources Control Board
Ms. Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board
Ms. Mayumi Okamoto, Office of Enforcement, State Water Resources Control Board
Ms. Frances McChesney, Office of Chief Counsel, State Water Resources Control Board

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

In the matter of:	)	Order on Complaint No. R4-2008-0058-M
	)	Mandatory Minimum Penalty
	)	for
City of Redondo Beach	)	Violation of California Water Code § 13376
Seaside Lagoon	)	and
200 Portofino Way Redondo Beach, CA	)	Order Nos. 99-057 and R4-2005-0016 (NPDES No. CA0064297)

YOU ARE HEREBY GIVEN NOTICE THAT:

1. The Regional Water Quality Control Board, Los Angeles Region (Regional Board) has found and determined that the City of Redondo Beach (hereinafter Permittee) violated requirements contained in California Water Code (CWC) § 13376 and Order Nos. 99-057 and R4-2005-0016.

2. The Permittee owns and operates Seaside Lagoon (facility) located at 200 Portofino Way, Redondo Beach, California, which is subject to the waste discharge requirements and limitations set forth in Regional Board Order Nos. 99-057 and R4-2005-0016.

3. The Prosecution Team identified fifty five (55) effluent limit violations of Order No. 99-057 and Order No. R4-2005-0016 in the Permittee's self-monitoring reports during the period May 2003 through July 2008. Out of the fifty five (55) violations, the Prosecution Team determined that fifty (50) were subject to mandatory minimum penalties. These violations include effluent limit exceedances for coliform and enterococcus bacteria, biochemical oxygen demanding substances (BOD_5), total residual chlorine (TRC), and total suspended solids (TSS).

4. On February 16, 2010, the Assistant Executive Officer issued Complaint No. R4-2008-0058-M to the Permittee in the amount of $150,000 for the fifty (50) effluent violations of Order Nos. 99-057 and R4-2005-0016 subject to mandatory minimum penalties, as identified in Exhibit "A" to Complaint No. R4-2008-0058-M.

5. On April 27, 2010, the Prosecution Team sent a letter in response to the Permittee's April 19, 2010 Brief in Opposition to Administrative Civil Liability. The Prosecution Team considered the arguments raised by the Permittee in section III.C. of its Opposition Brief and reviewed the Permittee's "Sampling Time Summary." (City Exhibit 18.) Based on the arguments raised, the Prosecution Team modified Exhibit "A" to twenty four (24) effluent limit violations, twenty two (22) of which are subject to mandatory minimum penalties in the amount of $66,000.

6. The Presiding Officer of the Regional Board Hearing Panel issued two pre-hearing orders ruling on procedural objections raised by the City (April 29, 2010) and on the equitable defense of laches and due process issues raised by the City (May 13, 2010). The Regional Board adopted the Presiding Officer's April 29 and May 13, 2010 Pre-hearing Orders as final decisions for purposes of this Administrative Civil Liability Order on Complaint No. R4-2008-0058-M and for purposes of any petition filed pursuant to Water Code section 13320. The Regional Board concluded that consistent with direction from the State Water Resources Control Board in Order WQ 2007-0010 (Escondido Creek Conservancy), the equitable doctrine of laches does not apply to mandatory minimum penalties.

7. On May 17, 2010, this matter was heard in Los Angeles, California before a Hearing Panel consisting of Regional Board Members Ms. Madelyn Glickfeld (Presiding Officer), Ms. Francine Diamond, Ms. Jeanette Lombardo, and Mr. Steve Blois. Mr. Michael W. Webb, City Attorney appeared on behalf of the City of Redondo Beach. Mr. Samuel Unger, Mr. Russ Colby, and Ms. Mayumi Okamoto appeared for the Prosecution Team. The Hearing Panel subsequently submitted to the Regional Board its report of the hearing consisting of the findings of fact, conclusions of law, and recommended administrative civil liability, a copy of which is attached hereto and incorporated herein by reference.

8. Based on evidence presented in the hearing, the Hearing Panel determined that there were eighteen (18) effluent limit violations, seventeen (17) of which are subject to mandatory minimum penalties in the amount of $51,000. Exhibit "A" has been further modified to reflect the Hearing Panel's determination (see Amended Exhibit "A" attached).

9. Upon considering the Hearing Panel report and making an independent review of the record, the Regional Board during its meeting on September 2, 2010 upheld the imposition of the Hearing Panel's proposed administrative civil liability on the Permittee. The Regional Board directed payment of a total assessment of $51,000 on Complaint No. R4-2008-0058-M.

10. The assessment is due and payable and must be received by the Regional Board no later than thirty days after the date of adoption of this Order on Complaint by the Regional Board.

11. In the event that the Permittee fails to comply with the requirements of this Order, the Executive Officer or designee is authorized to refer this matter to the Office of Attorney General for enforcement.

12. Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

IT IS HEREBY ORDERED that, pursuant to § 13323 of the CWC, the Permittee shall make a cash payment of $51,000 (payable to the State Water Pollution Cleanup and Abatement Account) no later than thirty days after the date of issuance of this Order.

In the event that the Permittee fails to comply with the requirements of this Order on Complaint No. R4-2008-0058-M, the Executive Officer is authorized to refer this matter to the Office of Attorney General for enforcement.

I, Samuel Unger, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board on September 2, 2010.

Samuel Unger
Samuel Unger
Interim Executive Officer

Sept. 16, 2010
Date

ACLC No. R4-2008-0058-M

AMENDED EXHIBIT "A"
City of Redondo Beach
Seaside Lagoon
CI 8034

May 2003 - July 2008

Date	Monitoring Period	Violation Type	Parameter	Reported Value	Permit Limit	Units	Pollutant Category	% Exceeded	Serious/ Chronic	Water Code Section 13385	Penalty
05/23/2003	May-03	Daily Maximum	TRC	1,800	8	µg/L	2	22,400	Serious	(h)(1)	$3,000
05/23/2003	May-03	Monthly Average	TSS	76	50	mg/L	1	52	Serious	(h)(1)	$3,000
05/28/2003	May-03	Daily Maximum	TRC	840	8	µg/L	2	10,400	Serious	(h)(1)	$3,000
05/31/2003	May-03	Monthly Average*	TRC	1,320	2	µg/L	2	65,900	Serious	(h)(1)	$3,000
06/24/2003	Jun-03	Monthly Average	TSS	64	50	mg/L	1	28	Chronic	(i)(1)	$3,000
07/10/2003	Jul-03	Monthly Average	TSS	76	50	mg/L	1	52	Serious	(h)(1)	$3,000
07/22/2003	Jul-03	30-Day Geometric Mean*	Enterococcus	99	24	MPN/100 ml	NA	NA	Chronic	(i)(1)	$3,000
08/20/2003	Aug-03	Monthly Average	TSS	84	50	mg/L	1	68	Serious	(h)(1)	$3,000
08/15/2005	Aug-05	Daily Maximum	BOD_5	75	30	mg/L	1	150	Serious	(h)(1)	$3,000
08/15/2005	Aug-05	Monthly Average	BOD_5	75	20	mg/L	1	275	Serious	(h)(1)	$3,000
09/26/2005	Sep-05	Daily Maximum	TSS	80	75	mg/L	1	7	Chronic	(i)(1)	$0
10/24/2005	Oct-05	30-Day Rolling Average*	Total Coliform	2,014	1,000	MPN/100 ml	NA	NA	Chronic	(i)(1)	$3,000
06/05/2006	Jun-06	Daily Maximum	TSS	112	75	mg/L	1	49	Serious	(h)(1)	$3,000
06/05/2006	Jun-06	Monthly Average	TSS	112	50	mg/L	1	124	Serious	(h)(1)	$3,000
9/24/2007	Sep-07	Daily Maximum	TRC	710	8	µg/L	2	8,775	Serious	(h)(1)	$3,000
10/6/2007	Oct-07	Daily Maximum	TRC	2,100	8	µg/L	2	26,150	Serious	(h)(1)	$3,000
10/6/2007	Oct-07	Monthly Average	TRC	2,100	2	µg/L	2	104,900	Serious	(h)(1)	$3,000
7/28/2008	Jul-08	Daily Maximum	TRC	2,000	8	µg/L	2	24,900	Serious	(h)(1)	$3,000
										Total	**$51,000**

HEARING PANEL REPORT AND PROPOSED ORDER

City of Redondo Beach, Seaside Lagoon
ACL Complaint No. R4-2008-0058-M

This matter was heard on May 17, 2010 in Los Angeles, California before a panel consisting of Regional Board Members Ms. Madelyn Glickfeld (Chair), Ms. Francine Diamond, Ms. Jeanette Lombardo, and Mr. Steve Blois. Mr. Michael W. Webb, City Attorney, appeared on behalf of the City of Redondo Beach (Permittee). Mr. Samuel Unger, Mr. Russ Colby, and Ms. Mayumi Okamoto appeared for the Prosecution Team.

The Panel members make the following:

FINDINGS OF FACT

1. The Permittee owns and operates the Seaside Lagoon (facility) located at 200 Portofino Way, Redondo Beach, California. The facility is a 1.4 million gallon man-made saltwater lagoon which provides recreational services to the public. Water is supplied from a cooling water discharge outfall owned and operated by AES Redondo Beach, LLC Power Plant and chlorinated prior to entering the lagoon. To maintain the water level in the lagoon, the Permittee discharges up to 2.3 million gallons per day (MGD) of de-chlorinated wastewater to King Harbor, a navigable water of the United States.

2. The Permittee's wastewater discharges from the facility contain pollutants and are subject to the requirements and limitations set forth in California Water Code (CWC) § 13376 and Regional Board Order Nos. 99-057 and R4-2005-0016. CWC § 13376 prohibits the discharge of pollutants to surface waters, except as authorized by waste discharge requirements that implement the provisions of the Federal Clean Water Act. Order Nos. 99-057 and R4-2005-0016 set forth the waste discharge requirements and effluent limitations governing the discharges from the facility during the relevant period of time.

3. CWC § 13385(h)(1) requires the Regional Board to assess a mandatory minimum penalty of three thousand dollars ($3,000) for each serious violation. Pursuant to CWC § 13385(h)(2), a "serious violation" is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant by 20 percent or more, or for a Group I pollutant by 40 percent or more. Appendix A of Part 123.45 of Title 40 of the Code of Federal Regulations specifies the Group I and II pollutants.

4. CWC § 13385(i) requires the Regional Board to assess a mandatory minimum penalty of three thousand dollars ($3,000) for each violation whenever the permittee violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.

5. The Prosecution Team identified fifty five (55) effluent limit violations of Order No. 99-057 and Order No. R4-2005-0016 in the Permittee's self-monitoring reports during the period May 2003 through July 2008. Out of the fifty five (55) violations, the Prosecution Team determined that fifty (50) were subject to mandatory minimum penalties. These violations include effluent limit exceedances for coliform and enterococcus bacteria, biochemical oxygen demanding substances (BOD_5), total residual chlorine (TRC), and total suspended solids (TSS).

6. On February 16, 2010, the Assistant Executive Officer issued Complaint No. R4-2008-0058-M against the Permittee for a mandatory minimum penalty in the amount of $150,000 for those violations of waste discharge identified in Exhibit "A".

7. On April 27, 2010, the Prosecution Team sent a letter in response to the Permittee's April 19, 2010 Brief in Opposition to Administrative Civil Liability. The Prosecution Team considered the arguments raised by the Permittee in section III.C. of its Opposition Brief and reviewed the Permittee's "Sampling Time Summary." (City Exhibit 18.) Based on the arguments raised, the Prosecution Team modified Exhibit "A" (attached as Amended Exhibit "A") to twenty-four (24) effluent limit violations, twenty-two (22) of which are subject to mandatory minimum penalties in the amount of $66,000.

8. On considering the written record and evidence presented at the hearing the Panel finds that there were eighteen (18) effluent limit violations, seventeen (17) of which are subject to mandatory minimum penalties in the amount of $51,000. The Panel specifically finds that those violations occurred as reported by the Permittee.

9. The Chair of the Regional Board Hearing Panel issued two pre-hearing orders ruling on procedural objections raised by the City (April 29, 2010) and on the equitable defense of laches and due process issues raised by the City (May 13, 2010). The Panel considered the Chair's April 29 and May 13, 2010 Pre-hearing Orders.

CONCLUSIONS OF LAW

1. The discharges of effluent containing coliform and enterococcus bacteria, biochemical oxygen demanding substances (BOD_5), total residual chlorine (TRC), and total suspended solids (TSS) in excess of the effluent limitations of Order Nos. 99-057 and R4-2005-0016 into navigable waters of the United States, as found in Finding of Fact No. 8 and Amended Exhibit "A" constitute seventeen (17) violations of effluent limitations contained in Order Nos. 99-057 and R4-2005-0016.

2. There are no statutes of limitations that apply to this administrative proceeding. The statutes of limitations that refer to "actions" and "special proceedings" and are contained in the California Code of Civil Procedure apply to judicial proceedings, not administrative proceedings. See City of Oakland v. Public Employees' Retirement System (2002) 95 Cal.App.4th 29, 48; 3 Witkin, Cal. Procedure (4th ed. 1996) Actions, § 405(2), p. 510.

3. Consistent with direction from the State Water Resources Control Board in Order WQ 2007-0010 (Escondido Creek Conservancy), the equitable doctrine of laches does not apply to mandatory minimum penalties.

4. $51,000 is the mandatory minimum penalty amount that must be assessed against the Permittee under CWC § 13385 for the violations identified in Amended Exhibit "A".

5. The maximum amount of administrative civil liability assessable for the violations alleged in Complaint No. R4-2008-0058-M pursuant to CWC § 13385 is $10,000 per day of violation plus $10 times the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

RECOMMENDED MANDATORY MINIMUM PENALTY

The amount of $51,000 should be imposed on the Permittee as a mandatory minimum penalty for the violations found herein to have been committed by the Permittee. A proposed Order on Complaint No. R4-2008-0058-M is attached.

Madelyn Glickfeld

July 27, 2010

Madelyn Glickfeld
Chair

Date

Attachments:
Amended Exhibit "A"
Proposed Order on Complaint No. R4-2008-0058-M

ACLC No. R4-2008-0058-M

AMENDED EXHIBIT "A"
City of Redondo Beach
Seaside Lagoon
CI 8034

May 2003 - July 2008

Date	Monitoring Period	Violation Type	Parameter	Reported Value	Permit Limit	Units	Pollutant Category	% Exceeded	Serious/ Chronic	Water Code Section 13385	Penalty
05/23/2003	May-03	Daily Maximum	TRC	1,800	8	µg/L	2	22,400	Serious	(h)(1)	$3,000
05/23/2003	May-03	Monthly Average	TSS	76	50	mg/L	1	52	Serious	(h)(1)	$3,000
05/28/2003	May-03	Daily Maximum	TRC	840	8	µg/L	2	10,400	Serious	(h)(1)	$3,000
05/31/2003	May-03	Monthly Average*	TRC	1,320	2	µg/L	2	65,900	Serious	(h)(1)	$3,000
06/24/2003	Jun-03	Monthly Average	TSS	64	50	mg/L	1	28	Chronic	(i)(1)	$3,000
07/10/2003	Jul-03	Monthly Average	TSS	76	50	mg/L	1	52	Serious	(h)(1)	$3,000
07/22/2003	Jul-03	30-Day Geometric Mean*	Enterococcus	99	24	MPN/100 ml	NA	NA	Chronic	(i)(1)	$3,000
08/20/2003	Aug-03	Monthly Average	TSS	84	50	mg/L	1	68	Serious	(h)(1)	$3,000
08/15/2005	Aug-05	Daily Maximum	BOD_5	75	30	mg/L	1	150	Serious	(h)(1)	$3,000
08/15/2005	Aug-05	Monthly Average	BOD_5	75	20	mg/L	1	275	Serious	(h)(1)	$3,000
09/26/2005	Sep-05	Daily Maximum	TSS	80	75	mg/L	1	7	Chronic	(i)(1)	$0
10/24/2005	Oct-05	30-Day Rolling Average*	Total Coliform	2,014	1,000	MPN/100 ml	NA	NA	Chronic	(i)(1)	$3,000
06/05/2006	Jun-06	Daily Maximum	TSS	112	75	mg/L	1	49	Serious	(h)(1)	$3,000
06/05/2006	Jun-06	Monthly Average	TSS	112	50	mg/L	1	124	Serious	(h)(1)	$3,000
9/24/2007	Sep-07	Daily Maximum	TRC	710	8	µg/L	2	8,775	Serious	(h)(1)	$3,000
10/6/2007	Oct-07	Daily Maximum	TRC	2,100	8	µg/L	2	26,150	Serious	(h)(1)	$3,000
10/6/2007	Oct-07	Monthly Average	TRC	2,100	2	µg/L	2	104,900	Serious	(h)(1)	$3,000
7/28/2008	Jul-08	Daily Maximum	TRC	2,000	8	µg/L	2	24,900	Serious	(h)(1)	$3,000
										Total	$51,000

EXHIBIT 8

California Regional Water Quality Control Board

Los Angeles Region

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Arnold Schwarzenegger
Governor

March 26, 2010

Mr. Michael W. Webb, City Attorney
City of Redondo Beach
415 Diamond Street
Redondo Beach, CA 90277-0639

VIA FEDEX
TRACKING NO. 8704 0546 7984

COMPLAINT NO. R4-2008-0058-M FOR MANDATORY MINIMUM PENALTY AGAINST THE CITY OF REDONDO BEACH, SEASIDE LAGOON, 200 PORTOFINO WAY, REDONDO BEACH, CA. (ORDER NOS. 99-057 AND R4-2005-0016, NPDES PERMIT NO. CA0064297, CI NO. 8034)

Dear Mr. Webb:

Unless waived, this matter is scheduled to be heard before a Hearing Panel of the Regional Water Quality Control Board (Regional Board) pursuant to California Water Code (CWC) §§ 13228.14 and 13323. Enclosed is a Preliminary Hearing Panel package and a copy of the PowerPoint slides for our next Hearing Panel, which starts at 10:00 a.m. on May 17, 2010 at the Public Utilities Commission Hearing Room, 320 W. 4th Street, 5th Floor, Los Angeles, California 90013. The Hearing Panel will hear the staff presentation, any evidence and argument you wish to present, and any comments offered by interested parties. All documentation that you wish the Hearing Panel to consider must be submitted to the attention of Russ Colby, Case Manager of the Prosecution Team, no later than 5:00pm on April 19, 2010.

The Hearing Panel will consider all evidence and comments, and will provide a proposed final order to the Regional Board. You will be notified of the date of the Regional Board meeting. At the Regional Board meeting, the Regional Board may adopt, modify, or reject the Hearing Panel's recommendation. The Regional Board will not ordinarily accept new evidence; thus, you should prepare to present all evidence and argument to the Hearing Panel.

On the day of the Hearing Panel, Regional Board staff may not be available to receive telephone messages; however, important calls may be made to the Regional Board's general number at (213) 576-6600 and the appropriate staff will be contacted.

If you have any questions regarding the matter, please contact Hugh Marley at (213) 620-6375 or Russ Colby at (213) 620-6373.

Sincerely,

Paula Rasmussen
Section Chief, Compliance and Enforcement

Enclosure

cc: Ms. Mayumi Okamoto, Office of Enforcement, SWRCB (w/o enclosure)

Mandatory Minimum Penalty for the City of Redondo Beach

Item X

24th Panel Hearing

May 17, 2010

Background

- Order No. 99-057
  - Adopted June 30, 1999
  - Effective July 6, 1999
  - 4.8 million gallons per day of de-chlorinated wastewater
  - Discharges to King Harbor, a navigable water of the U.S.
- Order No. R4-2005-0016
  - Adopted/Effective on March 3, 2005
  - Rescinded Order No. 99-057, except for enforcement purposes

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Background (cont.)

- Time Schedule Order No. R4-2007-0024
  - Adopted April 26, 2007
  - Effective May 1, 2007 to January 31, 2008
  - Prescribed interim limits for
    - Total Suspended Solids (TSS), and
    - Biochemical Oxygen Demanding Substances (BOD_5)

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Background (cont.)

- Time Schedule Order No. R4-2008-0002
  - Adopted January 31, 2008
  - Effective February 1, 2008 to February 28, 2010
  - Prescribed interim limits for
    - Total Suspended Solids (TSS)

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Background (cont.)

- Order No. 99-057 (Part 2 page 5) includes the following effluent limitations for BOD_5, TRC, TSS, and enterococcus :

Constituent	Unit of Measure	Discharge Limitations	
		Daily Maximum	Monthly Average
BOD_5	mg/L	30	20
TRC	µg/L	8	2
TSS	mg/L	150	50
Enterococcus	MPN/100 mL	(a) 30-day geometric mean <=24 MPN/100 mL (b) 6-month geometric mean <=12 MPN/100 mL	

µg/L = micrograms/liter, mg/L = milligrams/liter, MPN = most probable number

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Background (cont.)

- Order No. R4-2005-0016 includes the following effluent limitations for BOD_5, O&G, TRC, TSS, pH, and total coliform :

Constituent	Unit of Measure	Discharge Limitations	
		Daily Maximum	Monthly Average
BOD_5	mg/L	30	20
O&G	mg/L	15	10
TRC	mg/L	8	2
TSS	mg/L	150	50
pH	S.U.	(a) Instantaneous Minimum = 6.5 (b) Instantaneous Maximum = 8.5	
Total Coliform	MPN/100 mL	(a) 30-day geometric mean <=24 MPN/100 mL (b) 6-month geometric mean <=12 MPN/100 mL	

µg/L = micrograms/liter, mg/L = milligrams/liter, MPN = most probable number, S.U. = Standard Units

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Violations

- MMP Complaint No. R4-2008-0058-M issued February 16, 2010
  - Permittee reported 55 effluent limit violations from June 2002 to July 2008
    - Violations of BOD_5, O&G, TRC, TSS, pH, enterococcus, and total coliform
  - Out of 55 effluent limit violations, 50 are subject to mandatory minimum penalties

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Mandatory Minimum Penalties

- Mandatory Minimum Penalty of $150,000
  - 34 serious violations under CWC § 13385(h); exceeded effluent limitations by 40% and 20% for Group I and II pollutants
  - 16 chronic violations under CWC § 13385(i)

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Potential Maximum Civil Liability

- Effluent limit violations
  - 430 days x $10,000 = $4,300,000
  - 4.6 MGD discharged (minus 1,000 gallons) x $10/gal = $21.2 B
- Potential Maximum Penalty = **$21.2 B**

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Conclusions

- Permittee violated CWC section 13376 and Order Nos. 99-057 and R4-2005-0016
- $150,000 mandatory minimum penalty must be assessed against the Permittee

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Recommendation

- Make findings of fact and conclusions of law affirming Complaint No. R4-2008-0058-M for a mandatory minimum penalty of $150,000

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