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NCRWQCB

Robert R. Klamt, Interim Executive Officer
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

JAN 25 2008

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<input type="checkbox"/> Reg/NPS	<input type="checkbox"/> Cleanups	<input type="checkbox"/> Date

January 25, 2008

Dear Mr. Klamt:

Subject: Comments of Draft Waste Discharge Requirements for the University of California-Davis Bodega Marine Laboratory, Order No. CA-2008-0002, NPDES No. CA0024333, WDID No. 1B840350SON

On behalf of the University of California, Davis Bodega Marine Laboratory (BML), I thank you for the opportunity to comment on the Draft Waste Discharge Requirements for BML's seawater discharge into the Bodega Area of Special Biological Significance (ASBS). We have spent considerable effort to prepare a careful and thoughtful review of the Draft NPDES permit and hope that you will consider revisions proposed in this letter and the supporting attachments.

BML is dedicated to minimizing effects of its activities on surrounding terrestrial and marine ecosystems. As such, we are committed to full regulatory compliance and support the NPDES process. At the same time, the detailed monitoring required by the Draft Waste Discharge Requirements represents a substantial burden to BML's operations budget. Our preliminary analysis indicates that the new sampling, analytical, oversight and reporting requirements will cost a quarter of a million dollars during the first year (\$120K for program start-up and \$130K for annual carrying costs). On-going carrying costs represent a tripling of our annual budget for BML's water quality program.

While we are motivated to stay compliant, we would like to ensure that samples are not redundant and all results will be needed to accurately characterize water quality conditions in the ASBS. We believe that the proposed revisions would not compromise the protection of *beneficial uses* of the Bodega ASBS, and will allow BML to continue in its mission to benefit the *public interest* by conducting critically important research and education that provide significant public and environmental benefits.

Background

BML is a national resource for information on marine and coastal ecosystems. Established in 1960 by the University of California, the facility is dedicated to research and education in the public

interest. Its mission is to provide the multidisciplinary scientific understanding required to solve complex environmental problems on the marine and terrestrial sides of the tide line in northern California. BML is one of the larger and older members of the national network of marine laboratories and field stations that provide specialized research facilities. Between 1996-2006, BML served 65 resident scientists and 465 visiting scientists from 193 institutions representing 28 countries. Nearly 1,000 scientific publications resulted from their work. Over the same period, BML offered 554 classes serving 10,473 students. BML's public education reached 91,141 visitors, of which half were from grades K-12. A research unit of the California Department of Fish & Game devoted to shellfish health and marine conservation is deployed at BML, staffed by two California Department of Fish and Game scientists. Our research and educational programs rely on the availability of seawater that is pumped from the Bodega ASBS into classrooms and laboratories where organisms can be sustained, studied, and observed.

Proposed Revisions

Our comments on the Draft Waste Discharge Requirements are provided in the body of this letter and in Attachment A. We have limited comments in the letter to specific issues that require detailed discussion. Each comment begins with a reference to specific paragraphs or tables in the Draft Waste Discharge Requirements that address the topic. In cases where the comment is based on multiple occurrences, we direct the reader to BML comments in Attachment A.

1. **BML Comments 13, 33, 38, 39, 40, 41, 43, 44, 76, and 79 in Attachment A. Removal of the requirement for Acute Toxicity Testing, with the exception of Horseshoe Cove sediments.** Chronic Toxicity Tests, which are scheduled in the Draft Waste Discharge Order at the same locations and sampling frequency as the Acute Toxicity Tests, are more accurate and sensitive measures of effluent toxicity.

“Chronic toxicity tests are inherently more sensitive to toxicants than acute tests; that is, adverse effects are detected at lower concentrations of toxicant.” (SWRCB 96-1WQ, Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 1996. Page 3).

The Chronic Toxicity Tests determine the effects of seawater effluent on critical life stages (developing embryos and/or larvae) of 3 species: kelp, sea urchin, and silverside fish. The Acute Toxicity Test would determine the effects of effluent on adult fish (the same species as the one used in the chronic test that utilizes the sensitive larval stage), which are typically more resistant to pollutants. If any adverse effects of BML effluent exist, they would be detected in the chronic toxicity tests (early life stage development and growth) well before any responses would be observed in acute tests (mortality). As such, the sensitive Chronic Toxicity Tests make the less sensitive Acute Toxicity Test redundant.

Prescription of the more sensitive chronic toxicity tests was also described in the SWRCB Resolution 2007-0058 (Paragraphs 2.n. and o.) which stated that Chronic (and not Acute) Toxicity test would be performed at Eff-001, EFF-016, RSW-001, and REF-001. The Acute Toxicity test was only prescribed for the annual Horseshoe Cove Sediment Sample (SWRCB Resolution 2007-0058, Paragraph 2.p.).

We request that the Acute Toxicity Testing requirement be removed as an unnecessary expense (\$7,280 during the first year and at least \$15,600 over the life of the 5-year NPDES permit).

2. **Page E-5, Table E-7. Removal of the requirement for dry weather Chronic Toxicity testing of the receiving waters in Horseshoe Cove (RSW-001) during the first year.** The purpose of sampling Horseshoe Cove (RSW-001) is to assess the impact of BML's storm water discharge on receiving waters (SWRCB Resolution 2007-0058, Paragraph 2.q.). A water quality comparison during wet weather between the receiving waters at Horseshoe Cove (RSW-001) and natural water quality at the Mussel Point reference station (REF-001) determines whether receiving waters are compromised (SWRCB Resolution 2007-0058, Paragraph 2.q.) by the storm water discharge (EFF-016).

The Draft NPDES Permit (Pg E-6, Table E-7) requires two Acute and Chronic Toxicity Tests - one during wet and one during dry weather - of the receiving water (RSW-001) during the first year. Since the request to remove the requirement for the Acute Toxicity Test is addressed above in Comment #1, we limit our comments here to the Chronic Toxicity test requirement. It would appear that the additional dry weather Chronic Toxicity Test of the receiving water is an unnecessary expense (\$2,860) because:

- For the Chronic Toxicity test, storm water impacts are not evaluated during dry weather when storm water runoff is not active.
- Dry weather testing of the RSW-001 is not used to assess impacts of the seawater effluent (EFF-001). As described in SWRCB Resolution 2007-0058 Paragraph 2.n., impacts of seawater effluent (EFF-001) are assessed by comparing the seawater discharge (EFF-001) to natural water quality at the Mussel Point reference site (REF-001).

Therefore, we are requesting removal of the requirement for RSW-001 Chronic Toxicity testing during the dry season.

3. **Page F-20, Section C 3.b. Paragraphs 3, 4, and 5. Application of the requirement for quarterly testing of copper, cadmium and silver to the first year of the permit and at the discretion of the Regional Water Board thereafter.** As justification for an increased sampling rate (from twice per year to quarterly) for copper, cadmium and silver, the Draft NPDES Permit (Attachment F) cites prior water sample results (from February and April 2006) and bioaccumulation studies at Bodega Head. We submit that the evidence used for this determination is not reliable (as evidenced by the information provided below). We request that the permit provide language allowing reduced sampling (twice per year) after low levels of these constituents in BML seawater effluent are confirmed during the first year.

- High metal results from the February and April 2006 were most likely due to contamination. BML submitted samples for total metals analysis on February 14, 2006 and April 4, 2006. An error was made by BML staff in the preparation of samples prior to arrival for analysis at Brelje and Race Laboratories, Inc. Instead of using trace metal-free acid and a trace metal-free clean room necessary for regulatory and analytical analyses, the samples were acidified using standard nitric acid in one of the common use laboratories. Use of the trace metal-free

nitric acid is required to prevent contamination of the sample by trace metals (see Attachment B from Brelje and Race Laboratories, Inc.). More recent sampling (July 27) and all future samples will be collected and shipped to the analytical laboratory for processing and analyses using approved U.S. EPA methods.

- Using the approved method EPA 1640 (Total Trace Methods in Seawater) as required in this Order, we resubmitted seawater effluent samples on July 10, 2007 for total trace metals analysis to CRG Marine Laboratories, Inc. (Attachment C). These samples showed levels well below Ocean Plan Table B metals objectives:

<u>Constituent</u>	<u>Table B Objective</u>	<u>July 2007 Sample</u>
Total Cadmium	1 ug/L	0.074 ug/L
Total Copper	3 ug/L	1.16 ug/L
Total Silver	0.7 ug/L	not detected

- BML is an unlikely source for the elevated levels of cadmium and copper found in mussels as part of the Mussel Watch bioaccumulation study. The Bodega Head Mussel Watch station is located approximately 1 mile south of the BML discharge and at least 0.5 miles south of the Bodega ASBS (Attachment D). The station is immediately adjacent to an intensively used State Park parking lot and next to the outlet of Bodega Harbor, which receives runoff from marinas, boats, roads and the town of Bodega Harbor. Given the relative size of developments in the Harbor and the location of the mussel sampling location immediately downstream of these sources, BML is an unlikely source for these constituents.

4. **Footnote (a) in Tables 7 (Page 13), F-8 (Page F-16) and F-13 (Pages F-24 and 25).**

Clarification of language on Total Suspended Solids (TSS) calculations to acknowledge Standard Method protocols. Suspended solids (TSS) in seawater vary rapidly over time and at small spatial scales, making precise measurements difficult. Standard Method 2540D quantifies the precision of the measurement relative to suspended solid density (Pg 2-58, Standard Methods for the Examination of Water and Wastewater, 20th Edition). Given the high coefficient of variation (10% to 33%) for naturally occurring TSS (roughly 15 ug/L to 100 mg/L), we propose that the Order acknowledges measurement precision by calculating the effluent limitations for Total Suspended Solids as:

$$TSS_{EFFLUENT} - TSS_{INFLUENT} > 2.7 * s.d.$$

Where s.d. is the standard deviation of the precision estimate. Multiplying by 2.7 provides 95% confidence that the two values are different. Because the standard deviation varies with the amount of suspended solids in the sample, the standard deviation used would be based upon the average TSS of the influent and effluent samples.

We request that Footnote (a) in Tables 7 (Page 13), F-8 (Page F-16) and F-13 (F-24 and 25) be appended with the bolded sentence below:

"The discharge shall not contain concentrations of suspended and settleable solids higher than those found in the influent and shall not cause nuisance or adversely affect beneficial uses.

Standard Method precision measurements for Method 2540D may be applied to TSS differences as follows: $TSS_{EFFLUENT} - TSS_{INFLUENT} > 2.7 * \text{standard deviation}$. Standard deviation shall be extrapolated based upon the average of TSS effluent and influent concentrations.

5. **Page 12, Section III, Paragraph A and Page F-14, Section IV, Paragraph A1. Text Omissions.** We found two small omissions that would substantially change our understanding of the Discharge Prohibitions. We request that:

"The discharge of any waste disclosed by the Discharger or not within the contemplation of the Regional Board is prohibited."

Be changed to:

*"The discharge of any waste **not** disclosed by the Discharger or not within the contemplation of the Regional Board is prohibited."*

In addition to these proposed revisions, we would also like to request clarification on the following issues:

6. **Page 1, Table 3 and Page E-13, Table E-13. Effective Dates of the Order vs Monitoring and Reporting.** We would like clarification on effective dates and monitoring periods:

- Table 3 shows the effective date of the Order as April 25, 2008, while Table E-13 indicates that the Monitoring Periods for the samples taken Twice Annually and Annually should begin January 1, 2008. Since the effective date of the permit is April 25, it is unclear whether samples taken before April 25 would serve to fulfill legal requirements for the permit. To clarify our responsibilities, we would prefer that the effective date of the permit is aligned with the Monitoring periods (e.g., Annual monitoring requirements would be conducted between April 25, 2008 and April 24, 2009).
- Table E-13 shows that for the Twice Annual sampling frequency, there are two monitoring periods: January 1 through June 30 and July 1 through December 31. Our twice annual sampling is either two wet weather samples or one dry/one wet weather sample. Do we need to submit one sample during each period, or can two tests be submitted during one 6-month period? For example, could we submit the two wet weather samples during July 1 – December 31?
- For the "1X/Order Term" sampling frequency in Table E-13, our understanding is that the viable monitoring period for these tests would be May 1, 2008 through September 30, 2012 (i.e., after the effective date of the order and before the final Self Monitoring Report (SMR) reporting period is due with the application of new waste discharge requirements).

7. **Page 14, Last Paragraph, 2nd Sentence. Waste Field Sampling.** The Order indicates that some water quality samples can be collected after initial dilution with receiving water is completed:

“Compliance with water quality objectives contained in the Ocean Plan and Resolution No. 2007-0058 shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed;...”

Could you clarify which water quality constituents identified in the Waste Discharge Permit are eligible for waste field sampling (i.e., dilution credits)?

Additional replacements, errata, and comments are included in Attachment A. Thank you for the opportunity to comment. We look forward to working with you in the future.

Sincerely,



Dr. Gary Cherr
Acting Director
Professor, Environmental Toxicology & Nutrition
Bodega Marine Laboratory

Attachments

- Attachment A: Replacements and Errata
- Attachment B: Brelje and Race Laboratories, Inc.
- Attachment C: CRG Marine Laboratories, Inc. Total Metals Report
- Attachment D: Mussel Watch Station at Bodega Head

ATTACHMENT A: University of California Davis Bodega Marine Laboratory's Comments on Waste Discharge Requirements for the UC Davis Bodega Marine Laboratory REPLACEMENTS & ERRATA

Comment #	Part	Page	Section No., Letter or Table No. (e.g., VII. B. 2 or Table 6)	Paragraph	Existing Text	Proposed Change	Justification
1	Order	1	Table 1		2099 Westside Road	Add PO Box 247	include mailing address
2	Order	1	Table 2		Discharge Point 003 Latitude & Longitude	Change to 38° 19' 9" N 123° 4' 18" W	requested by Regional Water Board
3	Order	1	Table 2		Discharge Point 004 Latitude & Longitude	Change to 38° 19' 4" N 123° 4' 12" W	requested by Regional Water Board
4	Order	4	Table 4		Facility Contact, Title, and Phone	Change to Skylil McAfee, Assistant Director Operations & Facilities, (707) 875-2005	
5	Order	5	II A. Background	Par 1	The Discharger submitted a Report of Waste Discharge (dated December 28, 2005) and applied for an NPDES permit renewal to discharge...	Replace December 28, 2005 with January 31, 2005	Jan 31, 2005 was the date of the NPDES permit renewal submission.
6	Order	5	II. B. Facility Description	Par 2, last sentence	Waste seawater is discharged at a rate of 1.5 mgd at Discharge Point 001, located in near shore....	Waste seawater is discharged at a maximum rate of 1.5 mgd at Discharge Point 001	BML's seawater pump maximum is 1.5 mgd, and the average daily flow is 0.6 mgd
7	Order	6	II. B. Facility Description	Par 3, sentence 2	With a salinity of 3,000 mg/l, the well water	salinity of 3 salinity standard units OR 3 parts per thousand	Salinity is reported in standard units or in parts per thousand
8	Order	7	II.E.	Par 2	Nonetheless, the waste discharge requirements for Discharge Point 002 are exempt from under California Code of Regulations...	Nonetheless, the waste discharge requirements for Discharge Point 002 are exempt from CEQA under California Code of Regulations	typo, CEQA missing
9	Order	12	III.A.		The discharge of any waste disclosed by the Discharger...	The discharge of any waste not disclosed by the Discharger	typo, not missing
10	Order Attach F Attach F	13 F-16 F-24, 25	Table 7 Table F-8 Table F-13	Footnote [a]	The discharge shall not contain concentrations of suspended and settleable solids higher than those found in the influent and shall not cause nuisance or adversely affect beneficial uses.	The discharge shall not contain concentrations of suspended and settleable solids higher than those found in the influent, and shall not cause nuisance or adversely affect beneficial uses. Precision measurements may be applied to TSS differences as follows: $TSS_{\text{Effluent}} - TSS_{\text{Influent}} > 2.7 * \text{standard deviation}$. Standard deviation shall be extrapolated from Standard Methods data (Method 2540D) and based upon the average of TSS effluent and influent concentrations.	This revision reflects the precision error of method 2540D approved by EPA and detailed in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998.
11	Order	14	Table 8		Salinity as mg/l	Change mg/l to standard units	Salinity is reported in standard units or in parts per thousand
12	Order	14	Table 8	Footnote b	The salinity limitation at Eff-002 ...	Add 2nd sentence: Salinity may be reported as electrical conductivity in umhos/cm	Standard Methods 2520
13	Order	20	Section VI.	C.2.a.	The MRP of this Order requires routine monitoring for whole effluent acute and chronic toxicity at Monitoring Locations....	Throughout section 2.a., Remove "acute" where it occurs	Justification is presented in Comment #1 of the Cover Letter.
14	Order	22	2.e.	Par 1, sentence 1	The Discharger shall implement a Program for Prevention of Biological Pollutants (non-native invasive species) in consultation with the California Department Fish and Game Marine Resources Division.	Replace Marine Resources Division with Marine Fisheries Branch	Personnel we are working with on this program were recently transferred to the Marine Fisheries Branch.

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Comment #	Part	Page	Section No., Letter or Table No. (e.g., VII. B. 2 or Table 6)	Paragraph	Existing Text	Proposed Change	Justification
15	Order	23	6 a Storm water..	par 1, sentence 2	...The Discharger shall also develop, submit to the Regional Water Board and implement a SWMP for Discharge Points 003, 004, and 016 as required herein, to implement requirements of sections VI.B and VI.C of the MRP	Replace VI.B and VI.C with IV.B and IV.C	Section IV.B & C of the MRP relates to Storm water Monitoring at Points 003, 004, and 016 (p E-4 & E-55). Section VI (p E10) relates to Land Discharge Monitoring.
16	Attach A Attach E Attach F	A-4 E-3 E-4 E-5 E-5 E-6 E-11 E-11 E-11 E-12 E-12 F-2 F-7 F-7 F-7 F-19 F-22 F-23 F-27	PMP Table E-4 Table E-4 Table E-6 Table E-6 Table E-7 Table E-10 Table E-10 Table E-11 Table E-11 Table E-12 Table E-12 List of Tables Table F-2 Table F-2 Table F-2 b. RPD 4. WQBEL Table F-12 B. Eff Mon	Sentence 2 Column 1 Foots 2, 3, 5, 6 Column 1 Foot 5 Foot 1 Column 1 Foot 2 Column 1 Foots 4, 5 Column 1 Foot 1 Table F-12 Res Prov 2n Res Prov 2o Res Prov 2p Parag 1, 2 Parag 1 Table Title Sentence 1	Table B pollutants	Search and Replace Table B pollutants with Table B constituents	Within the Ocean Plan, SWRCB Res 2007-0058, and at the beginning of this Order, Table B parameters are described as either Table B water quality objectives or Table B constituents, not Table B pollutants. (Order, p 13, III.H. "water quality objectives"; p 16, 3.g. "exceedances of water quality objectives"; p 20, C.1.b. Ocean Plan "Table B Water Quality Objectives"; p 22, d. Sediment Monitoring, Ocean Plan Table B constituents).
17	Attach E	E-3	Table E-2		Methods	Suspended Solids Standard Methods 2540D; Settleable Solids Standard Methods 2540F; and ph Standard Methods 4500H	
18	Attach E	E-3	Table E-3		Methods	Suspended Solids Standard Methods SM 2540D; Settleable Solids Standard Methods 2540F; and ph Standard Methods 4500H	
19	Attach E	E-3	Table E-3		Salinity units as mg/l	Replace mg/l with s.u.	salinity is reported in standard units, similar to pH, or parts per thousand
20	Attach E	E-3	Table E-3		Salinity Method	Standard Methods 2520	Method includes salinity as specific conductance or electrical conductivity
21	Attach E	E-3	Table E-3	Footnote 2	Salinity monitoring is required....	Add 2nd sentence: Salinity may be reported as electrical conductivity in umhos/cm	Standard Methods 2520
22	Attach E	E-3	Table E-4		Methods	Suspended Solids Standard Methods 2540D; Settleable Solids Standard Methods 2540F	
23	Attach E	E-3	Table E-4		3 times EPA 200.7 for Cadmium, Copper, Silver Methods	Replace all EPA 200.7 for Cadmium, Copper and Silver with EPA 1640	EPA 1640 required by Ocean SWRCB Res 2007-0058. Letter 2d. states "ICP/MS" (EPA 1640 Total Trace Metal Analysis in Seawater).

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Comment #	Part	Page	Section No., Letter or Table No. (e.g., VII. B. 2 or Table 6)	Paragraph	Existing Text	Proposed Change	Justification
24	Attach E	E-3,4	Table E-4	Quarterly Footnote 2	Analytical results for this pollutant, generated to meet monitoring requirements for the Ocean Plan Table B....	Add If after the first year of quarterly samples, constituent level meets Table B objective, sampling will be reduced to 2X/Year.	Justification is presented in Comment #3 of the Cover Letter.
25	Attach E	E-3	Table E-4		Halomethanes Method EPA 624	typo, Replace EPA 624 with 524	EPA 524 is correct for trihalomethanes or halomethanes
26	Attach E	E-3	Table E-4		Ammonia Method EPA 4500	Replace EPA 4500 with Standard Methods 4500	Standard Methods 4500 Ammonia
27	Attach E	E-3	Table E-4		Salinity units as ppt	Replace ppt with s.u.	salinity is reported in standard units, similar to pH, or parts per thousand
28	Attach E	E-3	Table E-4		Salinity Method	Standard Methods 2520 with new footnote (7)	Method includes salinity as specific conductance or electrical conductivity
29	Attach E	E-4	Table E-4	Footnotes	New footnote for salinity method	Add footnote (7) for salinity method: Salinity may be reported as electrical conductivity in umhos/cm	
30	Attach E	E-4	Table E-4		Temperature Unit °F and Method	Replace Fahrenheit °F with Celsius °C. Add Standard Methods 2550	per Standard Methods 2550
31	Attach E	E-4	Table E-4		pH Method	ph Standard Methods 4500 H	
32	Attach E	E-4	Table E-4		Ocean Plan Table B Metals Method	Add Method EPA 1640	EPA 1640 required by Ocean SWRCB Res 2007-0058 Letter 2d. states "ICP/MS" (EPA 1640 Total Trace Metal Analysis in Seawater).
33	Attach E	E-4 E-11	Table E-4 Table E-11		Chronic Toxicity	Leave as-is or remove Chronic Toxicity listing as per justification	Chronic Toxicity requirements are identified in Table E-7. The requirement is again listed in Tables E-4 and E-11, but is not listed again in E 6 or E-10. Duplicate listings should be consistent among all Tables.
34	Attach E	E-4	Table E-5		Methods	Suspended Solids Standard Methods 2540; and ph Standard Methods 4500	
35	Attach E	E-4	Table E-5		Specific Conductance Method	Standard Methods 2520	
36	Attach E	E-4	Table E-5		Total Organic Carbon Method	Standard Methods 5310	
37	Attach E	E-4	Table E-5	Footnote 2	objectives of this section are will be better satisfied	typo	typo
38	Attach E	E-5 E-11	Table E-6 Table E-10		None	Leave as-is or add Chronic Toxicity listing as per justification	Chronic Toxicity requirements are identified in Table E-7. The requirement is again listed in Tables E-4 and E-11, but is not listed again in E 6 or E-10. Duplicate listings should be consistent among all Tables.
39	Attach E	E-5 & E-6	V. Whole Effluent Toxicity Testing Requirements	All	Although effluent limitations for whole effluent toxicity (WET) are not established by the Order, WET testing of discharges and receiving water is required by this MRP to determine compliance with water quality objectives established by the Ocean Plan for acute and chronic WET.	Throughout section V., remove acute toxicity testing requirement where it occurs.	Justification is presented in Comment #1 of the Cover Letter.
40	Attach E	E-6	Table E-7	All 4 rows, and Footnote 1	Acute (where it occurs)	Remove acute	Justification is presented in Comment #1 of the Cover Letter.

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Comment #	Part	Page	Section No., Letter or Table No. (e.g., VII. B. 2 or Table 6)	Paragraph	Existing Text	Proposed Change	Justification
41	Attach E	E-6	Table E-7	RSW-001	RSW-001: Acute and chronic WET shall be tested 2 times in the first year of the permit term...	Acute and chronic WET shall be tested 1 time in the first year of the permit term...	Justification is presented in Comment # 2 of the Cover Letter.
42	Attach E	E-6	A. Acute Toxicity Testing	1. Test Frequency	as summarized in Table E-6, above	typo, should be Table E-7 , above	typo
43	Attach E	E-6	A. Acute Toxicity Testing	All	A. Acute Toxicity Testing	Remove sections regarding acute WET testing that do not apply to this Order.	Justification for removal of acute WET tests, but not acute sediment tests, is presented in Comment #1 of the Cover Letter.
44	Attach E	E-6	A. Acute Toxicity Testing	A.3.	Test species for acute WET testing shall be with a marine species, either: mysid, <i>Mysidopsis bahia</i> , sheepshead minnow, <i>Cyprinodon variegatus</i> ; or silverside, <i>Menidia</i> spp.	Test species for acute WET testing shall be with a marine species, either: mysid, <i>Mysidopsis bahia</i> ; sheepshead minnow, <i>Cyprinodon variegatus</i> ; or silverside, <i>Menidia</i> spp. For sediment Acute Toxicity test, the amphipod <i>Eohaustorius estuarius</i> will be used.	SWRCB Resolution No. 2007-0058, Paragraph 2.p. identifies the amphipod <i>Eohaustorius estuarius</i> as the test species for sediment acute toxicity tests.
45	Attach E	E-7	B. Chronic Toxicity Testing	1. Test Frequency	as summarized in Table E-6, above	typo, should be Table E-7 , above	typo
46	Attach E	E-10	Table E-9		Methods	Suspended Solids Standard Methods 2540D; Settleable Solids Standard Methods 2540F; and ph Standard Methods 4500H	
47	Attach E	E-10	Table E-9		Salinity as mg/l	Replace mg/l with s.u.	Salinity is measured in standard units or parts per thousand
48	Attach E	E-10	Table E-9		Salinity Daily superscript 1 missing []	typo, add 1 in []	typo
49	Attach E	E-10	Table E-9		Method for salinity	Standard Methods 2520	Method includes salinity as specific conductance or electrical conductivity
50	Attach E	E-10	Table E-9	Footnote 1	Salinity monitoring is required....	Add: Salinity may be reported as electrical conductivity in umhos/cm	Standard Methods 2520
51	Attach E	E-11	Table E-10		Method for ph	ph Standard Methods 4500H	
52	Attach E	E-11	Table E-10		Salinity as mg/l	Replace mg/l with s.u.	Salinity is measured in standard units or parts per thousand
53	Attach E	E-11	Table E-10		Method for salinity	Standard Methods 2520	Method includes salinity as specific conductance or electrical conductivity
54	Attach E	E-11	Table E-10	Footnote 1	This constituent...	Add: Salinity may be reported as electrical conductivity in umhos/cm	
55	Attach E	E-11	Table E-10		Temperature Unit °F and Method	Replace Fahrenheit °F with Celsius °C . Add Standard Methods 2550	per Standard Methods 2550
56	Attach F	F-3	Table F-1		Facility Contact: Kitty Brown...	Change to Skyli McAfee, Assistant Director Operations & Facilities, (707) 875-2005	
57	Attach F	F-3	Table F-1		Authorized Person to Sign and Submit Reports:	Susan Williams, Director; or Acting Director	
58	Attach F	F-4, 5	II Facility Description		no space between paragraphs or indents	add space between paragraphs	
59	Attach F	F-5	II Facility Description	Par 2, Sent 2	With a salinity of 3,000 mg/l, the well water	salinity of 3 salinity standard units OR 3 parts per thousand	Salinity is reported in standard units or in parts per thousand

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Comment #	Part	Page	Section No., Letter or Table No. (e.g., VII. B. 2 or Table 6)	Paragraph	Existing Text	Proposed Change	Justification
60	Attach F	F-6	Table F-2	Res Prov 2a	Natural water quality ... /Order Section #- MRP Section III.	Replace MRP Section III. with MRP Section VIII. A & B	MRP Section III. refers to INF-001 and INF-002 freshwater, which do not occur in Resolution 2007-0058 language; whereas Page E-10 MRP Sections VIII. A & B refer to natural receiving waters of Mussel Point and Horseshoe Cove.
61	Attach F	F-6	Table F-2	Res Prov 2b	Constituents in excess of Ocean Plan Table B...../Order Discharge Prohibition III. F	Replace Order Discharge Prohibition III. F with Order Discharge Prohibition III. H	Order Page 13 ODP III. F refers to cleaning activities; ODP III. H refers to Table B objectives
62	Attach F	F-6	Table F-2	Res Prov 2d	The current approved analytical method with the lowest detection... for metals analysis / MRP Sections IV. A and B....	Replace MRP Sections IV.A and B... with MRP Sections IV. A and C	Page E-4 MRP Sec IV. B is for sampling points Eff 003 & 004, which do not occur in Resolution 2007-0058 language; whereas Page E-5 MRP Sec IV. C, Eff-016 requires metals analysis
63	Attach F	F-6	Table F-2	Res Prov 2e	The waste seawater... Storm water.../ Order, Discharge Prohibition III. G and MRP Section IV. B	Replace Order, Discharge Prohibition III. G with III. I Replace MRP Section IV.B with IV. A& C	Order Page 13 ODP III.G refers to freshwater effluent and NaCl, where III. I refers to seawater system discharge Page E-4 MRP Section IV.B refers to Eff 003 & 004, which do not occur in Resolution 2007-0058 language, whereas IV. A refers to all seawater and storm water effluent.
64	Attach F	F-6	Table F-2	Res Prov 2g	Non-storm water facility... /Order Discharge Prohibition III. H	Replace Order Discharge Prohibition III. H with III. J	Order Page 13 ODP III. H refers to Table B Constituents, whereas III. J refers to Non-storm water facility run-off
65	Attach F	F-7	Table F-2	Res Prov 2o	Storm water -run-off ... /MRP Sections IV.B and VIII. B...	Replace MRP Section IV.B with IV.C	Page E-4 MRP Section IV. B refers to Eff-003 & 004, which do not occur in Resolution 2007-0058 and are not subject to Table B analysis, whereas Page E-5 MRP IV.C refers to sampling storm water Eff-016 for Table B analysis.
66	Attach F	F-8	Table F-3		Highest Average Monthly Discharge	Remove Average	This column of numbers are not averaged values, but the highest differences between influent and effluent or the minimum/maximum range reported
67	Attach F	F-8	Table F-4		Highest Average Monthly Discharge	Remove Average	This column of numbers are not averaged values, but the highest differences between influent and effluent or the minimum/maximum range reported
68	Attach F	F-8	Table F-4		pH Highest Monthly Discharge Range 5.2-8.2	Replace 5.2 with 7.3	typo, the lowest pH reported was 7.3 in 2005. There were no pH reports of 5.2 for Discharge Point-002.
69	Attach F	F-8	Table F-4	Chloride	3000 mg/l, add footnote [c]	Add footnote [c] "Salinity of 3 was reported instead of chloride. Chloride concentrations were not measured per Regional Board staff approval.	Salinity measurements include chloride and numerous other elements .
70	Attach F	F-9	Table F-5	7th date	6/21/04 Date of Violation for Total Residual Chlorine (after 3/29 and 6/14/04)	Replace 6/21/04 with 6/4/04	Typo, Correct date is 6/4/04, there was no chlorine exceedance reported on 6/21/04

ATTACHMENT A: University of California Davis Bodega Marine Laboratory's Comments on Waste Discharge Requirements for the UC Davis Bodega Marine Laboratory REPLACEMENTS & ERRATA

Comment #	Part	Page	Section No., Letter or Table No. (e.g., VII. B. 2 or Table 6)	Paragraph	Existing Text	Proposed Change	Justification
71	Attach F	F-10	III.B.	Par 2	Nonetheless, the waste discharge requirements for Discharge Point 002 are exempt from under California Code of Regulations...	Nonetheless, the waste discharge requirements for Discharge Point 002 are exempt from CEQA under California Code of Regulations	typo, CEQA missing
72	Attach F	F-14	IV.A.1.		The discharge of any waste disclosed by the Discharger...	The discharge of any waste not disclosed by the Discharger	typo, not missing
73	Attach F	F-20	b. RPA	Par 3, last sentence	indicated a low dissolved concentration of these metals	Replace dissolved with total	In July 2007, CRG Laboratories performed Total Trace Metals Analysis in Seawater (EPA Method 1640). Total Trace Metals analysis is indicated in the CRG Cover Letter as well as on the Precision Data Sheet. See Attachment C.
74	Attach F	F-21	top of page	Par 1, sentence 1	Bodega Head ASBS station...	Bodega Head Station (remove ASBS)	The Bodega Head Mussel Watch station is not within the boundaries of the Bodega ASBS. The Mussel Watch station is located 0.5 miles south of the ASBS boundary, and about 1 mile south of the BML discharge. See Attachment D.
75	Attach F	F-22	Table F-9	Copper result	7/10/2007 Copper 0.074 ug/l	Replace 0.074 with 1.16 ug/l	typo, 1.16 ug/l was the highest total copper reported
76	Attach F	F-23	5. Whole Effluent Toxicology		This Order does not contain WET limitations, but, in accordance with State Water Board Resolution No. 2007-0058, establishes acute and chronic monitoring requirements for seawater effluent at Discharge Point 001, for storm water run-off at Discharge Point 016, for the natural water quality reference station at Ref-00, and the receiving water in Horseshoe Cove at RSW-001.1 and receiving water RSW-001.	This Order does not contain WET limitations, but, in accordance with State Water Board Resolution No. 2007-0058, establishes chronic toxicity monitoring requirements for seawater effluent at Discharge Point 001, for storm water run-off at Discharge Point 016, for the natural water quality reference station at Ref-00, and the receiving water in Horseshoe Cove at RSW-001.	Justification is presented in Comment #1 of the Cover Letter.
77	Attach F	F-24	2. Satisfaction of Antidegradation Policy	Par 1	The Bodega Marine Life Refuge into which...	Replace with The Bodega State Marine Reserve	Name officially changed in 2005 by the California Resources Agency and Cal DFG
78	Attach F	F-25	F. Land Discharge Specifications	Par 2	Accordingly, the salinity limitation at Eff-002 is effect only during months that ...	Typo- Add is in effect or is effective	typo
79	Attach F	F-27	C. Whole Effluent Toxicity Testing	Sentence 1	Monitoring requirements for acute and chronic toxicity are established for discharges to	Monitoring requirements for chronic toxicity are established for discharges to...	Justification is presented in Comment #1 of the Cover Letter.
80	Attach F	F-31	C. Public Hearing		March 6, 2007 Santa Rosa	Fortuna, change address	