CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

895 Aerovista Place, Suite 101 San Luis Obispo, California 93401

ORDER NO. R3-2015-00XX

ADMINISTRATIVE CIVIL LIABILITY IN THE MATTER OF CARPINTERIA SANITARY DISTRICT SANTA BARBARA COUNTY

The California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board), having held a public hearing on May 29, 2015 and having considered all the evidence, public comments, and stipulations by the designated parties, finds the following:

BACKGROUND

- The Carpinteria Sanitary District (Discharger) owns and operates a wastewater collection, treatment, and disposal system, which provides sewer service for the City of Carpinteria and portions of Santa Barbara County. The treatment system consists of pretreatment, screening, grit removal, primary sedimentation, aerated activated sludge tanks, secondary sedimentation, chlorination, and dechlorination. Treated wastewater is discharged from Discharge Point No. 001 (as described in Order No. R3-2011-0003) to the Pacific Ocean, a water of the United States.
- On April 16, 2010, the Discharger filed its most recent Report of Waste Discharge for National Pollutant Discharge Elimination System (NPDES) permit number CA 0047364.
- 3. On February 3, 2011, the Central Coast Water Board adopted Waste Discharge Requirements Order No. R3-2011-0003, NPDES CA-0047364, regulating the discharge of waste from the Carpinteria Sanitary District wastewater treatment plant.

DISCHARGE VIOLATION

- 4. On October 3, 2012 the Discharger had a discharge of non-chlorinated (i.e., non-disinfected) effluent to the Pacific Ocean. The parties stipulated that a total of 297,896 gallons of "non-chlorinated" wastewater was discharged when the Discharger's disinfection system failed.
- 5. On October 29, 2013, investigators from the State Water Resources Control Board, acting in cooperation with the Central Coast Water Board, inspected the Carpinteria Sanitary District facility. The scope of the inspection was to inquire about the cause and any corrective actions resulting from the 2012

Item No. 10 Attachment 1 July 30-31, 2015 ocean discharge and the effluent limitation violations discussed in paragraphs 17 through 19, below.

- On December 10, 2013, the Assistant Executive Officer of the Central Coast Water Board issued the Discharger a Notice of Violation (NOV) and Investigative Order pursuant to Water Code section 13267 (13267 Order) seeking information regarding discharges and effluent violations that occurred between 2011 and 2013.
- 7. The Discharger responded to the 13267 Order on January 27, 2014.
- The Federal Clean Water Act (33 U.S.C. §1311) prohibits the discharge of pollutants from a point source to waters of the United States, unless authorized by a NPDES Permit.
- 9. Water Code section 13243 states that the Central Coast Water Board may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted. The Central Coast Water Board implements this section of the Water Code by adopting and implementing the Water Quality Control Plan for the Central Coastal Basin (Basin Plan). The Basin Plan establishes the beneficial uses (Chapter 2) and water quality objectives (Chapter 3) for surface waters for the Central Coast Region, which must be met and maintained to protect those uses.
- 10. Water Code section 13376 states, in part, "Any person discharging or proposing to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state... shall file a report of the discharge in compliance with the procedures set forth in Section 13260..." and "The discharge of pollutants... by any person except as authorized by waste discharge requirements ... is prohibited."
- 11. Water Code section 13385 includes provisions for assessing administrative civil liability for discharges of wastes to surface waters in violation of the federal Clean Water Act. The discharge incident described above was to surface waters of the United States for which liability can be assessed in accordance with section 13385. Water Code section 13385(c)(2) states, in part, that the Regional Board may impose civil liability administratively for noncompliance with Water Code section 13376 on a daily basis at a maximum of ten thousand dollars (\$10,000) for each day in which the violation occurs in accordance with Water Code section 13385(c)(1); and where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged, but not cleaned up, exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharge, but not cleaned up, exceeds 1,000 gallons; or both, Water Code section 13385(c)(2).
- 12. The October 3, 2012 discharge is a violation of Prohibition III.B of Order No. R3-2011-0003, which provides in pertinent part that, "Discharge of any waste in any manner other than as described by this Order is prohibited."

13. The October 3, 2012 discharge is also a violation of the Standard Provisions of Order No. R3-2011-0003, which provide, in pertinent part:

The Discharger shall take all reasonable steps to minimize or preventany discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.

And:

Safeguards shall be provided to assure maximal compliance with allterms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operatingprocedures, or other precautions.

Attachment D, D-1 C. Duty to Mitigate and D-11, B.9, Central Coast Standard-Provisions, respectively.

13. 14. While the Discharger immediately reported the discharge on October 3, 2012, the Discharger did not conduct any sampling, pursuant to Provision VIII.A.2 of the Monitoring and Reporting Program of Order No. R3-2011-0003 (Attachment E), which provides in pertinent part:

The Discharger **shall monitor** for total coliform, fecal coliforms, and enterococcus at receiving water sampling stations RSW-F and RSW-G as identified in MRP section II above, in addition to three shore sampling stations approved by the Executive Officer, for seven days after loss of disinfection. (Emphasis added).

Although this failure to conduct sampling could be considered a violation of the Discharger's permit, it is not included as an additional penalty in the administrative civil liability imposed herein. In providing notification to the Central ValleyCoast Water Board permitting staff, the Discharger was apparently told there was no need to sample after the October 3, 2012 discharge. However, the Discharger is responsible for compliance with the terms of its permit despite verbal directives to the contrary.1

14. Central Coast Water Board staff did not provide a threshold time or volume for a low-chlorine discharge that triggers the seven-day follow-up monitoring requirement. The Discharger's General Manager conceded at the hearing that discharging undisinfected effluent over a five-and-one-half hour period is a "loss of disinfection" for purposes of Provision VIII.A.2 and that had he been

The board adopts finding 13 based on the parties' evidentiary stipulation. The Prosecution

Team apparently attempted to depart from this stipulation in its cross-examination of Dr. Pet er von Langen. The board is not bound by a stipulation between the parties and the Prosecution Team lacks authority to stipulate that evidence will be inadmissible at a hearing. (See, Evidentiary Stipulations, lines 4-5.) We nevertheless decline to make any modifications to the stipulated findings because the Discharger was not given notice that the Prosecution Team would attempt to introduce evidence that it agreed not to introduce.

aware of the requirement to sample he would have done the sampling. The board finds this violation is relevant to the Discharger's culpability but declines to assess a separate penalty for the monitoring violation.

The October 3, 2012 discharge is subject to a discretionary penalty. This discharge does not qualify as a violation subject to a mandatory minimum penalty under Water Code section 13385(h). The violation is assessed for discharging undisinfected effluent. No mandatory penalty would apply even assuming the Discharger stipulates that it exceeded the total coliform effluent limitation based on Aquatic Bioassay & Consulting Laboratories Inc.'s subsequent sample of representative secondary effluent. Total coliform is not a Group 1 or Group 2 pollutant, so this violation could not be a "serious" violation under section 13385(h)(2). The Discharger did not have at least three violations described in section 13385(i) in the 180 days before October 3, 2012 so this discharge could not be a chronic MMP under subdivision (i). Water Code section 13385(e) specifies factors that the Central Coast Water Board shall consider in establishing the amount of civil liability. The Water Quality Enforcement Policy (hereinafter "Enforcement Policy") adopted by the State Water Resources Control Board on November 19, 2009, and approved by the Office of Administrative Law on May 20, 2010, establishes a methodology for assessing administrative civil liability and addresses the factors in Water Code section 13385(e). Attachment A, incorporated herein and made a part of this Order by reference, presents the civil liability assessment derived from the use of the penalty methodology in the Enforcement Policy.

The policy can be found at: http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf_

MANDATORY MINIMUM PENALTY VIOLATIONS

- 16. Water Code section 13385, subdivision (h)(2) states, in part, the following: "For the purpose of this section, a 'serious violation' means any waste discharge that violates the effluent limitations ... for a Group II pollutant, as specified in Appendix A to section 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more, or for a Group I pollutant, as specified in Appendix A to section 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more."
- 17. On December 27, 2011, the Discharger exceeded three effluent limitations for settleable solids set forth in Order No. R3-2011-0003; the daily maximum, the 7-day average and the 30-day average. Settleable solids is a Group 1 pollutant, for which a violation is serious when the limit is exceeded by 40% or more. The Discharger exceeded each of the three effluent limits by 40 percent or more and is therefore subject to \$9,000 in mandatory minimum penalties (MMPs) [\$3,000 for each violation] in accordance with Water Code section 13385(h).

- 18. On January 3, 2013, Discharger exceeded the chlorine total residual instantaneous maximum effluent limitation set forth in Order No. R3-2011-0003. Chlorine total residual is a Group 2 pollutant, for which a violation is serious when the limit is exceeded by 20 percent or more. Discharger exceeded the effluent limitation by 20 percent or more and is therefore subject to \$3,000 in MMPs in accordance with Water Code section 13385(h).
- 19. 48. On January 7, 2013, Discharger exceeded the chlorine total residual instantaneous maximum effluent limitation set forth in Order No. R3-2011-0003 by 20 percent or more and is therefore subject to \$3,000 in MMPs in accordance with Water Code section 13385(h).
- 20. 49. Attachment B to this Order summarizes the MMP violations described above and is incorporated by reference.
- 21. 20. The parties stipulated to the imposition of a total of \$15,000 in MMPs for the violations described above and summarized in Attachment B.

MINIMUM LIABILITY

- 22. 21. The Enforcement Policy requires that the minimum liability be compared to the economic benefit, and that the recommended penalty must be at least 10 percent higher than the economic benefit so that liabilities are not construed as the cost of doing business. The Discharger produced evidence that the economic benefit of avoided sampling was far less than the \$25,534 calculated by the Prosecution Team's expert. The board finds it unnecessary to resolve this dispute. The avoided sampling would not have been necessary at all had the loss of disinfection not occurred, so the sampling cost does not represent economic benefit or savings from that violation. The cost of sampling, whatever that cost was, is the economic benefit or savings of violating the seven-day sampling requirement. The Prosecution Team elected not to seek penalties for that violation. The economic benefit in this instance is \$25,534,300, which represents the delayed and avoided costs of installing an alarm and avoided sampling (please refer to Attachment A). The minimum liability for the discretionary enforcement related to the October 3, 2012 discharge exceeds this amount by more than 10%, which complies with the Enforcement Policy requirement. The minimum liability for the October 3, 2012 discharger discharge would therefore be \$28,087,40,330.
- 23. The five (5) MMP violations must be assessed according to Water Code 13385(h) for \$3,000 each, for a total of \$15,000.
- 24. 23. The total minimum liability is therefore \$43,087.4015,330 [\$28,087.40330 + \$15,000] for both the discretionary penalties and the MMPs.

MAXIMUM LIABILITY

- 24. Pursuant to Water Code section 13385, subdivision (a), any person who violates Water Code section 13376 is subject to administrative civil liability pursuant to Water Code section 13385, subdivision (c), in an amount not to exceed the sum of both of the following: (1) ten thousand dollars (\$10,000) for each day in which the violation occurs and (2) where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.
- 26. 25. The alleged violations, set forth in full in the accompanying Attachment A, constitute violations subject to Water Code section 13385. The maximum liability that the Central Coast Water Board may assess pursuant to Water Code section 13385, subdivision (c) is \$2,978,960, based on a volume of 297,796 gallons (total gallons discharged minus 1,000 gallons) x \$10 per gallon plus \$10,000 per day.
- 27. 26. MMP violations are usually assessed at \$3,000 per violation, but can be treated as discretionary violations and penalized up to \$10,000 per violation. The five (5) violations assessed \$15,000 in MMPs could therefore be increased to a maximum of \$50,000.
- 28. 27. The total maximum liability is therefore \$3,028,960 for both the discharge and effluent limitation MMP violations.

OVERALL LIABILITY AMOUNT

29. The Central Coast Water Board has considered economic benefit or savings and finds that the penalty as a whole is appropriate notwithstanding the small economic benefit or savings. The most significant factors in this determination are the Discharger's culpability, as evidenced by the failure to install an alarm or automated back-up pump or discover the loss of disinfection sooner, and the failure to conduct follow up monitoring as the permit required; the large volume (297,896 gallons); the potential human health impacts of an undisinfected discharge within the shore zone in relatively shallow water; and the board's decision not to add staff costs to the liability amount calculated in Steps 1 through 6. The factors are discussed in more detail in Attachment A, which is incorporated in this Order as additional findings of the board. The board has also considered the Discharger's exemplary record and that the Discharger was instrumental in sewering coastal areas that previously relied on onsite wastewater disposal systems.

The board considered the Discharger's argument that it should only be assessed a small penalty because six other facilities discharged undisinfected effluent and were not assessed penalties. The Discharger failed to present any evidence about whether it was appropriate not to assess penalties in the other cases or why staff chose not to do so, but such evidence is unnecessary. The Enforcement Policy expresses the policy of fair, firm and consistent enforcement. It does not require the Water Boards to assess

penalties for every violation or make findings about how enforcement staff prioritized or ranked various dischargers' violations. The penalty methodology used in Attachment A serves the purpose of ensuring consistent enforcement. (Enforcement Policy, pp. 1, 10.) The Policy recognizes that "each Regional Water Board, and each specific case, is somewhat unique." For example, among the Discharger's examples are a creek discharge (Order R3-2012-00272), a discharge to a generally dry creek bed (Order R3-2007-00203), a land discharge of recycled water (Order R3-2008-0042.4), and three ocean discharges that were much farther offshore and, in two cases, in much deeper water (Exhibit 22). The Enforcement Policy contemplates taking those and other discharge-specific factors into account in deciding whether to seek penalties and in what amount. The board lacks adequate information to determine whether the cited violations are even analogous. The board finds that the penalty appropriately takes the Enforcement Policy into account and conforms to the policy of fair, firm and consistent enforcement.

IT IS HEREBY ORDERED, pursuant to Water Code section 13385, that the Carpinteria Sanitary District is assessed administrative civil liability against Discharger in the amount of \$96,77564,812.84 [\$81,77549,812.84 for the October 3, 2012 discharge (see Attachment A) and \$15,000 (see Attachment B) for the MMPs].

The Discharger shall submit a check payable to the "State Water Pollution Cleanup and Abatement Account" in the amount of \$96,775 64,812.84 to the State Water Resources Control Board, Accounting Office, P.O. Box 100, Sacramento CA 95812-0100 no later than June 29,August XX, 2015. A copy of the check shall also be submitted to the Central Coast Regional Water Quality Control Board, Attn: Harvey Packard, 895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401 by June 29,August XX, 2015.

Any person aggrieved by this action of the Central Coast 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 et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of issuance of this Order, except that if the thirtieth day following the date of the Order falls on a Saturday, Sunday, or state holiday, the petition must be received 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://waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

² The board takes official notice of the facility description. (Cal. Code Regs., tit. 23, § 648.2.)

³ The board takes official notice of the facility description. (Cal. Code Regs., tit. 23, § 648.2.)

⁴ The board takes official notice of the facility description. (Cal. Code Regs., tit. 23, § 648.2.)

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I, Kenneth A. Harris Jr., Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the Central Coast Water Board on May 29, July XX, 2015.

Kenneth A. Harris Jr. Executive Officer

Attachment A: Penalty Methodology Findings

Attachment B: MMPs – Effluent Limitation Violations

ATTACHMENT A

Pursuant to Water Code section 13385(e), the Central Coast Water Board must consider the following factors in determining the amount of liability for the October 3, 2012 unauthorized discharge of un-disinfected secondary effluent to the Pacific Ocean, a water of the United States.

On November 17, 2009, the State Water Board adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy (Enforcement Policy). The Enforcement Policy was approved by the Office of Administrative Law and became effective on May 20, 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability. Use of the methodology addresses the factors in California Water Code (CWC) section 13385(e), which requires the Central Coast Water Board to consider several factors when determining the amount of civil liability to impose, including "the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require."

The following considerations are based on the procedures included in the Water Quality Enforcement Policy methodology.

Discharge Violation

On October 3, 2012, the Discharger's chlorination system at the WWTP failed to disinfect the secondarily-treated effluent from 4:08 a.m. to 9:40 a.m., which resulted in an unauthorized discharge of un-disinfected effluent from the WWTP of 297,896 gallons to the Pacific Ocean.

The Discharger reported that the chlorination failure at the WWTP was discovered by a plant operator conducting plant rounds in the morning of October 3, 2012. The Discharger conducted an investigation into the cause of the failure, including the failure of a particular pump, but was unable to conclusively determine the cause of the pump's failure. The Discharger reported the discharge incident to the Central Coast Water Board and other agencies including the Pre-harvest Shellfish Unit of the Environmental Management Branch of the California Department of Public Health (CDPH) and the Santa Barbara County Environmental Health and Safety (EHS) Department.

Section 13385 of the CWC includes provisions for assessing administrative civil liability for discharges of wastes to surface waters in violation of the federal Clean Water Act. The October 3, 2012 discharge incident was to surface waters of the United States for which liability can be assessed in accordance with Section 13385 of the Water Code. Water Code section 13385(c) states, in part, that the Regional Board may impose civil liability administratively for noncompliance with Water code

section13376 on a daily basis at a maximum of ten thousand dollars (\$10,000) for each day in which the violation occurs in accordance with Water code section 13385(c)(1); and where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged, but not cleaned up, exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharge, but not cleaned up, exceeds 1,000 gallons; or both, Water Code section 13385(c)(2).

The October 3, 2012 discharge was in violation of its NPDES permit, specifically Prohibition III.B, and Standard Provisions as described herein, for which administrative liability may be imposed.

Penalty Determination for Discharge Violation

The following step-by-step calculation is based on the Enforcement Policy's guidelines in determining monetary penalties associated with discharge violations to surface waters of the United States.

Step #1: Potential for Harm

Potential for harm is evaluated using the scores derived from the following three factors, with a total score of five.

Factor 1: Harm or Potential Harm to Beneficial Uses

The evaluation of the potential harm to beneficial uses factor considers the harm that may result from exposure to the pollutants in the illegal discharge. <u>The score evaluates direct or indirect harm or potential for harm from the violation.</u> The most sensitive beneficial uses for this discharge are Water Contact Recreation (REC-1) and Shellfish Harvesting (SHELL), due to the potential exposure to elevated levels of pathogens (see Factor 2). Fecal contamination in recreational waters is associated with an increased risk of gastrointestinal and respiratory illness.

The outfall for this facility is located 1,000 feet offshore of Carpinteria State Beach in approximately 25 feet of water. Although the effluent is diluted by the diffuser at a 93:1 ratio, the Discharger's analysis indicates that receiving water limitations would be violated outside the initial zone of dilution. This discharge lasted for over $5\frac{1}{2}$ hours.

The Prosecution Team testified that discharges of raw (untreated) sewage are typically scored a 3, or "moderate." A discharge of treated, undisinfected wastewater poses less potential risk than untreated sewage, but secondary treatment alone does not reduce pathogens significantly. The need to reduce pathogens in a discharge this close to shore and within an area designated for shellfishing is why the permit requires chlorination. Therefore, the undisinfected wastewater is reasonably expected to impact beneficial uses, particularly water contact recreational use (REC I) and shellfish harvesting, which are sensitive to elevated levels of pathogens.

"Below moderate" (scored a 2) is defined as:

Less than moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected, harm to beneficial uses is minor).

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"Minor" (scored a 1) is defined as:

Low threat to beneficial uses (i.e., no observed impacts but potential impacts to beneficial uses with no appreciable harm).

"Beneficial uses" include existing uses and designated uses. (40 C.F.R. § 131.3(e), (f); Wat. Code, § 13050, subd. (f).) No actual impacts to beneficial uses were observed. No evidence was presented that any recreational users came into contact with the effluent or that shellfish was actually harvested during or shortly after the discharge. However, this outfall is near a state park and beach that has an extensive, current water contact recreation use, which the Basin Plan and Ocean Plan designate as an existing use for the Pacific Ocean in this area. Shellfish harvesting is a designated use under both the Basin Plan and the California Ocean Plan. The Basin Plan defines shellfish harvesting (SHELL) as, "Uses of water that support habitats suitable for the collection of filterfeeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sport purposes. This includes waters that have in the past, or may in the future, contain significant shellfisheries." A discharge of almost 300,000 gallons of undisinfected effluent has the potential to impact surfers, swimmers and non-commercial shellfish harvesting.

There was a potential for harm to beneficial uses from this discharge. The discharge received secondary treatment, which does not remove bacteria. The Discharger's representative samples indicated that the effluent discharged during the event had a total coliform level of 160,000 MPN/100 ml. The daily maximum effluent limitation (instantaneous) is 2,300 MPN/100 mL. In addition, although the discharge was diluted in the receiving water. Dr. Matthew Buffleben testified that it still violated the receiving water limitation for shellfishing and likely the receiving water limitations for water contact recreation outside of the zone of initial dilution. The zone of initial dilution, also referred to as the "mixing zone," is the area within the receiving water where 93:1 dilution is achieved. (Order R3-2011-0003, Attachment A ("Initial Dilution"); Fact Sheet § II.B.) Although the Prosecution Team and Discharger disagree as to the size of the zone of initial dilution, the Discharger's permit requires the determination of compliance with receiving water limitations from samples collected at stations representative of the area within the waste field where initial dilution is completed. (Order R3-2011-0003, §V.A.) That is, whether the zone of initial dilution is 10 feet or 100-150 feet, the permit requires compliance with the receiving water limitation after 93:1 dilution occurs. Even assuming the Discharger's model was the appropriate model and that its subsequent sampling was representative of discharge conditions. the representative sampling indicates that the discharge did not meet all receiving water limitations after the 93:1 dilution occurred, even when the samples were diluted with sea water. The discharge thus had the potential to impact both recreational uses and shellfish harvesting.

The Discharger's failure to conduct monitoring precludes any finding that there was no appreciable harm, i.e., that there was no exceedance of applicable bacteria standards in the receiving water. It is not reasonable to read the Enforcement Policy to require a showing that someone actually gets sick or shellfish actually have elevated bacteria levels before the potential for harm rises even to the level of "below moderate," which is scored as 2 in a 0 – 5 scale.

Due to the above considerations, the board finds the appropriate score for Factor 1 is two for being Below Moderate.

Factor 2: Physical, Chemical, Biological or Thermal Characteristics

While Factor 1 considers the harm to potential uses that can occur because of where the discharge occurred, Factor 2 considers the characteristics of the discharge itself. The board finds the appropriate score for Factor 2 is two, a moderate risk or threat, because the un-disinfected discharge received secondary biological treatment, but contained elevated levels of pathogens (coliform, enterococcus, etc.). No effluent sampling was conducted during the discharge event, but a representative secondary effluent total coliform sample taken by the Discharger's consultant (Aquatic Bioassay & Consulting Laboratories Inc.) showed 160,000 mpn/100 ml, which is more than 68 times above the effluent limit of 2,300 mpn/100ml.

Factor 3: Susceptibility to Cleanup or Abatement

The board finds the appropriate score for Factor 3 is <u>one</u>, meaning that less than 50% of the discharge was susceptible to cleanup, based on the <u>parties' stipulation</u> and the following <u>justifications</u>:

- 1. The unauthorized discharge was not knowndiscovered until an operator discovered zero chlorine residual at the front end of the chlorine contact tank (right after chlorination dosage point). This resulted in direct discharge to the Pacific Ocean with none of the discharge susceptible to cleanup or abatement.
- 2. Discharger has no provision for automated "recirculation" or "emergency storage" system in place in cases of chlorination failure.

Step #2: Assessments for Discharge Violations

The parties stipulated that 297,986 gallons of undisinfected effluent were discharged.

Deviation from Requirement

The deviation from requirement reflects the extent to which the violation deviates from the permit's specific requirement as presented in Table 1 of the Enforcement Policy (page 14). In this case, the board finds the deviation from requirements is <u>Moderate</u> because the intended effectiveness of the requirement to chlorinate <u>has been-partiallywas completely</u> compromised for more than five hours, without <u>a low chlorine dosage</u> alarm <u>systems</u> in place to notify operators <u>or an automated back-up pump</u>.

Volume Assessment

Pursuant to Water Code section 13385(a), the Discharger is subject to administrative civil liability for violating any waste discharge requirement contained in an NDPES permit. The Central Coast Water Board may impose administrative civil liability pursuant to Water Code section 13385(c) in an amount not to exceed the sum of both of the following; (1) \$10,000 for each day in which the violation occurred and (2) \$10 for each gallon of discharge that was not susceptible to cleanup or was not cleaned up in excess of 1,000 gallons. The Water Quality Enforcement Policy requires application of the per gallon factor to the maximum per gallon amounts allowed under statute for the violations involved.

The Water Quality Enforcement Policy allows discretion to lower the \$10 per gallon maximum amount to \$2 per gallon for high-volume discharges, including those involving sewage or stormwater. The board exercises its discretion to reduce the penalty to \$2 per gallon to yield an appropriate penalty for the discharge at issue, which did not involve sewage or stormwater.

Step #3: Per Day Assessments for Non-Discharge Violations

This Order does not include any non-discharge violations.

Step #4: Adjustment Factors

The following three factors should be considered for modification of the amount of initial liability:

<u>Culpability</u> is scored as <u>1.1.</u> The Discharger failed to take all <u>reasonable</u> <u>stepsreasonably available measures</u> to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment (Order No. R3-2011-003, Attachment D – Standard Provisions I (C) and 40 CFR §122.41(d)) and failed to develop and implement preventative and contingency plans (Attachment D-1, I (B.9)). In particular, Attachment D-1, I (B.9) requires:

Safeguards shall be provided to assure maximal compliance with all terms and conditions of this permit. Safeguards shall include preventative and contingency plans and may also include alternative power sources, stand-by generators, retention capacity, operating procedures, or other precautions. Preventative and contingency plans for controlling and minimizing the [e]ffect of accidental discharges shall:

- a. identify possible situations that could cause "upset", "overflow" or "bypass", or other noncompliance. (Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.)
- b. evaluate the effectiveness of present facilities and procedures and describe procedures and steps to minimize or correct any adverse environmental impact resulting from noncompliance with the permit.

At the time of the event, the Discharger's chemical disinfection system did not include a low chlorine dosage alarm system that would have immediately notified plant operators of a chlorination failure and thereby minimize or an automated back-up pump. The safeguard requirement does not explicitly require either one. The board therefore does not find that the absence of an alarm or automated backup, standing alone, violates the permit. However, either or both would have minimized the length of time and volume of the undisinfected discharge. Even though the pump was well-maintained and had no previous failures, such performance is not a guarantee of future success., had no previous or subsequent failures and was within its useful life (20 – 25 years). These factors minimize the risk of future pump failure but do not eliminate it. The Prosecution Team alleged, but did not prove, that low chlorine dosage alarms are industry standard. The 1981 Manual for Wastewater Chlorination and Dechlorination Practices was irrelevant and out of date. Even to the extent the

Manual is relevant, it does not clearly require a low chlorine dosage alarm.

Prosecution staff did not know whether even one facility in the Central Coast Region had such an alarm. Neither staff nor the State Water Board's consultants recommended adding an alarm during multiple facility inspections.

On the other hand, the Discharger's consultant, Beverly Hann, testified that she recommends low chlorine alarms for new or retrofitted facilities and would recommend adding such an alarm upon inspecting an existing facility that did not have one. Air-locking of chlorine pumps is a common problem that occurs on occasion and is known to engineers. Air-locking can result in a failure to deliver disinfectant chemicals even when the pump is working. The board finds that such alarms represent an important safeguard commonly recommended by sanitary engineers and would have reduced the volume of undisinfected secondary treated effluent discharged in this incident, but does not find that they are the industry standard. The Discharger was required by its permit to sample for 7 days after the loss of disinfection (see (Monitoring and Reporting Program, VIII.A.2). Although this failure to conduct sampling could be considered a violation of the Discharger's permit, it is not included in the administrative civil liability assessed by this Order. The Discharger spoke with Central Coast Water Board permitting staff and was allegedly told not tosample after the October 3, 2012 discharge the board is not assessing a separate penalty for this violation. The board considered the failure to review the permit requirements or to conduct the required sampling in assessing the Discharger's culpability, which the board may do whether or not it also assessed a penalty for the monitoring violation.

Cleanup and Cooperation is scored as <u>0.9.0.75</u>. After the violation, the Discharger subsequently created installed an alarm to notify staff in the event of a low chlorine condition. The Discharger originally reported that the October 3, 2012 discharge amount was estimated to be 281,250 gallons. In its 13267 response, based on an assessment of available data, the Discharger's consultant re-estimated the discharge amount as <u>231.076.231,076</u>. However, using effluent data from the Discharger's Supervisory Control and Data Acquisition (SCADA) system the Prosecution Team's calculation of the discharge volume was recalculated at 297,896. Based on its subsequent review of the relevant data on SCADA that was not previously available to the Discharger, the Discharger agreed with the discharge volume estimate of 297,896 gallons. The Discharger cooperated with all of staff's requests to inspect the facility and to discuss the violation and has an exemplary record, including the receipt of numerous awards. The Discharger has an exemplary record and was instrumental in sewering coastal areas that previously relied on onsite waste water disposal systems.

<u>History of Violations</u> is scored as <u>1</u>. Although the Discharger has dechlorination violations, the Discharger does not have previous violations similar to the chlorination system failure. See Attachment B for summary of effluent limit violations that are mandatory minimum penalties, and are not required to go through the discretionary penalty methodology analysis.

Step # 5: Determination of Base Liability

The total base liability is determined by adding the amounts/scores above (see attached data spreadsheet). In this case, the liability is assessed based on both per day and per gallon penalties.

Step #6: Ability to Pay and Ability to Continue in Business

The parties stipulated that the Discharger is capable of paying the liability, therefore the board finds the appropriate score is neutral or <u>one</u>.

Step #7: Other Factors as Justice mayMay Require

The table below shows the Prosecution Team's staff costs, which are added to the liability amount, in accordance with the Enforcement Policy which states, on page 19, "The costs of investigation and enforcement are 'other factors as justice may require', and should be added to the liability amount." Prosecution Team sought to include the staff costs for two of its members to investigate and prepare this matter. The board has considered the Enforcement Policy, which states that such costs "should" be added to the liability amount when reasonably attributable to the enforcement action. The board has considered staff costs under "other factors as justice may require" pursuant to section 13385, subdivision (e) but declines to add them to the liability amount derived from Steps #1-6. The board finds that the liability amount derived from the above six steps (\$49,812.84) is appropriate in light of all of the statutory factors for the reasons set forth above and in the Order. The record in this matter is inadequate to allow the board to determine whether the \$22,000 cost estimate was reasonable. There is no evidence that it is in the interest of justice or sound public policy in this case to penalize the Discharger for engaging in settlement discussions (estimated at \$3,125) or for the Prosecution Team's decision to use Sacramento rather than local staff to conduct site investigations. The Prosecution Team's decision to waive costs of some staff does not relieve it of having to prove that any costs it does seek are reasonable and in the interest of justice. The liability amount, which is more than double the amount of the estimated staff costs, is consistent with the State Water Board's policy of shifting the fiscal burden of an enforcement matter to the discharger rather than spreading it among all fee payors. (See, Order WQ 2014 -0015 [California Department of Transportation et al.])

	CARPINTERIA SANITARY DISTRICT MA	ATTER		
Staff-		Estimated-	Hourly Rate	Cost
Position	Task	Hours	(\$)	(\$)
WRCE1	Site Inspection (prep, travel, onsite meeting/inspection)	20	125	2,500
WRCE2	Site Inspection (prep, travel, onsite meeting/inspection)	20	125	2,500
WRCE1	Development of Investigative Order (NOV/13267 Letter)	12	125	1,500
WRCE2	Development of Investigative Order (NOV/13267 Letter)	12	125	1,500
Sr WRCE	Review/Approve Investigative Order	5	125	625
WRCE1	Review Technical Report by Discharger	20	125	2,500
WRCE2	Review Technical Report by Discharger	20	125	2,500
WRCE1	Develop draft Attachment A and Penalty Calculator	10	125	1,25 0
WRCE2	Develop draft Attachment A and Penalty Calculator	10	125	1,250
WRCE1	Technical Meeting by telephone	4	125	500
WRCE2	Technical Meeting by telephone	4	125	500
Sr WRCE	Technical Meeting by telephone	3	125	375
WRCE1	Settlement meeting and discussion	8	125	1,000
WRCE2	Settlement meeting and discussion	12	125	1,500

Sr WRCE	Settlement meeting and discussion	5	125	625
Sr WRCE	Revise Attachment A	11	125	1,375
				22,00
			TOTAL	0

Step #8: Economic Benefit

The economic benefit includes the failure to install a low chlorine dosage alarm system and the failure to conduct water quality monitoring of the receiving water. The following table shows the details of calculated economic benefits based on: (1) cost information provided by Aquatic Bioassay & Consulting Laboratories Inc. for sampling and analysis of receiving water (includes approximate cost of labor and equipment rental for seven days and (2) information provided by Discharger for installation of an alarm system.

	One-Time Non-depreciable		Annual Cost		Date of		Benefit of	
Compliance Action	Amount	Date	Amount	Date	Non-Compli ance	Compliance	Penalty Payment	Non-Compliance
Avoided Sampling and Analysis of Receiving Water (cutfall)	\$22,400	10/3/2012	\$0	1	10/3/2012	5/28/201 4	5/28/2015	\$25,234
Delayed Installation of Alarm	\$6,150	10/22/2012	\$0		3/25/2011	10/22/201 2	5/28/2015	\$300
Totals	\$ 28,550 6		\$0		-	-	-	\$ 25,534 <u>300</u>

Source: USEPA BEN Model: Version 5.4.0, 2/23/2015 15:45

Not-for-Profit, which pays no taxes

Cost Index for Inflation: ECI Employment Cost Index

Discount/Compound Rate: 4.8%

Step #9: Maximum and Minimum Liability

The Enforcement Policy states that the total liability shall be at least 10% higher than the economic benefit. Therefore the minimum liability is \$28,087.40.330.

The maximum liability allowed by Water Code section 13385 is \$10 per gallon (in excess of 1,000 gallons) plus \$10,000 per day. Therefore the maximum liability is \$3,028,960.

Step #10: Final Liability Amount

The final liability amount for the October 3, 2012 discharge, in consideration of the factors discussed above, is \$81,775.48,812.84.

¹ Requires 7 days offshore with boat and personnel. Cost: \$3,200 x 7

ATTACHMENT B

Violation Date	Constituent	Limitation Period	Limit	Result	Units	Percentage Over Limit
12/27/2011	Settleable Solids	7-Day Average of	1.5	5.89	mg/L	293%
12/27/2011	Settleable Solids	Daily Maximum	3	40	mg/L	1233%
12/27/2011	Settleable Solids	30-Day Average of	1	1.47	mg/L	47%
01/03/2013	Chlorine, Total Residual	Instantaneous	5600	10400	ug/L	86%
01/07/2013	Chlorine, Total Residual	Instantaneous	5600	7800	ug/L	39%

Document comparison by Workshare Compare on Thursday, July 02, 2015 5:00:47 PM

Input:	
Document 1 ID	file://C:\Users\jjahr\Desktop\Carpinteria Proposed ACLO.docx
Description	Carpinteria Proposed ACLO
Document 2 ID	file://C:\Users\jjahr\Desktop\Carpinteria Proposed ACLO - revised %28June 18 2015%29 Final.docx
Description	Carpinteria Proposed ACLO - revised %28June 18 2015%29 Final
Rendering set	Standard

Legend:			
Insertion			
Deletion			
Moved from			
Moved to			
Style change			
Format change	Format change		
Moved deletion-			
Inserted cell			
Deleted cell			
Moved cell			
Split/Merged cell			
Padding cell			

Statistics:	
	Count
Insertions	67
Deletions	155
Moved from	3
Moved to	3
Style change	0
Format changed	0
Total changes	228