Draft Violations Subject to Discretionary Penalties Occurring During the Period May 1, 2005 through April 30, 2012, with Specific Factors Considered

During the subject permit compliance review period, staff identified the following violations, subject to discretionary penalties, as documented in the Discharger's self-monitoring reports.

Effluent Limitation Exceedances Subject to Discretionary Penalties
May 1, 2005 through April 30, 2012

CIWQS No.	Date of Violation	Description of Violation and Permit Limits	Units	Permit Limits	Reported Values
438640	8/30/05	Coliform, Daily Maximum	MPN	230	900
719462	10/04/05	Coliform, Daily Maximum	MPN	230	500
721065	6/27/06	Chlorine Residual at end of disinfection process	mg/L	1.5	1.2
721084	7/05/06	Total Residual Chlorine, Effluent	mg/L	0.0	2.6
721078	7/26/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721076	7/27/06	Settleable Solids Daily Maximum	ml/L	0.2	0.6
721079	7/27/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721080	7/28/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721082	7/29/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721083	7/30/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721657	7/30/06	Chlorine Residual at end of disinfection process	mg/L	1.5	0.2
774871	7/31/06	Settleable Solids, Monthly Average	ml/L	0.1	0.2
721658	8/1/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721659	8/4/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
434854	9/3/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
721663	10/10/06	Coliform, Daily Maximum	MPN	230	900
721073	10/12/06	Chlorine Residual at end of disinfection process	mg/L	1.5	1.0
721664	10/14/06	Total Residual Chlorine, Effluent	mg/L	0.0	0.1
723436	12/5/06	Chlorine Residual at end of disinfection process	mg/L	1.5	0.0

627489	6/12/07	Coliform, Daily Maximum	MPN	230	1600
627489	6/19/07	Coliform, Daily Maximum	MPN	230	900
627491	6/30/07	Exceeded Monthly Median of 23 MPN for Coliform	MPN	23	490
627494	7/3/07	pH		6.5-8.5	6.1
723439	8/7/07	Coliform, Daily Maximum	MPN	230	1600
680550	8/14/07	Coliform, Daily Maximum	MPN	230	1600
723444	8/31/07	Exceeded Monthly Median of 23 MPN for Coliform	MPN	23	801
680551	10/2/07	Coliform, Daily Maximum	MPN	230	500
680552	12/1/07	Chlorine Residual at end of disinfection process	mg/L	1.5	0.5
774872	12/16/07	Chlorine Residual at end of disinfection process	mg/L	1.5	1.2
774874	4/8/08	Chlorine Residual at end of disinfection process	mg/L	1.5	0.9
774875	5/13/08	Coliform, Daily Maximum	MPN	230	500
	5/18/08	Chlorine Residual at end of disinfection process	mg/L	1.5	0.4
	7/3/08	Total Residual Chlorine, Effluent	mg/L	0.0	1.6
	7/13/08	Chlorine Residual at end of disinfection process	mg/L	1.5	0.3
	7/18/08	Chlorine Residual at end of disinfection process	mg/L	1.5	1.2
	8/31/08	Coliform, Monthly Average	MPN	23	150
	9/14/08	Chlorine Residual at end of disinfection process	mg/L	1.5	1.2
	10/1/08	Total Residual Chlorine, Effluent	mg/L	0.0	9.6
	10/14/08	Coliform, Daily Maximum	MPN	230	500
	11/14/08	Chlorine Residual at end of disinfection process	mg/L	1.5	1.2
	2/6/09	Chlorine Residual at end of disinfection process	mg/L	1.5	1.2
	2/6/09	pH		6.5-8.5	6.3
	2/24/09	Chlorine Residual at end of disinfection process	mg/L	1.5	1.1
	4/14/09	Chlorine Residual at end of disinfection process	mg/L	1.5	1.1
	4/20/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.9
	5/14/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.9
866598	6/19/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.9
866594	7/1/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.5
866595	7/8/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.1

866599	8/1/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.4
866601	8/25/09	Coliform, Daily Maximum	MPN	230	900
866600	8/30/09	Chlorine Residual at end of disinfection process	mg/L	1.5	0.6
866244	9/30/09	Coliform, Monthly Median	MPN	23	70
766250	12/8/09	Coliform, Daily Maximum	MPN	230	500
866257	12/11/09	Total Residual Chlorine, Effluent	mg/L	0.0	0.3
866260	12/29/09	Chlorine Residual at end of disinfection process	mg/L	1.5	1.3
866261	12/31/09	BOD, Monthly Average	lbs/day	25	44.84
	12/31/09	BOD, Monthly lbs/day Removal	%	85	76
	4/18/10	Chlorine Residual at end of disinfection process	mg/L	1.5	1.1
	4/26/10	Chlorine Residual at end of disinfection process	mg/L	1.5	0.8
	5/10/10	Chlorine Residual at end of disinfection process	mg/L	1.5	0.9
	8/3/10	Chlorine Residual at end of disinfection process	mg/L	1.5	1.0
	10/31/10	Coliform, Monthly Median	MPN	23	50
	12/2/10	Chlorine Residual at end of disinfection process	mg/L	1.5	0.5

SSO Violations
May 1, 2005 through October 30, 2011

Date of Violation	Estimated Volume Discharged (Gallons)	Estimated Volume Recovered (Gallons)	Estimated Volume Discharged to Surface Waters (Gallons)	Discharge Characteristics
6/17-19/09	87,000	0	87,000	Untreated Wastewater

Pursuant to Water Code section 13385(e), in determining the amount of any liability under that section, the Regional Water Board shall take a number of factors into consideration. As discussed below, staff have considered the required factors, applying the Penalty Calculation Methodology presented in the May 20, 2010 Enforcement Policy, to determine the potential administrative civil liability for the violations presented in the tables above.

I. Effluent Limit Violations: In accordance with CWC section 13350(e), a penalty may be issued for effluent violations without a discharge to surface

waters. When a discharge occurs, CWC 13385(c) allows a penalty of $10,000 a day and $10 for each gallon over 1,000 not cleaned up.

Calculation of Penalty

i. Coliform (non-Discharge violation)

Over the assessment period, there were a total of twenty-six violations for exceeding the coliform limits. Of the twenty six violations, seventeen violations met the requirements to be ranked as a Class II Violation.

Step 3: Per Day Assessment for Non-Discharge Violations

a) *Potential for Harm:* 0.15 – minor

Discussion: The Water Quality Enforcement Policy does not consider coliform to be a Group 1 or 2 Pollutant, and therefore does not consider coliform violations to be serious violations. However, high concentrations of coliform fecal bacteria in water impair beneficial uses related to public health, including REC-1 and Shell (shellfish harvesting).

Step 4. Adjustment Factors

b) *Culpability:* 1

Discussion: As the owner and operator of the System, the Discharger is fully responsible for the violations alleged in this Complaint.

c) *Cleanup and Cooperation:* 1.3

Discussion: Staff have made a number of efforts to work with the Discharger to identify and agree upon some route by which the Discharger might move toward compliance. The Discharger has intermittently expressed interest in cooperation, but citing a lack of resources has indicated that it cannot cooperate and has not proven cooperative even in supplying requested information, most recently failing to submit either a compliance project proposal or a priority list for known repair and/or maintenance needs in the collection and treatment system. For this reason, staff recommend a score of 1.3 for this factor.

d) *History of Violations:* 1.1

Discussion: Staff recommend a score of 1.1 as there is a history of such violations.

Step 5. Determination of Total Base Liability Amount
The Total Case Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

e) *Total Base Liability Amount:* $18,232.50
0.15 per day factor x 17 days x $5,000 per violation = $21,700
$12,700 x 1 (culpability) x 1.3 (cleanup and cooperation) x 1.1 (history of violations) = $18,232.50

ii. **Total Residual Chlorine (non-Discharge violation)**

Over the assessment period, there were fifteen violations for exceeding the chlorine limit of non-detect; of these fifteen, thirteen met the criteria to be considered Class II violations.

Step 3. Per Day Assessment for Non-Discharge Violations

a) *Potential for Harm:* 0.5 – Major/moderate

Discussion: The thirteen violations ranged from 0.1 to 9.6 mg/L The drinking water MCL for chlorine is 4 mg/l, however recommended chlorine limits for aquatic life are far lower; the 1 hour maximum concentration for freshwater life is 0.0019 mg/l. Residual chlorine in effluent is a significant violation with a potentially serious environmental impact.

Step 4. Adjustment Factors – See discussion above under i., Step 4

b) *Culpability:* 1

c) *Cleanup and Cooperation:* 1.3

d) *History of Violations:* 1.1

Step 5. Determination of Total Base Liability Amount
The Total Case Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

f) *Total Base Liability Amount:* $46,475
0.5 per day factor x 13 days x $5,000 per violation = $32,500
$7,500 x 1 (culpability) x 1.3 (cleanup and cooperation) x 1.1 (history of violations) = $46,475

iii. <u>Chlorine Residual at end of disinfection process (non-Discharge Violation)</u>

Over the assessment period, there were thirty-three violations for exceeding the daily chlorine residual. Of the thirty-three, twenty-nine met the requirements to be ranked as Class II Violations.

Step 3. Per Day Assessment for Non-Discharge Violations

a) *Potential for Harm:* 0.15 - minor

Discussion: The chlorine contact chamber is designed to disinfect the effluent before it leaves the facility. The minimum of 1.5 mg/l chlorine residual provides added assurance that the effluent is disinfected. If effluent is not adequately disinfected, it may pose a threat to public health.

Step 4. Adjustment Factors - See discussion above under i., Step 4

b) *Culpability:* 1

c) *Cleanup and Cooperation:* 1.3

d) *History of Violations:* 1.1

Step 5. Determination of Total Base Liability Amount

The Total Case Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

g) *Total Base Liability Amount:* $31,102.50
0.15 per day factor x 29 days x $5,000 per violation = $21,750
$6,750 x 1 (culpability) x 1.3 (cleanup and cooperation) x 1.1 (history of violations) = $31,102.50

iv. <u>pH (non-Discharge Violation)</u>

Over the assessment period, there were a total of eight violations for not meeting daily pH limits of not less than 6.5 nor greater then 8.5. Of the eight violations, two met the requirements to be ranked as a Class II Violation.

Step 3. Per Day Assessment for Non-Discharge Violations

a) *Potential for Harm:* 0.1

Discussion: The reported pH was 6.1 and 6.3. pH outside of the acceptable limits can adversely impact beneficial uses associated

with fish and wildlife habitat, however staff anticipate that due to the infrequency of the violations and the volume of other flows available for mixing in the vicinity of the discharge point, it is likely that any adverse impact associated with this violation would be fairly short term and localized.

Step 4. Adjustment Factors - See discussion above under i., Step 4

b) *Culpability:* 1

c) *Cleanup and Cooperation:* 1.3

d) *History of Violations:* 1.1

Step 5. Determination of Total Base Liability Amount
The Total Case Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

h) *Total Base Liability Amount:* $1,430
0.1 per day factor x 2 days x $5,000 per violation = $1,000
$500 x 1 (culpability) x 1.3 (cleanup and cooperation) x 1.1 (history of violations) = $1,430

v. **<u>Settleable Solids (non-Discharge Violation)</u>**
Over the assessment period, there a total of five violations or exceeding the settleable solids limits. Of the five violations, two met the requirements to be ranked as a Class II Violation.

Step 3. Per Day Assessment for Non-Discharge Violations

a) *Potential for Harm:* 0.1 – minor

Discussion: The Basin Plan states, under Section 2 Water Quality Objectives, Objectives for Inland Surface Water, Enclosed Bays and Estuaries, Settleable Material, that "Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses." Due to the infrequent occurrence as well as the continuous flow exiting the discharge pipe, staff do not believe that the settleable solids associated with these violations result in measureable bottom deposits.

Step 4. Adjustment Factors - See discussion above under i., Step 4

b) *Culpability:* 1

c) *Cleanup and Cooperation:* 1.3

d) *History of Violations:* 1.1

Step 5. Determination of Total Base Liability Amount
The Total Case Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

i) *Total Base Liability Amount:* $715
0.1 per day factor x 1 day x $5,000 per violation = $500
$500 x 1 (culpability) x 1.3 (cleanup and cooperation) x 1 (history of violations) = $715

vi. BOD (non-Discharge violation)
Over the assessment period, there were a total of three violations that exceeded BOD limits. Of the three violations, one met the requirements to be ranked as a Class II Violation.

Step 3. Per Day Assessment for Non-Discharge Violations

b) *Potential for Harm:* 0.1 - minor

Discussion: The one violation was failing to meet the 85% monthly removal requirement. The BOD violation was reported at 76%. The second violation was for failing to meet the monthly average of 25 lbs/day. The BOD violation was reported at 44.84 lbs/day. A high BOD indicates heavy pollution with little oxygen remaining for aquatic life. Due to the infrequent occurrence, staff does not feel that this occurrence posed much of a threat.

Step 4. Adjustment Factors - See discussion above under i., Step 4

b) *Culpability:* 1

c) *Cleanup and Cooperation:* 1.3

d) *History of Violations:* 1.1

Step 5. Determination of Total Base Liability Amount
The Total Case Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

j) *Total Base Liability Amount:* $1,430
0.1 per day factor x 2 days x $5,000 per violation = $1,000

$500 x 1 (culpability) x 1.3 (cleanup and cooperation) x 1 (history of violations) = $1,430

II. SSO (Discharge Violation)

From June 17, 2009 to June 19, 2009 (Wednesday to Friday), the treatment plant reportedly had abnormally low influent flows. On the third day, the Discharger determined that a collection system manhole was overflowing. The manhole is located in a horse field and is the final manhole before the wastewater plant. The overflowing raw sewage entered the stormwater system which drains into a wetland area/percolation pond located in an oxbow that seasonally discharges to the Eel River. (An oxbow is a U-shaped bend in the river formed when a wide meander from the main stem of a river is cut off to create a wetland.) In the summertime, as long as it does not rain and there is no flow from this oxbow into the Eel River, the Discharger uses the area as a percolation pond for the treatment plant. The reported estimated spill volume is 87,000 gallons for 3 days, with none of the spilled material recovered. The Discharger did not collect samples for BOD and TSS testing as there are no nearby laboratories available to conduct these tests on the weekend.

Step 1. Potential Harm Factor

a) *Harm/Potential Harm for Discharge Violation:* 4 – above moderate

Discussion: A three day uncontrolled spill of raw sewage has a high potential of impacting beneficial uses.

b) *Degree of Toxicity:* 3 – spilled material poses above moderate risk

Discussion: The spilled material was raw sewage.

c) *Susceptibility of Cleanup or Abatement:* 1 - <50% of Discharge Susceptible to cleanup or abatement:

Discussion: The Discharger did not recover any of the spilled sewage.

d) *Deviation from Standard:* Major

Discussion: The SSO started on a Wednesday at around 1:00 pm and continued until Friday at around 11:00 pm. For three days raw sewage was flowing into the stormwater drain, and thence into the wetland area and the Eel River.

Adding the scores assigned under a), b), and c), above, the Potential for Harm associated with this SSO is 8.

Step 2. Assessments of Discharge Violations

a) *Per Gallon Factor:* 0.6

b) *Gallons:* 87,000 – 1,000 = 86,000 gallons

c) *Statutory/Adjusted Max per Gallon ($):* $2

k) *Total Initial Amount of Discharge:* $103,200
0.6 (per gallon factor) x 86,000 gallons x $2 (per gallon) = $103,200

Total Adjusted Initial Amount of Discharge: $121,200
0.6 (per day factor) x 3 days x $10,000 (statutory maximum per day) = $18,000 + $103,200 = $121,200

Step 4. Adjustment Factors

a) *Culpability:* 1.5

Discussion: Staff believe that a release of such magnitude should have been identified and located much more quickly. With flows still abnormally low on the second day, the operator should have investigated instead of waiting one more day. As the owner and operator of the System, the Discharger is fully responsible for the violations alleged in this Complaint.

b) *Cleanup and Cooperation:* 1

Discussion: Even though the SSO was not cleaned up, a 1 was given which neither increases nor decreases the fine.

c) *History of Violations:* 0.75

Discussion: Over the period of this ACL, Loleta has had few SSOs.

Step 5. Determination of Total Base Liability Amount

l) *Total Base Liability Amount:* $136,350

$121,200 (initial amount of the ACL) x 1.5 (culpability) x 1 (cooperation) x 0.75 (history) = $136,350

The combined Total Base Liability Amount for the Effluent Limit Violations and the SSO is shown in the table below.

Parameter	Penalty Amount
Coliform	$18,232.50
Total Residual Chlorine	$46,475
Chlorine Residual at end of disinfection process	$31,102.50
pH	$1,430
Settleable Solids	$1,430
BOD	$1,430
SSO	$136,350
Total	**$236,450**

III. Application of Penalty Methodology Steps 6, 7, 8, and 9 to the Combined Total Base Liability Amount and Determination of Final Liability Amount (Step 10).

The following factors apply to the combined Total Base Liability Amounts for all of the violations discussed above.

Step 6. Ability to Pay and Continue in Business

m) *Adjusted Combined Total Base Liability Amount:* $236,450

Discussion: Loleta CSD is a publicly owned treatment work serving a small community with a financial hardship as defined by CWC section 13385 (k)(2). Loleta has a population of 783 with an average income of $31,284. The CSD also receives industrial wastewater discharges from the Humboldt Creamery. The Humboldt Creamery is reportedly considering applying for its own individual discharge permit which would reduce flows entering the collection and treatment system, but would also deprive the CSD of a portion of its current income.

On February 8, 2007, the Regional Water Board issued an Administrative Civil Liability Order (ACLO) No. R1-2007-0003 in the amount of $225,000. The Discharger paid $10,000 to the CAA and proposed to apply the remaining amount to a Compliance Project (CP), involving facility improvements including smoke testing and infiltration repairs. The Discharger has completed the project to the satisfaction of the Regional Water Board. However, in absence of comprehensive, effective improvements and/or changes to the method and manner of its wastewater collection, treatment, and disposal system, the Discharger will continue to violate permit

requirements and continue to be subject to additional penalties, both discretionary and mandatory, regardless of its ability to pay those penalties.

Extreme financial penalties place an excessive burden on this low income community, however, as noted above, if preventive measures are not implemented, staff anticipate that similar violations will continue to occur, resulting in adverse impacts to water quality and beneficial uses, as well as both mandatory and discretionary penalties for the Discharger. Hence, though staff recommend a fairly significant reduction to the proposed penalty based on ability to pay, staff recommend that the Board uphold this discretionary penalty as an additional monetary assessment against the discharger. In the event that the Discharger elects to conduct a project to bring its collection and treatment system into compliance, staff would recommend that the Regional Water Board allow the Discharger to apply the discretionary penalties, along with mandatory minimum penalties assessed, to such a project.

Per the discussion above, staff propose to apply an ability to pay adjustment of 0.3 to the Combined Total Base Liability Amount.

l) $236,450 x 0.3 (ability to pay) = $70,935

Step 7. Other Factors as Justice May Require

n) *Adjusted Combined Total Base Liability Amount:* $70,935 + $15,000 (Staff Costs) = $85,935

o) *Discussion*: Over the past two years, State and Regional Water Board have incurred $15,000 staff costs associated with the investigation and enforcement of the violations alleged herein. In accordance with the Enforcement Policy, this amount is added to the Combined Total Base Liability Amount.

Step 8. Economic Benefit

p) *Estimated Economic Benefit:* $254,866.70

$231,697 x 10% = $23,169.70
$23,169.70 + $231,697 = 254,866.70

(Calculations for the $231,697 were made using the BEN model, as shown in Attachment C.)

q) *Discussion:*

The economic benefit to the City of Loleta is a savings realized by not having proper WWTF operator coverage, and not maintaining and upgrading the wastewater treatment plant and collection systems. The facility needs at least 4 or more hours a day of coverage by a certified WWTF operator in order to properly oversee the daily operations of the plant. With proper staff coverage and continual upgrades to the facility, fewer violations would occur.

Step 9. Maximum and Minimum Liability Amounts

r) *Minimum Liability Amount:* $254,866.70

s) *Discussion:* The Enforcement Policy requires that the minimum liability amount imposed not be below the economic benefit plus ten percent. As discussed above, the Regional Water Board Prosecution Team's estimate if the Discharger's economic benefit obtained from the violations cited in the Complaint is $254,866.70.

t) *Maximum Liability Amount:* $985,000

u) *Discussion:* The maximum administrative liability amount is the maximum amount allowed by Water Code Section 13350 (e)(1) five thousand dollars ($5,000) for each day the violations occurs. The maximum administrative liability amount allowed by Water Code Section 13385(c) is $10,000 a day for a discharge plus $10 for each gallon not cleaned up that exceeds 1,000 gallons.

The proposed liability falls within these maximum and minimum liability amounts.

Step 10. Final Liability Amount

The final potential liability amount for the violations subject to discretionary penalties during the permit compliance review period (May 1, 2005 through April 30, 2012) is **$254,866.70**.