EXHIBIT A

WATER QUALITY ENFORCEMENT POLICY METHODOLOGY

1. **Violation 1 -** Failing to submit a Report of Waste Discharge (ROWD): California Water Code (CWC) section 13385, subdivision (a)(1), provides that civil liability may be administratively imposed by the Regional Water Board against any person that violates CWC section 13376.

2. **Violation 2 -** Violating prohibitions contained in the Water Quality Control Plan for the North Coast Region (Basin Plan): CWC section 13385, subdivision(a)(4), provides that civil liability may be administratively imposed by the Regional Water Board against any person that violates CWC section 13243.

3. CWC section 13385, subdivision (c), provides that the civil liability may be imposed by the Regional Water Board in an amount not to exceed the sum of the following:

   a. Ten thousand dollars ($10,000) for each day in which the violation occurs.

   b. 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.

4. The City of Arcata is subject to liability pursuant to section 13385, subdivision (c) by violating CWC section 13376 which prohibits the discharge of waste without submitting a ROWD or obtaining a permit, and CWC section 13243 by discharging waste in violation of the Basin Plan.

Enforcement Policy Methodology

5. Pursuant to CWC section 13385, subdivision (e), the Regional Water Board is required to consider the following factors in determining the amount of civil liability, including the nature, circumstances, extent, and gravity of the violation; 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 of any civil liability on the ability to continue in business; voluntary cleanup resulting from the violations; and other matters that justice may require. Water Code section 13385, subdivision (e) requires that, at a minimum, the liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violations.

6. On November 17, 2009, the State Water Resources Control 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 Water Code section 13385(e). An analysis of the Enforcement Policy methodology for the violations alleged in Exhibit A is set forth below.

STEP 1 Potential for Harm for Discharge Violations

Factor 1, Harm or Potential Harm to Beneficial Uses: The discharge created a moderate threat to beneficial uses within the impacted area of Janes creek. Fish and other aquatic organism are reasonably expected to have been impacted during the two day discharge event, but likely without appreciable acute or chronic effects. A score of 3 is assigned to this factor.

Factor 2, The Physical, Chemical, Biological or Thermal Characteristics of the Discharge: The discharged material, sediment from dredging activities, posed a significant threat to aquatic organisms because of high turbidity and sediment disposition. Regional Water Board staff observed clear water in Janes Creek upstream and heavily turbid water downstream of the project site. On October 2, 2012, Regional Water Board staff collected water samples from Janes Creek approximately 25 feet downstream of the site confirming a turbidity of 11,000 NTU. A score of 2 was assigned to this factor.

Factor 3, Susceptibility to Cleanup or Abatement: Less than 50% of the discharged material was susceptible to cleanup. A score of 1 was assigned to this factor.

Final Score – Potential for Harm: The total score for step one is **6**.

STEP 2 Per Gallon Factor and Per Day Factor

The per gallon factor is not applicable.

Per day factor:

Violation 1:
Because not submitting a report of waste discharge or obtaining a permit rendered these requirements ineffective for the protection of water quality, the deviation from standard is considered "major." Table 2 on page 15 of the Enforcement Policy assigns a 0.22 factor where the potential for harm score is 6, and the deviation from requirements is major. Applying the per day factor yields a penalty of $4,400 (number of days, 2 X the maximum statutory liability, $10,000 X the per day factor, 0.22)

The total unadjusted amount of the administrative civil liability is **$4,400**.

Violation 2:
Because discharging in violation of the prohibitions contained in the Basin Plan rendered these requirements ineffective for the protection of water quality, the deviation from standard is considered "major." Table 2 on page 15 of the Enforcement Policy assigns a 0.22 factor where the potential for harm score is 6, and the deviation from requirements is major. Applying the per day factor yields a penalty of $4,400 (number of days, 2 X the maximum statutory liability, $10,000 X the per day factor, 0.22)

The total unadjusted amount of the administrative civil liability is **$4,400**.

STEP 3 – Per Day Assessments for Non-Discharge Violations
This step in the penalty calculator is not applicable to this discharge because it addresses only non-discharge violations.

STEP 4 – Adjustment Factors

Culpability:
The Discharger is the responsible party and may have been negligent with respect to submitting a ROWD or applying for and obtaining a Water Quality Certification. The Discharger had a 1600 California Department of Fish and Game Agreement (1600 Agreement) containing natural resource protection conditions covering this project site as well as six other sites. No permit was issued for a discharge from the project.

Violation 1:
The Discharger performed the work without submitting a ROWD, or obtaining necessary Water Quality Certification, and/or WDRs issued by the Regional Water Board for the project. The project activities resulted discharges of sediment-laden wastewater to Janes Creek.

Violation 2:
The project activities resulted in discharges of sediment-laden wastewater to Janes Creek in violation of the Basin Plan and the 1600 Agreement for the project.

The Discharger should have procured all necessary permits prior to start of work and conducted project activities in a manner to prevent discharges, and was negligent in this regards. The degree of culpability here should be a multiplier of **1.1**.

Cleanup and Cooperation: The Discharger ceased work and discharging once staff from the Regional Water Board inspected and noted sediment discharges from the site. No cleanup activities by the Discharger have been implemented because effective cleanup measures are not feasible. Therefore, the extent the Discharger voluntarily cooperated in returning

to compliance and correcting impacts result in a neutral Cleanup and Cooperation multiplier of **1.0**.

History of Violations: Given the Discharger's lack of a history of repeat violations for failing to submit a ROWD or discharging in violation of the Basin Plan, a neutral multiplier of **1.0** is appropriate.

STEP 5 – Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 2.

(Initial Liability) x (Culpability Multiplier) x (Cleanup and Cooperation Multiplier) x (History of Violations Multiplier) = Total Base Liability

Violation 1:
$4,400 x 1.1 x 1.0 x 1.0 = $4,840

Violation 2:
$4,400 x 1.1 x 1.0 x 1.0 = $4,840

Total for Violations 1 & 2 = **$9,680**

STEP 6 – Ability to Pay and Ability to Continue in Business

Prosecution staff believes the City has the ability to pay the proposed liability and continue to operate. Regional Water Board staff believes the penalty is less than the cost of the project.

STEP 7 – Other Factors as Justice May Require

The Regional Water Board has incurred $1,200 in staff costs (8 hrs. @ $150/hr.) associated with the investigation and enforcement of the violations alleged herein. In accordance with the Enforcement Policy, this amount is added to the total base liability amount from Step 5.

$9,680 + $1,200 = **$10,880**

STEP 8 – Economic Benefit

The Economic Benefit amount is any savings or monetary gain derived from the act or omission that constitutes the violation.

The work included maintenance dredging and sediment removal from two culverts in Janes Creek under West End Road. For this work, the City installed a sheet-pile dam upstream and another dam downstream of the project work site (site) which provided a clear-water bypass around and isolated the project work site. The City utilized this system for several days during the project work. In addition to the clear-water bypass, the City installed a temporary sediment basin constructed of hay bales in an upland area for turbid water pumped from the dredging activities at the site.

According to the City, the upstream dam was undermined during the dredging activities and creek water began entering the site. At this point, the City abandoned the clear-water bypass and began utilizing the temporary sediment basin in order to dewater the site. The temporary sediment basin was inadequate for the volume of turbid creek water and sediment removal required for dewatering the site. The City should have stopped work, corrected the dam and resumed using the clear-water bypass or another method and/or system to remove sediment prior to continuing with dredging activities.

Costs avoided from not fixing the upstream dam

The City avoided the costs associated with fixing the upstream dam in order to continue to use the clear-water bypass. The avoided costs include staff and equipment time to drive existing piles deeper, and additional sheet pile material costs. Specifically, the avoided costs are:

Staff time = 1 equipment operator x 8 hr. x $22/hr. = $176
Staff time = 2 maintenance workers x 8 hr. x $17/hr. = $272
Equipment time = pile hammer + equipment x $1180/day = $1,180
Costs for fixing dam = $1,628

Estimated cost benefit to the Discharger = $1,628

Cost avoided from utilizing the sediment basin

The City gained a cost benefit by utilizing the sediment basin, rather than another prefabricated commercial system for sediment removal, such as a Baker Tank. Specifically, the avoided costs are:

Estimated costs for a prefabricated commercial system (Baker Tank)
$1000/disposal x 2 disposals + $45/day (rental) x 2 days = $2,090[1]

Estimated cost benefit to the Discharger = $2,090

Cost avoided by not filing for a 401 certification

The City avoided the cost of filing for a 401 Certification, which for a project categorized under habitat restoration requires a payment of $944.

In summary, the economic benefit gained by the City by not complying with these measures is equal to the present value of the avoided costs, which is the sum of 1) the costs associated with correcting the upstream dam in order to continue to use the clear-water bypass ($1,628), not installing a banker tank ($2,090), and the cost of not filing for a 401 certification ($944). Thus, the total economic benefit is $4,662.

STEP 9 – Maximum and Minimum Liability Amounts

Pursuant to Water Code section 13385(c), the maximum liability that may be imposed for the violations alleged is $20,000. The minimum liability is the estimated economic benefit to the Discharger which is $4,662.

The stipulated administrative liability falls within these maximum and minimum liability amounts.

STEP 10 – Final Liability Amount

The stipulated administrative civil liability amount is **$10,880.00**, which includes $1,200 for staff costs.

[1] Caltrans Field Guide to Construction Site Dewatering, Appendix B, Sediment Treatment Options