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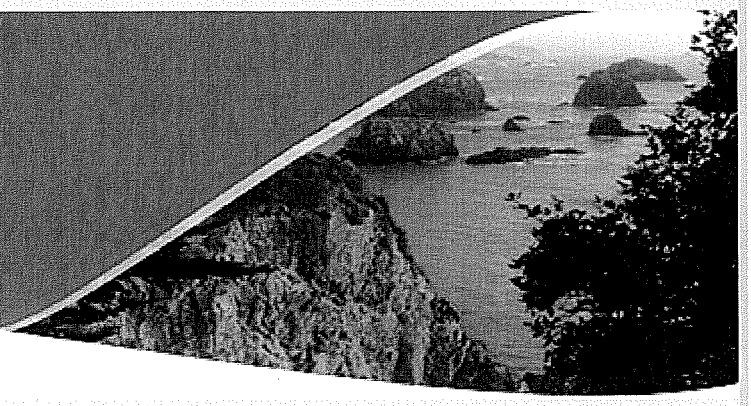
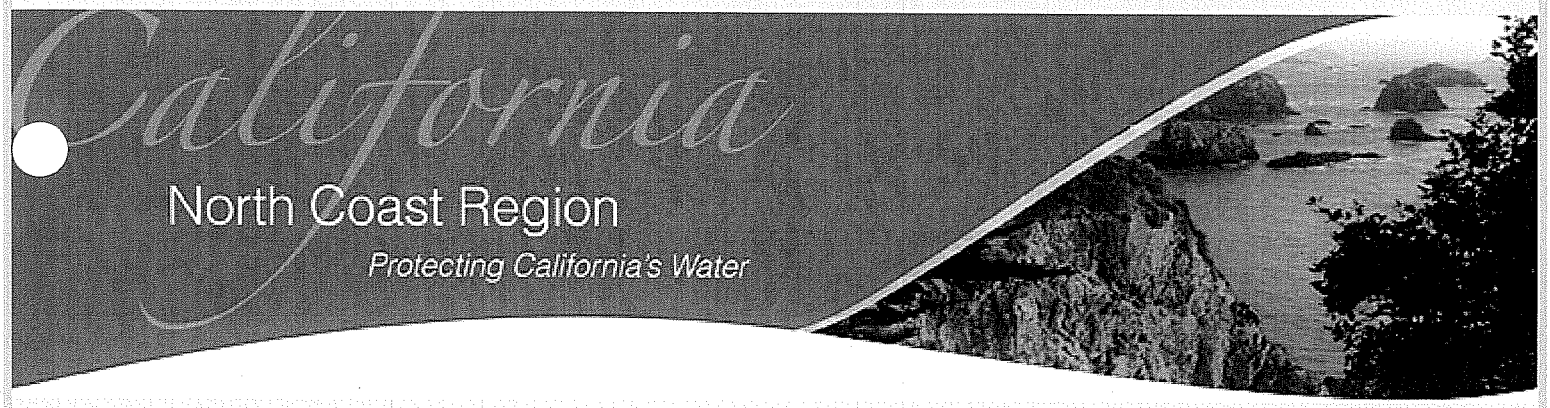


Prosecution Team Case in Chief

Confusion Hill Bypass Project

February 14, 2011

- Written Submission
- Declaration and Supporting Exhibits:
  1) Mona Dougherty
  2) Kason Grady
  3) Julie Macedo



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- Prosecution Team – Case in Chief; Brief of Factual and Legal Argument
- Witness Statement
- Declaration of Mona Dougherty and Supporting Exhibits
- Declaration of Kason Grady and Supporting Exhibits
- Declaration of Julie Macedo and Supporting Exhibits

Prosecution Brief

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

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BEFORE THE CALIFORNIA WATER QUALITY CONTROL BOARD

NORTH COAST REGION

In the Matter of: CALIFORNIA DEPARTMENT OF TRANSPORTATION, CONFUSION HILL BYPASS PROJECT, WDID No. 1B05153WNME	ACLC Order No. R1-2007-0095 PROSECUTION TEAM'S BRIEF, CASE-IN-CHIEF Declarations of Kason Grady, Mona Dougherty, and Julie Macedo submitted herewith

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PROSECUTION TEAM LEGAL AND FACTUAL ANALYSIS

I. INTRODUCTION – OVERVIEW OF CONFUSION HILL PROJECT

The California Department of Transportation ("Caltrans") contracted with MCM Construction, Inc. ("MCM"; Caltrans and MCM are sometimes collectively referred to as the "Dischargers") to construct the Confusion Hill Bypass Project, (the "Project") located in Mendocino County. The purpose of the Project was to relocate a portion of Highway 101, accomplished by relocating the highway from the east side of the South Fork Eel River to the west side. The Project required construction of two new bridges and a new section of highway.

Caltrans submitted its application for a 401 certification in 2005, and the certification was issued February 16, 2006. The Project commenced on June 19, 2006 and the Administrative Civil Liability Complaint ("ACLC") was issued in 2007 after several site inspections, two Notices of Violations ("NOVs") and an Investigatory Order pursuant to Water Code §13267. The Complaint seeks administrative liabilities for violations that occurred between August 17, 2006 and June 1, 2007, although the Project continued until 2009. After 2007, the Regional Board staff turned its efforts to enforcement.[1]

Caltrans and MCM will argue that this Project was an example of swift and responsible construction. While swift, the Project was fraught with violations, and the penalties sought by the ACLC are conservative and undervalue the Project's true environmental harm and the Dischargers' sometimes **intentional** disregard for the regulatory system. The Project resulted in unauthorized discharges of toxic concrete wastewater, sediment and other pollutants to a sensitive, sediment-impaired water that is a known habitat for endangered species. The Regional Board staff exercised its

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[1] In reviewing evidence gathered from the Dischargers to prepare for this hearing, the Prosecution Team has discovered many additional violations that were committed after June 1, 2007, both discharge and reporting. The Prosecution Team is considering further enforcement action, and a description of the additional violations is provided, *infra.*

discretion throughout the complaint, in choosing which violations to pursue and how to value those violations, and the ultimate fine sought is conservative. The staff considered the 13385 factors and often reduced the proposed civil liability recommended from the potential maximum penalty for specific violations. The penalty recommended in the ACLC is just over half of the maximum. This number is fair and should not be decreased[2], despite the Dischargers' arguments. The Dischargers' argument that this Project was environmentally friendly rings hollow in light of the following problems:

- The SWPPP manager was replaced mid-project for failure to consistently be effective, onsite, and update the SWPPP to reflect the current Project conditions;[3]
- The Resident Engineer was replaced mid-project;[4]
- An additional consultant, Joe Cartwright, was hired to assist with SWPPP compliance, with the cost divided between MCM and Caltrans;[5]
- Caltrans issued an administrative retention of fundsfor poor SWPPP performance;[6]
- Caltrans issued work stoppages and complained to MCM several times about its poor understanding of best management practices ("BMPs") and attitude toward compliance;[7]

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[2] The Prosecution Team is willing to forego seeking penalties for a limited number of violations where it is willing to consider the possibility that the violation date may be duplicative of another date or is related to in stream sediment. *See* Section VIII, *infra*.

[3] *See* Declaration of Julie Macedo ("Macedo Decl."), Exhibits A and B.

[4] *See* Declaration of Mona Dougherty ("Dougherty Decl."), ¶2.

[5] *See* Macedo Decl., Exhibit C.

[6] *See* Macedo Decl., Exhibits D, E, and F.

[7] *See* Macedo Decl., Exhibits G and H regarding work stoppages; for examples of Caltrans' frustration with MCM related to environmental compliance, *see* C, I, J, K, Q..

- At least two meetings were held among the Dischargers where environmental compliance was discussed and Caltrans expressed frustration with MCM for failure to respect the permit requirements;[8]
- Caltrans questioned in writing whether MCM's conduct in failing to observe permit requirements was intentional;[9]
- This Board has already fined Caltrans $20,000 for a discrete violation on this Project, which was ultimately split between Caltrans and MCM;[10]
- There is evidence of MCM and Caltrans controlling information and deliberately preventing information related to discharges from getting to regulatory agencies, including the Regional Board.[11]

Correspondence between Caltrans and MCM documents MCM's refusal to make appropriate expenditures for BMPs, and Caltrans' insistence that more BMPs were needed for regulatory compliance. Ultimately, Caltrans and MCM are complicit in their combined failure to report violations, including the discharge violations that occurred as a result of failing to install and maintain BMPs. Many of these discharges could have been easily avoided with minimal effort.[12] If efforts were not going to be taken, the appropriate response would be to contact the Regional Board prior to a rain event for a permit amendment of some kind[13], or to quickly report a discharge and work to resolve it with the

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[8] *See* Macedo Decl, Exhibits I and J.

[9] *See* Macedo Decl, Exhibit K.

[10] The previous Confusion Hill ACLC is attached as Exhibit A to the Dougherty Decl.

[11] *See* Macedo Decl, Exhibit L.

[12] *See* August 20, 2008 email from Sebastian Cohen, Caltrans Resident Engineer to MCM's Evan Paine: "As usual, a majority of the issue[s] are easily achievable with only a little effort and forethought on the part of the Contractor(s)…"; Macedo Decl., Exhibit C; *see also* June 13, 2007 MCM correspondence to Caltrans re: sandblasting waste: "In some cases this additional work may be no more than spreading out a piece of visquene…". *See* Macedo Decl., Exhibit M.

[13] Caltrans is familiar with requesting a 401 permit amendment on construction projects; it requested two amendments for this Project. *See* Declaration of Kason Grady ("Grady Decl."), Exhibit A.

Regional Board. The evidence provided by the Dischargers to the Regional Board through the discovery process shows that this is not what occurred; instead, MCM objected to Caltrans to what it considered overly stringent permit requirements so it did what it wanted without Regional Board guidance and often against express direction from Caltrans and permit language. Often, when Caltrans and MCM were aware of discharges, they decided not to notify the Regional Board. Caltrans and MCM are both ultimately liable for their conduct and the Board needs to issue an Order to make it clear to Caltrans and its contractors, MCM and others, what is expected in this environmentally-rich region.

II. OVERVIEW OF REGULATORY SCHEME – PERMITS AND GOVERNING DOCUMENTS

A. The Permits that Apply to the Project

The governing documents for the Confusion Hill Project are the NPDES permit issued to Caltrans, Order No. 99-06-DWQ (the "Storm Water Permit"), the Clean Water Act section 401 Certification (the "401 permit"), the Project SWPPP and the Basin Plan. The Project must comply with the more stringent requirement of the two permits, one of which is applicable statewide, and one which is project specific.[14]

B. The Regulatory Process and the Role of the Regional Board – From 401 Application to Enforcement

The Clean Water Act (federal) and California Water Code (state) guide regulatory environmental compliance. A 401 certification is based on the Clean Water Act, and will also include waste discharge requirements that are based on compliance with a region's Basin Plan. The Basin Plan describes how to achieve water quality compliance through identification of beneficial uses, narrative and numeric water quality objectives intended to protect those beneficial uses, and action plans to achieve water quality objectives and

[14] The applicable permits are referenced in the Declarations of Kason Grady and Mona Dougherty; the specific sections giving rise to violations are cited in the ACLC and are not repeated in their entirety here. The Confusion Hill ACLC is Exhibit B to the Kason Decl.

beneficial use protection. The Basin Plan is available in both hard copy and electronic form (the latter via the North Coast Region's website). Regional Board staff regularly rely on the Basin Plan as a key regulatory document, and have cited it specifically in 401 certifications, including certifications for Caltrans projects.

The development of the terms and conditions of a 401 certification for a specific Caltrans project begins with the submittal by Caltrans of a 401 application. Regional Board staff review this application and prepare comments for Caltrans on whether and the extent to which the project as described in the application complies with water quality regulations. Caltrans can and does rely during this application review step on BMPs included and documented in Caltrans' BMP manuals for describing how Caltrans intends to conduct the project and achieve water quality compliance. The culmination of this process is a Caltrans 401 Application and Project Description that has been approved by Regional Board staff because it protects water quality***, if executed precisely as described***. This approved Project Description forms the basis for the findings and conditions included in the 401 certification and for issuance of the certification.

It is Regional Board staff's expectation that the project as approved and conditioned will form the basis for project design, bid and execution, since the project described in the Application is the project that has been permitted through the certification process. It is staff's further expectation that Caltrans will bring to the Regional Board's attention any deviations of the project as designed and bid from the project as previously approved and certified.

Regional Board staff often attend pre-construction meetings that involve Caltrans and, depending on the timing, its selected contractor. For the Confusion Hill Project, Dean Prat hosted a meeting between Caltrans and the Regional Board on November 29, 2005 and attended a construction meeting in Garberville on June 8, 2006 with MCM and

Caltrans.[15] During construction, Regional Board staff are available for consultation with Caltrans and contractor staff, but also conduct inspections and coordinate with other regulatory agencies regarding a project. Significant water quality compliance problems may result in issuance of a Notice of Violation or Section 13267 letter. Enforcement is not taken on every project, given the Regional Board's limited resources. However, violations for this Project were significant in terms of the area affected, the impacted waterways, and the sheer number of violations identified before and after the ACLC was issued.

C. The Dischargers' Mistaken Approach Underlying All of the Violations – The Regional Board Has the Authority to Modify the Permits, Not the Dischargers

A single theme underlies all of the Dischargers' violations. MCM and Caltrans failed to include the Regional Board in decision making, instead choosing what was best for either or both of them. The evidence shows MCM and Caltrans repeating this theme over and over throughout the Project. What to do if the permits do not allow certain discharges? Simply do not report them. What to do if Caltrans wants BMPs installed and those cost money? Do the work without proper BMPs when the Resident Engineer is not present. This "self-help" approach to compliance harms the environment with each individual discharge, but it also runs counter to the entire regulatory structure.

(i) The Project permits set the boundaries of what is allowed. MCM disregards this basic tenet – in correspondence and in statements made to the Regional Board, it was clear that MCM took liberties with the permit language and thought if it did something that it considered "environmentally friendly" in one aspect of implementing the Project, it could disregard requirements in another. Nowhere in the Caltrans permit or the Project 401 certification is such a trading concept either stated or implied. For example, Caltrans submitted its application for the Project and contemplated 12-15 temporary trestle footings, which were permitted. MCM has indicated it utilized fewer trestle footings.

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[15] *See* Grady Decl., Exhibits E and F.

MCM's position seems to be that this "savings" on permitted intrusions into the stream could be "spent" by intruding into the stream in other ways, or elsewhere. The permits provide the exclusive guidance as to what is permitted, and staff believes that they were fair and reasonable, especially when compared to other construction projects.[16]

(ii) MCM's opinion is not determinative of what is a water quality concern. MCM's perspective about what qualifies as a water quality concern was stated by Mr. Paine:

> [I]t is somewhat arbitrary on what constitutes a water quality concern. The Confusion Hill slide that cascaded into the river only a couple of weeks after the date of the activities listed in this NOV, that turned the entire river brown and saturated the water with silt and sedimentation for weeks, would seem to qualify as a water quality concern. Activities expected and approved, that may have minor impacts measured in minutes, do not qualify as water quality concerns. ... The activities listed in the NOV are well within the scope of the permit and do not qualify as water quality concerns.[17]

However, water quality concerns are not arbitrary. They are articulated in the Basin Plan, and enforced through the Water Code. If MCM, or any member of the regulated community, were responsible for determining when it had to report a violation, or what a discharge was based on its opinion of water quality concerns, only the most visible and blatant discharges would be regulated. This Project is a prime example of how the self-reporting nature of environmental regulations can lead to abuses, as it did here in at least two obvious examples: (1) turbidity monitoring was not done correctly, preventing Regional Board staff from determining whether turbidity violations had occurred, and (2) discharges were not reported, leading to reporting violations. Both result in the Regional

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[16] Often construction projects are prohibited from using sedimentation basins. *See* Dougherty Decl., ¶5, referring to the 101 Widening Project (Sonoma) and the Trinity River Bridge Project. Conversely, sedimentation basins can be used for the intended purpose (only for dewatering flows and sediment, <u>not</u> concrete wastewater) and result in no turbid discharges. Dougherty Decl., *id.*, referring to the Mad River Project, and Exhibit B.

[17] *See* Macedo Decl., Exhibit N.

Board's inability to respond to real water quality concerns.

(iii) Caltrans and MCM were complicit in preventing information from getting to the Regional Board. In addition to reporting violations that have now become apparent, it also appears that Ron Den Heyer limited the information related to SWPPP problems from being more widely circulated within Caltrans, and ultimately the State and Regional Boards. See infra, Section VI(D).

III. VIOLATIONS IN THE ACLC

As outlined in the complaint, staff grouped the violations into distinct categories for ease of reference.

A. Construction Dewatering

Caltrans refers to "Isolated Pool B" throughout the Project documents. Isolated Pool B is not a sedimentation basin, but in fact a part of the South Fork Eel River, with the associated beneficial uses, that has been isolated from the live channel during the dry season low flow period. For the construction dewatering violations, staff analyzed the use of Isolated Pool B (the unlined dewatering basin) on the gravel bar. Use of this basin was an intentional and direct violation of the Application/Certification and substantially and directly impacted water quality. Department of Fish & Game informed the Regional Board that Isolated Pool B provided habitat for threatened amphibians and that the habitat was damaged by the unauthorized discharges.[18] Staff recommended the maximum penalty for these 39 violations due to the high degree of culpability associated with these violations, including significant economic benefit to the contractor when it discharged directly to the gravel bar a mere 15 feet from the river channel. The Dischargers knew using Isolated Pool B was a direct violation of the 401 permit, yet chose to use it anyway to save time

and money. These construction dewatering violations resulted in discharges of wastes to waters of the State.

B. Leaky Equipment

The Biological Monitor repeatedly noted problems with leaky equipment. Drill Tech, a subcontractor, was "called out" for using excessively old and leaky equipment. The Biological Monitor provided details about specific equipment that should have been taken out of service or, at a minimum, should have had BMPs in place. While MCM constantly lamented that "all equipment leaks; that's just the way it is"[19] and it is unreasonable for the Regional Board to regulate a "natural occurrence," there is evidence that often there were no BMPs in place and/or BMPs were ineffective and left to deteriorate and become ineffective.[20] The recommended civil liability for this category of violations is conservative in the sense that staff DID NOT include violations in the ACLC for leaks where the evidence indicated it was properly cleaned up. *See* fn. 4 of the ACLC. This demonstrates a reasonable position by Board staff and a practical resolution to the problem of leaky equipment – quickly clean up leaks and often no civil liability will be imposed. However, where the BMPs were required, requested by staff or Caltrans and consistently not installed or properly implemented, or when specifically-identified leaky equipment was not replaced, the reasonable inference to be drawn is that MCM just did not care about compliance. To incentivize compliance and prevent these types of discharges, civil liabilities should be imposed. For 28 violations, the staff recommended a penalty of $150,000. This reflected the consideration that MCM or its subcontractors sometimes made efforts to clean up leaky equipment, but that this problem was pervasive and discharges of extremely harmful wastes, such as hydraulic fluid and fuels, reached waters

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[18] *See* Dougherty Decl., ¶6.

[19] *See* Grady Decl., Exhibit G.

[20] *See* Macedo Decl, Exhibit O.

of the State.

C. Slag/Welding Discharges

Controlling slag discharges appears to have been an afterthought by MCM,[21] and only after being notified by Caltrans that BMPs should be in place were they installed, and sometimes not even then. This category of violations was subject to an escalating degree of culpability because containment was often not installed after being requested by Caltrans. Therefore, in addition to not following the permit language, the contractor ignored the directives of Caltrans to minimize slag discharges. Of the 15 violations and maximum $150,000 in penalties, the staff recommended $50,000 in violations, finding an appropriate balance between MCM's disregard of the requirements despite having been notified by Caltrans they were needed, and the characteristics of the discharge.

D. Discharges to the River

The turbid discharges described in the complaint are likely significantly underreported (see the next category) due to MCM's position about determining when to report this information and when and how to take turbidity measurements. The Project occurred in an environmentally sensitive area, as the South Fork Eel watershed is listed on the 303(d) list of water bodies impaired for sediment and temperature, and is spawning and rearing grounds for Coho salmon, Chinook salmon, and Steelhead, each listed under the federal and/or California Endangered Species Act. Turbid discharges impair the beneficial uses of the river, and staff believes that the discharges were easily avoidable by minimal effort of the contractor. For the 20 violations and a maximum penalty of $200,000, staff recommends $150,000 in this instance.

E. Insufficient Turbidity Measurements

Turbidity measurements were a problem on this project. The Certification is clear that the Discharger must monitor turbidity, and Caltrans' "Construction Site Storm Water

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[21] *See* Macedo Decl, Exhibit P.

Quality Sampling Guidance Manual" describes an NTU unit as the appropriate unit of measurement.[22] The industry standard for turbidity monitoring is laboratory testing of a sample or field monitoring equipment with equivalent accuracy. This is supported by the Construction General Permit and indeed by Caltrans' own Construction Site Storm Water Quality Sampling Guidance Manual. Only these methodologies provide data that is reliable, accurate and precise enough to verify compliance with the Basin Plan turbidity water quality objective. Any attempt to manufacture another method or scale of measurement to assess turbidity does not have a scientific foundation and appears to be an attempt to obfuscate data and prevent Regional Board staff from being able to determine compliance with permit requirements. While these violations could have easily been avoided, due to the lack of direct harm to beneficial uses, staff recommended half of the allowable maximum for the 22 violations known at the time of drafting the complaint.

F. Improper Disposal of Concrete Wastewater

Concrete wastewater is toxic. The certification process for this Project specifically involved a dialogue between Regional Board staff and Caltrans regarding the use of unlined basins that could become contaminated with concrete wastewater, and Condition 9 expressly prohibited the placement of concrete wastewater in a way that could be deposited into waters of the State directly or where it could be washed by rainfall into waters of the State.[23] As described above in the construction dewatering violation, at no time should sediment-laden water, let alone untreated concrete wastewater, have been discharged to this pool. The high alkalinity of concrete wastewater is particularly toxic to the endangered species that live in the South Fork Eel River. Staff felt the maximum penalty was appropriate for this conduct, and suggested a $160,000 penalty for 16 violations of clear permit language.

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[22] *See* Dougherty Decl., ¶7 and Exhibit C.

[23] *See* Grady Decl., Exhibit E, where the topic of concrete wastewater was discussed at length during a pre-Project meeting.

G. Rubbish and Debris Discharges

Debris was often left haphazardly around the job site, without regard for the potential for it to make it to the waters of the State. While trash seems innocuous, depending on the type of rubbish, it could create a barrier, foster bacteria, or introduce chemicals into the river in addition to being a nuisance. These types of violations are rarely the subject of enforcement actions, but were part of an overall disregard for the environment and regulations by MCM, and keeping trash out of waterways is a controllable factor that could prevent water quality degradation as described in the Basin Plan. There was evidence that people were specifically tasked with trash removal, and yet there are a variety of documents that indicated trash sat for days untouched. These discharges are easy to cleanup and if they had been timely cleaned up, staff may not have included them in the ACLC, and cleanup would have been a mitigating factor in the consideration of a recommended penalty. While nine violations were included in the complaint, with a maximum civil liability of $90,000, staff recommended a penalty of only $10,000.

H. Individual Events

There were a handful of violations that did not fall neatly within the above categories and repeated violations of certain conditions of the permit, certification, basin plan or SWPPP. Of these five "individual event" violations, four were deserving of the maximum penalty of $10,000. One hydraulic fluid spill that was cleaned up immediately resulted in a suggested fine of $1,000. This reduction shows that staff is reasonable and applies the factors in a consistent manner (the suggested penalties for leaks of hydraulic fluid in category B were also significantly reduced from the statutory maximum). MCM's refueling of equipment on the gravel bar, discharge of soil to the bank within the bankfull width, and sandblasting without BMPs were in violation of clear directives and permit guidelines. The soil was placed so that it was likely to be discharged by rainfall to waters of the state. The sandblasting discharge was not susceptible to cleanup and directly contributed to the preexisting sediment impairment of the river.

IV. THE RECOMMENDED PENALTY

A. Consideration of 13385 Factors

13385 factors were analyzed as to each set of violations (*see* pgs. 18-26 of the ACLC). Staff exercised its discretion in a manner consistent with other enforcement actions, taking into account the characteristics of the discharge (cement vs. trash, for example) and factors specific to the Dischargers, Caltrans and MCM. There was a significant history of violations that was summarized in the ACLC, and staff felt that reflected a chronic disregard for environmental regulation on these types of projects.

B. Calculation of Penalty

The ACLC contains violations of both the Storm Water permit and the 401 permit conditions. When several 401 permit conditions were violated, the staff determined the number of violations according to the number of conditions violated. This is the approved State Water Resources Control Board ("SWRCB") method, as noted in previous SWRCB memoranda to counsel, case law under Water Code 13385 and recently affirmed in the SWRCB Enforcement Policy, adopted on November 19, 2009 and approved by the Office of Administrative Law on May 20, 2010. Water Board 13385(c)(1) creates a "per violation per day" penalty scheme, rather than "one violation a day" as the Dischargers may argue.

In California, the Regional Boards follow this approach and rely on the analogous analysis of a similar provision in the Clean Water Act.

> Far from double counting, the district court's decision to treat each violation of the 1992 Permit as a separate infraction for purposes of penalty calculation makes sense. This structure gives courts considerable flexibility to tailor penalties to the unique facts of the case... [T]his method of counting violations creates the proper incentives for polluters to comply. For example, if the maximum penalty that could be levied against a violator on a single day was $25,000, no matter how many different Permit effluent violations were violated, the permittee would have a strong disincentive to comply with the other permit limitations.

United States v. Smithfield Foods, Inc., 191 F.3d 516, 527-28 (4th Cir. 1999); *see also U.S. Allegheny Ludlum Corp.*, 366 F.3d 164, 187-88; *adopting Chesapeake Bay Foundation, Inc. v. Gwaltney of Smithfield, Ltd. (disapproved of on other grounds),* 791 F.2d 304,

313-14; *Borden Ranch Partnership v. United States Army Corps of Engineers*, 261 F.3d 810, 817-818 (2001); *Atlantic States Legal Foundation, Inc. v. Tyson Foods*, Inc., 897 F.2d 1128, 1139 (11th Cir. 1990). The Prosecution Team's method of calculation is also supported by the Enforcement Policy: "A single act may violate multiple requirements, and therefore constitute multiple violations." Policy, pp. 17-18.[24]

Staff exercised its discretion at several steps in the enforcement process: what violations to pursue, whether to count each permit violation as a violation with a maximum liability, and finally the consideration of section 13385 factors to determine how to value each violation. The staff's recommendations are fair, conservative, and ultimately necessary to deter the type of conduct that occurred on the Confusion Hill Project from happening repeatedly throughout the region and state.

C. Reliance on Documents and Admissions by Dischargers

In developing the complaint, Kason Grady, Water Resources Control Engineer, relied largely on the Biological Monitor's reports and photographs, and documents submitted by Caltrans in response to a §13267 order. This is reliable evidence of actual Project conditions, and Regional Board staff confirmed the Project conditions on several site inspections.[25] Statements made by Caltrans and MCM that reflect violations on their face are statements against interest, admissions, or statements by a co-defendant. Conditions as reflected by the Storm Water Coordinator are reliable because as a Caltrans employee, he is responsible for inspecting jobsites and BMPs for compliance with storm water permit requirements. The Biological Monitors are agents of Caltrans, and hired as a condition of the permit with the National Marine Fisheries Service.[26] These types of documents and photographs from the regulated community are evidence that is

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[24] *See* Macedo Decl., Exhibit Q.

[25] Dean Prat conducted 5 onsite inspections, in October 2006, January 2007, October 2007 (2), and January 2008.

[26] *See* Grady Decl., Exhibit H.

customarily relied upon by responsible persons at the Regional Board.[27]

At the time the ACLC was issued and the depositions of the Regional Board staff (notably Mr. Grady, who was questioned as to the evidence upon which he relied in developing the complaint), the evidence generated by Caltrans and its employees and agents, including that generated by the Biological Monitor, were all that was available to the Regional Board. However, through the hearing and discovery process, MCM and Caltrans both produced documents from their Project files. These documents do nothing to exculpate MCM and Caltrans; instead, they paint a vivid picture of the tension between Caltrans and MCM, and Caltrans' frustration with MCM in terms of environmental compliance. The Board is entitled to consider all evidence at the hearing in support of the ACLC allegations, including what was produced by the Dischargers after the ACLC was issued.

V. CALTRANS' AND MCM'S CONDUCT DURING THE PROJECT REPRESENTS A FUNDAMENTAL MISUNDERSTANDING (UNINFORMED OR DELIBERATE) OF WHAT THE PERMITS REQUIRE

A. Actions "Authorized by the Permit" are Not Whatever is Needed to Build the Project

MCM articulated a position, unheard of by the Regional Board prior to this Project, that the permits authorize "whatever is needed to complete the project."[28] This is a gross overstatement and a deliberate misunderstanding of the permit process. The 401 permit process (described above) commences with an application by Caltrans[29], and the ultimate

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[27] Government Code §11513(c), which applies to this hearing, provides: The hearing need not be conducted according to technical rules relating to evidence and witnesses except as hereinafter provided. Any relevant evidence shall be admitted if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of the evidence over objection in civil actions. (Emphasis added.)

[28] *See* Macedo Decl., Exhibit N.

[29] Caltrans' 401 application is also provided to the Contractor to allow the Contractor to

[Footnote continued on next page.]

permit issued allows construction activities that would otherwise be prohibited. For the Confusion Hill Project, this means that the temporary footings for the trestle are temporary impacts to the river, but ones deemed necessary and appropriate. It does not mean that BMPs are not required or that there are not reasonable constraints on the construction efforts taken to erect the trestle. The permits act as the constraints, and while the permits provide as much flexibility as possible while protecting water quality, they only work if there is dialogue among Caltrans, its contractor, and the Regional Board.

Caltrans seemed to understand this. In responding to MCM early on in the construction, Caltrans disagreed with MCM's approach:

> Your stated position that all impacts as a result of the work of the project, which are necessary to construct the project, are permitted, without any containment measures in place, is not concurred with. It is necessary and expected that measures to minimize impacts prior to causing the said impact is what is expected from the language of the permits. The idea of allowing welding slag and sandblasting waste to deposit freely without containment measures, and then be cleaned from the river bar after construction is complete, is not what Caltrans and the permitting agencies consider to be an acceptable practice. Minimization prior to the causation of the deposition of waste and maximization of containment are the key components in a majority of BMPs, regardless of the waste product; the construction operation; or the specific BMP. I believe that you will find this to be true and respected as an industry standard practice for most projects in environmentally sensitive areas, of which our project site most definitely is. (emphasis in original)[30]

Caltrans conducts construction projects throughout the state, and has a 200+ page BMP manual. While the Regional Board does not take a position between the ultimate allocation of the penalties between Caltrans and MCM, MCM's position as it had been communicated to Caltrans prior to this correspondence and as it has been communicated to the Regional Board throughout this hearing process is unacceptable.

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develop its bid.

[30] *See* Macedo Decl, Exhibit R.

B. MCM's Argument Regarding what is a Sufficient BMP

The Regional Board does not prescribe the manner or method of BMPs, but they are required to be effective. A management practice that is ineffective, poorly maintained, or simply not the best selection given the pollutant at issue, the water body affected, or the effectiveness of the practice fails to meet this standard. The amount of money spent on BMPs may not be a good indicator of their adequacy. For example, if BMPs that are not appropriate for the site or activity are selected, or not appropriate for the pollutant that they are intended to control (filter fabric for sediment control is not effective for containing hydrocarbons), or BMPs are improperly installed or maintained, they will be ineffective while still being expensive.

Communications exchanged between Caltrans and MCM, between MCM and its subcontractors, and even between subcontractors themselves, are full of disagreements about who is responsible for installing a BMP or who must pay for it, but there is very little discussion regarding the cost effectiveness of the BMP. Furthermore, there is absolutely no communication with the Regional Board to discuss more cost effective alternatives, or to compare the cost of foregoing BMPs with the cost of the violations for failing to comply with the permits.[31]

C. MCM's Disregard of Caltrans' Directives to Comply with Permits

MCM sometimes *intentionally* disregarded MCM directives regarding installing BMPs.

> The disturbing aspect of yesterday's events are that MCM staff was directly informed that the sandblasting operations, as being planned during the end of the day on Tuesday, 5/22/07, were going to require appropriate BMPs to minimize the impacts of the sandblasting operation. No specific BMPs were discussed at the time and no direction was given in writing, but clear indication

[31] *See* Macedo Decl, Exhibits M, S, T, U, and V.

> that some measures were needed was given, and was apparently received, as MCM staff apparently stated that the issue would be put off until the next day. Upon arrival at the north bridge early Wednesday, 5/23/07, Caltrans staff found that the sandblasting operation had taken place with no BMPs of any kind in place. No action or even a good-faith effort was attempted to contain the material. The fact that the operation took place with no measures to minimize deposition of material, and the fact that it took place prior to the presence of Caltrans staff appears to have been a deliberate attempt to violate the permit. MCM had clear direction that the operations, as initially planned, were not to take place.
>
> Additionally, if further disregard and/or intentional violation of any of the permits on this project occur, immediate personnel changes will be required and project suspension will be contemplated until such a time that adequate measures are taken to ensure that no future violations will occur. If MCM has the position that inappropriate interpretation of the permits is taking place, or that BMPs that are being required by the contract are excessive or are not an industry standard practice, the Notice of Potential Claim process is the appropriate avenue to pursue such disagreements. Disregard for direction given from Caltrans staff, regarding any contractual or compliance issue, will not be tolerated.
>
> I understand that MCM is concerned with setting a precedent for future projects or for future work on this project; specifically, how future sandblasting work on the superstructure will occur and what the necessary BMPs will be. My immediate response to such issues or concerns is that the proposed measures for the work should be contemplated and appropriate BMPs proposed and reviewed with Caltrans staff, regarding their effectiveness. At a minimum, a good faith effort is required. (emphasis added)[32]

This is at least in line with what the Regional Board would have preferred – the Regional Board may not have approved of a good faith effort that was ineffective, but even that was not made in many cases. The cost of BMPs are an issue to work out between Caltrans and MCM – the correct answer is not to forego installing or developing the BMPs altogether.[33] When changed conditions are found, Regional Board staff is available to work with permittees regarding a possible amendment or to develop a more effective

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[32] *See* Macedo Decl, Exhibit K.

[33] As Caltrans points out in the document cited, the proper procedure is to (1) comply with the permits and (2) make a claim to Caltrans for payment.

BMP. Regional Board Staff testified that enforcement for technical violations would be unlikely if the discharger in question is making appropriate efforts and communicating with the Regional Board to improve or develop an effective BMP.

VI. OVERALL POOR ENVIRONMENTAL COMPLIANCE DURING PROJECT

A. Lack of BMP Installation and Upkeep

Despite what the Dischargers are likely to argue, the Project had significant compliance issues. One issue that continued throughout the Project was the failure of the contractor to install and maintain BMPs.[34] This failure was noted repeatedly by Caltrans, both at the beginning of the Project, and also in 2008, after both the Caltrans' Resident Engineer and the Project SWPPP Coordinator had been replaced and after two rainy seasons, when the Regional Board would expect better understanding of permit and project conditions. Correspondence demonstrates deliberate and intentional violations:

> The State exhibited frustration with MCM's cooperation with "housekeeping" BMPs. Several state personnel (biologists, structures, inspectors, etc.) voiced concerns that MCM personnel have refused to employ appropriate BMPs when they point out what they believe are BMP deficiencies. Specifically, the State has photographs of minor equipment leaks and spills and produced photographs of spent welding rods on the gravel bar and areas surrounding the current trestle construction. **In fact, they believe many used welding rods were discharged deliberately to contradict the wishes of the various State employees.**[35]

Caltrans' frustration was expressed in writing:

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[34] The Caltrans Storm Water Permit includes section H.2 under Construction Program Management that requires all Caltrans construction sites to comply with the State Board Construction General Permit. The Construction General Permit includes section C.2 under Special Provisions for Construction Activity that requires dischargers to develop and implement a storm water pollution prevention plan (SWPPP) and implement controls to reduce pollutants in storm water discharges from their constructions sites. Failure to implement BMPs in fueling operations and failure to provide containment on the trestle above the river violated the Caltrans Storm Water Permit by failing to have these controls in place. *See* Dougherty Declaration, ¶11.

> We have had way too many of the same reoccurring SWPPP issues and my staff and I are completely fed up with asking and trying to enforce compliance – just as you are tired of hearing about it. ... When I visit the site in the evenings and find piles of sandblasting sand, oil stains, slag piles, excessive piles of garbage etc., that were all asked to be cleaned up several weeks ago and in some cases months ago, I become quite frustrated. Drill Tech was recently shut down due to re-occurring leaking equipment; several other mini-memos for various items of work were required to be submitted threatening work-shutdown to bring about permit compliance; Portious [sic] has been significantly absent; the SWPPP document itself is not up-to-date with amendments; we have had several concrete containment issues (which have been discussed repetitively); and the general attitude towards SWPPP compliance has generally deteriorated in the last few months. **As usual, a majority of the issue[s] are easily achievable with only a little effort and forethought on the part of the Contractor[s], yet the same issues continue to occur.** In short – Ham's attitude and guidance to all staff on the project is in need of alteration and a renewed willingness to comply.[36]

In anticipation of a water board visit, Caltrans was trying to prod the contractors into getting all of the appropriate BMPs in place.

> We have several areas that have not been addressed at all, and other that have been partially winterized. Unfortunately, almost all of the things we looked at yesterday are things that were provided in our list several weeks ago (which is clearly listed in the SWPPP Manager's duties), indicating what needed to be done by the 20th of September. The Specials are quite clear that all of that was to be 100% complete by 9/20. As of yesterday we still have several things remaining, and this is after we had several inches of rain on Oct. 2-4. **... I am very close to simply writing a letter shutting down all operations on the project until everything is complete. I am obviously too much of a softy, and have yet to get so pissed off that I have to do this, but I'm pretty close.**[37]

Note that these communications are admissions that BMPs often go for weeks without being installed as directed. As one can expect, the lack of BMPs can lead to discharges.

> Equipment is being fueled on the riverbar at the north bridge. Our permit with the Regional Water Quality Control Board explicitly states that fueling must only occur outside of waters of the United States. At the PDT James Hamm

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[35] *See* Macedo Decl, Exhibit W.

[36] *See* Macedo Decl, Exhibit C.

[37] *See* Macedo Decl, Exhibit E.

> acknowledged that they were fueling a compressor, generator, man-lift and backhoe. A discharge of oil occurred from the backhoe directly onto the riverbar. Equipment that has even minor leaks must not be allowed to operate in sensitive areas such as the riverbar. This discharge should have been reported to the RE and cleaned up immediately. There were no BMPs in place to prevent the discharged oil from reaching the riverbar. (emphasis added)[38]

These documents prove that Caltrans considered these activities discharges, and therefore permit violations.

B. Disregard of Prohibited Activities Leading to Cementitious Discharges

The most toxic water quality violations alleged in the complaint are the cementious discharges. Even with the direct impact this wastewater can have on the environment, MCM's representatives did not make the effort to take environmental precautions.

> During a phone conversation on Thursday, August 24, 2006, Mr. Hamm indicated that pumped groundwater that had come into contact with wet cement would be treated and then sprayed on the riverbar as a dust palliative. This is unacceptable and would be a violation of the RWQCB permit since the water would most likely still contain cementious material.[39]

The practice of using cement wastewater as a dust control measure is a fundamental misunderstanding of the permit requirements.

C. Project Specific Issues, Including Personnel Issues and Work Stoppages

The personnel issues reflect the problems between Caltrans and MCM. Ron Den Heyer was initial Caltrans Resident Engineer and ultimately replaced in part for failing to enforce compliance with environmental permits. The SWPPP Coordinator was removed by Caltrans for ineffectiveness. Work stoppages were often threatened and sometimes ordered. In addition to the correspondence excerpted in this brief reflecting the consistent prodding of MCM by Caltrans to step up its environmental compliance efforts, MCM and

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[38] *See* Macedo Decl, Exhibit L.

[39] *See* Macedo Decl, Exhibit L.

Caltrans attended at least two "project partnering" meetings where the parties were able to air out their differences. However, these meetings did not seem to result in improved compliance.

D. The Control of Information Led to Reporting Violations

Caltrans is responsible for submitting information related to a discharge to the Regional Board, at a maximum, within 5 days after a discharge. There are numerous examples of actual discharges that went unreported. A separate and distinct issue arose when it was evidence through documentation only produced through discovery that Walt Dragoloski was prevented from sharing information regarding discharges with Alex Arevalo, who is the Caltrans NPDES Storm Water Coordinator for District 1.[40] Mr. Arevalo is in part responsible for preparing an annual report that includes all discharges. Therefore, not only is the discharge not being reported to the Regional Board, but it appears that the discharge is also not being included in Caltrans' annual report, which is ultimately submitted to the State Water Resources Control Board as a requirement of Caltrans' storm water permit. Ron Den Heyer spoke with Mr. Dragoloski and made sure the information was kept in the direct chain of command. This email communication raises issues beyond this Project of reporting violations and internal Caltrans' procedures.

VII. THE DISCOVERY PROCESS HAS REVEALED MANY MORE VIOLATIONS

At the time the ACLC was issued, an investigatory §13267 order and multiple Notices of Violation had been issued. A small ACLC for $20,000 was issued in March 2008 for a discharge of turbid wastewater and drilling spoils to the South Fork Eel River and failure to submit a report on time. Staff intended for these enforcement actions to serve as a deterrent for further violations, but in preparing for this hearing, Caltrans and

MCM have produced documents that indicate the prior enforcement did not provide any deterrent effect, and the violations on the Project continued.[41]

A. Additional Discharge Violations

As mentioned above, the cementitious discharges were the most toxic to the affected waterways. These continued in 2008.

> Due to current methods being utilized; current weather conditions; and subsequent concerns regarding the quality of the product being provided, the immediate termination of grouting operations on this Bridge has been implemented. The existing field conditions indicate that the grout tubes contain a substantial amount of water from ongoing precipitation events. During the current grouting operations being utilized the vent tubes are spilling and depositing cementatious (sic) material onto the bridge deck and subsequently into "Water of the State", a definite permit violation. The lack of containment of cementatious (sic) material during grouting operations at the vent locations is unacceptable.[42]

And:

> On the morning of June 13, 2008, the Contractor performed tendon grouting operations on the bridge deck of the Segmental Bridge (Southbridge). A small hole in the plastic inlet grout tube allowed a stream of grout approximately 1/16 to 1/4 inch in diameter lasting approximately 10 to 15 seconds to discharge to the bar of the South Fork Eel River...a total discharge of approximately 3 to 5 gallons of grout material fell to the river bar below. Although the majority of the material fell to river bar that was immediately below the location of where the material left the bridge deck, because of high winds some of the material drifted in the wind and landed within the waters of the South Fork of the Eel River (SFER).[43]

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[40] *See* Macedo Decl., Exhibit L. Mr. Arevalo is a cc of Mr. Dragolowski's email.

[41] The ACLC does not preclude the Regional Board from alleging additional violations that occurred during the complaint period, August 2006 through June 2007. However, violations that occurred from June 2007 through the end of the Project in mid-2009 are considerably more numerous.

[42] *See* Macedo Decl., Exhibits X and Y.

[43] *See* Macedo Decl., Exhibit Z.

And:

> The (3) Concrete Cement washout basins are 40% full of rainwater and concrete cement washout material accumulation. MCM has been removing water from the basins for disposal at Schendell. MCM has spilled some of this cementious (sic) water in the adjacent ditch and have been requested to remove the solid before the next rains and treat the soil as wash out material, i.e., dispose of at Snake Pit.[44]

These three documents indicate continued discharges that had a direct impact on Waters of the State. Other documents indicate that sediment discharges, leaky equipment violations, and debris changes also continued.[45] If the Regional Board issued another §13267 order to cover the remainder of the Project since November 2006, it would specifically request information about how long cement and grouting operations continued. The earliest date of a cementitious discharge in the current ACLC is August 29, 2006; these two documents indicate grouting and cement operations continued at least until January 2009, and the Regional Board alleged only single-day violations based on documentation that existed at the time the ACLC was issued. If further discovery revealed that the grout operations and improper use of the concrete wastewater basins

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[44] *See* Macedo Decl., Exhibit AA.

[45] The Project activities that comprise the other categories of violations in the ACLC also continued. For example, *see* the February 22, 2009 sediment discharge ("A significant amount of soil fines were left on the south end of the bridge deck over the weekend, resulting in some of the material being washed over the edge by heavy rainfall (Photo 003). In addition, a pile of refuse, some of which is susceptible to wind-carry, remained on the bridge near recent guardrail construction activities (Photo 004)." The second page of this exhibit shows how long unresolved issues were left; even high priorities items sat for days. *See* Macedo Decl, Exhibit BB. The use of leaky equipment continued: "...Lastly, the grout pump used by your subcontractor has an oil leak that leaks continuously while the pump is running. This equipment must be repaired or removed and replaced prior to further grouting." *See* Macedo Decl., Exhibit X; dated January 8, 2008. Finally, a petroleum spill on January 12, 2009: "North End of South Bridge - 3. Several small spills of what appears to be hydraulic fluid were observed on the bridge deck near the north end of the SB (Photos 005 and 006). The spills should be mitigated by application of absorbent granules, then swept up and placed in a proper disposal container." *See* Macedo Decl., Exhibit CC.

continued with no effort at containment, failure to comply with Caltrans' directives, or evidence of overflow due to rainwater, it is conceivable that every working day that grouting operations took place or the washout basins were used resulted in a discharge, and is subject to a $10,000 fine.

B. Reporting Violations

The Regional Board is largely dependent on the regulated community self-monitoring. Obviously, reporting violations represent a direct threat to water quality, since unreported discharges often go undetected and untreated, and a threat to the regulatory scheme itself. Neither the January 8, 2008, nor the January 9, 2009, cementitious discharges were reported to the Regional Board. The discharges were toxic and both occurred during the rainy season. Reporting violations are subject to a *$10,000 day penalty for each day the discharge goes unreported.* The sediment discharges, petroleum spills, and debris left on the gravel bar described in Footnote 47 were also not reported. Notwithstanding the customary calculation of the violation continuing until the discharge is reported, cutting off the time at the completion of the Project still results in penalties in excess of hundreds of thousands of dollars for the few violations identified in this Brief alone.

C. A Future Enforcement Action Would Utilize the New Enforcement Policy and Its Penalty Calculator

The State Water Recourses Control Board adopted a new penalty calculation methodology that was not used in the ACLC before the Board. However, if the Regional Board seeks penalties for the violations for violations for the latter two years of the Project, the consideration of Water Code §13385 factors changes slightly. The Dischargers' culpability, cleanup and cooperation, and history of violations can all be used as multipliers for the total penalty. While the Board has the ultimate say as to the penalty amount, it must justify its figure within the confines of the methodology. Considering the

size and scope of the Project, the toxicity of the cementitous discharges and the chronic nature of other discharges, the continued failure to report such discharges to the Regional Board, and the attitudes of the Dischargers, particularly MCM, regarding permit compliance, the Regional Board staff believes it is appropriate to pursue these violations in an effort to deter such disregard for environmental quality on future construction sites in the region and throughout the state.

VIII. OTHER COST ISSUES: ULTIMATE PENALTY SOUGHT FROM BOARD

Kason Grady, who was the key staff member responsible for drafting the ACLC and evaluating the evidence in support of it, testified for three days as the "Person Most Knowledgeable" on behalf of the Regional Board. Mr. Grady, both during his deposition and since that time, considered the strength of the evidence supporting each violation. For almost all of the violations, counsel for MCM questioned whether the photographs and statements submitted by the Biological Monitor or other Caltrans employees could be duplicative or misdated. While this was unlikely to be the case for every violation, the Prosecution Team has consistently stated that it would not seek penalties for errors in its calculations or description of the evidence, and went back and reviewed the evidence with duplicates in mind. In addition, an issue arose about in-stream sediment, and while Mr. Grady is not part of Regional Board management, the Prosecution Team does not wish to modify his testimony, and has decided to forego the penalties related to in-stream sediment. Finally, staff costs are consistently added to the penalty as recoverable costs. These adjustments and the ultimate penalty amount sought in a Board order are described below.

A. Potential Duplicates, Reduced Penalties

During Mr. Grady's deposition, counsel for MCM questioned whether undated photographs could be duplicative of dated, known violations. Mr. Grady's review of the photographs and other evidence after his deposition, viewed in the light most favorable to the Dischargers, revealed that the September 7, 2006, and November 14, 2006, violations might be duplicates of other dates.[46] These turbid discharges to the river and construction dewatering violations had a maximum penalty of $100,000 and a recommended penalty of $87,500.

Upon additional review, Mr. Grady considered two days of discharges to have evidence that warranted further investigation, but which a review of the available documents did not clarify the extent to which, if any, containment was achieved.[47] These violations were for a cementitous discharge on September 29, 2006, and for construction dewatering on October 16, 2006. The maximum penalty that could be assessed is $50,000, and after consideration of the §13385 factors, staff recommended a penalty of $45,000. The Prosecution Team will not be seeking these penalties in the final Order.

B. In-Stream Sediment Issue

The allegations in the ACLC regarding in stream sediment are found in Appendix D, Turbid Discharges to River and comprise $120,000 in maximum penalties and $90,000 in recommended penalties. An issue arose about these violations in the deposition of Kason Grady. The North Coast Basin Plan states that turbidity shall not be increased more than

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[46] It is conceivable that the violations for September 7, 2006 are based on conversations that could be referring to dates prior to September 7. The November 14, 2006 event date could be referring to the November 13 event. With additional discovery or an investigatory order, we could confirm the precise date of the violations.

[47] See Grady Declaration, ¶12.

20 percent above naturally occurring background levels, with a provision for allowable zones of dilution for specific discharges upon the issuance of permits or waivers. The Basin Plan does not differentiate between a turbidity increase due to disturbing sediment in the stream or turbidity from other new sources. Monitoring requirements and sampling points are set to ensure protection of beneficial uses, because it is very feasible for turbidity from disturbed in-stream sediment to adversely impact beneficial uses. Thus, if an activity causes a turbidity increase above Basin Plan objectives to occur (whether it was from a discharge or an action that causes mobilization of sediment already in the stream), it constitutes a violation, and the permittee is responsible and subject to potential penalties. While the Water Board has the right to pursue these violations, based on the testimony given by the PMK, we will not pursue those in the Order sought from the Board.

In summary, there are $270,000 in maximum penalties and $222,500 in recommended penalties that the Prosecution Team is willing to forego.

C. Staff Costs

According to the State Water Board Enforcement Policy, staff costs are "other factors as justice may require" and should be added to the total amount of liability. The 2002 Enforcement Policy in effect at the time of the Confusion Hill ACLC allowed staff costs to be added to the penalty amount, and the more recent Enforcement Policy has clarified what is included in staff costs.

> These costs may include the cost of investigating the violation, preparing the enforcement action, participating in settlement negotiations, and putting on a hearing, including any expert witness expenses. Such costs are the total costs incurred by the Water Boards enforcement or prosecution staff, including legal costs that are reasonably attributable to the enforcement action. Costs include the total financial impact on the staff of the Water Board, not just wages, and should include benefits and other indirect overhead costs. Policy, pg. 20.

This was a significant enforcement action for the Regional Board, and considerable staff time was involved. Document review for the violations began in mid-2007, and the

complaint was issued in 2009. Settlement discussions at the request of the Dischargers took place in 2008-2010. In August 2010, the Prosecution Team elected to discontinue settlement negotiations and proceed to hearing. Staff time is routinely valued at $150 an hour. A conservative[48] estimate of staff costs are reflected below:

Prosecution Team Member:	Activity/Dates:	Total Hours/Total Amount ($150/hour):
Kason Grady:	Pre-ACLC; 2007-2009	390/$58,500
	Hearing Preparation[49]; August 2010 - February 2011	300/$45,000
Mona Dougherty:	Hearing Preparation; August 2010 - February 2011	180/$27,000
Cris Carrigan:	Pre-ACLC; 2007-2009	100 hours/$15,000
	Settlement Negotiation; 2009-2010	100 hours/$15,000
Julie Macedo	Hearing Preparation; August 2010-February 2011	500 hours/$75,000
	Total:	1,570/$235,500

(i)	Initial ACLC penalty amount:	$1,511,000
(ii)	Evidentiary Reductions:	$222,500
(iii)	Additional Staff Costs:	$235,500
(iv)	**Total Penalty Amount Sought Against Caltrans and MCM:**	**$1,524,000**

[48] These staff costs do not include: (1) Dean Prat and Mona Dougherty's time to draft Notices of Violation, or Dean Prat's time to attend his deposition or assist with hearing preparation; (2) David Leland and Luis Rivera's time to review the ACLC prior to issuance, or assist with hearing preparation, David Leland's time to attend his deposition; (3) Cris Carrigan's time in hearing preparation; (4) Mona Dougherty's, Kason Grady's, Luis Rivera's or David Leland's time spent in settlement negotiations, either formal meetings between Caltrans and/or MCM, or informal discussions; (5) the time of two interns who assisted Kason Grady with document review in preparing the complaint; and (6) indirect costs. The Prosecution Team feels the total amount of staff time listed above is conservative but fair.

[49] The Hearing Preparation totals will continue to accrue until the conclusion of the March 24, 2011 hearing. The totals for Kason Grady, Mona Dougherty, and Julie Macedo should

[Footnote continued on next page.]

IX. CONCLUSION

The Regional Board feels the requested civil liabilities are fair and necessary to send a message regarding what is expected in terms of respect for environmental compliance. It is not the Board's responsibility to allocate the liability between MCM and Caltrans; that is to be decided between them at a later date. As Permittee, Caltrans is responsible for the permit violations. As the prime contractor directing construction, MCM is responsible for its actions that led to permit violations. This Project was an example of construction at the expense of the environment and the regulatory system. The manner in which the Confusion Hill Project was conducted resulted in numerous avoidable permit violations and real harm to water quality. That type of behavior, and general attitude toward environmental compliance, should not be allowed to continue.

Date: February 11, 2011

Julie Macedo, Counsel for North Coast
Regional Water Quality Control Board

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therefore be increased at the time of the Board's Order.

Witness Statement

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

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BEFORE THE CALIFORNIA WATER QUALITY CONTROL BOARD
NORTH COAST REGION

In the Matter of: California Department of Transportation, Confusion Hill Bypass Project, WDID No. 1B05153WNME	)))))	ACLC Order No. R1-2007-0095 Prosecution Team Case in Chief; Witness Statement

Consistent with the requirement in the Hearing Procedures issued December 23, 2010 (pg. 6), the Prosecution Team may wish to call the following witnesses at the Confusion Hill administrative hearing on March 24, 2011:

Name of Each Fact Witness:

1. Kason Grady;
2. Mona Dougherty;
3. Dean Prat; and
4. David Leland.

A Brief Summary of Their Testimony:

Mr. Grady and Ms. Dougherty provided declarations submitted with the Prosecution Team's Case in Chief submission, and will both be available for cross-examination on

such subjects. They may also be questioned on topics presented in Rebuttal, or on subjects raised in their depositions. Mr. Grady may testify further about the evidence supporting the Confusion Hill ACLC and additional violations, and Ms. Dougherty's testimony will also cover her knowledge of the Caltrans and general construction storm water permits.

Mr. Prat may be called to testify regarding the 401 certification process for the Confusion Hill Project. He offered deposition testimony previously in this matter.

Mr. Leland may offer testimony regarding the North Coast's policies and procedures. He also offered deposition testimony previously in this matter. Mr. Prat and Mr. Leland may have testimony on rebuttal topics.

Anticipated Time Required for Each Witness to Present Direct Testimony:

Counsel for the Prosecution Team, MCM and Caltrans stipulated to extend the hearing to 2 hours of Presentation for the Prosecution Team, and 4 hours for the Dischargers (MCM, Caltrans, Ladd) collectively, to be divided among them as they see fit. If this modification is accepted, the Prosecution Team anticipates no more than 1 hour of the Prosecution Team's time will be used for direct presentation, most likely with Mr. Grady and Ms. Dougherty. If the Advisory Team orders some other hearing time limits, the 1 hour estimate will be modified accordingly.

February 11, 2011

Julie Macedo

Julie Macedo, Counsel for North Coast
Regional Water Quality Control Board

Declaration of Mona Dougherty

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

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BEFORE THE CALIFORNIA WATER QUALITY CONTROL BOARD
NORTH COAST REGION

In the Matter of: California Department of Transportation, Confusion Hill Bypass Project, WDID No. 1B05153WNME	)))))	ACLC Order No. R1-2007-0095 DECLARATION OF MONA DOUGHERTY

I, Mona Dougherty, declare as follows:

1. I am employed at the North Coast Regional Water Quality Control Board (Regional Board) as a Water Resources Control Engineer, and have been employed here for ten years. I graduated Humboldt State University in 2000 with a Bachelor of Science in Environmental Resources Engineering and am a licensed Professional Engineer (License No. 71250). I work primarily in municipal storm water and enforcement and have the primary responsibility for oversight of the Caltrans storm water permit and program for the Regional Board.

2. I was told a few times by people familiar with the Confusion Hill project that the Resident Engineer, Ron Den Heyer, had been replaced and that one of the reasons for his replacement was to ensure better compliance with permits. He was replaced by Sebastian Cohen.

3. On March 6, 2008, the Regional Board adopted an administrative civil liability of $20,000 (ACL) that I presented to them. The ACL was issued to Caltrans for a discharge of turbid wastewater and drilling spoils to the South Fork Eel River due to activities associated with the Confusion Hill project and failure to submit a written report on time. Staff brought an enforcement action to the Regional Board for permit violations related to one specific event during the Confusion Hill project, planning to address the additional violations related to the project in a later enforcement action. Staff planned the $20,000 ACL to serve as a deterrent for further violations related to the project. A true and correct copy of this ACLC is attached hereto as Exhibit A.

4. The Confusion Hill Project was required to comply with two water quality permits, the Caltrans Storm Water Permit (Order No. 99 - 06 - DWQ) issued statewide, and the Clean Water Act (CWA) section 401 permit (401 permit), issued for the project. These permits allow project activities to proceed under certain conditions to protect water quality. The Confusion Hill Project was mandated to comply with the more stringent requirements of the two permits, usually the 401 permit.

5. The Regional Board staff has issued 401 permits as stringent or more stringent that the Confusion Hill 401 permit to other Caltrans' projects that have not resulted in necessary dewatering enforcement actions. 401 permits for the Russian River bridge replacement, and three large 101 widening projects in Sonoma County did not allow construction dewatering discharges to a sedimentation basin. Caltrans and their contractors were required to dispose of construction dewatering flows in an alternate manner. The Mad River Bridge replacement project did allow for a sediment basin, but discharges were conducted properly into a filter fabric lined basin and did not result in turbid discharges to the river. True and correct copies of the Mad River Bridge sedimentation basin BMPs are attached hereto as Exhibit B.

6. Caltrans refers to "isolated pool b" throughout the project documents. This isolated pool is not a sedimentation basin, but in fact a part of the South Fork Eel River, with the associated beneficial uses, that has been isolated from the live channel during the dry season low flow period. At no time should sediment laden water, let alone concrete wastewater, have been discharged to this pool. DFG staff informed me that this pool provided habitat for threatened amphibians and that the habitat was damaged by the unauthorized discharges.

7. The industry standard for turbidity monitoring is laboratory testing of a sample or field monitoring equipment with equivalent accuracy. The standard unit of measurement for turbidity is an NTU. This is supported by the Construction General Permit and indeed by Caltrans' own Construction Site Storm Water Quality Sampling Guidance Manual. A true and correct excerpted page from this manual is attached hereto as Exhibit C, as well as Section 2130 of Standard Methods cited in the Guidance Manual. Only these methodologies provide data that is reliable, accurate and precise enough to verify compliance with the Basin Plan turbidity water quality objective. Any attempt to manufacture another method or scale of measurement to assess turbidity does not have a scientific foundation and appears to be an attempt to obfuscate data and prevent Regional Board staff from verifying compliance with permit requirements.

8. The amount of money spent on BMPs may not be a good indicator of their adequacy. For example, if BMPs that are not appropriate for the site or activity are selected, or not appropriate for the pollutant that they are intended to control (filter fabric for sediment control is not effective for containing hydrocarbons), or BMPs are improperly installed or maintained, they will be ineffective while still being expensive. In other words, money spent on BMPs does not necessarily equate to adequate water quality protection.

9. In many cases during the Confusion Hill project, activities were conducted not only without adequate BMPs, but in fact without BMPs at all.

10. The Mad River Bridge replacement project used effective BMPs to control welding slag discharge during welding, pier construction and demolition activities. True and

correct copies of the Mad River Bridge welding slag BMPs are attached hereto as Exhibit D.

11. The Caltrans Storm Water Permit includes section H.2 under Construction Program Management that requires all Caltrans construction sites to comply with the State Board Construction General Permit. The Construction General Permit includes section C.2 under Special Provisions for Construction Activity that requires dischargers to develop and implement a storm water pollution prevention plan (SWPPP) and implement controls to reduce pollutants in storm water discharges from their constructions sites. Failure to implement BMPs in fueling operations and failure to provide containment on the trestle above the river violated the Caltrans Storm Water Permit by failing to have these controls in place.

12. I estimate that I spent approximately 180 hours since August 2010 in preparing for the March 2011 administrative hearing. This time includes my deposition time, time spent preparing for my deposition with counsel, reviewing documents after my deposition, and assisting with drafting the Prosecution Team's Case in Chief.

Executed this 10th day of February, 2011, at Santa Rosa, California.

Mona Dougherty

Mona Dougherty

EXHIBIT

A

Declaration of Mona Dougherty

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

California Regional Water Quality Control Board
North Coast Region

Administrative Civil Liability Order No. R1-2008-0008

for

Violations of Clean Water Act, Section 401, Water Quality Certification
and Municipal Storm Water Permit

In the Matter of
California Department of Transportation
Confusion Hill Bypass Project
WDID No. 1B05153WNME

Mendocino County

The Executive Officer of the California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Water Board), hereby gives notice that:

1. On July 15, 1999, the State Water Resources Control Board (SWRCB) adopted a National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from the State of California, Department of Transportation Properties, Facilities and Activities, Order No. 99-06-DWQ (Storm Water Permit).

2. The Storm Water Permit covers all municipal storm water and construction activities that require permit coverage conducted by the California Department of Transportation (Caltrans) in California and, therefore, provides construction storm water permit coverage for the Confusion Hill Bypass project.

3. On February 16, 2006, the Regional Water Board Executive Officer issued a Clean Water Act, Section 401, Water Quality Certification (Water Quality Certification) to Caltrans for the Confusion Hill Bypass project.

4. The project is located on Highway 101 in Mendocino County, approximately 18.5 miles south of Garberville and eight miles north of Leggett. Highway 101 currently crosses an active landslide in the area known as Confusion Hill. The purpose of the project is to provide a reliable transportation route around the landslide area by relocating the highway from the east side of the South Fork Eel River to the west side. Relocating the highway requires construction of two new bridges and a new section of highway between the new bridges.

5. The project includes drilling and excavation activities that result in turbid wastewater and sediment that is transported from one side of the South Fork Eel River to the other for disposal through a two-inch diameter water pipe ("transport pipe").

6. On May 4, 2007, Caltrans' contractor dismantled the transport pipe and pulled it from one side of the river to the other. The pipe was not capped before dismantling and turbid wastewater was discharged below the ordinary high water mark of the South Fork Eel River (hereafter referred to as "the pipeline discharge").

7. The Regional Water Board received verbal notification of the pipeline discharge from Walt Dragolowski of Caltrans on May 4, 2007. Mr. Dragolowski reported that the pipe had not been flushed with clean water nor capped before being dismantled and pulled to the other side of the river. Mr. Dragolowski directed the contractor to clean the discharged wastewater from the rocks on the gravel bar by hand without mechanized equipment. In comments to the Administrative Civil Liability Complaint submitted on October 25, 2007, Caltrans reported that the clean up activities did not take place except in the area above the flood plain, which is presumably above the ordinary high water mark.

8. On May 14, 2007, the Regional Water Board received a fax from the Office of Emergency Services (OES) reporting the pipeline discharge. OES had received notification from Karen Maurer, a California Department of Fish and Game warden. Ms. Maurer reported that 170 gallons of gray slurry with sediment was discharged to the South Fork Eel River when the pipe was dismantled and dragged through the river.

9. On June 11, 2007, Regional Water Board staff (Staff) received the written notice of the pipeline discharge. The notice of discharge was written by Justin Porteous of MCM Construction, Inc. and submitted to the Regional Water Board by Caltrans personnel. Mr. Porteous estimated that 15 to 25 gallons of turbid wastewater and drilling spoils were discharged to the South Fork Eel River.

10. Staff received conflicting and confusing reports on the pipeline discharge. It is Caltrans' responsibility to provide information clearly and accurately, with events described in detail and impacts to water quality plainly identified. One of the primary conflicts in the reports is the location of the discharge. In comments submitted on October 25, 2007, Caltrans stated that turbid wastewater was discharged to the gravel bar and an isolated pool, rather than to the flowing water of the South Fork Eel River, as the river was in a low flow period.

11. The gravel bar and the isolated pool are below the ordinary high water mark of the South Fork Eel River and are therefore within waters of the United States, which are also waters of the State. Discharges to the gravel bar would likely be washed into the river after the next rainfall. Not only will the large isolated pool eventually commingle with the river during higher flow periods, but the isolated pool itself has beneficial uses on its own that must be protected from discharges of waste. The California Department of Fish and Game identified the isolated pool as containing fish and amphibians, including a sighting of a California red-

legged frog, an amphibian identified as threatened under the federal Endangered Species Act. The pipeline discharge, whether it occurred in the flowing water or on a gravel bar and isolated pool, was prohibited by the Water Quality Certification, as described in paragraph 12, below.

12. The following facts and applicable legal requirements are the basis for the alleged violations in this matter:

a. Caltrans' Water Quality Certification prohibits discharge of debris, soil, silt or other organic or earthen material to waters of the State, or discharge in which the wastes identified above may be washed by rainfall into waters of the State, unless specifically allowed by the Water Quality Certification. The conditions of the Water Quality Certification that were violated by the pipeline discharge include:

i. Additional Condition 7. Adequate best management practices for sediment and turbidity control shall be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.

ii. Additional Condition 9. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this permit, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State.

iii. Additional Condition 14. Project activities shall comply with provisions in the North Coast Region Water Quality Control Plan (Basin Plan).

b. The Water Quality Certification does not provide authorization for the May 4, 2007 pipeline discharge.

c. Conditions of the Storm Water Permit that were violated by the pipeline discharge include the following:

i. General Discharge Prohibition A.1. Any discharge from Caltrans rights-of-way or Caltrans properties, facilities, and activities within those rights-of-way that is not composed entirely of storm water to waters of the United States is prohibited unless authorized pursuant to Section B of the NPDES Permit.

ii. General Discharge Prohibition A.4. The dumping, deposition, or discharge of waste by Caltrans directly into waters of the State or adjacent to such waters in any manner that may allow its being

transported in the waters is prohibited unless authorized by the RWQCB[1].

iii. General Discharge Prohibition A.6. The discharge of sand, silt, clay , or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity, or discoloration in waters of the State or which unreasonably affect or threaten to affect beneficial uses of such waters, is prohibited.

iv. Program Evaluation and Reporting Provision K. The Storm Water Management Plan (SWMP), prepared by Caltrans as required by the Storm Water Permit, and Provision K.3.a of the Storm Water Permit require that Caltrans notify the Regional Water Board verbally within five days and with written follow-up within thirty days after discovery of violations. The Storm Water Permit requires Caltrans to implement the reporting program specified in its SWMP.

In the SWMP section 9.4.1., Noncompliance Reporting Plan for Municipal and Construction Activities, Caltrans identifies violations that must be reported according to the schedule above, as those discharges that result in violations of narrative and numeric prohibitions and limitations of the Storm Water Permit, and discharges that violate requirements of Clean Water Act , 404 permits and 401 water quality certifications.

Caltrans notified Staff verbally of the discharge the same day as the discharge occurred, however, the required written notification was not submitted in a timely manner. As the discharge occurred on May 4, 2007, to comply with the Storm Water Permit, Caltrans needed to submit written notification of the violation by June 3, 2007. Caltrans submitted the written notification on June 11, 2007.

d. Provisions of the Basin Plan that are applicable to the project are as follows:

Discharge Prohibitions:

The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.

[1] RWQCB is an acronym used by the State Water Resources Control Board to refer to the Regional Water Quality Control Boards.

The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited.

13. California Water Code section 13385, subdivision (a)(1), (2), and (4) provides the basis for civil liability. Subdivision (a)(1) provides for civil liability against any person who violates California Water Code section 13376, which requires a person discharging pollutants or dredged or fill material into navigable waters of the United States to file a report of waste discharge. Subdivision (a)(2) provides for civil liability against any person who violates any NPDES permit or water quality certification. Subdivision (a)(4) provides for imposition of civil liabilities against any person who violates any Basin Plan prohibition issued pursuant to California Water Code section 13243 for a Basin Plan or order for administrative enforcement issued pursuant to Article 1 of Chapter 5 of Division 7 of the California Water Code. As detailed above, Caltrans violated the discharge prohibitions and requirements of the Water Quality Certification, Storm Water Permit, and Basin Plan.

14. California Water Code section 13385, subdivision (c) provides that the maximum amount of civil liability that may be imposed by the Regional Water Board is the sum of 1) $10,000 for each day in which the violation occurs, and 2) where there is discharge in excess of 1,000 gallons that is not susceptible to cleanup or is not cleaned up, an additional liability of $10 per gallon may be assessed. Although the Regional Water Board received conflicting reports of the volume of wastewater that was discharged on May 4, 2007, both wastewater volumes reported were well under 1,000 gallons, and, therefore, no additional liability beyond the maximum of $10,000 per day could be assessed.

15. The maximum civil liability that could be imposed against Caltrans in this matter is calculated as follows:

Violation	Number of Days (at $10,000/day)	Maximum Civil Liability
wastewater discharge	1 (May 4, 2007)	$10,000
failure to submit written report due June 3, 2007	4 (June 5 – June 8, 2007)	$40,000
Total Potential Civil Liability		$50,000

16. In determining the amount of any civil liability, pursuant to California Water Code section 13385, subdivision (e), the Regional Water Board is required to take into account the nature, circumstances, extent, and gravity of the violation; and, with respect to the violator, the ability to pay, 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 Regional Water Board is also required to consider the requirement in this section that states that, at a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.

a. **Nature, circumstances, extent and gravity of the violation:** The wastewater discharge could have been easily avoided through more careful draining and cleaning of the pipeline and capping the pipeline before it was pulled across the South Fork Eel River.

   The United States Environmental Protection Agency established a total maximum daily load (TMDL) for the South Fork Eel River in 1999 for sediment and temperature. The TMDL confirmed the adverse effects to the beneficial uses of the South Fork Eel River from sediment and that discharges of sediment have a deleterious effect to the river.

   The South Fork Eel River is within the habitat range of coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*Oncorhynchus mykiss*), each listed under the federal Endangered Species Act or the California Endangered Species Act. Populations of salmonids in California have declined substantially in the last century. Elevated sediment loads are known to adversely affect salmonids. Sediment delivery to watercourses is known to have substantially increased in this watershed as a result of human activities. Beneficial uses related to aquatic life, including salmonids, are the most sensitive to sediment discharges.

   The Storm Water Permit and Caltrans' own SWMP require submittal of a written report of violations of permit conditions and of water quality certification conditions within thirty days of identification of the noncompliance. Caltrans discovered the pipeline discharge on May 4, 2007, but failed to submit the written report until June 11, 2007. Although a verbal report of the pipeline discharge was given by Caltrans on the day of its occurrence, information provided in the verbal notification was brief and incomplete. Staff needed the written report to evaluate the significance of water quality impacts from the pipeline discharge and to initiate enforcement, if needed. Staff contacted Caltrans personnel twice by email and several times by telephone requesting submittal of the written report. Staff requests for the written report began on May 4, 2007, and continued approximately at weekly intervals until the report was submitted over a month later. The reporting schedule in the Storm Water Permit is generous, but even with that and multiple requests from Regional Water Board staff, Caltrans failed to submit the report on time.

As recognized by the SWRCB Water Quality Enforcement Policy (Enforcement Policy), accurate, honest reporting of violations is a cornerstone to the State's water quality program. The Enforcement Policy states that:

"The foundation of the State's regulatory program relies on dischargers to accurately and honestly report information required by the Boards. Knowingly falsifying or knowingly withholding such information that would indicate violations of requirements contained in board orders, plans and policies, erodes the State's regulatory program and places the health of the public and the environment at risk. The SWRCB views these violations as very important and strongly encourages the RWQCBs to respond to any instance of falsification or withholding of required information in accordance with this policy.

"The discharger is responsible for compliance with orders and reporting of required information, including violations, to the SWRCB or RWQCB. The discharger is also responsible for ensuring that any employees, agents, or contractors acting on its behalf report required information truthfully, accurately and on time.

"Enforcement of statutes pertaining to falsification or withholding of required information should be a high priority."

It is Caltrans' responsibility to provide information clearly and accurately, with events described in detail and impacts to water quality plainly identified. Not only was the report late, but it was difficult to determine the facts of the incident from the information provided by the report.

Caltrans has failed to report violations of Regional Water Board orders that occurred on other projects and these are discussed below. Staff has additionally discovered that Caltrans failed to report other violations that occurred at the Confusion Hill Bypass project previous to the violation addressed in this ACL Order and this is also discussed further in section d below. The Regional Water Board warned Caltrans in writing of the consequences of not complying with reporting requirements prior to the pipeline discharge, but has rarely taken more serious enforcement action on violations of reporting requirements.

b. **Susceptibility to Cleanup or Abatement and Voluntary Cleanup Efforts Undertaken:** Caltrans personnel verbally reported to Staff that the contractor had been directed to clean any rocks on the gravel bar of sediment that could be cleaned by hand without mechanized equipment. In Caltrans comments submitted on October 25, 2007, however, it was reported that the only cleanup efforts occurred at a location above the flood plain, which is presumably outside of waters of the State.

c. **Violator's ability to pay:** Staff understands that the Confusion Hill Bypass project will cost between $70 million and $77 million. The maximum potential civil liability is small in comparison to the cost of the project. Staff has no information to indicate that Caltrans would be unable to pay the administrative civil liability.

d. **Prior history of violations:**

Confusion Hill Bypass Project Violations

On October 30, 2006, the Regional Water Board issued Caltrans the first notice of violation for the Confusion Hill Bypass project. The violations identified included turbid water discharges to the South Fork Eel River on August 29, and August 30, 2006, and a discharge of concrete wastewater to an unlined basin within waters of the State on September 29, 2006.

Additionally, the October 30, 2006, notice of violation described violations discovered by Staff on an inspection of the site on October 6, 2006, including a basin used routinely to settle turbid water within 100 feet of the active channel in violation of the Water Quality Certification. During the October 6, 2006 inspection, Staff was informed that the same unlined basin was routinely used to dispose of concrete wastewater, another violation of the Water Quality Certification. Also during the inspection, Staff witnessed welding and cutting activities occurring within waters of the State on the gravel bar and above waters of the State on the trestle bridge without the use of containment best management practices (BMPs). Steel cuttings, welding slag and other debris littered the gravel bar and were allowed to fall into the river from the trestle bridge. This violated Additional Condition nine of the Water Quality Certification. Finally, also in violation of the Water Quality Certification, Staff observed heavy equipment on the gravel bar leaking excessive fluid and without adequate BMPs to contain the unauthorized leakage.

On November 27, 2006, the Regional Water Board issued to Caltrans a combined notice of violation for violations of the Confusion Hill Bypass project Water Quality Certification and Storm Water Permit and California Water Code Section 13267 Order requiring submittal of a technical report. This second notice of violation included violations such as turbid discharges to the river, failure to report violations of the Water Quality Certification and Storm Water Permit, inadequate BMPs to control turbid discharges and the inappropriate uses of BMPs, for example using a silt fence within the flowing water of the river to control a turbid plume that appeared to be caused by heavy equipment pushing gravel and silt into the river.

The violations identified in the November 27, 2006, notice of violation came to Staff's attention through reports and photographs provided by the California Department of Fish and Game (CDFG). The violations had not been reported to the Regional Water Board by Caltrans.

The California Water Code Section 13267 Order required Caltrans to submit a technical report to the Regional Water Board regarding these violations and others. Staff had learned from CDFG staff of the existence of biological monitoring reports created for the project by a Caltrans contractor during the previous summer. Staff required their submittal within the California Water Code 13267 Order. The biological monitoring reports and other Caltrans documents submitted in response to the California Water Code 13267 Order identified many violations of the Water Quality Certification and Storm Water Permit that Caltrans had failed to report to the Regional Water Board. The types of violations that were not reported include sediment discharges, oil and other machinery fluid discharges, discharges of concrete wastewater and discharges of welding slag and cuttings to waters of the State.

Staff is currently evaluating these additional violations that are not included in this Order, and is drafting supplementary enforcement actions to address them.

Other Relevant Violations

On November 1, 2005, the Regional Water Board issued a Cleanup and Abatement Order to Caltrans for the Dry Creek Bridge replacement project. Caltrans violated the Water Quality Certification issued for the project by allowing equipment staging, material stockpiles and refuse disposal within waters of the State without a permit. Staff discovered the violations of the Water Quality Certification from a citizen complaint. Caltrans had not reported the violations.

On December 28, 2005, the Regional Water Board issued an Administrative Civil Liability Complaint to Caltrans for violations of the Van Duzen River Bridge replacement project Water Quality Certification. The violations included turbid discharges to the Van Duzen River, inadequate BMPs to protect water quality, leaks and spills of petroleum products within waters of the State, the unauthorized discharge of fill materials to waters of the State, failure to comply with the authorized work schedule required to protect wildlife and endangered species, and failure to report these violations as required by the Water Quality Certification. Caltrans paid an administrative civil liability of $101,000.

On April 7, 2006, the Regional Water Board issued a California Water Code section 13267 Order to Caltrans to require the submittal of information related

to the disposal of landslide material into the South Fork Eel River at Confusion Hill. Caltrans failed to apply for a permit for these activities or to notify the Regional Water Board of the discharges until Staff discovered the sidecasting activities. The Regional Water Board received a complaint from a downstream water supply system that water quality monitoring revealed anomalous turbidity readings in the South Fork Eel River that may have been related to the sidecasting activities.

e. **Degree of culpability:** Staff has worked closely with Caltrans on the Confusion Hill Bypass project, attempting to ensure compliance with the Water Quality Certification and the Storm Water Permit. Staff has spent considerable time providing assistance to Caltrans on the project by amending the Water Quality Certification at Caltrans' request, performing inspections, and providing guidance for compliance by email and telephone. Staff also issued two written notices of violation and a California Water Code Section 13267 Order to address previous violations associated with the project.

The violations included in this Order were easily avoidable through the use of adequate BMPs and timely reporting of the violation. Caltrans had been warned by the two previous notices of violation that many of the BMPs utilized at Confusion Hill were inadequate and had resulted in violations of the Water Quality Certification and Storm Water Permit.

Staff contacted Caltrans at least two times by email and three times by telephone to request submittal of the written notification of the May 4, 2007 pipeline discharge required by the Storm Water Permit. Even though the report was prepared by the contractor on May 7, 2007, it was not submitted until June 11, 2007.

f. **Economic benefit:** Staff assumes that Caltrans or its contractor received economic benefit by failing to implement adequate BMPs, but that the economic benefit gained was small. Staff estimates the economic benefit gained by the violations to be $300 for staff time and equipment to properly flush and cap the pipeline before dismantling.

g. **Other matters that justice may require:** Staff has expended and continues to expend considerable time attempting to bring the Confusion Hill Bypass project into compliance with the Water Quality Certification and Storm Water Permit and address violations. Staff costs for this enforcement action are estimated to be $7,437.

17. On July 17, 2007, the Regional Water Board Assistant Executive Officer issued an Administrative Civil Liability Complaint in response to the pipeline discharge.

On October 25, 2007, Caltrans requested a hearing on this Order. The hearing has been properly noticed.

18. The adoption of this Order is an enforcement action to protect the environment and is, therefore, exempt from provisions of the California Environmental Quality Act (Public Resources Code sections 21000 et seq.) pursuant to title 14, California Code of Regulations, sections 15308 and 15321, subdivision (a)(2).

THEREFORE, IT IS HEREBY ORDERED, pursuant to California Water Code Section 13385, that:

1. Caltrans shall be assessed a total civil liability of $20,000 in this matter, $10,000 for the pipeline discharge and $10,000 for failing to report on time. The civil liability shall be paid to the State Water Pollution Cleanup and Abatement Account within 30 days of the adoption of this Order.

2. Not withstanding the adoption of this Order, the Regional Water Board shall retain the authority to assess supplementary penalties for additional violations of Caltrans' Water Quality Certification, Storm Water Permit, and the Basin Plan.

Certification

I, Robert R. Klamt, Interim Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region on March 6, 2008.

for Robert R. Klamt
Interim Executive Officer

EXHIBIT

B

Declaration of Mona Dougherty

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

EXHIBIT

C

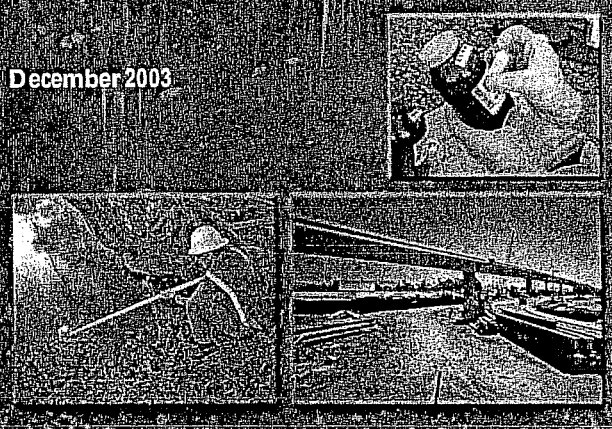
Declaration of Mona Dougherty

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

Caltrans

Construction Site Storm Water Quality Sampling Guidance Manual

December 2003



State of California
Department of Transportation

CTSW-RT-03-116.3 1.30

www.dot.gov/hq/construc/stormwater/SamplingGuidanceManual.pdf

Field Duplicates. Field duplicates are used to assess variability attributable to collection, handling, shipment, storage and/or laboratory handling and analysis. For grab samples, duplicate samples are collected by the sampling crew simultaneously filling two grab sample bottles at the same location. If intermediate containers are used, first pour an incremental amount into one sample bottle and then pour a similar amount into the second. Continue going back and forth until both bottles are full. Field duplicate samples should be submitted to the laboratory "blind" (i.e. not identified as a QC sample, but labeled with a different site identification than the regular sample). A field duplicate sample should be collected at one station once every 10 samples.

Laboratory Duplicates. Laboratory duplicates (also called laboratory splits) are used to assess the precision of the analytical method and laboratory handling. For the laboratory duplicate analysis the analytical laboratory will split one sample into two portions and analyze each one. When collecting samples to be analyzed for laboratory duplicates, typically double the normal sample volume is required. This requires filling a larger size sample bottle, or filling two normal size sample bottles, labeling one with the site name and the second with the site name plus "laboratory duplicate." Laboratory duplicate samples are collected, handled, and delivered to the analytical laboratory in the same manner as environmental samples. Enough extra sample volume for the laboratory to create a duplicate should be collected at a frequency of one for every 10 samples.

A QC sample schedule should be developed, included in the SAP, and followed closely by sampling personnel. The project QC sample schedule should meet the minimum QC sample frequency criteria over the term of the project.

2.3.5 Laboratory Sample Preparation and Analytical Methods

This section describes the steps to be taken by analytical laboratories to prepare for monitoring events, and the procedures laboratories will use for sample analyses. The following topics are discussed:

- Laboratory Selection and Contracting
- Pre-Sampling Preparations
- Sample Storage and Handling Prior to Analysis
- Reporting Limit Requirements
- Analytical Methods
- Laboratory Data Package Deliverables

Samples will be analyzed for one or more of the constituents presented in Table 2-1. Required analytical method, sample bottle type, target reporting limit, volume required for analysis, sample preservation, and maximum holding time are also presented in Table 2-1. The importance of these elements is incorporated into many of the following discussions.

Caltrans
Construction Site
Storm Water Quality
Sampling
Guidance Manual

Table 2-1
Sample Collection, Preservation and Analysis for Monitoring Sedimentation/Siltation and/or Turbidity

Constituent	Analytical Method	Sample Preservation	Minimum Sample Volume	Sample Bottle Type	Maximum Holding Time	Reporting Limit	Estimated Cost
(a) Suspended Sediment Concentration (SSC)	ASTM D3977-97 (A, B, or C)	Store at 4° C (39.2° F)	500 mL	Polyethylene plastic or glass	7 days	1 mg/L	$15-30
(b) Settleable Solids (SS)	EPA 160.5 Std Method 2540(f)	Store at 4° C (39.2° F)	1000 mL	Polyethylene plastic or glass	48 hours	0.1 mL/L/hr	$15
(c) Total Suspended Solids (TSS)	EPA 160.2 Std Method 2540(d)	Store at 4° C (39.2° F)	100 mL	Polyethylene plastic or glass	7 days	1 mg/L	$15
(d) Turbidity	EPA 180.1 Std Method 2130(b)	Store at 4° C (39.2° F)	50 mL	Polyethylene plastic or glass	48 hours	0.1 NTU	$10

Notes: Adapted from Table 600-1 of the SSWPPP/WPCP Preparation Manual (March 2003)

ASTM – American Society for Testing and Materials
°C – Degrees Celsius
°F – Degrees Fahrenheit
EPA – U.S. Environmental Protection Agency
L – Liter
mL/L/hr – Milliliters per liter per hour
mg/L – Milligrams per liter
mL – Milliliters
NTU – Nephelometric Turbidity Unit
Std Method – Per the *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, American Water Works Association

With the standard calibration curve, use the DE value to determine the calibration factor F.

Calculate the final ADMI color value as follows:

$$\text{ADMI value} = \frac{(F)\,(DE)}{b}$$

where:

b = absorption cell light path, cm.

Report ADMI color values at pH 7.6 and at the original pH.

4. Alternate Method

The ADMI color value also may be determined spectrophotometrically, using a spectrophotometer with a narrow (10-nm or less) spectral band and an effective operating range of 400 to 700 nm. This method is an extension of 2120C. Tristimulus values may be calculated from transmittance measurements, preferably by using the weighted ordinate method or by the selected ordinate method. The method has been described by Allen et al.,[2] who include work sheets and worked examples.

5. References

1. McLaren, K. 1970. The Adams-Nickerson colour-difference formula. *J. Soc. Dyers Colorists* 86:354.
2. Allen, W., W.B. Prescott, R.E. Derby, C.E. Garland, J.M. Peret & M. Saltzman. 1973. Determination of color of water and wastewater by means of ADMI color values. *Proc. 28th Ind. Waste Conf.*, Purdue Univ., Eng. Ext. Ser. No. 142:661.
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2130 TURBIDITY*

2130 A. Introduction

1. Sources and Significance

Clarity of water is important in producing products destined for human consumption and in many manufacturing operations. Beverage producers, food processors, and potable water treatment plants drawing from a surface water source commonly rely on fluid-particle separation processes such as sedimentation and filtration to increase clarity and insure an acceptable product. The clarity of a natural body of water is an important determinant of its condition and productivity.

Turbidity in water is caused by suspended and colloidal matter such as clay, silt, finely divided organic and inorganic matter, and plankton and other microscopic organisms. Turbidity is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted with no change in direction or flux level through the sample. Correlation of turbidity with the weight or particle number concentration of suspended matter is difficult because the size, shape, and refractive index of the particles affect the light-scattering properties of the suspension. When present in significant concentrations, particles consisting of light-absorbing materials such as activated carbon cause a negative interference. In low concentrations these particles tend to have a positive influence because they contribute to turbidity. The presence of dissolved, color-causing substances that absorb light may cause a negative interference. Some commercial instruments may have the capability of either correcting for a slight color interference or optically blanking out the color effect.

* Approved by Standard Methods Committee, 1994.

2. Selection of Method

Historically, the standard method for determination of turbidity has been based on the Jackson candle turbidimeter; however, the lowest turbidity value that can be measured directly on this device is 25 Jackson Turbidity Units (JTU). Because turbidities of water treated by conventional fluid-particle separation processes usually fall within the range of 0 to 1 unit, indirect secondary methods were developed to estimate turbidity. Electronic nephelometers are the preferred instruments for turbidity measurement.

Most commercial turbidimeters designed for measuring low turbidities give comparatively good indications of the intensity of light scattered in one particular direction, predominantly at right angles to the incident light. Turbidimeters with scattered-light detectors located at 90° to the incident beam are called nephelometers. Nephelometers are relatively unaffected by small differences in design parameters and therefore are specified as the standard instrument for measurement of low turbidities. Instruments of different make and model may vary in response.† However, interinstrument variation may be effectively negligible if good measurement techniques are used and the characteristics of the particles in the measured suspensions are similar. Poor measurement technique can have a greater effect on measurement error than small differences in instrument design. Turbidimeters of nonstandard design, such as forward-scattering devices, may be more sensitive than nephelometers to the presence of larger particles. While it may not be appropriate to compare their output with that of instruments of standard design, they still may be useful for process monitoring.

† Nephelometers that instrument manufacturers claim meet the design specifications of this method may not give the same reading for a given suspension, even when each instrument has been calibrated using the manufacturer's manual. This differential performance is especially important when measurements are made for regulatory purposes. Consult regulatory authorities when selecting a nephelometer to be used for making measurements that will be reported for regulatory purposes.

An additional cause of discrepancies in turbidity analysis is the use of suspensions of different types of particulate matter for instrument calibration. Like water samples, prepared suspensions have different optical properties depending on the particle size distributions, shapes, and refractive indices. A standard reference suspension having reproducible light-scattering properties is specified for nephelometer calibration.

Its precision, sensitivity, and applicability over a wide turbidity range make the nephelometric method preferable to visual methods. Report nephelometric measurement results as nephelometric turbidity units (NTU).

3. Storage of Sample

Determine turbidity as soon as possible after the sample is taken. Gently agitate all samples before examination to ensure a representative measurement. Sample preservation is not practical; begin analysis promptly. Refrigerate or cool to 4°C, to minimize microbiological decomposition of solids, if storage is required. For best results, measure turbidity immediately without altering the original sample conditions such as temperature or pH.

2130 B. Nephelometric Method

1. General Discussion

a. Principle: This method is based on a comparison of the intensity of light scattered by the sample under defined conditions with the intensity of light scattered by a standard reference suspension under the same conditions. The higher the intensity of scattered light, the higher the turbidity. Formazin polymer is used as the primary standard reference suspension. The turbidity of a specified concentration of formazin suspension is defined as 4000 NTU.

b. Interference: Turbidity can be determined for any water sample that is free of debris and rapidly settling coarse sediment. Dirty glassware and the presence of air bubbles give false results. "True color," i.e., water color due to dissolved substances that absorb light, causes measured turbidities to be low. This effect usually is not significant in treated water.

2. Apparatus

a. Laboratory or process nephelometer consisting of a light source for illuminating the sample and one or more photoelectric detectors with a readout device to indicate intensity of light scattered at 90° to the path of incident light. Use an instrument designed to minimize stray light reaching the detector in the absence of turbidity and to be free from significant drift after a short warmup period. The sensitivity of the instrument should permit detecting turbidity differences of 0.02 NTU or less in the lowest range in waters having a turbidity of less than 1 NTU. Several ranges may be necessary to obtain both adequate coverage and sufficient sensitivity for low turbidities. Differences in instrument design will cause differences in measured values for turbidity even though the same suspension is used for calibration. To minimize such differences, observe the following design criteria:

1) Light source—Tungsten-filament lamp operated at a color temperature between 2200 and 3000°K.

2) Distance traversed by incident light and scattered light within the sample tube—Total not to exceed 10 cm.

3) Angle of light acceptance by detector—Centered at 90° to the incident light path and not to exceed ±30° from 90°. The detector and filter system, if used, shall have a spectral peak response between 400 and 600 nm.

b. Sample cells: Use sample cells or tubes of clear, colorless glass or plastic. Keep cells scrupulously clean, both inside and out, and discard if scratched or etched. Never handle them where the instrument's light beam will strike them. Use tubes with sufficient extra length, or with a protective case, so that they may be handled properly. Fill cells with samples and standards that have been agitated thoroughly and allow sufficient time for bubbles to escape.

Clean sample cells by thorough washing with laboratory soap inside and out followed by multiple rinses with distilled or deionized water; let cells air-dry. Handle sample cells only by the top to avoid dirt and fingerprints within the light path.

Cells may be coated on the outside with a thin layer of silicone oil to mask minor imperfections and scratches that may contribute to stray light. Use silicone oil with the same refractive index as glass. Avoid excess oil because it may attract dirt and contaminate the sample compartment of the instrument. Using a soft, lint-free cloth, spread the oil uniformly and wipe off excess. The cell should appear to be nearly dry with little or no visible oil.

Because small differences between sample cells significantly impact measurement, use either matched pairs of cells or the same cell for both standardization and sample measurement.

3. Reagents

a. Dilution water: High-purity water will cause some light scattering, which is detected by nephelometers as turbidity. To obtain low-turbidity water for dilutions, nominal value 0.02 NTU, pass laboratory reagent-grade water through a filter with pore size sufficiently small to remove essentially all particles larger than 0.1 µm;* the usual membrane filter used for bacteriological examinations is not satisfactory. Rinse collecting flask at least twice with filtered water and discard the next 200 mL.

Some commercial bottled demineralized waters have a low turbidity. These may be used when filtration is impractical or a good grade of water is not available to filter in the laboratory. Check turbidity of bottled water to make sure it is lower than the level that can be achieved in the laboratory.

* Nuclepore Corp., 7035 Commerce Circle, Pleasanton, Calif., or equivalent.

Standard Methods

b. Stock primary standard formazin suspension:

1) Solution I—Dissolve 1.000 g hydrazine sulfate, $(NH_2)_2 \cdot H_2SO_4$, in distilled water and dilute to 100 mL in a volumetric flask. CAUTION: *Hydrazine sulfate is a carcinogen; avoid inhalation, ingestion, and skin contact. Formazin suspensions can contain residual hydrazine sulfate.*

2) Solution II—Dissolve 10.00 g hexamethylenetetramine, $(CH_2)_6N_4$, in distilled water and dilute to 100 mL in a volumetric flask.

3) In a flask, mix 5.0 mL Solution I and 5.0 mL Solution II. Let stand for 24 h at 25 ± 3°C. This results in a 4000-NTU suspension. Transfer stock suspension to an amber glass or other UV-light-blocking bottle for storage. Make dilutions from this stock suspension. The stock suspension is stable for up to 1 year when properly stored.

c. Dilute turbidity suspensions: Dilute 4000 NTU primary standard suspension with high-quality dilution water. Prepare immediately before use and discard after use.

d. Secondary standards: Secondary standards are standards that the manufacturer (or an independent testing organization) has certified will give instrument calibration results equivalent (within certain limits) to the results obtained when the instrument is calibrated with the primary standard, i.e., user-prepared formazin. Various secondary standards are available including: commercial stock suspensions of 4000 NTU formazin, commercial suspensions of microspheres of styrene-divinylbenzene copolymer,† and items supplied by instrument manufacturers, such as sealed sample cells filled with latex suspension or with metal oxide particles in a polymer gel. The U.S. Environmental Protection Agency[1] designates user-prepared formazin, commercial stock formazin suspensions, and commercial styrene-divinylbenzene suspensions as "primary standards," and reserves the term "secondary standard" for the sealed standards mentioned above.

Secondary standards made with suspensions of microspheres of styrene-divinylbenzene copolymer typically are as stable as concentrated formazin and are much more stable than diluted formazin. These suspensions can be instrument-specific; therefore, use only suspensions formulated for the type of nephelometer being used. Secondary standards provided by the instrument manufacturer (sometimes called "permanent" standards) may be necessary to standardize some instruments before each reading and in other instruments only as a calibration check to determine when calibration with the primary standard is necessary.

All secondary standards, even so-called "permanent" standards, change with time. Replace them when their age exceeds the shelf life. Deterioration can be detected by measuring the turbidity of the standard after calibrating the instrument with a fresh formazin or microsphere suspension. If there is any doubt about the integrity or turbidity value of any secondary standard, check instrument calibration first with another secondary standard and then, if necessary, with user-prepared formazin. Most secondary standards have been carefully prepared by their manufacturer and should, if properly used, give good agreement with formazin. Prepare formazin primary standard only as a last resort. Proper application of secondary standards is specific for each make and model of nephelometer. Not all secondary standards have to be discarded when comparison with a primary standard shows that their turbidity value has changed. In some cases, the secondary standard should be simply relabeled with the new turbidity value. Always follow the manufacturer's directions.

† AMCO-AEPA-1 Standard, Advanced Polymer Systems, 3696 Haven Ave., Redwood City, Calif., or equivalent.

4. Procedure

a. General measurement techniques: Proper measurement techniques are important in minimizing the effects of instrument variables as well as stray light and air bubbles. Regardless of the instrument used, the measurement will be more accurate, precise, and repeatable if close attention is paid to proper measurement techniques.

Measure turbidity immediately to prevent temperature changes and particle flocculation and sedimentation from changing sample characteristics. If flocculation is apparent, break up aggregates by agitation. Avoid dilution whenever possible. Particles suspended in the original sample may dissolve or otherwise change characteristics when the temperature changes or when the sample is diluted.

Remove air or other entrained gases in the sample before measurement. Preferably degas even if no bubbles are visible. Degas by applying a partial vacuum, adding a nonfoaming-type surfactant, using an ultrasonic bath, or applying heat. In some cases, two or more of these techniques may be combined for more effective bubble removal. For example, it may be necessary to combine addition of a surfactant with use of an ultrasonic bath for some severe conditions. Any of these techniques, if misapplied, can alter sample turbidity; *use with care.* If degassing cannot be applied, bubble formation will be minimized if the samples are maintained at the temperature and pressure of the water before sampling.

Do not remove air bubbles by letting sample stand for a period of time because during standing, turbidity-causing particulates may settle and sample temperature may change. Both of these conditions alter sample turbidity, resulting in a nonrepresentative measurement.

Condensation may occur on the outside surface of a sample cell when a cold sample is being measured in a warm, humid environment. This interferes with turbidity measurement. Remove all moisture from the outside of the sample cell before placing the cell in the instrument. If fogging recurs, let sample warm slightly by letting it stand at room temperature or by partially immersing it in a warm water bath for a short time. Make sure samples are again well mixed.

b. Nephelometer calibration: Follow the manufacturer's operating instructions. Run at least one standard in each instrument range to be used. Make certain the nephelometer gives stable readings in all sensitivity ranges used. Follow techniques outlined in ¶s 2*b* and 4*a* for care and handling of sample cells, degassing, and dealing with condensation.

c. Measurement of turbidity: Gently agitate sample. Wait until air bubbles disappear and pour sample into cell. When possible, pour well-mixed sample into cell and immerse it in an ultrasonic bath for 1 to 2 s or apply vacuum degassing, causing complete bubble release. Read turbidity directly from instrument display.

d. Calibration of continuous turbidity monitors: Calibrate continuous turbidity monitors for low turbidities by determining turbidity of the water flowing out of them, using a laboratory-model nephelometer, or calibrate the instruments according to manufacturer's instructions with formazin primary standard or appropriate secondary standard.

5. Interpretation of Results

Report turbidity readings as follows:

Turbidity Range *NTU*	Report to the Nearest *NTU*
0–1.0	0.05
1–10	0.1
10–40	1
40–100	5
100–400	10
400–1000	50
>1000	100

When comparing water treatment efficiencies, do not estimate turbidity more closely than specified above. Uncertainties and discrepancies in turbidity measurements make it unlikely that results can be duplicated to greater precision than specified.

6. Reference

1. U.S. ENVIRONMENTAL PROTECTION AGENCY. 1993. Methods for Determination of Inorganic Substances in Environmental Samples. EPA-600/R/93/100 - Draft. Environmental Monitoring Systems Lab., Cincinnati, Ohio.

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2150 ODOR*

2150 A. Introduction

1. Discussion

Odor, like taste, depends on contact of a stimulating substance with the appropriate human receptor cell. The stimuli are chemical in nature and the term "chemical senses" often is applied to odor and taste. Water is a neutral medium, always present on or at the receptors that perceive sensory response. In its pure form, water cannot produce odor or taste sensations. Man and other animals can avoid many potentially toxic foods and waters because of adverse sensory response. These senses often provide the first warning of potential hazards in the environment.

Odor is recognized[1] as a quality factor affecting acceptability of drinking water (and foods prepared with it), tainting of fish and other aquatic organisms, and esthetics of recreational waters. Most organic and some inorganic chemicals contribute taste or odor. These chemicals may originate from municipal and industrial waste discharges, from natural sources such as decomposition of vegetable matter, or from associated microbial activity, and from disinfectants or their products.

The potential for impairment of the sensory quality of water has increased as a result of expansion in the variety and quantity of waste materials, demand for water disposal of captured air pollutants, and increased reuse of available water supplies by a growing population. Domestic consumers and process industries such as food, beverage, and pharmaceutical manufacturers require water essentially free of tastes and odors.

Some substances, such as certain inorganic salts, produce taste without odor and are evaluated by taste testing (Section 2160). Many other sensations ascribed to the sense of taste actually are odors, even though the sensation is not noticed until the material is taken into the mouth. Because some odorous materials are detectable when present in only a few nanograms per liter, it is usually impractical and often impossible to isolate and identify the odor-producing chemical. The ultimate odor-testing device is the human nose. Odor tests are performed to provide qualitative descriptions and approximate quantitative measurements of odor intensity. The method for intensity measurement presented here is the *threshold odor* test, based on a method of limits.[2] This procedure, while not universally preferred,[3] has definite strengths.[4]

Sensory tests are useful as a check on the quality of raw and finished water and for control of odor through the treatment process. They can assess the effectiveness of different treatments and provide a means of tracing the source of contamination.

Section 6040B provides an analytical procedure for quantifying several organic odor-producing compounds including geosmin and methylisoborneol.

2. References

1. U.S. ENVIRONMENTAL PROTECTION AGENCY. 1973. Proposed Criteria for Water Quality. Vol. 1, Washington, D.C.
2. AMERICAN SOCIETY FOR TESTING AND MATERIALS COMMITTEE E-18. 1968. STP 433, Basic principles of sensory evaluation; STP 434, Manual on sensory testing methods; STP 440, Correlation of subjective-

* Approved by Standard Methods Committee, 1991.

EXHIBIT

D

Declaration of Mona Dougherty

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

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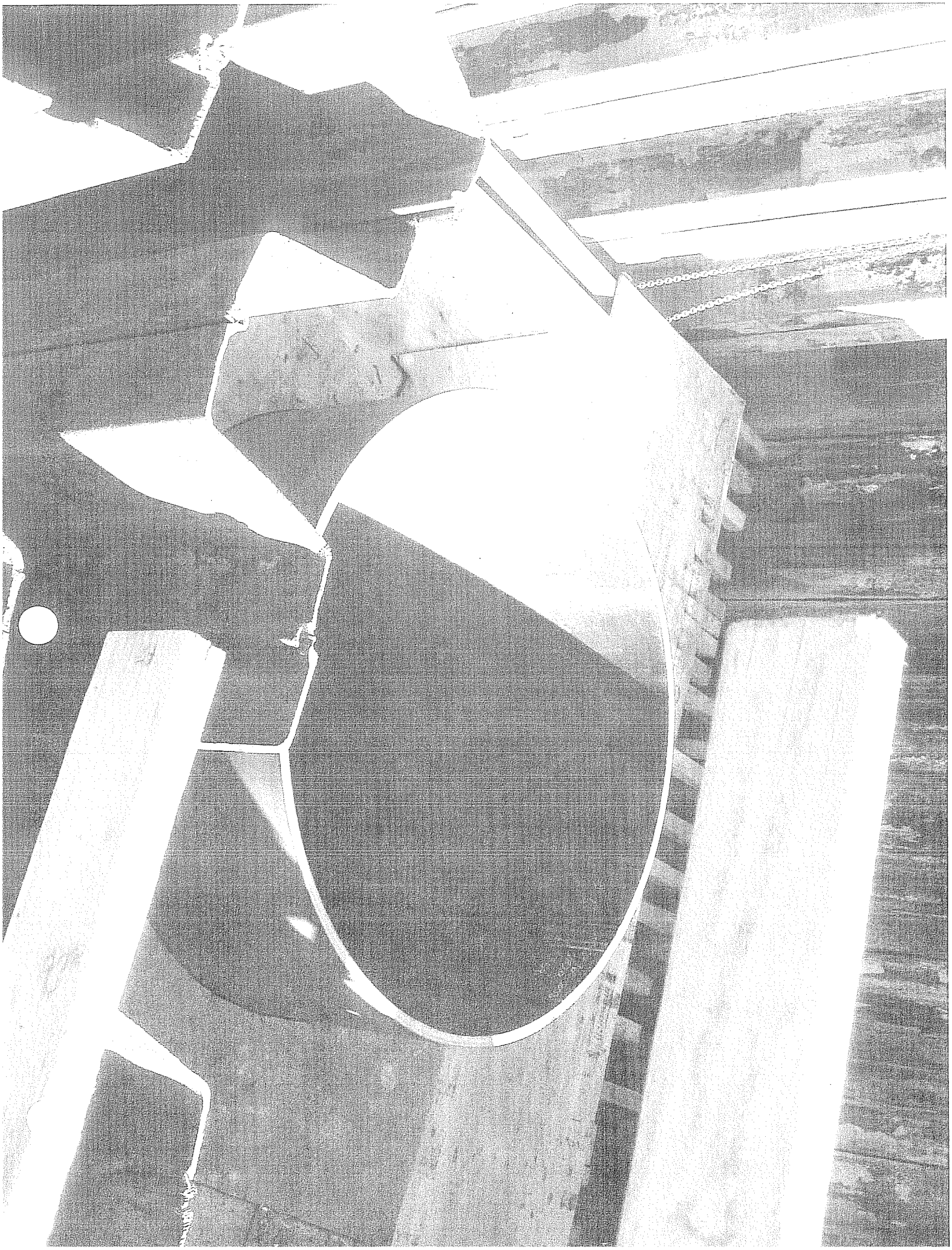

Declaration on Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

REED SATO, Director (SBN 87685)
CHRISTIAN CARRIGAN, Senior Staff Counsel (SBN 197045)
JULIE E. MACEDO, Senior Staff Counsel (SBN 211375)
State Water Resources Control Board
1001 I Street, 16th Floor
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Telephone: 916-323-6847
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E-mail: jmacedo@waterboards.ca.gov

Attorney for Regional Water Quality Control Board,
North Coast Region

BEFORE THE CALIFORNIA WATER QUALITY CONTROL BOARD
NORTH COAST REGION

In the Matter of: California Department of Transportation, Confusion Hill Bypass Project, WDID No. 1B05153WNME	)))))	ACLC Order No. R1-2007-0095 DECLARATION OF KASON GRADY

I, Kason Grady, declare as follows:

1. I am employed at the North Coast Regional Water Quality Control Board (Regional Water Board) as a Water Resources Control Engineer, and have been employed here for over four years. I graduated from the University of California, Los Angeles in 2005 with a Bachelor of Science in Chemical Engineering. I work primarily in wastewater discharge permitting, although I was in the Enforcement Unit at the time I drafted the Confusion Hill ACLC.

2. I have maintained the physical enforcement file for the Confusion Hill Project, which I made available at the three days I offered deposition testimony.

3. I started working on the Confusion Hill enforcement matter with the Office of Enforcement attorneys shortly after I was hired, in spring of 2007.

4. True and correct copies of the 401 amendments for the Confusion Hill Project as

attached hereto as Exhibit A.

5. A true and correct copy of the ACLC issued on the Confusion Hill matter on August 13, 2009 is attached hereto as Exhibit B.

6. A true and correct copy of the 401 Certification for the Confusion Hill Bypass Project, dated February 16, 2006 is attached hereto as Exhibit C.

7. Other permits and advisory documents for the Project are too voluminous to attach in their entirety. These documents are available online, on either the Caltrans or the Water Board websites. I have relied on these permits and other documents in preparing the ACLC, and consider them part of the Administrative Record. The documents could be printed or burned to cd to be kept with the enforcement file Regional Board. The cover pages of the various permits are collectively attached as Exhibit D for reference, and the documents are:

- Caltrans' Storm Water Permit (and Fact Sheet) (adopted by the State Board)
- Storm Water Construction General Permit (adopted by the State Board)
- Caltrans' Storm Water Management Plan
- Caltrans' Special Provisions for the Confusion Hill Project
- Caltrans' Construction Site BMP Manual

8. Attached as Exhibit E is a true and correct copy of notes taken at a November 29, 2005 meeting between Dean Prat and Caltrans employees prior to the Project certification. These notes were provided to Mr. Prat by Alex Arevalo.

9. Attached as Exhibit F is a true and correct copy of correspondence from Caltrans to Dean Prat rescheduling a meeting that eventually occurred on June 8, 2006. I am informed and believe that Dean Prat attended that meeting, along with Caltrans and MCM.

10. Attached as Exhibit G is a true and correct copy of an excerpt from the first day of my deposition, from October 21, 2010.

11. Attached as Exhibit H is a true and correct copy of the National Marine Fisheries Service' permit for the Confusion Hill Project. Please refer to paragraph 2.d. on page 4 regarding the Biological Monitor requirement.

12. After the conclusion of my deposition, I reviewed my deposition transcript, went back over the evidence to confirm or deny hypothetical assertions posed by the Dischargers regarding potentially duplicative violations, in-stream sediment discharges and other violations where the strength of the evidence was in question. I also reviewed documents provided by MCM during the discovery process.

13. I was the primary Region 1 staff member with responsibility for drafting the ACLC. From mid-2007 to August 2009, I would estimate that I spent 390 hours on drafting, reviewing documents in search of violations, speaking with counsel, and other tasks related to evaluating evidence in support of the violations.

14. I estimate that I spent approximately 300 hours since August 2010 in preparing for the March 2011 administrative hearing. This time includes my deposition time, time spent preparing for my deposition with counsel, reviewing documents after my deposition, and assisting with drafting the Prosecution Team's Case in Chief.

Executed this 10th day of February, 2011, at Santa Rosa, California.

Kason Grady

EXHIBIT

A

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

DEPARTMENT OF TRANSPORTATION
NORTH REGION ENVIRONMENTAL SERVICES
P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 441-5730
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RWQCB
REGION 1
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Flex your power!
Be energy efficient!

March 2, 2006

Dean Prat
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

EA 01-397511
Men 101 PM 98.9/R100
Confusion Hill

Subject: Request for Amendments to 401 Water Quality Certification for Confusion Hill Bypass Project

Dear Mr. Prat:

The Department of Transportation (Caltrans) received the 401 Water Quality Certification for the Confusion Hill Bypass Project on February 16, 2006. Pursuant to your conversation with Alex Arevalo on February 21, 2006 regarding the project, I am requesting the following clarifications in the language for Additional Condition #4 on page 5 and Additional Condition #13 on page 6.

Additional Condition #4 states: "A copy of the Storm Water Pollution Prevention Plan (SWPPP) shall be submitted to the attention of Regional Water Board staff Dean Prat at least 30 days prior to the start of the project."

Caltrans recognizes the need for and authority of the North Coast Regional Water Board to have adequate time to review the SWPPP for the proposed project. This is reflected in Caltrans National Pollutant Discharge Elimination System (NPDES) Permit, Order No. 99-06-DWQ (Caltrans Statewide NPDES Permit). Section H.8.b. states in part "RWQCB staff has the authority to require the submittal of an SWPPP at any time, including up to 30 days prior to commencement of significant soil disturbance activities; to require changes to the SWPPP; and to enforce the provisions of the SWPPP".

Given the time constraints of work windows set by the resource agencies, Caltrans has scheduled certain necessary construction activities to occur within the first and subsequent construction seasons. We agreed that the intent of condition #4 is to allow adequate time to review the SWPPP.

Caltrans requests that Additional Condition #4 be reworded to: "A copy of the Storm Water Pollution Prevention Plan (SWPPP) shall be submitted to the attention of Regional Water

Board staff Dean Prat at least 30 days prior to the start of soil disturbance or other activities that could affect water quality."

This proposed change would allow project activities that do not have the potential to impact water quality to begin during the review period, while still ensuring that Regional Water Board staff has adequate time to review the SWPPP.

Additional condition #13 states: "Fueling, lubrication, maintenance, operation, storage and staging of vehicles and equipment shall be outside waters of the United States and shall not result in a discharge or a threatened discharge to waters of the United States. At no time shall the applicant use any vehicle or equipment, which leaks any substance that may impact water quality."

The word "operation" could be ambiguous in its interpretation as applied to construction activities. As stated in the project description, there will be construction activities occurring within 'waters of the United States' (defined as below ordinary high water). Please note that Caltrans has included in the specifications for the project the following requirement: "Every day before starting work, motorized construction equipment used below top of banks of South Fork Eel River shall be checked for fluid leaks. Any leaks found shall be immediately corrected, contamination shall be contained and affected soils shall be immediately removed."

Caltrans requests that Additional Condition #13 be reworded to: "Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be outside waters of the United States and operation of such vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the United States. At no time shall the applicant use any vehicle or equipment which leaks any substance that may impact water quality."

Thank you for your time and consideration of this matter. Please contact me at your earliest convenience to confirm that the requested changes are acceptable.

Sincerely,

Gary Berrigan
Acting Chief, Environmental Branch E2

c: SLeroy
JBulinski
DMelendrez

California Regional Water Quality Control Board
North Coast Region
William R. Massey, Chairman

Dan Skopec
Acting Secretary

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5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold Schwarzenegger
Governor

April 18, 2006

Mr. Gary Berrigan
CDOT Eureka
P.O. Box 3700
Eureka, CA 95501

Dear Mr. Berrigan:

Subject: Amendment to the Clean Water Act Section 401 Certification (Water Quality Certification) for the Confusion Hill Bypass Project

File: CDOT – Hwy 101, Confusion Hill Bypass
WDID No. 1B05153WNME

On March 6, 2006, we received your letter requesting amendments to Additional Conditions Nos. 4 and 13 of the Clean Water Act Section 401 Water Quality Certification (Water Quality Certification) that was issued for the Confusion Hill Bypass Project on February 16, 2006. The purpose of the project is to provide a safe and reliable transportation route around the Confusion Hill landslide area by relocating the highway from the east side of the South Fork Eel river to the west side. Your letter details potential problems with some of the language contained in Additional Conditions Nos. 4 and 13 and requests that these conditions be amended slightly to better clarify their intent.

Additional Condition No. 4 requires submittal of a Storm Water Pollution Prevention Plan (SWPPP) at least 30 days prior to the start of the project. Your letter recognizes the Regional Water Board's authority to require submittal of the SWPPP at least 30 days prior to the commencement of significant soil disturbance activities and the need for Regional Water Board staff to have adequate time to review the SWPPP and require changes. However, the requirement to submit the SWPPP prior to the start of the project is problematic because the time constraints associated with the authorized work window requires that CDOT begin staging and preparation activities well in advance of any significant soil disturbing activities. Regional Water Board staff recognize that Additional Condition No. 4 does not clearly define the start of the project and this condition shall be amended.

Your letter also suggests that the term "operation" in Additional Condition No. 13 is ambiguous. Additional Condition No. 13 states that fueling, lubrication, maintenance, operation, storage and staging of vehicles and equipment shall be outside waters of the United States and shall not result in a discharge or a threatened discharge to waters of the United States. Regional Water Board staff recognize this project involves certain authorized operations within waters of the United

States. Regional Water Board staff agree that including the term "operation" in this condition is not appropriate for this project.

This letter serves as an amendment to the Water Quality Certification issued for the Confusion Hill Bypass project on February 16, 2006, revising and replacing Additional Condition Nos. 4 and 13 as outlined below:

Additional Condition No. 4: A copy of the Storm Water Pollution Prevention Plan (SWPPP) shall be submitted to the attention of Regional Water Board staff Dean Prat at least 30 days prior to the start of soil disturbance activities or other activities that could affect water quality.

Additional Condition No. 13: Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be outside waters of the United States and operation of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the United States. At no time shall the applicant use any vehicle or equipment that leaks any substance that may impact water quality.

I hereby issue an amendment to Additional Condition Nos. 4 and 13 of the Water Quality Certification Order (WDID No. 1B05153WNME) for the Highway 101, Confusion Hill Bypass Project and certify that the remainder of the Water Quality Certification sections of the Order are still valid. If you have any questions or comments, please contact Dean Prat at (707) 576-2801.

Sincerely,

Catherine Kuhlman

Catherine E. Kuhlman
Executive Officer

041806_DLP_cdotconfusionhill401amend.doc

cc: Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 333 Market Street, San Francisco, CA 94599
U.S. Army Corps of Engineers, District Engineer, P.O. Box 4863, Eureka, CA 95502
Ms. Susan Leroy, CDOT Eureka, P.O. Box 3700, Eureka, CA 95501

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North Coast Region
John W. Corbett, Chairman

Linda S. Adams
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Arnold
Schwarzenegger
Governor

December 12, 2007

Mr. Gary Berrigan
CDOT Eureka
P.O. Box 3700
Eureka, CA 95501

Dear Mr. Berrigan:

Subject: Amendment to the Clean Water Act Section 401 Certification (Water Quality Certification) for the Confusion Hill Bypass Project

File: CDOT – Hwy 101, Confusion Hill Bypass
WDID No. 1B05153WNME

On November 26, 2007, we received an email from Jerome Washington of your agency requesting clarification or amendment of Additional Condition No. 16 of the Clean Water Act Section 401 Water Quality Certification (Water Quality Certification) for the Confusion Hill Bypass Project. The clarification or amendment was requested because Caltrans has obtained a permit from the Division of Water Rights allowing water drafting for this project from the South Fork Eel River outside of the work window specified in Additional Condition No. 16 of the Water Quality Certification. Additional Condition No. 16 states that all work within waters of the United States shall not commence until May 15th and shall be completed prior to October 31st.

Based on the information contained in the Division of Water Rights' Temporary Permit for Diversion and Use of Water, permitted water drafting activities are not likely to result in discharges or threatened discharges that could affect water quality. This letter serves as an amendment to the Water Quality Certification issued for the Confusion Hill Bypass project on February 16, 2006, revising and replacing Additional Condition No. 16 as outlined below:

Additional Condition No. 16: All work within waters of the United States shall not commence until May 15th and shall be completed prior to October 31st. Water drafting activities conducted in accordance with a Temporary Permit for Diversion and Use of Water issued by the Division of Water Rights are exempt from this condition.

Please note that if it is determined that any water drafting activities are causing adverse impacts to the South Fork Eel River, water drafting activities shall cease immediately until measures to correct the problem(s) are implemented such that activities will no longer result in any adverse impacts to water quality.

I hereby issue an amendment to Additional Condition No. 16 of the Water Quality Certification Order (WDID No. 1B05153WNME) for the Highway 101, Confusion Hill Bypass Project and certify that the remainder of the Water Quality Certification sections of the Order are still valid. If you have any questions or comments, please contact Dean Prat at (707) 576-2801.

Sincerely,

Robert R. Klamt
Interim Executive Officer

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cc: Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 333 Market Street, San Francisco, CA 94599
U.S. Army Corps of Engineers, District Engineer, P.O. Box 4863, Eureka, CA 95502
Mr. Jerome Washington, CDOT Eureka, P.O. Box 3700, Eureka, CA 95501

EXHIBIT

B

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

California Regional Water Quality Control Board
North Coast Region

Administrative Civil Liability Complaint No. R1-2009-0095

for

Violations of Clean Water Act, Section 401, Water Quality Certification
and State Water Resources Control Board
Order No. 99-06-DWQ Storm Water Permit

In the Matter of
California Department of Transportation
Confusion Hill Bypass Project
WDID No. 1B05153WNME

Mendocino County

The Assistant Executive Officer of the California Regional Water Quality Control Board, North Coast Region (hereinafter the Regional Water Board), under his lawfully delegated authority, hereby gives notice and alleges that:

1. The California Department of Transportation (hereinafter "Caltrans" or the "Discharger") contracted with MCM Construction, Inc. to construct the Confusion Hill Bypass Project (the "Project"), located on Highway 101 in Mendocino County, approximately 18.5 miles south of Garberville and 8 miles north of Leggett (Post Mile 98.9 / R 100.8).[1] Highway 101 currently crosses an active landslide in the area known as Confusion Hill. The purpose of the Project is to provide a reliable transportation route around the landslide area by permanently relocating the highway from the east side of the South Fork Eel River (the "River") to the west side. Relocating the highway required construction of two new bridges and a new section of highway between the new bridges.

2. In 2001, the cost of construction and vehicle delays due to road closures on the existing highway from the landslide were estimated to be nearly $4 million. In 2002 and 2003, Caltrans' construction costs exceeded $9 million, and vehicle delay costs were estimated to be near $2 million. In 2003, Caltrans received approval for $65 million of emergency relief funds for the Project, and another $7 million for the landslide response that had been ongoing since 2002.

3. On July 15, 1999, the State Water Resources Control Board ("SWRCB") adopted a National Pollutant Discharge Elimination System ("NPDES") Permit for Storm Water Discharges from the State of California, Department of Transportation

[1] Since Caltrans is the named permittee for this Project and legally responsible to the Regional Water Board for all violations associated therewith, the allegations of violations set forth in this complaint do not distinguish the acts of Caltrans from those of its contractor.

(Caltrans) Properties, Facilities and Activities, Order No. 99-06-DWQ (the "Storm Water Permit").

4. Municipal separate storm sewer systems ("MS4s") serving a population of 100,000 or more are required to have storm water permits. The United States Environmental Protection Agency considers MS4s to include road systems owned by states which are in an area with a population greater than 100,000. California's road system, roadway rights-of-way, roadside drainage conveyance systems, and storm water outfall structures are all considered an interconnected storm sewer system, and therefore subject to the MS4 permitting program. At the Discharger's request, the SWRCB adopted a single NPDES permit for storm water discharges from all its properties, facilities, and activities that provides coverage for both the MS4 requirements and the statewide Construction General Permit requirements. Thus, the Storm Water Permit covers all municipal storm water and construction activities engaged in by the Discharger that require permit coverage. The Storm Water Permit conditionally authorizes storm water and nonstorm water discharges from Caltrans' properties, facilities, and activities, and prohibits discharges of pollutants and material other than storm water that are not authorized by the Storm Water Permit. The Project is subject to the Storm Water Permit.

5. The National Oceanographic and Atmospheric Administration's National Marine Fisheries Service ("NMFS") imposed terms and conditions on the Discharger's Storm Water Permit in order for its activities to be exempt from section 7(o)(2) of the Endangered Species Act. NMFS term and condition (d) of its Reasonable and Prudent Measure 2 requires a biologist ("Biological Monitor") to monitor in-channel activities, and to monitor the performance of sediment control or detention devices.

6. Clean Water Act, section 401 requires Caltrans to apply for and obtain a Water Quality Certification for the Project (the "Certification"). On December 15, 2005, Caltrans submitted an application for certification, but it was determined to be incomplete by the Regional Water Board, which required submittal of additional information and fees. The correspondence between Regional Water Board staff and Caltrans employees from December 15, 2005, to February 16, 2006, is included as part of Caltrans' application for the Certification (the "Application"). On February 16, 2006 (as amended on April 18, 2006), the Regional Water Board executive officer ("Executive Officer") issued the Certification and approved the Discharger's Application for the Project. The Application is incorporated by reference into, and an integral part of the Certification. The Certification, in turn, requires that Caltrans comply with the Application.

7. This Complaint alleges 154 violations of conditions contained in the Certification and 141 days of violation of General Discharge Prohibitions, Receiving Water

Limitations and General Requirements contained in the Discharger's Storm Water Permit. Many of the discharge violations of the Certification may also be violations of the Stormwater Permit, however staff decided that in those instances, the Certification conditions sufficiently cover the discharges and the demonstration of duplicative permit violations is unnecessary. The alleged violations occurred between August 17, 2006, and June 1, 2007. The violations are detailed chronologically in Attachment A, and associated photographs, where available, are provided in Attachment B.

8. On September 8, 2006, the Discharger notified the Regional Water Board via email of unauthorized construction dewatering discharges and of a discharge from equipment crossing the River. The construction dewatering was discharged to an unlined and unauthorized sedimentation basin on the gravel bar ("Isolated Pool B") and occurred on August 29 and 30, 2006. The Discharger's notification referenced a plume of turbidity caused by hydrostatic head pressure from 8 hours of continuous construction dewatering into Isolated Pool B that mobilized sediment transport through the gravel bar into the active River channel. The Discharger's Application specified that all sedimentation basins would be located a minimum of 100 feet from the live stream channel. The Regional Board came to learn that Caltrans used Isolated Pool B, which was located only about 70 feet from the River, for construction dewatering throughout the 2006 construction season. Not only was Caltrans' use of the sedimentation basin unauthorized because of its close proximity to the active stream channel, but also Best Management Practices ("BMPs") were not in place prior to the discharge on August 29, 2006. Moreover, BMPs should have been modified to control the turbid discharge anticipated by Caltrans that occurred on August 30, 2006.

9. Regional Water Board staff worked closely with Caltrans before authorizing the Application to clarify that the Certification bars any concrete wastes or associated wastewater from being discharged to unlined basins. Nevertheless, on October 2, 2006, the Discharger notified the Regional Water Board that concrete contact water had been discharged to Isolated Pool B on September 29, 2006, in violation of the Certification.

10. On October 6, 2006, Regional Water Board staff inspected the north bridge portion of the Project. During the inspection, staff observed the following violations: (1) unauthorized use of a sedimentation basin on the gravel bar (Isolated Pool B); (2) a backhoe on the gravel bar with an excessive fluid leak and improper containment; (3) cut rebar lying on the gravel bar without containment; (4) steel slag and debris lying on the gravel bar; (5) steel being cut on the gravel bar without adequate containment; and (6) welding slag falling directly into the River and onto the gravel bar.

Also on October 6, 2006, Caltrans notified the Regional Water Board in writing, via facsimile, about unpermitted dewatering discharges that occurred on August 29 and August 30, 2006, a turbid discharge to the River that occurred on September 1, 2006, and a turbid discharge to the River from equipment crossing the River that occurred on September 6, 2006. The notifications are commonly referred to as "Attachment Ks" because this is the document name given by Caltrans to discharge notifications required under Section K of the Storm Water Permit.

After the October 6, 2006 inspection, the Discharger continued to violate conditions in the Certification and the Storm Water Permit. On October 7, 2006, and November 13 and 14, 2006, the Discharger continued to discharge construction dewatering to the gravel bar. The Discharger continued to weld and cut steel without adequate containment until June 2007, and continued to operate and stage leaky equipment without adequate containment through November, 2006.

11. On October 30, 2006, the Executive Officer issued a Notice of Violation to the Discharger for the violations on August 29, August 30, and September 29, 2006, and for violations observed by Regional Water Board staff on October 6, 2006 ("NOV1"). NOV1 requested that the Discharger implement adequate on-site BMPs immediately and submit a report by November 15, 2006, addressing all of the latter areas of noncompliance and detailing the Discharger's actions to implement adequate BMPs. The required report was submitted on November 17, 2006.

12. On November 2, 2006, the California Department of Fish and Game provided Regional Water Board staff with 3 photographs (Appendix B: 061002-01, 061007-01, 061007-02) taken at the Project site by the Biological Monitor. The photographs depict discharges to the River that had not yet been reported to the Regional Water Board by Caltrans.

13. On November 27, 2006, the Executive Officer issued a second Notice of Violation ("NOV2") for the violations described in paragraph 12 in conjunction with a Water Code section 13267(b) order requiring the submittal of technical reports (the "13267 Order"). NOV2 addressed the following violations: (1) unauthorized discharges of turbid water to the River; (2) placement of a silt fence in the River; and (3) a backhoe crossing the River causing a turbidity plume. The 13267 Order required Caltrans to submit a report by December 13, 2006, including all of the weekly biological reports, all reports of discharges to surface water prepared by the Discharger or its contractors, all reports of noncompliance pursuant to the Storm Water Permit (Attachment Ks), any written recommendations for protection of water quality made by the Discharger or its contractors, and any reports or photographs of violations, including the details

surrounding the events and the associated potential impacts to beneficial uses. On December 14, 2006, the Discharger submitted the technical reports and information required by the 13267 Order in a binder (the "Binder"). Entries from the Binder are cited in Attachment A as evidence of some of the violations alleged in this Complaint.

14. The following sections of the Storm Water Permit are alleged to have been violated by the Discharger in this complaint:

A. GENERAL DISCHARGE PROHIBITIONS

1. Any discharge from Caltrans rights-of-way or Caltrans properties, facilities, and activities within those rights-of-way that is not composed entirely of "storm water" to waters of the United States is prohibited unless authorized pursuant to Section B of this NPDES Permit. For some discharges, Caltrans may also need to obtain Water Quality Certification under CWA [Clean Water Act Section 401] S2 [sic]. The discharge of runoff from Caltrans owned rights-of-way or Caltrans properties, facilities, and activities to waters of the United States which have not been reduced to the MEP [maximum extent practicable] is prohibited. The discharge of runoff from construction sites containing pollutants which have not been reduced using BAT [best available technology] for toxic pollutants and BCT [best conventional technology] for conventional pollutants to waters of the United States is prohibited.

2. The discharge of pollutants or dredged or fill material to waters of the United States, except as authorized by an NPDES Permit or a dredged or fill material permit (subject to the exemption described in California Water Code (CWC) section 13376), is prohibited.

3. The discharge of waste to waters of the State in a manner causing or threatening to cause a condition of pollution or nuisance defined in CWC section 13050, is prohibited.

4. The dumping, deposition, or discharge of waste by Caltrans directly into waters of the State or adjacent to such waters in any manner that may allow its being transported into the waters is prohibited unless authorized by the RWQCB.

6. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity, or discoloration in waters of the State or which unreasonably affect or threaten to affect beneficial uses of such waters, is prohibited.

7. Wastes or wastewater from road sweeping vehicles or from other maintenance or construction activities shall not be discharged to any surface waters or to any storm drain leading to surface water bodies.

B. NONSTORM WATER DISCHARGE PROHIBITIONS

1. Caltrans shall effectively prohibit nonstorm water discharges into its storm water conveyance system unless such discharges are either:

   a. Authorized by a separate NPDES permit; or
   b. Authorized in accordance with Nonstorm Water Discharge Prohibition B.2 of this NPDES Permit.

C. RECEIVING WATER LIMITATIONS

C-2 Receiving Water Limitations For Construction Activities:

2. The [Stormwater Pollution Prevention Plan] SWPPP developed for the construction activity covered by this NPDES Permit shall be designed and implemented such that storm water discharges and authorized nonstorm water discharges shall not cause or contribute to an exceedance of any applicable water quality standards contained in a Statewide Water Quality Control Plan and/or the applicable RWQCB's Basin Plan.

D. RWQCB AUTHORITIES

1. Following adoption of this permit, RWQCB's shall implement the Provisions of this permit. Implementation of this permit may include, but is not limited to, reviewing SWPPPs, reviewing Maintenance Facility Pollution Prevention Plans (FPPPs), reviewing monitoring reports, conducting compliance inspections, conducting monitoring, reviewing the Annual Reports and taking enforcement actions.

2. RWQCB's may require submittal of, require changes to, specify a format for, and enforce Provisions of SWPPPs and FPPPs.

15. The following Additional Conditions contained in the Discharger's Water Quality Certification are alleged to have been violated in this complaint:[2]

[2] The Certification Condition numbers used in the complaint are as they appear in the Additional Conditions section of the Certification.

2. All conditions listed in this Water Quality Certification must be included in the Plans and Specifications prepared by the applicant for the Contractor. All conditions shall be implemented according to the submitted application and this Water Quality Certification.

7. Adequate best management practices for sediment and turbidity control shall be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.

9. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this permit, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State.

10. All materials used for cleaning concrete from tools and equipment, and any wastes generated by this activity, shall be adequately contained to prevent contact with soil and surface water and shall be disposed of properly.

11. If construction dewatering is found to be necessary, the applicant will use a method of water disposal other than disposal to surface waters (such as land disposal) or the applicant shall apply for coverage under the General Construction Dewatering Permit and receive notification of coverage to discharge to surface waters.

12. Fueling, lubrication, maintenance, storage, and staging of vehicles and equipment shall be outside of waters of the United States and operation of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the United States. At no time shall the applicant use any vehicle or equipment, which leaks any substance that may impact water quality.

13. Project activities shall comply with provisions in the North Coast Region Water Quality Control Plan (Basin Plan).

19. Visual observations of the River shall be conducted whenever a project activity has the potential to mobilize sediment and increase the turbidity of the River. Field turbidity measurements shall be collected whenever a project activity causes turbidity of the River to be increased above background concentrations in order to demonstrate compliance with receiving water limitations.

Whenever turbidity in the River is increased above background as a result of project activities, turbidity measurements shall be collected upstream (within 50 feet) of the source of turbidity. The frequency of turbidity monitoring shall be a minimum of every hour during periods of increased turbidity and shall continue until turbidity measurements demonstrate compliance with receiving water limitations and turbidity levels are no longer increasing as a result of project activities. If turbidity levels are greater than 20 percent above background 100 feet downstream of the source of turbidity, all necessary steps shall be taken to install, repair, and/or modify BMPs to control the source(s) of sediment and the overall distance from the source of turbidity to the downstream extent of the increased turbidity (20 percent above background) shall be measured.

Turbidity monitoring results shall be reported to appropriate Regional Water Board staff by telephone within 1 hour of taking any turbidity measurement that shows turbidity levels are 20 percent above background 100 feet or more downstream of the source of turbidity. All recorded visual observation and all field turbidity measurements collected for the purpose of this condition shall be submitted in a report to the Regional Water Board by November 15th each year and within 45 days of project completion.

16. The following provisions of the Basin Plan apply to the Project site and are alleged to have been violated in this complaint:

ACTION PLAN FOR LOGGING, CONSTRUCTION AND ASSOCIATED ACTIVITIES

The following waste discharge prohibitions pertain to logging, construction, and associated activities in the North Coast Region.

1. The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.

3. The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited.

3-3.00 Objectives for Inland Surface Waters, Enclosed Bays and Estuaries:

Turbidity

Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

pH

The pH shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH level shall not exceed 0.2 units in waters with designated marine (MAR) or saline (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with designated COLD or WARM beneficial uses.

17. Water Code section 13385, subdivisions (a)(4), and (a)(5) provide the bases for the Regional Water Board's imposition of administrative civil liability. Subdivision (a)(4) provides for administrative civil liability against any person who violates any waste discharge requirement or Basin Plan prohibition issued pursuant to Water Code section 13243. Subdivision (a)(5) provides for administrative civil liability against any person who violates any requirements of section 401 of the Clean Water Act, as amended. As detailed in this complaint, Caltrans violated the discharge prohibitions and requirements of the Certification and Storm Water Permit. Water Code section 13385, subdivision (c) provides that the maximum amount of administrative civil liability that may be imposed by the Regional Water Board is $10,000 per day of violation.

18. On February 19, 2002, the SWRCB adopted Resolution No. 2002-0040 amending the Water Quality Enforcement Policy ("Enforcement Policy"). The Enforcement Policy was approved by the Office of Administrative Law and became effective on July 30, 2002.

19. 401 Water Quality Certification Violations

Due to the repetitive nature and number of alleged violations at the Confusion Hill Project site, Regional Water Board staff has grouped them below by violation type, rather than enumerating each violation separately. Appendix A details chronologically the individual violations that form the bases of staff's calculation of the number of days of violation. Violation type "H" addresses certain

discharges that did not fit neatly into any of the other major violation categories. The eight violation types are as follows:

A. Construction dewatering
B. Leaky equipment
C. Slag discharges
D. Discharges to the river
E. Insufficient turbidity measurements
F. Improper disposal of cement wastes
G. Rubbish and debris discharges
H. Individual events

The maximum potential liability for the 154 separate discharge violations of the Certification (categories A through H) is $1.54 million.[3] The individual violations are listed in Appendix A, and photos relevant to the violations are included in Appendix B. Each type of violation is discussed below in further detail:

A. Construction Dewatering Violations

Caltrans discharged turbid water directly to Isolated Pool B, an unlined dewatering basin situated directly on the gravel bar within the River bed. This use of Isolated Pool B was unauthorized, and constitutes a direct violation of Conditions 9, 12 and 17 of the Certification.

Condition 9 prohibits the discharge of, among other things, debris, soil, silt or other organic or earthen materials to waters of the State, or to places where such pollutants may be washed by rainfall into waters of the State.

Condition 12 requires dewatering discharges either to be disposed of at non-surface water locations, or to be covered under the General Construction Dewatering Permit. Isolated Pool B lies within the definition of surface waters because it is within the bankfull channel and has a direct hydrologic connection to the active River channel.

Condition 17 requires that construction activities be conducted as described in the Certification and the Application. The Application requires that, "Temporary sedimentation basins would be located a minimum of 100 feet from the live stream channel." Isolated Pool B was only about 70 feet from the live stream channel at the times of discharge.

[3] The Complaint also alleges 141 days of violation of Caltrans' Storm Water Permit and SWPPP, which subject Caltrans to an additional maximum administrative civil liability of $1.41 million. The alleged Storm Water Permit violations are discussed in paragraph 20, below.

Use of Isolated Pool B (the unlined dewatering basin) on the gravel bar is a direct violation of the Application and Certification, and substantially and directly impacted water quality. On August 29, August 30, and September 7, 2006, sediment transport occurred from subsurface flow through the gravel bar directly to the River due to hydrostatic head pressure from dewatering discharges to Isolated Pool B. The Discharger violated Conditions 9, 12 and 17 by discharging into Isolated Pool B at least 7 times as indicated in Appendix A.

After the discharge from Isolated Pool B on August 31, 2008, the Discharger began dewatering directly to the gravel bar about 15 feet from the River. Dewatering at this new location did not have the same hydrostatic pressure problems as Isolated Pool B because this location was not used for an extended period at any one time. However, discharging sediment-laden water directly to the gravel bar within 15 feet of the River is not authorized, is not a BMP, and poses potentially serious water quality impacts similar to the unauthorized discharges to Isolated Pool B. Instead of addressing the problem caused by using Isolated Pool B in an unauthorized location too close to the River, the Discharger apparently tried to save time and the costs associated with creating a proper detention basin at least 100 feet away from the River, and began discharging directly to the gravel bar a mere 15 feet from the River.

Further, according to the Engineering Diaries, on November 13, 2006, construction dewatering occurred at the top of an access road without BMPs in place so that a silty water discharge ran down to the gravel bar. This constitutes a violation of Condition 7 because of inadequate BMPs for sediment control, and of Condition 9 because silty water was allowed to reach the gravel bar. Another dewatering event occurred on March 7, 2007, when silty water was discharged to a slope immediately adjacent to a designated environmentally sensitive area in the River. The silty water discharge made its way into the backwater pool and "discolored the waters."

As summarized in Appendix A-A, Caltrans committed 39 construction dewatering violations of which Regional Water Board staff is aware. The maximum potential administrative civil liability for the 39 construction dewatering violations is $390,000.

B. Leaky Equipment Violations

Equipment leaks are prohibited by both the Certification and the Storm Water Permit. Condition 13 of the Certification, set forth above, prohibits the use of leaky equipment that may impact water quality. The Storm Water Permit requires the use of BMPs, specifically NS-10 and NS-13, which are set forth in Appendix C. BMP NS-10 Vehicle Equipment Maintenance states, "Leaks shall be repaired immediately or the problem vehicle(s) or equipment shall be removed

from the project site." BMP NS-13 Material and Equipment Use Over Water reiterates, "Maintain equipment in accordance with BMP NS-10, 'Vehicle and Equipment Maintenance.' If a leaking line cannot be repaired, remove equipment from over the water." BMP NS-13 goes on to require, "watertight curbs or toe boards to contain spills and prevent materials, tools, and debris from leaving the barge, platform, dock, etc."

According to the Biological Monitor, during the week of July 10, 2006, "oil, grease and other fluids leaking from machinery also needed occasional inspection and repair." The Biological Monitoring Report for the week of July 17, 2006, states, "oil and hydraulic spills/drips are also a constant problem and need frequent checking for leaks. The old heavy machinery seems to require a lot of service and repairs on site." Again, in October, 2006, the Biological Monitor lamented "oil leaks continue to occur without adequate cleanup or prevention with the standard kiddy pools and diapers. Most of the heavy equipment used on this project is old and leaks constantly. Overnight, oil spots are often not prevented and typically just covered up with soil. The worst offenders are the Manitowoc crane on the false bridge, the LINK man lift on the gravel bar, and the CAT 350. This has been brought to the attention of the RE on many occasions. The plastic 'tarps' placed under the crane constantly spills its contents onto its tracks and the bridge decking..."

According to the Engineering Diaries, leaks from equipment occurred nearly every day. However, in at least some instances the spills and leaks were addressed and cleaned up immediately.[4] Staff is not recommending the imposition of any administrative civil liability for these instances where a spill occurred, but was cleaned up and addressed immediately because the Discharger's response mitigated the effects of the spill. Nonetheless, the frequency of leaks and spills helps illustrate the scale of the problem at the Project site and sheds light on the significant potential impacts to water quality that cumulative leaks could have had.

A trestle was located directly over the River to provide access for construction equipment to cross from Highway 101 to the west side of the River. The trestle also allowed large cranes and other equipment to remain over the River for long periods of time while constructing the north bridge. From the time it was constructed and first put to use, the trestle deck had large gaps between the timbers and holes where debris and oil leaks could spill directly to the River below. On October 24, 2006, as a first management effort, Caltrans attempted to

[4] Such instances include a hydraulic oil spill on July 11, 2006, a leak from a Backhoe on the Bear Pen access road on July 17, 2006, another leak from a rental Backhoe on July 18, 2006, a ten gallon hydraulic fluid spill on July 26, 2006, a leak from a crane on July 27, 2006, a leak from the same crane again on August 4, 2006, a spill from another piece of equipment on August 11, 2006, and oil leaks on October 9, 2006.

seal the cracks in the trestle deck with a foam insulator and toe boards. The foam separated when large equipment drove across the trestle and flexed the deck. Caltrans' failed effort to seal the trestle deck does not represent a BMP because there are other more practicable solutions that would still have been cost effective. Moreover, Appendix B includes photographs from October 30, and November 1, 2006, that show the trestle with recent oil stains and the deck still with large holes and gaps.

Caltrans used plastic sheeting under the equipment to contain oil leaks. However, the Biological Monitor documented that using plastic sheeting to contain oil leaks on this Project was fraught with problems, including collection of rainwater, tears in the plastic and spills from the plastic. On January 8, 2007, the Discharger placed filter fabric across the entire trestle deck as a final management effort to attempt to resolve the lack of containment. Except in the most egregious situations, where staff has been made aware of more than one leaky equipment violation on a single day, it has treated the multiple leaks as a single violation.

As summarized in Appendix A-B, Caltrans committed 28 leaky equipment violations of which Regional Water Board staff is aware. The maximum potential administrative civil liability for 28 violations of Conditions 9 and 13 associated with the use of equipment where leaks and resulting potential water quality impacts occurred is $280,000.

C. Slag Discharge Violations

Welding and steel cutting are distinct activities with similar types of discharges, and relatively similar BMPs. According to a letter from Caltrans dated June 18, 2008, "Prior to June 2007, appropriate work location and the use of primary containment metal buckets was the BMP," to control welding slag discharges. In the same letter, Caltrans states that the BMP was amended to include "...welding and torch positioning, and work location such that sparks and slag are contained upon a surface that allows for clean-up. When an upland layout yard is not feasible, metal buckets (primary containment) and fiberglass blankets (secondary containment) are placed below the work location. The welding slag BMP was formally enacted in early to mid June 2007."

The welding slag and steel cutting discharge violations detailed in Appendix A warrant an escalating degree of liability as time went by, because the Discharger should have adjusted its BMPs as soon as it recognized a discharge was occurring. Steel cutting discharge violations in particular carry a high degree of culpability since they were the result of the contractor not using any containment. These violations are considered egregious due to the complete disregard of BMPs and of the Certification.

For these slag and steel cutting discharges, like rubbish discharges, when there is evidence of multiple discharges on a single day, staff has aggregated the violations into one discharge event. This approach was considered appropriate due to both the relative impacts of these types of discharges and the cause of these discharges being general Project management practices.

As set forth in Appendix A-C, the Discharger committed 15 welding slag and steel cutting violations of which Regional Water Board staff is aware. The maximum potential administrative civil liability for the 15 violations of Condition 9 of the Certification associated with the discharge of welding slag and steel cutting is $150,000.

D. Turbid Discharge to the River Violations

Turbid discharges to the River detailed on Exhibit A include: (1) disturbance of in stream gravels; (2) a broken pipe spanning the river that conveyed sediment laden water; (3) drilling debris without containment; (4) concrete discharges from the placement of footings; and (5) side-casting of loose soil. During the second documented heavy vehicle crossing, the equipment was not cleaned prior to crossing the River, and sediment discharge created a 400-foot plume that lasted for 30 minutes.

As summarized in Appendix A-D, the Discharger committed 20 turbidity discharge violations of which Regional Board Staff is aware. The maximum potential administrative civil liability for 2 violations of Condition 7, 15 violations of Condition 9, and 3 violations of Condition 17 due to turbid discharges to the River is $200,000.

E. Insufficient Turbidity Measurement Violations

The Certification is clear about the Discharger's obligations to monitor turbidity. The Certification's turbidity monitoring requirements were developed to determine compliance with receiving water limitations contained in the Basin Plan. Even though the Biological Monitors took some turbidity measurements, the measurements taken did not satisfy the requirements of the Certification. The 2006 Water Quality Data Table provided in the Final Biological Monitoring Report contains an endnote that demonstrates inaccurate readings were taken for turbidity for every event before September 28, 2006. Moreover, the same endnote applies equally to readings taken after September 28, 2006, because it appears that the turbidity meter needed maintenance and perhaps calibration (no calibration records were provided with the data). Without proper and documented maintenance and calibration, it is impossible to determine the accuracy of the data gathered by the turbidity meter. Also, the table does not

clearly indicate that measurements were taken within fifty feet upstream and within one hundred feet downstream of each turbidity discharge event. Nor does the data clearly indicate that monitoring continued every hour until measurements demonstrated compliance with receiving water limitations, or until turbidity levels were no longer increasing. Finally, turbidity monitoring results were not reported to Regional Water Board staff until ordered by the Executive Officer pursuant to Water Code Section 13267. The failure to report alone is sufficient noncompliance with the Condition to support a violation for each discharge event. Because the data collected is so unreliable, it has not been used for the purpose of determining compliance with Condition 19 of the Certification. In such instances where the data collected show an increase in turbidity, the data can only be used to corroborate other evidence of a turbidity discharge.

As summarized in Attachment A-E, the Discharger committed 22 turbidity measurement violations of which Regional Water Board staff is aware. The maximum potential administrative civil liability for 22 violations of Condition 19 of the Certification due to insufficient turbidity measurements is $220,000.

F. Improper Disposal of Cement Waste Violations

Condition 10 of the Certification states, "All materials used for cleaning concrete from tools and equipment, and any wastes generated by this activity, shall be adequately contained to prevent contact with soil and surface water and shall be disposed of properly." The Application for the Certification described the practices for disposal of cement wastes as, "All concrete waste and wash water will be contained." Regional Water Board staff worked closely with the Discharger during the permitting process and even delayed issuance of the Certification to ensure agreement that no concrete wastes or associated wastewater would be discharged to unlined basins. Nevertheless, Attachment A details 7 violations of Condition 9, 2 violations of Condition 10, and 7 violations of Condition 16 of the Certification due to the improper disposal of cement wastes.

As summarized in Attachment A-F, the Discharger committed 16 improper disposal of cement waste violations of which Regional Water Board staff is aware. The maximum potential administrative civil liability for 16 violations of these Conditions is $160,000.

G. Rubbish, Debris, Trash and Sediment Discharge to the River Violations.

Rubbish in the River affects the downstream beneficial uses by creating visual impacts, but it can also pose threats to wildlife and human health. Depending on the type of rubbish, it could create a barrier, foster bacteria, or introduce chemicals into the River. These violations are included in this complaint because

of their impacts on beneficial uses, and to further demonstrate the general sloppiness of construction practices and non-adherence to standards required by the Certification. As Attachment A details, in some cases, rusty I-beams were used over the River without any containment and large flakes of rust fell into the River as sediment. For these rubbish discharges, like slag discharges, when there is evidence of multiple discharges per day, the violations have been aggregated into one discharge event. This approach was considered appropriate due to both the relative impacts of these types of discharges and the cause of these discharges being general Project management practices.

As summarized in Attachment A-G, the Discharger committed 9 violations of the prohibition on discharge of rubbish, debris and trash to the River of which Regional Water Board staff is aware. The maximum potential administrative civil liability for the 9 violations of Condition 9 of the Certification due to discharges of rubbish and organic debris to the River is $90,000.

H. Individual Event Violations

Condition 13 of the Certification states, "Fueling, lubrication, maintenance...of vehicles and equipment shall be outside of waters of the United States and operation of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the United States." The Vehicle and Equipment Fueling BMP, NS-9, requires among other factors that fueling shall occur in designated and approved level-grade areas with berms and/or dikes to prevent run-on, runoff, and to contain spills. These areas are required to be at least 50 feet from drainage facilities watercourses (see Appendix C). Violations of the Stormwater Permit and Certification should yield a substantial liability for fueling equipment on the gravel bar. The maximum potential administrative civil liability for the violation of Condition 13 of the Certification detailed on Attachment A for refueling on the gravel bar of the River on August 22, 2006, is $10,000.

In August, 2006, as detailed on Attachment A, a hydraulic fluid spill occurred on the gravel bar which was cleaned up immediately. The maximum potential administrative civil liability for this discharge is $10,000.

As detailed on Attachment A, on November 3, 2006, the Discharger pushed soil over the edge of the bank to within the bankfull width. This action transported soil to a location where it could be washed by rainfall into waters of the State and, therefore violated Certification Condition 9. The maximum potential administrative civil liability for this discharge is $10,000.

The sand blasting discharge detailed on Attachment A that occurred in May, 2007, was preventable, and was the result of disregarding the BMPs, the Certification and management directives. The sand discharged to the gravel bar

was not susceptible to cleanup due to its physical nature. This sand will be transported downstream as bottom deposits during high flows and will contribute to the cumulative impacts on the beneficial uses of the River. The portion of discharged sand that landed on the slope above the gravel bar was susceptible to cleanup, but was still not cleaned up as of the Regional Water Board inspection on October 25, 2007. The maximum potential administrative civil liability for this discharge is $20,000.

The maximum potential administrative civil liability for these individual event violations, which is summarized on Attachment A-H, is $50,000.

To sum, the maximum potential administrative civil liability for the aforementioned 154 violations of the Certification is $1.54 million.

20. Storm Water Permit Violations

From August, 2006 through January 8, 2007, Caltrans violated its Storm Water Permit a total of 141 days. For 141 days, the Discharger violated its Storm Water Pollution Prevention Plan (SWPPP) BMPs by both failing to adopt and implement sufficient refueling BMPs and by failing to implement sufficient containment on the trestle deck. According to an inspection by the Discharger's personnel on August 22, 2006,

> "Fueling is occurring in the TCE near the RE's office without the use of ANY BMP's. (Emphasis original) Ladd personnel were fueling the tracked hoe and claimed they had no training or knowledge of required fueling practices and have been fueling their equipment for weeks in such a manner."

Equipment was being fueled outside of an approved fueling area and without any BMPs and had been performed in such a manner for weeks. Copies of the relevant BMPs are included in Appendix C. Since no and/or inadequate BMPs were in place during refueling "for weeks," staff conservatively estimates the maximum potential administrative civil liability for refueling activity to be $100,000 based on 2 weeks (10 working days) of violation.

On August 22, 2006, as detailed in Finding 19.H above and in Appendix A, the Discharger violated the Storm Water Permit by not implementing BMP NS-9 (See Appendix C) when fueling multiple pieces of equipment on the gravel bar. The maximum potential administrative civil liability for fueling on the gravel bar in violation of the Storm Water Permit is $10,000.

On September 20, 2006, one of the Discharger's inspectors "observed [a] manlift and generator on [the] temp[orary] trestle/working pad by [the] river bed without drip protection at [the] north bridge work area. Drip pans shall be placed under all

vehicles and equipment placed on docks, barges, or other structures over water bodies as per bmp manual NS-13."

The trestle deck was inadequately contained for the entire 2006 construction season. The first attempt at creating a watertight trestle occurred on October 24, 2006. However, photographs (061030-02,-05, -08, -09, -10, -11, -12, 061101-09) provide evidence that the trestle deck was inadequately contained after this date and that the effort to seal the deck with foam on October 24, 2006, was not an effective BMP. The final BMP was not implemented until January 8, 2007, when the Discharger placed filter fabric over the entire trestle. Since the trestle deck was inadequately contained for the entire season, 130 days of violation are assessed from September 1, 2006, to January 8, 2007, with a maximum potential administrative civil liability for insufficient trestle deck containment of $1,300,000.

The maximum potential administrative civil liability for Storm Water Permit violations is $1,410,000, which includes 11 days of equipment fueling BMP violations, and 130 days of insufficient trestle deck containment BMP violations.

21. In determining the amount of any administrative civil liability, the Regional Water Board is required to take into account 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 on its ability to continue business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting for the violation, and other matters that justice may require. At a minimum, Water Code section 13385, subdivision (e) requires that liability be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violations. The following considerations apply generally to all of the specific categories of violations and corresponding recommended administrative civil liabilities discussed specifically in paragraph 22, below:

a. **Nature, Circumstances, Extent and Gravity of the Violations:**
The United States Environmental Protection Agency established a total maximum daily load ("TMDL") for the South Fork Eel River in 1999 for sediment and temperature. The TMDL confirms the adverse effects to the beneficial uses of the South Fork Eel River from sediment, and that discharges of sediment have a deleterious effect on the River.

The South Fork Eel River is within the habitat range of coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*Oncorhynchus mykiss*), each listed under the federal Endangered Species Act or the California Endangered Species Act. Populations of

salmonids in California have declined substantially in the last century. Elevated sediment loads are known to adversely affect salmonids. Sediment delivery to watercourses is known to have substantially increased in this watershed as a result of human activities. Beneficial uses related to aquatic life, including salmonids, are the most sensitive to sediment discharges. Accordingly, staff considers the nature, circumstances, extent and gravity of all the violations relating to sediment discharges, turbidity and the failure to measure turbidity to be very serious.

b. **Susceptibility to Cleanup or Abatement and Voluntary Cleanup Efforts Undertaken:** Most discharges to the river were not susceptible to cleanup and, therefore, this factor is not applicable to reductions in administrative liability for such discharges. Caltrans has not submitted sufficient information to show that any of the alleged discharges were cleaned up or abated in a timely manner. Where staff considers this factor relevant to a reduction in the proposed penalty amount, it is discussed specifically in paragraph 22, below.

c. **Violator's Ability to Pay:** Staff understands that the Confusion Hill Bypass Project cost between $70 million and $77 million to construct. The maximum potential civil liability is small in comparison to the cost of the Project. Staff has no information to indicate that the proposed administrative liability would jeopardize Caltrans' ability to remain in business, or that it would be unable to pay the proposed administrative civil liability.

d. **Prior History of Violations:**

Confusion Hill Bypass Project Violations

The violations identified in the November 27, 2006, NOV came to staff's attention through reports and photographs provided by the California Department of Fish and Game ("CDFG"). Caltrans had not reported the violations to the Regional Water Board.

Other Relevant North Coast Region Violations

On November 1, 2005, the Regional Water Board issued a Cleanup and Abatement Order to Caltrans for the Dry Creek Bridge replacement project. Caltrans violated the Water Quality Certification issued for the project by allowing equipment staging, material stockpiles and refuse disposal within waters of the State without a permit. Staff discovered the violations of the Water Quality Certification from a citizen complaint. Caltrans had not reported the violations.

On December 28, 2005, the Regional Water Board issued an Administrative Civil Liability Complaint to Caltrans for violations of the Van Duzen River Bridge replacement project Water Quality Certification. The violations included turbid discharges to the Van Duzen River, inadequate BMPs to protect water quality, leaks and spills of petroleum products within waters of the State, the unauthorized discharge of fill materials to waters of the State, failure to comply with the authorized work schedule required to protect wildlife and endangered species, and failure to report these violations as required by the Water Quality Certification. Caltrans paid an administrative civil liability of $101,000.

On April 7, 2006, the Regional Water Board issued a California Water Code section 13267 Order to Caltrans to require the submittal of information related to the disposal of landslide material into the South Fork Eel River at Confusion Hill. Caltrans failed to apply for a permit for these activities or to notify the Regional Water Board of the discharges until staff discovered the sidecasting activities. The Regional Water Board received a complaint from a downstream water supply system that water quality monitoring revealed anomalous turbidity readings in the South Fork Eel River that may have been related to the sidecasting activities.

On May 30, 2007, the Regional Water Board issued Caltrans a Notice of Violation for the Hardscrabble Creek Bridge Replacement project after learning that Caltrans had removed several times more trees from the project site than had been specified in its Water Quality Certification. Although in a subsequent site inspection, Regional Water Board staff did not observe any apparent adverse impacts to water quality resulting from the unauthorized tree removal, the tree removal constituted a major deviation from the Water Quality Certification and required prior authorization by the Regional Water Board Executive Officer.

On March 6, 2008, the Regional Water Board adopted Administrative Civil Liability Order No. R1-2008-0008 in the matter of Caltrans Confusion Hill project. The order assessed a total civil liability of $20,000 for one day of discharge of 170 gallons of a sediment slurry to the River and four days of failure to submit a written report of the discharge.

On September 30, 2008, the Regional Water Board Assistant Executive Officer issued Administrative Civil Liability Complaint Number R1-2008-0054, assessing a total penalty of $60,000 for four violations of the Hardscrabble Creek Bridge Replacement project Water Quality Certification and Storm Water Permit including two 1,000 gallon discharges, failure to follow the project description and failure to use adequate BMPs. After issuance of the complaint, Caltrans supplied information that reduced the maximum potential

penalty to $40,000. Caltrans and Staff are currently in settlement negotiations for the Hardscrabble Creek complaint.

e. **Degree of Culpability:** Staff worked closely with Caltrans on the Confusion Hill Bypass Project, attempting to ensure compliance with the Water Quality Certification and the Storm Water Permit by clarifying requirements in the Application and Certification. Staff has spent considerable time providing assistance to Caltrans on the Project by amending the Water Quality Certification at Caltrans' request, performing inspections, and providing guidance for compliance by email and telephone. Staff also issued two written NOVs and a California Water Code Section 13267 Order to address previous violations associated with the Project.

   The Discharger easily could have avoided many of the violations included in this Order had it simply used adequate BMPs and timely reported the violations. Caltrans was warned in the two NOVs that many of the BMPs utilized at Confusion Hill were inadequate and had resulted in violations of the Water Quality Certification and Storm Water Permit, but it failed to take corrective measures.

f. **Economic Benefit:** Staff assumes that Caltrans and/or its contractor received substantial economic benefit by failing to implement adequate BMPs, but believes that the proposed $1.5 million administrative civil liability will capture the benefit gained.

g. **Other Matters that Justice May Require:** Staff has expended and continues to expend considerable time attempting to bring the Confusion Hill Bypass Project into compliance with the Water Quality Certification and Storm Water Permit and address violations. Staff costs for this enforcement action are estimated to be $70,182. Staff respectfully requests that the Regional Water Board award it these costs of enforcement in addition to the proposed administrative civil liability.

22. Administrative Civil Liability Recommendation

The prior history of violations for the Project includes one event that is not included in this complaint. That discharge event occurred on May 4, 2007, and has already been the subject of an enforcement action. On March 6, 2008, the Regional Water Board adopted Administrative Civil Liability Order No. R1-2008-0008, assessing a $20,000 total administrative civil liability; $10,000 for a single event pipeline discharge of turbid water onto the gravel bar, and $10,000 for failure to report on time. The significant number of violations detailed in Appendices A and B and described in paragraphs 19 and 20 comprise a long and continuous history of violations at the Project site.

A. Recommended Liability for (39) Construction Dewatering Violations.

The nature, circumstances, extent and gravity of the construction dewatering violations described above and summarized on Attachment A-A warrants a substantial penalty. Those construction dewatering discharge violations to Isolated Pool B should never have occurred since the requirement to dewater to basins at least 100 feet from the River is clear and unambiguous. The nature and extent of the discharge violations directly to the gravel bar within 15 feet of the River are similarly egregious. The silty water discharge that made its way to the backwater pool, discoloring the water, is also clearly forbidden by the Certification. In each of these cases, the culpability of the Discharger is also very high since the permit requirements are clear, yet were repeatedly violated. It appears that, rather than replace Isolated Pool B with a pool located the requisite 100 feet away from the River, the Discharger intentionally made the expedient economic decision to save time and money and discharge directly to the gravel bar a mere 15 feet from the River channel. All of the construction dewatering violations actually resulted in discharges of wastes to waters of the State. All the construction dewatering violations appear to have provided significant economic benefit for the Discharger in terms of time saved. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Because of the very serious nature, circumstances, extent and gravity of these violations, because of actual impacts to waters of the state from these violations and because of the high degree of culpability associated with these violations, staff recommends the maximum administrative civil liability of $390,000 be imposed.

B. Recommended Liability for (28) Leaky Equipment Violations.

The nature, circumstances, extent and gravity of the leaky equipment violations was pervasive at the Project site. The Biological Monitor reports that oil and hydraulic spills and drips were "a constant problem" at the Project site. Applicable BMPs are clear and unambiguous, and require that leaky equipment be repaired or removed from the Project site, yet the Discharger continued to use the same offending equipment throughout the course of the Project. Accordingly, the Discharger's culpability also warrants a high civil liability here as it clearly chose to utilize dilapidated, leaky equipment, rather than remove it from the site and replace it. Likely, the Discharger gained a substantial economic advantage from not replacing its leaky equipment, particularly the Manitowoc crane, the LINK man lift and the CAT 350. The constant leaking was brought to the Resident Engineer's attention by the Biological Monitor on many occasions, but the equipment was never replaced. Because proper BMPs were not installed on the trestle deck until very late in the Project, it is likely that many of the leaky equipment dischargers reached waters of the State. It appears from the record

that the Discharger made at least occasional efforts to clean up leaky equipment discharges when they occurred. Although leaks were a constant problem, these efforts do warrant a reduction in the recommended administrative civil liability from the statutory maximum. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Because leaky equipment violations were pervasive, because the Discharger could have prevented them, but chose not to replace leaky equipment, and because discharges of hydraulic fluid and fuels likely reached waters of the State in spite of efforts to address and clean up spills immediately, staff recommends an administrative civil liability for the 28 leaky equipment violations of $150,000.

C. Recommended Liability for (15) Slag Discharges from Welding and Steel Cutting.

The nature, circumstances, extent and gravity of slag discharges from welding and steel cutting is that they occurred frequently and were unaddressed by the Discharger even after the Regional Water Board's inspection on October 6, 2006. The BMPs implemented for slag discharges prior to June, 2007, were inadequate and do not represent MEP. The Discharger is highly culpable because of its disregard of BMPs. While slag discharges are not as toxic or harmful to waters of the State as the construction dewatering and leaky equipment discharges, staff considers slag discharges to be more egregious than rubbish and debris discharges. In some instances when welding slag was discharged to the gravel bar, the material may have been susceptible to cleanup; in other instances, the slag was discharged directly to the River and was not susceptible to cleanup. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Accordingly, staff recommends an administrative civil liability of $50,000 for the 15 slag discharges.

D. Recommended Liability for (20) Violations from Turbid Discharges to the River.

a. The nature, circumstances, extent and gravity of these violations must be viewed in light of the fact that the River is on the 303(d) list of water bodies impaired for sediment, and is spawning and rearing grounds for Coho salmon, Chinook salmon and Steelhead, each listed under the federal or California Endangered Species Act. Turbid discharges to the River degrade its beneficial uses by directly contributing to a preexisting impairment and degrading spawning grounds. The turbid discharges have a high degree of toxicity with respect to the endangered species occupying the River. It appears from the record that many of these discharges could have been avoided, and therefore staff recommends a high culpability factor be applied to these violations. For example, the

January 5, 2007, drilling wastewater and stormwater discharge through the broken pipe could have been easily avoided by more careful draining and cleaning the pipeline, or by capping the pipeline before it was pulled across the South Fork Eel River, but the Discharger made neither effort. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Staff considers these violations to have serious impacts to water quality, which warrant a high administrative civil liability. Accordingly, staff recommends an administrative civil liability for the (20) violations from Turbid Discharges to the River of $150,000.

E. Recommended Liability for (22) Insufficient Turbidity Measurement Violations.

The nature, circumstances, extent and gravity of the insufficient turbidity measurements warrant a substantial penalty because they hinder compliance determination. Because turbidity measurement data was not appropriately gathered and because that data which was gathered is unreliable, the Regional Water Board was deprived of the opportunity to monitor and regulate the Project's impacts on water quality. The Discharger is directly responsible for taking these measurements and bears a high degree of responsibility for assuring that they are accurate and complete. Without having accurate and complete data measurements, the Regional Board staff cannot determine whether the turbidity events caused substantial detriment. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Because of the Discharger's failure to take accurate and complete measurements, the Regional Water Board's regulatory program could not be implemented, and staff considers these violations to be very serious. Accordingly, staff recommends an administrative civil liability of $110,000 for 22 violations from insufficient turbidity measurements.

F. Recommended Liability for (16) Improper Disposal of Cement Waste Violations.

The nature, circumstances, extent and gravity of the cement waste discharge violations indicates a high liability because it was made clear to Caltrans during the Certification and Application process that cement wastes were not to be discharged to the River. The Discharger also has a high degree of culpability due to its disregard of clearly defined practices for the disposal of cement wastes. Also, the characteristic high alkalinity of cement waste is very toxic, particularly to the endangered species known to occupy the River. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Because of the nature of the discharge of cement wastes to a 303(d) listed water, because of the clear directive to avoid the discharge of cement wastes to the River and because of the high toxicity of

cementitious discharges, staff recommends a $160,000 administrative civil liability for the (16) cement waste discharge violations.

G. Recommended Liability for (9) Days of Rubbish and Debris Discharge Violations.

Rubbish and debris discharges are not toxic, and do not present a substantial impairment of beneficial use, nor a significant threat to water quality. The Caltrans engineering diaries, which were submitted to the Regional Water Board by CDFG, indicate that a punch list was developed to clean up the accumulated debris on the gravel bar. Although the cleanup efforts may have mitigated some of the potential impacts, the discharges were in violation of the permits and should not have occurred in the first place. Furthermore, the accumulation of debris indicates that the cleanup efforts were not performed in a timely manner. Accordingly, staff considers them to be minor violations, and it recommends a $10,000 administrative civil liability for the (9) days of rubbish and debris discharge violations.

H. Recommended Liability for (5) Individual Event Violations.

The equipment fueling that occurred on the gravel bar in August 2006 was in direct violation of the Certification and Storm Water Permit, was out of compliance with a standard BMP and created a potential impact to surface waters. Accordingly, staff considers the nature, circumstances, extent and gravity of this violation, as well as the Discharger's culpability and the toxicity of the discharge to warrant a high liability. Staff does not believe any of the remaining statutory factors weigh in favor of a reduction in the proposed administrative civil liability. Accordingly, staff recommends that the maximum liability of $10,000 be imposed for the violation associated with equipment refueling on the gravel bar.

The hydraulic fluid spill on the gravel bar in August 2006 was an accident and staff assigns a low degree of culpability for it. Also, it was cleaned up immediately and therefore likely had a low impact on water quality. Accordingly, staff recommends a $1,000 liability for the single violation associated with this event.

When soil was pushed over the bank to within the bankfull width of the River in November, 2006, it was placed in a location where it was likely to be discharged by rainfall to waters of the State. Because pushing the soil over the bank was intentional, and because this soil could have been cleaned up before being discharged to waters of the State, but was not, staff considers this violation to warrant the statutory maximum liability of $10,000.

The sandblasting discharge in May 2007 was in direct violation of the Certification. No BMPs were in place before the discharge and it directly contributed to the preexisting sediment impairment of the River. The violation was intentional and carries a high degree of culpability. Accordingly, staff recommends at $20,000 civil liability for the two violations arising from the May, 2007 sandblasting discharge.

A total administrative civil liability of $41,000 is recommended for the six individual event violations.

I. Recommended Liability for (141) Days of Violation of the Storm Water Permit

This Complaint describes 141 days of violations of the Storm Water Permit and SWPPP, including 11 days of improper fueling BMPs and 130 days of insufficient containment on the trestle deck. For weeks, construction workers were refueling equipment in forbidden areas without any training or knowledge of required fueling practices. The Discharger's level of culpability for these violations is considered extremely high. It was the Discharger's sole responsibility to educate and train its workforce before undertaking Project activities, particularly refueling activities that could result in catastrophic fuel spills or discharges and a direct and substantial impact to water quality. The same analysis of the culpability factor applies to containment on the trestle BMPs, which were not addressed until January 8, 2007. Insufficient containment also represented a direct potential impact to water quality. However, because it is not clear whether these violations resulted in actual discharges to waters of the State, nor the extent to which they may have impaired those waters, staff recommends an administrative civil liability of $450,000.

STAFF RECOMMENDS A TOTAL ADMINISTRATIVE CIVIL LIABILITY FOR THE VIOLATIONS ALLEGED IN THIS COMPLAINT OF **$1,511,000** OUT OF A STATUTORY MAXIMUM OF $2,950,000.

Table 1 below summarizes the recommended administrative civil liability amounts for each type of violation:

Table 1: Summary of Administrative Civil Liability

Permit	Violation Type	# Violations	Maximum Potential Liability	Proposed Penalty
Certification	Construction dewatering	39	$390,000	$390,000
Certification	Leaky equipment	28	$280,000	$150,000
Certification	Slag discharges	15	$150,000	$50,000
Certification	D. Turbid Discharges to	20	$200,000	$150,000

Permit	Violation Type	# Violations	Maximum Potential Liability	Proposed Penalty
	the river			
Certification	E. Insufficient turbidity measurements	22	$220,000	$110,000
Certification	F. Improper disposal of cement wastes	16	$160,000	$160,000
Certification	G. Rubbish and debris discharges	[illegible]	$90,000	$10,000
Certification	H. Individual events	5	$50,000	$41,000
Storm Water Permit	SWPPP BMP: Containment	141	$1,401,000	$450,000
		Total →	$2,950,000	$1,511,000

23. The issuance of this Complaint is an enforcement action to protect the environment and is, therefore, exempt from provisions of the California Environmental Quality Act (Public Resources Code sections 21000 et seq.) pursuant to title 14, California Code of Regulations, sections 15308 and 15321, subdivision (a)(2).

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Luis G. Rivera
Assistant Executive Officer

August 13, 2009

09_0095_ACLC_CaltransConfusionHillDischarge_KVG

Appendix A
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
H	8/17/2006	**Hydraulic fluid spill** on gravel bar[1]	060817-01	9	$10,000
A	08/21/2006	**Construction Dewatering:** Photo of discharge to Isolated Pool B. "4. A temporary sedimentation basin has been constructed and used within 100 feet of the live stream channel."[2]	060821-01	9, 12, 17	$30,000
H	8/22/2006	**Equipment Fueling on Gravel Bar:** "1. Equipment is being fueled on the riverbar at the north bridge. Our permit with the Regional Water Quality Control Board explicitly states that fueling must only occur outside of waters of the United States. At the PDT James Hamm acknowledged that they were fueling a compressor, generator, man-lift and backhoe."[2]		13	$10,000
B		**Leaky Equipment:** "2. A discharge of oil occurred from the backhoe directly onto the riverbar. Equipment that has minor leaks must not be allowed to operate in sensitive areas such as the riverbar. This discharge should have been reported to the RE and cleaned up immediately. There were no BMP's in place to prevent the discharged oil from reaching the riverbar."[2]		9, 13	$20,000
B	8/29/2006	**Leaky Equipment**: Oil leak on gravel bar[2]	060829-01	9, 13	$20,000
F		**Improper Disposal of Cement Wastes:** "On August 29, during placing a concrete in a corrugated steel pipe within the river, the water level rose and to prevent it from overflowing into the river, the water was pumped to the dewatering basin."[2]		9, 17	$20,000
F		**Improper Disposal of Cement Wastes:** "After placing the concrete seal course, the contractor cleaned the hopper, tremie and shovels in a footing excavation in the river bar."[2]		9, 10, 17	$30,000
D,E		**Turbid Discharge to River** from isolated pool B through gravel bar; No turbidity measurements were taken "Seeping through bar. After 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		9, 19	$20,000
A		**Construction Dewatering to Isolated Pool B:** "... 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		9,12,17	$30,000
F	8/30/2006	**Concrete Washout to unlined area**[2]	060830-01 060830-02	9, 17	$20,000
A		**Construction Dewatering to Isolated Pool B:** "... 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		9, 12, 17	$30,000
D,E		**Turbid Discharge to River** from isolated pool B through gravel bar; No turbidity measurements were taken "Seeping through bar. After 8 hours of pumping from coffer dams set in bar to Isolated Pool B"[1]		7, 9, 19	$30,000

A	8/31/2006	**Construction dewatering** pumped into Isolated Pool B. "After 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]	060831-01	9, 12, 17	$30,000
A		**Construction dewatering** directly to gravel bar – "After this event the water was not pumped into the isolated pool but was pumped directly onto the gravel bar adjacent to the cofferdams. The gravel bar was at a minimum about 15 feet from the river, but the plume did not appear to go into the river."[2]		9, 12, 17	$30,000
E	9/1/2006	**Insufficient Turbidity Measurements:** Sediment plume lasted two minutes and persisted for approximately 5 minutes 20-30 feet downstream were caused by placement of gravel bags for placement of trestle footings.[7]		19	$10,000
D,E		**Cement Discharge to River:** "Temporary plume of fine sediments from cement seeping out bottom when seal cement poured."[1,2]	060901-01	9, 19	$20,000
A	9/5/2006	**Construction Dewatering:** "ASR NOTE: ...I overheard Superintendent James Ham tell his employee to 'shut off the pump, you're pumping out too much water.' ...the pump was discharging to...Mr. Ham's feet on the outside of B5 cofferdam with rock saturated and no standing water. I also did not see any equipment to verify pH levels or any muratic acid to lower pH levels."[3]		9, 12, 17	$30,000
E	9/6/2006	**Insufficient Turbidity Measurements:** 1st Heavy Vehicle Crossing caused a 200-foot plume for 25 minutes. No turbidity measurements were taken.[2]	060906-01	19	$10,000
D,E	9/7/2006	**Turbid Discharge to River** "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area. One was from dewatering into a settlement basin and after about 8 hrs of pumping some turbidity was noticed emanating from the gravel bar."[3]		7, 9, 19	$30,000
A		**Construction Dewatering** to Isolated Pool B: "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area...The other was during the seal course placement within the two CSP's for the trestle bent 3 foundations...A pump was running to lower the water level inside the CSP's, which was ineffective until the water level rose due to the placement of the concrete seal course. Pumping was halted after the conc placement started. The water was pumped to a settlement basin against the river bank."[3]		9, 12, 17	$30,000
D,E		**Turbid Discharge to River:** "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area...The other was during the seal course placement within the two CSP's for the trestle bent 3 foundations...The conc was placed with a tremie pipe and during the first half yard of conc placement a small discharge was noticed... The discharges dissipated quickly		9, 19	$20,000

		within about 50' (Rt CSP) to 100' (Lt CSP) as near as I could tell. Although there was some discussion of measuring the turbidity, Brad mentioned that it didn't appear to him that there was a 20% increase at 100'."[3]			
F	9/8/2006	**Cement Discharge:** "...the water was tested for pH, treated with muriatic acid then pumped into the settlement basin. I estimate about 25 gal was pumped from the Lt CSP and perhaps 50 gal pumped from the Rt CSP based on the conc placed."[3]	060908-01 060908-02	9, 17	$20,000
D,E	9/9/2006	**Turbid Discharge to River:** Sediment Plume from placement of trestle footings. Improper BMPs and no turbidity measurements were taken.[2] "RE Ron den Heyer came to my office with Carl Page and a photo of turbidity from drilling debris in the water around trestle foundation 4 Lt...Mitch...said that MCM was using a baffle to keep anchor rod hole cleanout debris within the 6' dia CSP...He also has told them previously that any debris on the planks over the CSP's had to be cleaned off into the CSP's."[3]	060909-01 060909-02	9, 19	$20,000
B		**Leaky Equipment:** Oil stained gravel on gravel bar photographed by Biological Monitor.[2]	060909-03	9, 13	$20,000
A	9/11/2006	**Construction Dewatering:** "Note: Mitch Shands on site intermittently some pumping of H2O out of CMP was done. This water was tested for pH per Mitch – was ~ same pH as the active channel."[3]		9, 12, 17	$30,000
F	9/13/2006	**Cement Discharge:** Improper disposal of cement wastes – "Workers dumped cement refuse onto edge of gravel bar."[2]	060913-01	9, 17	$20,000
C	9/15/2006	**Welding Slag:** "Env Issues: Span 4 is over the active channel - noticed some minor slag dropping into channel ..."[3]		9	$10,000
G	9/18/2006	**Rubbish Discharge to River:** Rubbish in river (wood waste and rope).[2]	060918-01 060918-02	9	$10,000
C	9/21/2006	**Welding Slag Discharge to River:** "When the next weekly biologic monitor report comes out on Monday it will contain information regarding a discharge of welding slag and/or wire into the South Fork Eel River during construction of the trestle. This discharge is required to be reported to the Regional Water Quality Control Board (RWQCB). There were no BMP's in place to help prevent the discharge...The contractor attempted to prevent further discharge by placing a 5-gallon bucket of water under the welding locations. The buckets were only partly effective due to windy conditions. Please inform Justin Porteous, MFC, to investigate the incident and file an Attachment K as required by the SWPPP."[2]	060921-01	9	$10,000
G	9/22/2006	**Rubbish Discharge to River:** Rubbish and organic debris in river (wood scraps, sawdust, and trash)[2]	060922-01 060922-02 060922-03 060922-04	9	$10,000
		"Trestle Construction. The MCM Trestle Construction Operation continues to discharge sawdust, cigarette	060922-05 060922-06		

		recycled I-beams, welding rods, oily rags and gloves, cut wood pieces, ...into the South Fork Eel main stem on a daily basis."[1]			
D,E		**Turbid Discharge to River:** 2nd Heavy Vehicle Crossing caused a 400-foot plume visible for 30 minutes. Insufficient turbidity measurements taken – Horiba Meter not accurate. "Equipment cleaning was a pro-active measure taken for the first and third crossings, but it appeared to have not been done for the second crossing event witnessed by B. Norman...This was apparent by the much larger amount of dirt on the equipment during the second crossing compared to the other two crossings. No 'staging of the equipment' occurred immediately prior to the September 22 crossing...Note mud was still caked on after going through the clean cobble river bed."[2]	060922-07 060922-08 060922-09 060922-10 060922-11 060922-12 060922-13 060922-14 060922-15	9, 19	$20,000
B	9/26/2006	**Leaky Equipment:** Photograph of dirt road with many oil stains.[1]	060926-01	9, 13	$20,000
G		**Rubbish Discharge to River:** Large flakes of rust and wood waste in river[1]	060926-02 060926-03 060926-04 060926-05 060926-06	9	$10,000
G	9/27/2006	**Rubbish Discharge to River:** Rust dropped into north-side main stem Eel River[1]	060927-01 060927-02 060927-03 060927-04	9	$10,000
B		**Leaky Equipment:** "Oil leaks above river on wooden trestle. The large trestle crane had this problem regularly."[1] Photograph by Biological Monitor of oil stains on the trestle deck with rags and absorbent pads soaked with oil.[1]	060927-05	9, 13	$20,000
E	9/28/2006	**Insufficient Turbidity Monitoring:** In stream prep-work: "Sediment plume caused by workers in the channel moving gravels off bedrock to set CMP 'footings cofferdams'" Duration: 4 hours in pulses; Length 100 Feet; Turbidity: (4,5,5,4,3) In Plume / (0,0,..., 0) Upstream)[1,2] The turbidity measurements were not taken as required by the Certification making difficult the determination of water quality impacts.	060928-01 060928-02 060928-03	19	$10,000
D,E	9/29/2006	**Cement Discharge:** Cement in mainstem from concrete footing seal pour. "Sandbags were then placed on the outside perimeter only, no sandbags were placed on the inside of the CMP. CONTR began placing seal coarse concrete @ 1701 hrs... CONTR began by placing the seal coarse in the #3 FTG. During the placement, it was apparent that the contractor did not have a good seal around the CMP. Concrete escaped from the CMP leaving a plume in the river approx 150'-0 in length."[2] Insufficient turbidity measurements.	060929-01 060929-02 060929-03	9, 19	$20,000
D,E		**Cement Discharge:** Silt in mainstem from cement footing seal pour.	060929-04 060929-05 060929-06	9, 19	$20,000

"During the placement for the #4 FTG, the CONTR's

		tremie on the hopper came off. While trying to reattach the tremie, the CONTR worked around the CMP standing on the sandbags. A plume was evident but how much was concrete or how much was alga was hard to determine."[2]			
F		**Cement Discharge:** Improper disposal of cement wastes on gravel bar "After the tremie was reattached, the CONTR resumed placing the seal course, To prevent the water from overflowing the CMP, the water (untreated) was pumped onto the gravel bar, approx 60'-0 from the rivers edge."[2]	060929-07 060929-08 060929-09	9, 17	$20,000
F		**Cement Discharge:** "Once the seal coarse operation was completed, the CONTR cleaned the hopper, tremie and shovels in the glory hole for 2-7's FTG. This was also observed by SR Garry Tolen."[3]		9, 10, 17	$30,000
E	10/2/2006	**Turbid Discharge to River:** 3rd Heavy Vehicle Crossing caused a plume. Turbidity measurements show an increase from 0-2.0 NTU 100 feet down stream. "At 3:24 pm, the turbidity measurement 100-feet below the crossing area maintained a reading of 2.0 NTU's on the Horiba U-10 water quality meter."[2]	061002-01	19	$10,000
A	10/3/2006	**Construction Dewatering:** "A little after 1100 Mitch Shands called to inform me the discharge from the dredge wasn't far from the steel plate cofferdam. I said it was supposed to be 100 ft from the river but we were allowing up against the bedrock because we couldn't get 100 ft. He said it was about 20 ft from the bedrock. He said Francisco Cordero, labor foreman, said they didn't have any more hose. I said that wasn't our problem and I'd come out to take a look."[2]		9, 12, 17	$30,000
B	10/5/2006	**Leaky Equipment:** "Oil and diesel stains on the gravel bar were ID for cleanup..."[3]		9, 13	$20,000
B	10/6/2006	**Leaky Equipment:** RWB Inspection - Backhoe in gravel bar with fluid leakage, Compressor and Crane with insufficient BMPs. "Staff observed a backhoe on the gravel bar near the north bridge that had excessive fluid leakage. Absorbent rags were stuffed into several crevices to control the leakage, however; that backhoe was not in an adequate condition for continued use near any river or gravel bar."[4]	061006-01 061006-02 061006-03 061006-04	9, 13	$20,000
C		**Welding Slag Discharge:** RWB Inspection Welding on temporary trestle and over river channel, debris falling into water. "Staff observed welding on the temporary trestle and over the river channel. Welding slag was observed to be falling directly into the water and the adjacent gravel bar.[6] "Molten slag was observed dripping into the river at 2:20 pm, using no bucket to catch the excess. This activity was terminated, but not before noticeable amounts of slag, small sheets of rusty metal, welding rods, and other debris had accumulated in the river channel."[3]		9	$10,000

C		**Steel Cutting:** RWB Inspection – "Staff observed that rebar had been cut with a torch on the gravel bar without any containment. Steel slag and debris was deposited on the gravel bar within 150 feet of the high water mark, and where it may be washed into the river...Staff also observed steel being cut in the same area on the gravel bar. A small piece of plastic was placed under the saw; however, the plastic was not containing all the steel cuttings."[4]	061006-05	9	$10,000
A		**Construction Dewatering:** "During our inspection staff observed use of a sedimentation basin on the gravel bar near the north bridge. Staff were informed that the same basin was used to dispose of water that contacted wet cement, as well as for the dewatering activities that caused the turbidity discharges described above."[4]	061006-01	9, 12, 17	$30,000
A	10/7/2006	**Construction dewatering** disposal on gravel bar[1, 2] "Dewatering of the footings on the gravel bar caused some concern and a mini-memo was delivered to Mr. Hamm at MCM. Silty water was not being deposited in the approved area 70-feet away from the river."[2]		9, 12, 17	$30,000
D,E		**Turbid Discharge to River:** First Event – Plume noted during attempt to install last two footings for falsework trestle. No turbidity measurements taken. "After the CONTR made 3 passes the silt began to escape thru the silt fence. CONTR stopped digging and placed more filter sandbags. The plume dissipated in about ½ hr."[2] "Caltrans admits the presence of the silt fence in the river, intended to be containment for the anticipated release of turbid waters from in-stream excavation of cofferdam spoils was not the proper BMP."[8]	061007-01 061007-02	9, 17, 19	$30,000
D,E		**Turbid Discharge to River:** Second Event – Silt from cement CMP footing seal pour. No turbidity measurements taken. "The CONTR then made a 2nd attempt at excavating the footings. After about 6 passes, the silt again began to escape and leave a plume...Mr. Ham stated that the plastic wouldn't work, that the water is coming up thru the rock (Bottom) and using bladder bags would not give him enough room to work..."[3]		9, 17, 19	$30,000
D,E		**Turbid Discharge to River:** Third Event – "...Mr. Ham then stated that he was at least two thirds complete and everyone from the agencies are probably home now so he was going to go back down and complete the remaining excavation work...CONTR's SUBMITTAL IS INCOMPLETE AND HAS NOT BEEN APPROVED! CONTR IS PERFORMING WORK AT HIS OWN RISK."[3]		9, 17, 19	$30,000
B	10/11/2006	**Leaky Equipment:** "Inspections of machinery identified two problems. The IR compressor leaks excessively, and diapers and plastic sheets have been employed for a long		9, 13	$20,000

		time but the leaks increase. The second unidentified leak from the Manotowic crane grows worse. Plastic sheeting catching oil and hydraulic leaks have also spilt onto the false bridge deck on several occasions."[1]			
B	10/12/2006	**Leaky Equipment:** "Oil and diesel stains on the gravel bar were identified for cleanup... I discovered a large oil stain under one piece of machinery at noon, not cleaned up by 1:30, raised concerns...keeping the gravel bar clean is a constant battle to control the accumulation of debris, oil, and hydraulic fluids."[1] Photo of an oil spill under the backhoe.[1] Photo of an air compressor with plastic sheeting spilling its contents onto the river bar.[1] Photo of leaking crane on trestle with plastic sheeting spilling its contents.[1]	061012-01 061012-02 061012-03	9, 13	$20,000
E	10/14/2006	**Insufficient Turbidity Measurements:** Two discharges during construction of in-stream footings. "The area around the footing to be excavated was isolated from active flow with the use of a fabric material, fence posts, and sand bags. This initial attempt produced a notable plume outside the containment area, and was ceased until improvements were made. The second attempt proved ineffective due to subsurface flow through the isolation area and porosity of the fabric." No turbidity measurements were taken.[1]		19	$20,000
D	10/16/2006	**Cement Discharge:** "At 17:10, when pour concrete at 1 footing by the river (bent 2-4), there were miner leak [sic]."[3]		9, 19	$20,000
E		**Insufficient Turbidity Measurements:** In-channel prep-work for installation of steel containment shroud. Hand work resulted in 8'x3' plume for 15 min. Insufficient turbidity measurements.[1]	061016-01	19	$10,000
G		**Rubbish Discharge to River:** Rust on I-beam uncontained over river, and wood waste and trash in the river.[2]	061016-02 061016-03 061016-04 061016-05 061016-06 061016-07 061016-08 061016-09 061016-10	9	$10,000
C	10/17/2006	**Steel Cutting Discharge:** "Welding slag was discharged to the river and cleaned up immediately"[1] "Found a welder attaching angles to the cofferdam template with no attempt to catch splatter/slag. I told them they were not allowed to drop material into the water and they hung a bucket under the work which caught about half of the falling material."[3]	061017-01 061017-02 061017-03 061017-04 061017-05 061017-06	9	$10,000
C	10/18/2006	**Steel Cutting Discharge:** Steel Cutting on gravel bar without containment[1] "Garry came to jobsite and pointed out that the welding slag remaining on the riverbed needed to be cleaned."[3]	061018-01	9	$10,000

E		**Insufficient Turbidity Measurements:** Sheet piles were pounded into place, resulting in a 25'x6' plume for 20 min during cofferdam installation. Insufficient turbidity measurements.[1]	061018-02	19	$10,000
C	10/20/2006	**Welding Slag** on gravel bar: Photograph[1]	061020-01	9	$10,000
D;E		**Cement Discharge to River:** Concrete seal course pour resulted in a 2'X4' plume for 5 min. No turbidity measurements[1]	061020-02	9; 19	$20,000
C	10/24/2006	**Steel Cutting** going into river[1] – "I observed a worker cutting plate steel with a cutting torch on the river bed."[2]	061024-01 061024-02 061024-03 061024-08	9	$10,000
G		**Rubbish Discharge to River:** "Large flakes of rusty metal from I-beams and slag from continuous welding accumulated on the gravel bar. These were temporarily cleaned up, but those in the river remain."[1]		9	$10,000
G	10/25/2006	**Rubbish Discharge to River:** "A punch list was developed to return the gravel bar to its natural state by the end of the month. They included removing various debris from Split-set and welding rods around railing and wood scraps, sawdust, plastic and food wrappings. Molten slag on rocks and in the sand on both sides of river needed removal as well. Large rust flakes on both banks and in the river have accumulated and require removal also."[1]	061025-01 061025-02 061025-03	9	$10,000
C		**Steel Cutting:** "~0830…I went down to the gravel bar and found some 3x3 angles that had been spliced on the gravel bar and a worker cutting plate steel with the slag falling on the gravel."[3]		9	$10,000
C	10/26/2006	**Welding slag** discharge to gravel bar – "…Observed welder in the manlift welding longitudinal force transfer clips onto the trestle beams with much of the debris falling to the gravel bar..."[3]	061026-01	9	$10,000
C		**Welding slag** going into river[1] – "Rich came with Carl, pointed out MCM cutting, welding at gravel bed. The site was later cleaned by the contractor… "...one of his [Ham's] workers was on the southerly side of the river cutting steel plates to go around FW columns in bent 2-3 with nothing under it to catch the slag. He said well I guess he'll have to clean it up. I said yes, but he shouldn't be cutting that way anyway."[3]	061026-02	9	$10,000

G		**Rubbish Discharge to River:** Photo of large flakes of rust from I beams uncontained and falling to gravel bar and river.[2]	061026-03	9	$10,000
B	10/27/2006	**Leaky Equipment:** "Oil leaks continue to occur without adequate cleanup or prevention with the standard kiddy pools and diapers. Most of the heavy equipment used on this project is old and leak constantly. Overnight oil spots are often not prevented and typically just covered up with soil. The worst offenders are the Manitowoc crane on the false bridge, the LINK man lift on the gravel bar, and the CAT 350. This has been brought to the attention of the RE on many occasions. The plastic 'tarps' placed under the crane constantly spills its contents onto its tracks and the bridge decking."[1] Photograph of oil contained by plastic sheeting.[1]	061027-01 061027-02 061027-03	9, 13	$20,000
C	10/28/2006	"**Welding Slag** continued to fall into the river without adequate mitigation."[1]		9	$10,000
B		**Leaky Equipment:** Photograph of oil stained gravel on the gravel bar[1]	061028-01 061028-02	9, 13	$20,000
B	10/30/2006	**Leaky Equipment:** Photographs of fresh oil stains on the trestle deck and the Manatowic crane on the trestle deck with a plastic diaper.[1] Photograph of oil stains along the access road in front of the Caltrans office.[1] Photograph of an oil stain underneath piece of equipment	061030-01 061030-02 061030-03 061030-04 061030-05 061030-08 061030-09 061030-10 061030-11	9, 13	$20,000
C		**Steel Cutting:** Large steel plate and cuttings in the river	061030-06 061030-07	9	$10,000
G	10/31/2006	**Rubbish Discharge to River:** in river: Photograph of flakes of rust in the river.[1]	061031-01	9	$10,000
C		**Steel Cutting:** Steel plates still in river from the day before.	061031-02 061031-03	9	$10,000
B		**Leaky Equipment:** Photograph of an oil leak from a large piece of equipment on a dirt road.[1]	061031-04	9, 13	$20,000
C	11/1/2006	**Welding slag** discharged to river without containment.[1]	061101-01 061101-02 061101-03 061101-04 061101-05 061101-06 061101-07	9	$10,000
B	11/3/2006	**Leaky Equipment:** "11. The crane being used on the trestle has leaking fluids. This has been noted many times earlier. The contractor has attached a piece of plastic under the crane, but the plastic catches both oil leaks and stormwater. There is evidence on the trestle deck that oil that has leaked off of the plastic. I observed commingled oil with water on the plastic during my site visit."[3]		9, 13	$20,000
H		**Sediment Discharge:** "19. During construction of the work platform for the south		9	$10,000

		bridge Pier 2, loose soil was pushed over the edge of the bank. The soil cascaded all the way to the toe of the slope, which is below the Ordinary High water elevation."[3]			
A	11/13/2006	**Construction Dewatering:** "I spoke to Mitch Lipsky about: 1) pumping silty grey H2O directly onto rock that allows the silty H2O to go into the gravel bar...2)disposal of silty H2O with a bucket that is taken out of the shaft/pumped into bucket. Material, H2O and rock was dumped at top of access without containment-- the resulting silty H2O ran off the top of the access road and back down to the gravel bar. This can not take place! Corrective measures were not implemented until Ron Den Heyer was on site & spoke to Mitch."[3] "Spoke with Mitch Lipsky regarding water from the drilling operation draining onto the rock within the 100 yr. I stated that it was in violation of the permits."[3]	061113-01	7, 9	$20,000
A	11/14/2006	**Construction Dewatering:** "Spoke with Mitch's signal man in the AM and told him to let Mitch know to shut off the pump draining water to the rock below the 100 yr. In the afternoon I addressed the issue to him directly. He was told that he was in violation of the permits."[3]		7, 9	$20,000
D	~1/5/2007	**Turbid Discharge to River:** Approximately 170 gallons of stormwater and drilling water was discharged to Eel River and gravel bar at night through a broken pipe.[5]		9	$10,000
A	3/7/2007	**Construction Dewatering:** "1 Labor, and 2 metal fabricators dewatering Pier Pit and prepping site for work trestle. A small electric sump pump is being used to get the last of the water. Water is being released under the Oregon Oak Tree – the brownish water is making its way to the Eel river side-channel discoloring the waters."[3]		7, 9	$20,000
H	5/23/2007	**Sand Blasting** rebar without appropriate BMPs. "The contractor used sand to sandblast rebar...at Pier 3... without use of appropriate BMP's, without Caltrans oversight, and in disregard of the direction provided by the Resident Engineer prior to the activity. It is estimated that 6 bags of sand were used to clean the rebar and the waste was not contained and was allowed to fall directly to the gravel bar of the South Fork Eel River, below the Pier 3 falsework...the sand is well dispersed...and that it may not be feasible to remove the sand without also removing naturally placed riverbar fines."[6]		7, 9	$20,000
		Total →			$1,540,000

[1] CD of Biological Monitoring Reports: Received 11/20/2006
[2] Response to Notice of Violation (Binder) Received 12/14/2006; Final Biological Monitoring Report and associated photographic record
[3] Engineering Diaries
[4] Regional Water Board Inspection
[5] Email notification from Walt Dragaloski on 2/21/2007
[6] Email notification from Walt Dragaloski on 5/23/2007
[7] Attachment K Received on 10/6/2006
[8] Caltrans Letter Received on 3/12/2007

Appendix A_A
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
A	08/21/2006	**Construction Dewatering:** Photo of discharge to Isolated Pool B. "4. A temporary sedimentation basin has been constructed and used within 100 feet of the live stream channel."[2]	060821-01	9, 12, 17	$30,000
A	8/29/2006	**Construction Dewatering to Isolated Pool B:** "... 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		9,12,17	$30,000
A	8/30/2006	**Construction Dewatering to Isolated Pool B:** "... 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		9, 12, 17	$30,000
A	8/31/2006	**Construction dewatering** pumped into Isolated Pool B. "After 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]	060831-01	9, 12, 17	$30,000
A		**Construction dewatering** directly to gravel bar – "After this event the water was not pumped into the isolated pool but was pumped directly onto the gravel bar adjacent to the cofferdams. The gravel bar was at a minimum about 15 feet from the river, but the plume did not appear to go into the river."[2]		9, 12, 17	$30,000
A	9/5/2006	**Construction Dewatering:** "ASR NOTE: ...I overheard Superintendent James Ham tell his employee to 'shut off the pump, you're pumping out too much water.' ...the pump was discharging to...Mr. Ham's feet on the outside of B5 cofferdam with rock saturated and no standing water. I also did not see any equipment to verify pH levels or any muratic acid to lower pH levels."[3]		9, 12, 17	$30,000
A	9/7/2006	**Construction Dewatering** to Isolated Pool B: "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area...The other was during the seal course placement within the two CSP's for the trestle bent 3 foundations...A pump was running to lower the water level inside the CSP's, which was ineffective until the water level rose due to the placement of the concrete seal course. Pumping was halted after the conc placement started. The water was pumped to a settlement basin against the river bank."[3]		9, 12, 17	$30,000
A	9/11/2006	**Construction Dewatering:** "Note: Mitch Shands on site intermittently some pumping of H2O out of CMP was done. This water was tested for pH per Mitch – was ~ same pH as the active channel."[3]		9, 12, 17	$30,000
A	10/3/2006	**Construction Dewatering:** "A little after 1100 Mitch Shands called to inform me the		9, 12, 17	$30,000

		discharge from the dredge wasn't far from the steel plate cofferdam. I said it was supposed to be 100 ft from the river but we were allowing up against the bedrock because we couldn't get 100 ft. He said it was about 20 ft from the bedrock. He said Francisco Cordero, labor foreman, said they didn't have any more hose. I said that wasn't our problem and I'd come out to take a look."[2]			
A	10/6/2006	**Construction Dewatering:** "During our inspection staff observed use of a sedimentation basin on the gravel bar near the north bridge. Staff were informed that the same basin was used to dispose of water that contacted wet cement, as well as for the dewatering activities that caused the turbidity discharges described above."[4]	061006-01	9, 12, 17	$30,000
A	10/7/2006	**Construction dewatering** disposal on gravel bar[1,2] "Dewatering of the footings on the gravel bar caused some concern and a mini-memo was delivered to Mr. Hamm at MCM. Silty water was not being deposited in the approved area 70-feet away from the river."[2]		9, 12, 17	$30,000
A	11/13/2006	**Construction Dewatering:** "I spoke to Mitch Lipsky about: 1) pumping silty grey H2O directly onto rock that allows the silty H2O to go into the gravel bar…2)disposal of silty H2O with a bucket that is taken out of the shaft/pumped into bucket. Material, H2O and rock was dumped at top of access without containment-- the resulting silty H2O ran off the top of the access road and back down to the gravel bar. This can not take place! Corrective measures were not implemented until Ron Den Heyer was on site & spoke to Mitch."[3] "Spoke with Mitch Lipsky regarding water from the drilling operation draining onto the rock within the 100 yr. I stated that it was in violation of the permits."[3]	061113-01	7, 9	$20,000
A	11/14/2006	**Construction Dewatering:** "Spoke with Mitch's signal man in the AM and told him to let Mitch know to shut off the pump draining water to the rock below the 100 yr. In the afternoon I addressed the issue to him directly. He was told that he was in violation of the permits."[3]		7, 9	$20,000
A	3/7/2007	**Construction Dewatering:** "1 Labor, and 2 metal fabricators dewatering Pier Pit and prepping site for work trestle. A small electric sump pump is being used to get the last of the water. Water is being released under the Oregon Oak Tree – the brownish water is making its way to the Eel river side-channel discoloring the waters."[3]		7, 9	$20,000
		Total →			$390,000

[1] CD of Biological Monitoring Reports: Received 11/20/2006
[2] Response to Notice of Violation (Binder) Received 12/14/2006; Final Biological Monitoring Report and associated photographic record
[3] Engineering Diaries
[4] Regional Water Board Inspection
[5] Email notification from Walt Dragaloski on 2/21/2007
[6] Email notification from Walt Dragaloski on 5/23/2007
[7] Attachment K Received on 10/6/2006
[8] Caltrans Letter Received on 3/12/2007

Appendix A_B
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
B	8/22/2006	**Leaky Equipment:** "2. A discharge of oil occurred from the backhoe directly onto the riverbar. Equipment that has minor leaks ...must not be allowed to operate in sensitive areas such as the riverbar. This discharge should have been reported to the RE and cleaned up immediately. There were no BMP's in place to prevent the discharged oil from reaching the riverbar."[2]		9, 13	$20,000
B	8/29/2006	**Leaky Equipment:** Oil leak on gravel bar[2]	060829-01	9, 13	$20,000
B	9/9/2006	**Leaky Equipment:** Oil stained gravel on gravel bar photographed by Biological Monitor.[2]	060909-03	9, 13	$20,000
B	9/26/2006	**Leaky Equipment:** Photograph of dirt road with many oil stains.[1]	060926-01	9, 13	$20,000
B	9/27/2006	**Leaky Equipment:** "Oil leaks above river on wooden trestle. The large trestle crane had this problem regularly."[1] Photograph by Biological Monitor of oil stains on the trestle deck with rags and absorbent pads soaked with oil.[1]	060927-05	9, 13	$20,000
B	10/5/2006	**Leaky Equipment:** "Oil and diesel stains on the gravel bar were ID for cleanup..."[3]		9, 13	$20,000
B	10/6/2006	**Leaky Equipment:** RWB Inspection - Backhoe in gravel bar with fluid leakage, Compressor and Crane with insufficient BMPs. "Staff observed a backhoe on the gravel bar near the north bridge that had excessive fluid leakage. Absorbent rags were stuffed into several crevices to control the leakage, however; that backhoe was not in an adequate condition for continued use near any river or gravel bar."	061006-01 061006-02 061006-03 061006-04	9, 13	$20,000
B	10/11/2006	**Leaky Equipment:** "Inspections of machinery identified two problems. The IR compressor leaks excessively, and diapers and plastic sheets have been employed for a long time but the leaks increase. The second unidentified leak from the Manotowic crane grows worse. Plastic sheeting catching oil and hydraulic leaks have also spilt onto the false bridge deck on several occasions."[1]		9, 13	$20,000
B	10/12/2006	**Leaky Equipment:** "Oil and diesel stains on the gravel bar were identified for cleanup... I discovered a large oil stain under one piece of machinery at noon, not cleaned up by 1:30, raised concerns...keeping the gravel bar clean is a constant battle to control the accumulation of debris, oil, and hydraulic fluids."[1]	061012-01 061012-02 061012-03	9, 13	$20,000

		Photo of an oil spill under the backhoe.[1] Photo of an air compressor with plastic sheeting spilling its contents onto the river bar.[1] Photo of leaking crane on trestle with plastic sheeting spilling its contents.[1]			
B	10/27/2006	**Leaky Equipment:** "Oil leaks continue to occur without adequate cleanup or prevention with the standard kiddy pools and diapers. Most of the heavy equipment used on this project is old and leak constantly. Overnight oil spots are often not prevented and typically just covered up with soil. The worst offenders are the Manitowoc crane on the false bridge, the LINK man lift on the gravel bar, and the CAT 350. This has been brought to the attention of the RE on many occasions. The plastic 'tarps' placed under the crane constantly spills its contents onto its tracks and the bridge decking."[1] Photograph of oil contained by plastic sheeting.[1]	061027-01 061027-02 061027-03	9, 13	$20,000
B	10/28/2006	**Leaky Equipment:** Photograph of oil stained gravel on the gravel bar[1]	061028-01 061028-02	9, 13	$20,000
B	10/30/2006	**Leaky Equipment:** Photographs of fresh oil stains on the trestle deck and the Manatowic crane on the trestle deck with a plastic diaper.[1] Photograph of oil stains along the access road in front of the Caltrans office.[1] Photograph of an oil stain underneath piece of equipment	061030-01 061030-02 061030-03 061030-04 061030-05 061030-08 061030-09 061030-10 061030-11	9, 13	$20,000
B	10/31/2006	**Leaky Equipment:** Photograph of an oil leak from a large piece of equipment on a dirt road.[1]	061031-04	9, 13	$20,000
B	11/3/2006	**Leaky Equipment:** "11. The crane being used on the trestle has leaking fluids. This has been noted many times earlier. The contractor has attached a piece of plastic under the crane, but the plastic catches both oil leaks and stormwater. There is evidence on the trestle deck that oil that has leaked off of the plastic. I observed commingled oil with water on the plastic during my site visit."[3]		9, 13	$20,000
		Total →			$280,000

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[8] Caltrans Letter Received on 3/12/2007

Appendix A_C
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
C	9/15/2006	**Welding Slag:** "Env Issues: Span 4 is over the active channel - noticed some minor slag dropping into channel ..."[3]		9	$10,000
C	9/21/2006	**Welding Slag Discharge to River:** "When the next weekly biologic monitor report comes out on Monday it will contain information regarding a discharge of welding slag and/or wire into the South Fork Eel River during construction of the trestle. This discharge is required to be reported to the Regional Water Quality Control Board (RWQCB). There were no BMP's in place to help prevent the discharge...The contractor attempted to prevent further discharge by placing a 5-gallon bucket of water under the welding locations. The buckets were only partly effective due to windy conditions. Please inform Justin Porteous, MFC, to investigate the incident and file an Attachment K as required by the SWPPP."[2]	060921-01	9	$10,000
C	10/6/2006	**Welding Slag Discharge:** RWB Inspection Welding on temporary trestle and over river channel, debris falling into water. "Staff observed welding on the temporary trestle and over the river channel. Welding slag was observed to be falling directly into the water and the adjacent gravel bar.[6] "Molten slag was observed dripping into the river at 2:20 pm, using no bucket to catch the excess. This activity was terminated, but not before noticeable amounts of slag, small sheets of rusty metal, welding rods, and other debris had accumulated in the river channel."[3]		9	$10,000
C	10/6/2006	**Steel Cutting:** RWB Inspection – "Staff observed that rebar had been cut with a torch on the gravel bar without any containment. Steel slag and debris was deposited on the gravel bar within 150 feet of the high water mark, and where it may be washed into the river...Staff also observed steel being cut in the same area on the gravel bar. A small piece of plastic was placed under the saw; however, the plastic was not containing all the steel cuttings."[4]	061006-05	9	$10,000
C	10/17/2006	**Steel Cutting Discharge:** "Welding slag was discharged to the river and cleaned up immediately"[1] "Found a welder attaching angles to the cofferdam template with no attempt to catch splatter/slag. I told them they were not allowed to drop material into the water and they hung a bucket under the work which caught about half of the falling material."[3]	061017-01 061017-02 061017-03 061017-04 061017-05 061017-06	9	$10,000
C	10/18/2006	**Steel Cutting Discharge:** Steel Cutting on gravel bar without containment[1] "Garry came to jobsite and pointed out that the welding	061018-01	9	$10,000

		slag remaining on the riverbed needed to be cleaned."[3]			
C	10/20/2006	**Welding Slag** on gravel bar: Photograph[1]	061020-01	9	$10,000
C	10/24/2006	**Steel Cutting** going into river[1] – "I observed a worker cutting plate steel with a cutting torch on the river bed."[2]	061024-01 061024-02 061024-03 061024-08	9	$10,000
C	10/25/2006	**Steel Cutting:** "~0830…I went down to the gravel bar and found some 3x3 angles that had been spliced on the gravel bar and a worker cutting plate steel with the slag falling on the gravel."[3]		9	$10,000
C	10/26/2006	**Welding slag** discharge to gravel bar – "…Observed welder in the manlift welding longitudinal force transfer clips onto the trestle beams with much of the debris falling to the gravel bar..."[3]	061026-01	9	$10,000
C	10/26/2006	**Welding slag** going into river[1] – "Rich came with Carl, pointed out MCM cutting, welding at gravel bed. The site was later cleaned by the contractor… "...one of his [Ham's] workers was on the southerly side of the river cutting steel plates to go around FW columns in bent 2-3 with nothing under it to catch the slag. He said well I guess he'll have to clean it up. I said yes, but he shouldn't be cutting that way anyway."[3]	061026-02	9	$10,000
C	10/28/2006	"**Welding Slag** continued to fall into the river without adequate mitigation."[1]		9	$10,000
C	10/30/2006	**Steel Cutting:** Large steel plate and cuttings in the river	061030-06 061030-07	9	$10,000
C	10/31/2006	**Steel Cutting:** Steel plates still in river from the day before.	061031-02 061031-03	9	$10,000
C	11/1/2006	**Welding slag** discharged to river without containment.[1]	061101-01 061101-02 061101-03 061101-04 061101-05 061101-06 061101-07	9	$10,000
		Total →			$150,000

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Appendix A_D
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
D	8/29/2006	**Turbid Discharge to River** from isolated pool B through gravel bar; No turbidity measurements were taken "Seeping through bar. After 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		9	$10,000
D	8/30/2006	**Turbid Discharge to River** from isolated pool B through gravel bar; No turbidity measurements were taken "Seeping through bar. After 8 hours of pumping from coffer dams set in bar to Isolated Pool B"[1]		7, 9	$20,000
D	9/1/2006	**Cement Discharge to River:** "Temporary plume of fine sediments from cement seeping out bottom when seal cement poured."[1,2]	060901-01	9	$10,000
D	9/7/2006	**Turbid Discharge to River** "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area. One was from dewatering into a settlement basin and after about 8 hrs of pumping some turbidity was noticed emanating from the gravel bar."[3]		7, 9	$20,000
D	9/7/2006	**Turbid Discharge to River:** "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area...The other was during the seal course placement within the two CSP's for the trestle bent 3 foundations...The conc was placed with a tremie pipe and during the first half yard of conc placement a small discharge was noticed... The discharges dissipated quickly within about 50' (Rt CSP) to 100' (Lt CSP) as near as I could tell. Although there was some discussion of measuring the turbidity, Brad mentioned that it didn't appear to him that there was a 20% increase at 100'."[3]		9	$10,000
D	9/9/2006	**Turbid Discharge to River:** Sediment Plume from placement of trestle footings. Improper BMPs and no turbidity measurements were taken.[2] "RE Ron den Heyer came to my office with Carl Page and a photo of turbidity from drilling debris in the water around trestle foundation 4 Lt...Mitch...said that MCM was using a baffle to keep anchor rod hole cleanout debris within the 6' dia CSP...He also has told them previously that any debris on the planks over the CSP's had to be cleaned off	060909-01 060909-02	9	$10,000

		into the CSP's."[3]			
D	9/22/2006	**Turbid Discharge to River:** 2nd Heavy Vehicle Crossing caused a 400-foot plume visible for 30 minutes. Insufficient turbidity measurements taken – Horiba Meter not accurate. "Equipment cleaning was a pro-active measure taken for the first and third crossings, but it appeared to have not been done for the second crossing event witnessed by B. Norman...This was apparent by the much larger amount of dirt on the equipment during the second crossing compared to the other two crossings. No 'staging of the equipment' occurred immediately prior to the September 22 crossing...Note mud was still caked on after going through the clean cobble river bed."[2]	060922-07 060922-08 060922-09 060922-10 060922-11 060922-12 060922-13 060922-14 060922-15	9	$10,000
D	9/29/2006	**Cement Discharge:** Cement in mainstem from concrete footing seal pour. "Sandbags were then placed on the outside perimeter only, no sandbags were placed on the inside of the CMP. CONTR began placing seal coarse concrete @ 1701 hrs... CONTR began by placing the seal coarse in the #3 FTG. During the placement, it was apparent that the contractor did not have a good seal around the CMP. Concrete escaped from the CMP leaving a plume in the river approx 150'-0 in length."[2] Insufficient turbidity measurements.	060929-01 060929-02 060929-03	9	$10,000
D	9/29/2006	**Cement Discharge:** Silt in mainstem from cement footing seal pour. "During the placement for the #4 FTG, the CONTR's tremie on the hopper came off. While trying to reattach the tremie, the CONTR worked around the CMP standing on the sandbags. A plume was evident but how much was concrete or how much was alga was hard to determine."[2]	060929-04 060929-05 060929-06	9	$10,000
D	10/7/2006	**Turbid Discharge to River:** First Event – Plume noted during attempt to install last two footings for falsework trestle. No turbidity measurements taken. "After the CONTR made 3 passes the silt began to escape thru the silt fence. CONTR stopped digging and placed more filter sandbags. The plume dissipated in about ½ hr."[2] "Caltrans admits the presence of the silt fence in the river, intended to be containment for the anticipated release of turbid waters from in-stream excavation of cofferdam spoils was not the proper BMP."[8]	061007-01 061007-02	9, 17	$20,000
D	10/7/2006	**Turbid Discharge to River:** Second Event – Silt from cement CMP footing seal pour. No turbidity measurements taken. "The CONTR then made a 2nd attempt at excavating the footings. After about 6 passes, the silt again began to escape and leave a plume...Mr. Ham stated that the plastic wouldn't work, that the water is coming up thru the rock (Bottom) and using bladder bags would not give him enough room to work..."[3]		9, 17	$20,000

D	10/7/2006	**Turbid Discharge to River:** Third Event – "...Mr. Ham then stated that he was at least two thirds complete and everyone from the agencies are probably home now so he was going to go back down and complete the remaining excavation work...CONTR's SUBMITTAL IS INCOMPLETE AND HAS NOT BEEN APPROVED! CONTR IS PERFORMING WORK AT HIS OWN RISK."[3]		9, 17	$20,000
D	10/16/2006	**Cement Discharge:** "At 17:10, when pour concrete at 1 footing by the ri[illegible] (bent 2-4), there were miner leak [sic]."[3]		9	$10,000
D	10/20/2006	**Cement Discharge to River:** Concrete seal course pour resulted in a 2'X4' plume for 5 min. No turbidity measurements[1]	061020-02	9	$10,000
D	~1/5/2007	**Turbid Discharge to River:** Approximately 170 gallons of stormwater and drilling water was discharged to Eel River and gravel bar at night through a broken pipe.[1]		9	$10,000
Total →					$1,540,000

[1] Email notification from Walt Dragaloski on 2/21/2007

Appendix A_E
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
E	8/29/2006	**Turbid Discharge to River** from isolated pool B through gravel bar; No turbidity measurements were taken "Seeping through bar. After 8 hours of pumping from coffer dams set in bar to Isolated Pool B."[1]		19	$10,000
E	8/30/2006	**Turbid Discharge to River** from isolated pool B through gravel bar; No turbidity measurements were taken "Seeping through bar. After 8 hours of pumping from coffer dams set in bar to Isolated Pool B"[1]		19	$10,000
E	9/1/2006	**Insufficient Turbidity Measurements:** Sediment plume lasted two minutes and persisted for approximately 5 minutes 20-30 feet downstream were caused by placement of gravel bags for placement of trestle footings.[7]		19	$10,000
E	9/1/2006	**Cement Discharge to River:** "Temporary plume of fine sediments from cement seeping out bottom when seal cement poured."[1,2]	060901-01	19	$10,000
E	9/6/2006	**Insufficient Turbidity Measurements:** 1st Heavy Vehicle Crossing caused a 200-foot plume for 25 minutes. No turbidity measurements were taken.[2]	060906-01	19	$10,000
E	9/7/2006	**Turbid Discharge to River** "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area. One was from dewatering into a settlement basin and after about 8 hrs of pumping some turbidity was noticed emanating from the gravel bar."[3]		19	$10,000
E	9/7/2006	**Turbid Discharge to River:** "Late this afternoon, Gene Leo was talking to Walt Dragaloski about the reports he had from biologist Brad Norman about discharges into the river at the N Br const area...The other was during the seal course placement within the two CSP's for the trestle bent 3 foundations...The conc was placed with a tremie pipe and during the first half yard of conc placement a small discharge was noticed... The discharges dissipated quickly within about 50' (Rt CSP) to 100' (Lt CSP) as near as I could tell. Although there was some discussion of measuring the turbidity, Brad mentioned that it didn't appear to him that there was a 20% increase at 100'."[3]		19	$10,000

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
E	9/9/2006	**Turbid Discharge to River:** Sediment Plume from placement of trestle footings. Improper BMPs and no turbidity measurements were taken.[2] "RE Ron den Heyer came to my office with Carl Page and a photo of turbidity from drilling debris in the water around trestle foundation 4 Lt...Mitch...said that MCM was using a baffle to keep anchor rod hole cleanout debris within the 6' dia CSP...He also has told them previously that any debris on the planks over the CSP's had to be cleaned off into the CSP's."[3]	060909-01 060909-02	19	$10,000
E	9/22/2006	**Turbid Discharge to River:** 2nd Heavy Vehicle Crossing caused a 400-foot plume visible for 30 minutes. Insufficient turbidity measurements taken – Horiba Meter not accurate. "Equipment cleaning was a pro-active measure taken for the first and third crossings, but it appeared to have not been done for the second crossing event witnessed by B. Norman...This was apparent by the much larger amount of dirt on the equipment during the second crossing compared to the other two crossings. No 'staging of the equipment' occurred immediately prior to the September 22 crossing...Note mud was still caked on after going through the clean cobble river bed."[2]	060922-07 060922-08 060922-09 060922-10 060922-11 060922-12 060922-13 060922-14 060922-15	19	$10,000
E	9/28/2006	**Insufficient Turbidity Monitoring:** In stream prep-work: "Sediment plume caused by workers in the channel moving gravels off bedrock to set CMP 'footings cofferdams'" Duration: 4 hours in pulses; Length 100 Feet; Turbidity: (4,5,5,4,3) In Plume / (0,0,..., 0) Upstream)[1,2] The turbidity measurements were not taken as required by the Certification making difficult the determination of water quality impacts.	060928-01 060928-02 060928-03	19	$10,000
E	9/29/2006	**Cement Discharge:** Cement in mainstem from concrete footing seal pour. "Sandbags were then placed on the outside perimeter only, no sandbags were placed on the inside of the CMP. CONTR began placing seal coarse concrete @ 1701 hrs... CONTR began by placing the seal coarse in the #3 FTG. During the placement, it was apparent that the contractor did not have a good seal around the CMP. Concrete escaped from the CMP leaving a plume in the river approx 150'-0 in length."[2] Insufficient turbidity measurements.	060929-01 060929-02 060929-03	19	$10,000
E	9/29/2006	**Cement Discharge:** Silt in mainstem from cement footing seal pour. "During the placement for the #4 FTG, the CONTR's	060929-04 060929-05 060929-06	19	$10,000

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
		tremie on the hopper came off. While trying to reattach the tremie, the CONTR worked around the CMP standing on the sandbags. A plume was evident but how much was concrete or how much was alga was hard to determine."[2]			
E	10/2/2006	**Turbid Discharge to River:** 3rd Heavy Vehicle Crossing caused a plume. Turbidity measurements show an increase from 0-2.0 NTU 100 feet down stream. "At 3:24 pm, the turbidity measurement 100-feet below the crossing area maintained a reading of 2.0 NTU's on the Horiba U-10 water quality meter."[2]	061002-01	19	$10,000
E	10/7/2006	**Turbid Discharge to River:** First Event – Plume noted during attempt to install last two footings for falsework trestle. No turbidity measurements taken. "After the CONTR made 3 passes the silt began to escape thru the silt fence. CONTR stopped digging and placed more filter sandbags. The plume dissipated in about ½ hr."[2] "Caltrans admits the presence of the silt fence in the river, intended to be containment for the anticipated release of turbid waters from in-stream excavation of cofferdam spoils was not the proper BMP."[8]	061007-01 061007-02	19	$10,000
E	10/7/2006	**Turbid Discharge to River:** Second Event – Silt from cement CMP footing seal pour. No turbidity measurements taken. "The CONTR then made a 2nd attempt at excavating the footings. After about 6 passes, the silt again began to escape and leave a plume...Mr. Ham stated that the plastic wouldn't work, that the water is coming up thru the rock (Bottom) and using bladder bags would not give him enough room to work..."[3]		19	$10,000
E	10/7/2006	**Turbid Discharge to River:** Third Event – "...Mr. Ham then stated that he was at least two thirds complete and everyone from the agencies are probably home now so he was going to go back down and complete the remaining excavation work...CONTR's SUBMITTAL IS INCOMPLETE AND HAS NOT BEEN APPROVED! CONTR IS PERFORMING WORK AT HIS OWN RISK."[3]		19	$10,000
[illegible]	10/14/2006	**Insufficient Turbidity Measurements:** Two discharges during construction of in-stream footings. "The area around the footing to be excavated was isolated from active flow with the use of a fabric material, fence posts, and sand bags. This initial attempt produced a notable plume outside the containment area, and was ceased		19	$20,000

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
		until improvements were made. The second attempt proved ineffective due to subsurface flow through the isolation area and porosity of the fabric." No turbidity measurements were taken.[1]			
E	10/16/2006	**Insufficient Turbidity Measurements:** In-channel prep-work for installation of steel containment shroud. Hand work resulted in 8'x3' plume for 15 min. Insufficient turbidity measurements.[1]	061016-01	19	$10,000
E	10/16/2006	**Cement Discharge:** "At 17:10, when pour concrete at 1 footing by the river (bent 2-4), there were miner leak [sic]."[3]		19	$10,000
E	10/18/2006	**Insufficient Turbidity Measurements:** Sheet piles were pounded into place, resulting in a 25'x6' plume for 20 min during cofferdam installation. Insufficient turbidity measurements.[1]	061018-02	19	$10,000
E	10/20/2006	**Cement Discharge to River:** Concrete seal course pour resulted in a 2'X4' plume for 5 min. No turbidity measurements[1]	061020-02	19	$10,000
		Total →			$220,000

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Appendix A_F
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
F	8/29/2006	**Improper Disposal of Cement Wastes:** "On August 29, during placing a concrete in a corrugated steel pipe within the river, the water level rose and to prevent it from overflowing into the river, the water was pumped to the dewatering basin."[2]		9, 17	$20,000
		Improper Disposal of Cement Wastes: "After placing the concrete seal course, the contractor cleaned the hopper, tremie and shovels in a footing excavation in the river bar."[2]		9, 10, 17	$30,000
F	8/30/2006	**Concrete Washout to unlined area**[2]	060830-01 060830-02	9, 17	$20,000
F	9/8/2006	**Cement Discharge:** "...the water was tested for pH, treated with muriatic acid then pumped into the settlement basin. I estimate about 25 gal was pumped from the Lt CSP and perhaps 50 gal pumped from the Rt CSP based on the conc placed."[3]	060908-01 060908-02	9, 17	$20,000
F	9/13/2006	**Cement Discharge:** Improper disposal of cement wastes – "Workers dumped cement refuse onto edge of gravel bar."[2]	060913-01	9, 17	$20,000
F	9/29/2006	**Cement Discharge:** Improper disposal of cement wastes on gravel bar "After the tremie was reattached, the CONTR resumed placing the seal course, To prevent the water from overflowing the CMP, the water (untreated) was pumped onto the gravel bar, approx 60'-0 from the rivers edge."[2]	060929-07 060929-08 060929-09	9, 17	$20,000
		Cement Discharge: "Once the seal coarse operation was completed, the CONTR cleaned the hopper, tremie and shovels in the glory hole for 2-7's FTG. This was also observed by SR Garry Tolen."[3]		9, 10, 17	$30,000
		Total →			$160,000

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Appendix A_G
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
G	9/18/2006	**Rubbish Discharge to River:** Rubbish in river (wood waste and rope).[2]	060918-01 060918-02	9	$10,000
G	9/22/2006	**Rubbish Discharge to River:** Rubbish and organic debris in river (wood scraps, sawdust, and trash)[2] "Trestle Construction. The MCM Trestle Construction Operation continues to discharge sawdust, cigarette butts, plastic and paper packaging and empty water bottles, welding wire, loose nails, rust scale from recycled I-beams, welding rods, oily rags and gloves, cut wood pieces, ...into the South Fork Eel main stem on a daily basis."[1]	060922-01 060922-02 060922-03 060922-04 060922-05 060922-06	9	$10,000
G	9/26/2006	**Rubbish Discharge to River:** Large flakes of rust and wood waste in river[1]	060926-02 060926-03 060926-04 060926-05 060926-06	9	$10,000
G	9/27/2006	**Rubbish Discharge to River:** Rust dropped into north-side main stem Eel River[1]	060927-01 060927-02 060927-03 060927-04	9	$10,000
G	10/16/2006	**Rubbish Discharge to River:** Rust on I-beam uncontained over river, and wood waste and trash in the river.[2]	061016-02 061016-03 061016-04 061016-05 061016-06 061016-07 061016-08 061016-09 061016-10	9	$10,000
G	10/24/2006	**Rubbish Discharge to River:** "Large flakes of rusty metal from I-beams and slag from continuous welding accumulated on the gravel bar. These were temporarily cleaned up, but those in the river remain."[1]		9	$10,000
G	10/25/2006	**Rubbish Discharge to River:** "A punch list was developed to return the gravel bar to its natural state by the end of the month. They included removing various debris from Split-set and welding rods	061025-01 061025-02 061025-03	9	$10,000

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
		around railing and wood scraps, sawdust, plastic and food wrappings. Molten slag on rocks and in the sand on both sides of river needed removal as well. Large rust flakes on both banks and in the river have accumulated and require removal also."[1]			
G	10/26/2006	**Rubbish Discharge to River:** Photo of large flakes of rust from I beams uncontained and falling to gravel bar and river.[2]	061026-03	9	$10,000
G	10/31/2006	**Rubbish Discharge to River:** in river: Photograph of flakes of rust in the river.[1]	061031-01	9	$10,000
		Total →			$90,000

[1] CD of Biological Monitoring Reports: Received 11/20/2006
[2] Response to Notice of Violation (Binder) Received 12/14/2006; Final Biological Monitoring Report and associated photographic record
[3] Engineering Diaries
[4] Regional Water Board Inspection
[5] Email notification from Walt Dragaloski on 2/21/2007
[6] Email notification from Walt Dragaloski on 5/23/2007
[7] Attachment K Received on 10/6/2006
[8] Caltrans Letter Received on 3/12/2007

Appendix A_H
401 Water Quality Certification

Table 1:
Discharge Violations

	Date	Description	Appendix D: Photo #	Additional Condition Violation #	Maximum Potential Civil Liability
H	8/17/2006	**Hydraulic fluid spill** on gravel bar[1]	060817-01	9	$10,000
H	8/22/2006	**Equipment Fueling on Gravel Bar:** "1. Equipment is being fueled on the riverbar at the north bridge. Our permit with the Regional Water Quality Control Board explicitly states that fueling must only occur outside of waters of the United States. At the PDT James Hamm acknowledged that they were fueling a compressor, generator, man-lift and backhoe."[2]		13	$10,000
H	11/3/2006	**Sediment Discharge:** "19. During construction of the work platform for the south bridge Pier 2, loose soil was pushed over the edge of the bank. The soil cascaded all the way to the toe of the slope, which is below the Ordinary High water elevation."[3]		9	$10,000
H	5/23/2007	**Sand Blasting** rebar without appropriate BMPs. "The contractor used sand to sandblast rebar...at Pier 3... without use of appropriate BMP's, without Caltrans oversight, and in disregard of the direction provided by the Resident Engineer prior to the activity. It is estimated that 6 bags of sand were used to clean the rebar and the waste was not contained and was allowed to fall directly to the gravel bar of the South Fork Eel River, below the Pier 3 falsework...the sand is well dispersed...and that it may not be feasible to remove the sand without also removing naturally placed riverbar fines."[2]		7, 9	$20,000
		Total →			$1,540,000

[1] CD of Biological Monitoring Reports: Received 11/20/2006
[2] Email notification from Walt Dragaloski on 5/23/2007
[3] Engineering Diaries

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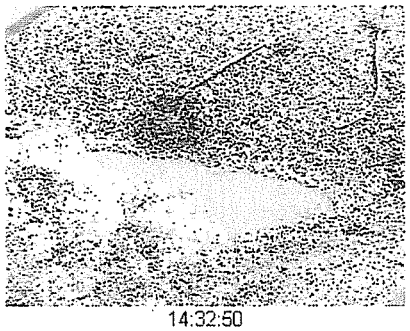
060817-01 14-18 August 2006 CONFUSION HILL Nor...



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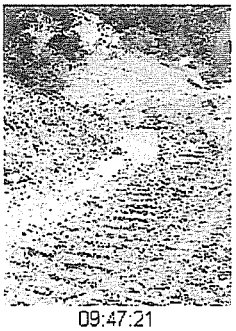

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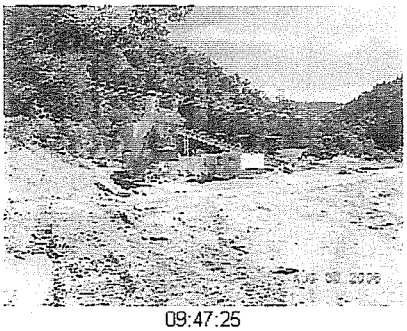
-01 28 August to 1 Sept 2006 CONFUSION HIL...



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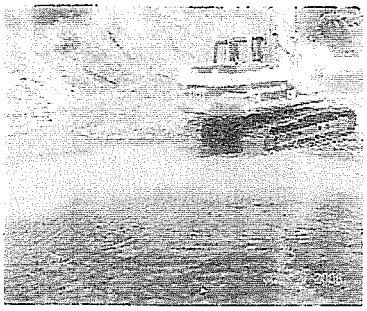
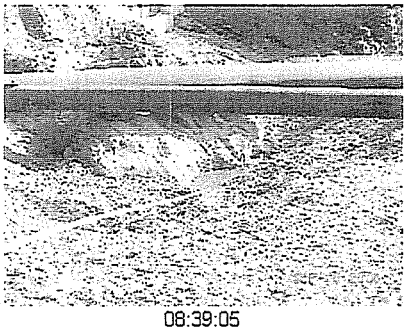
060831-01 Final BMR Figure 20.jpg

060901-01 Final BMR Figure 22.jpg



060906-01 Final BMR Figure 38.jpg



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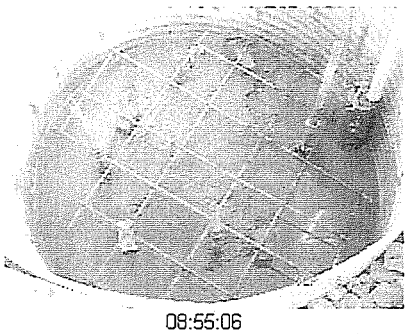

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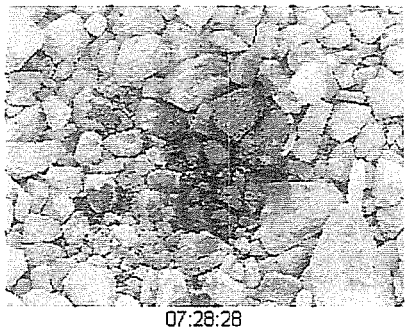

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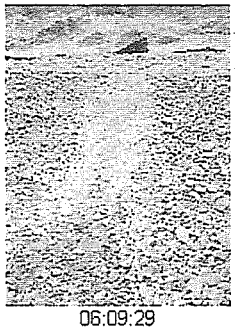

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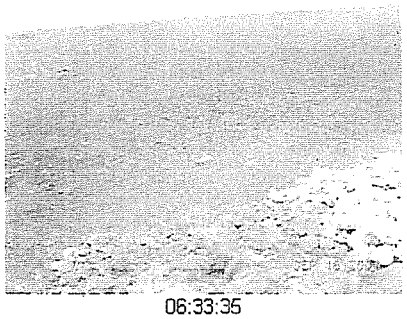

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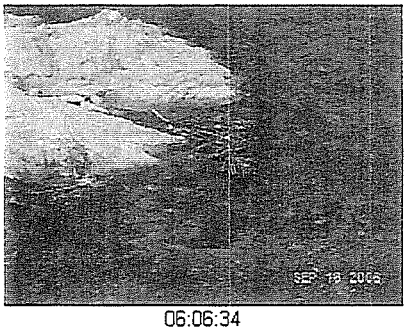

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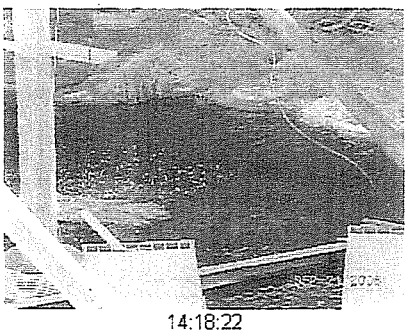

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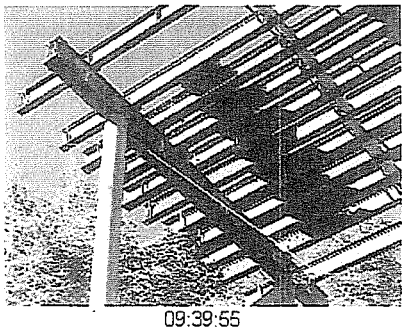

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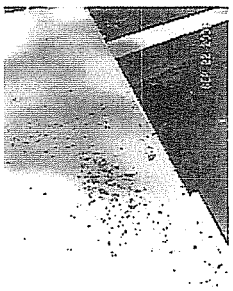

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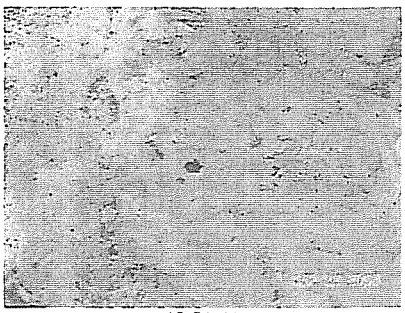

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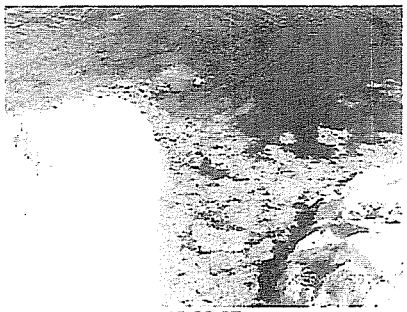

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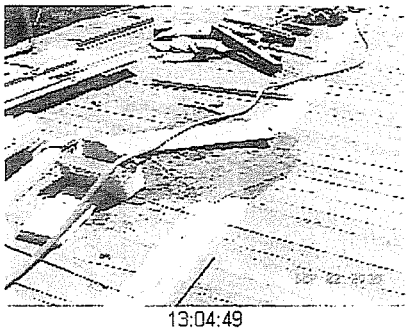

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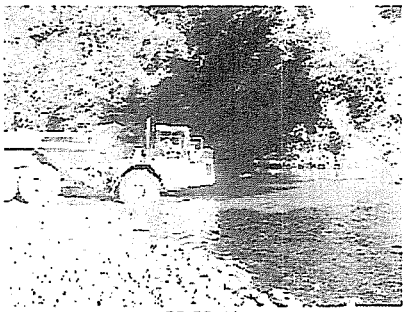

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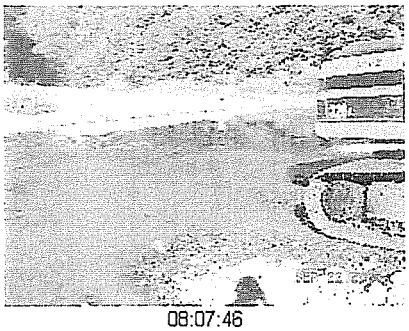

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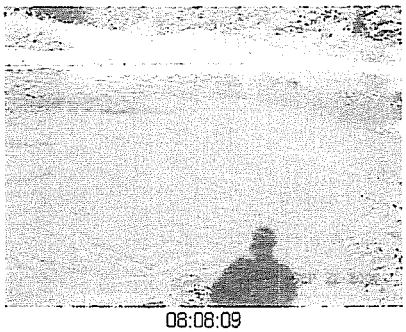

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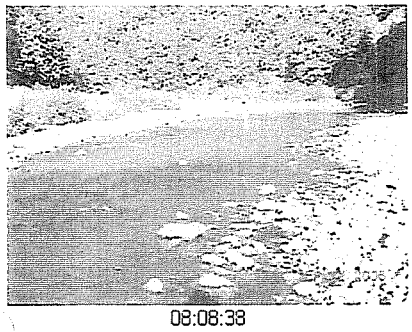

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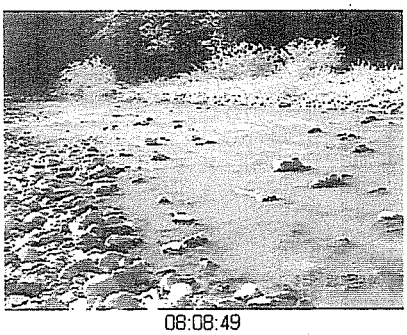

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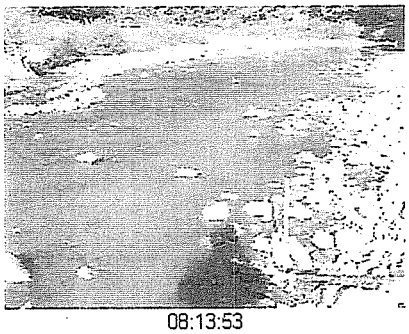
060922-13 Norman's Confusion Hill 18 to 22 Sept 2006...



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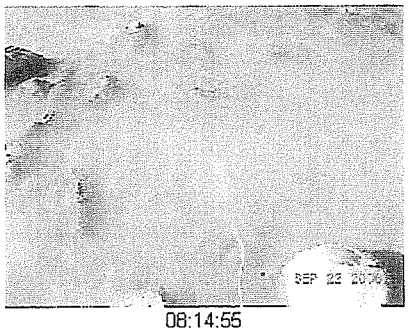

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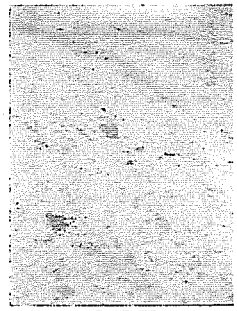

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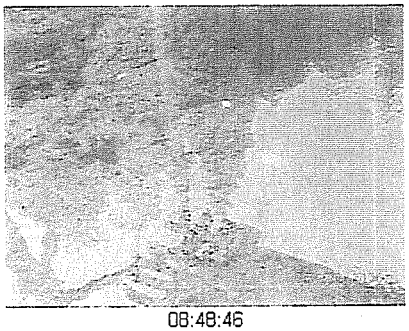

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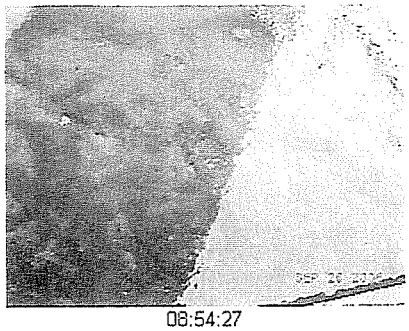

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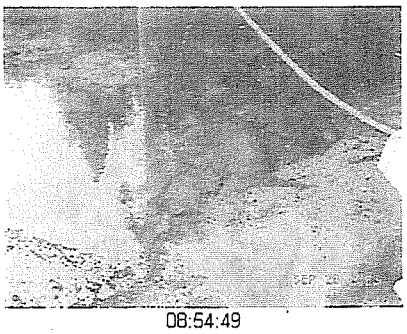

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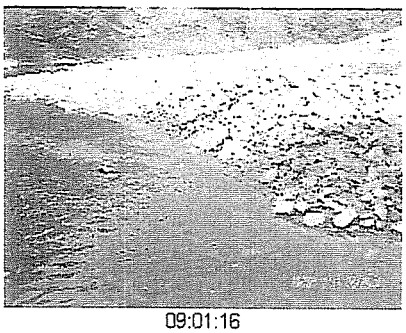

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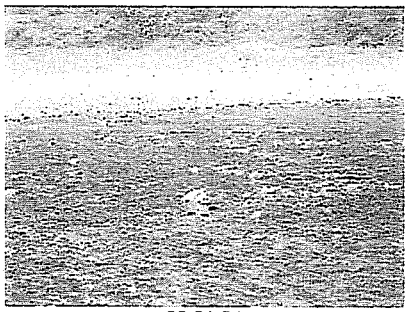

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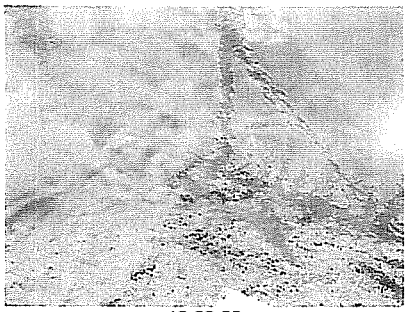

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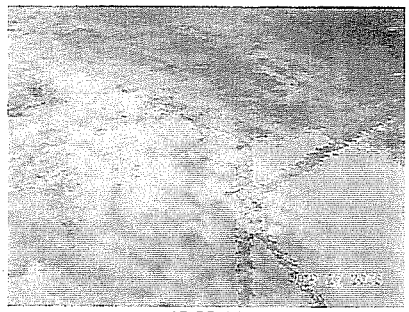

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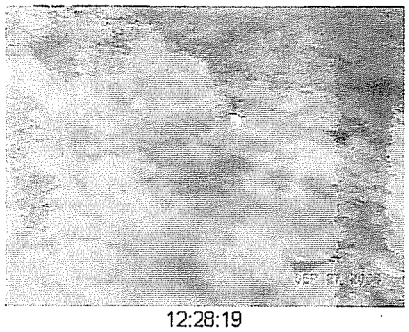

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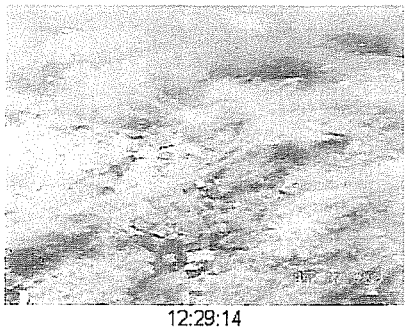

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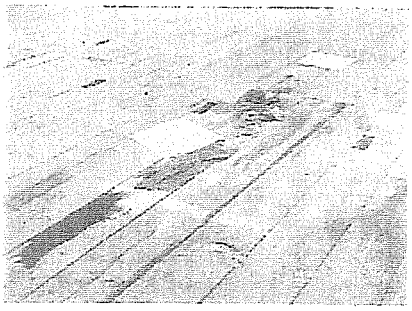

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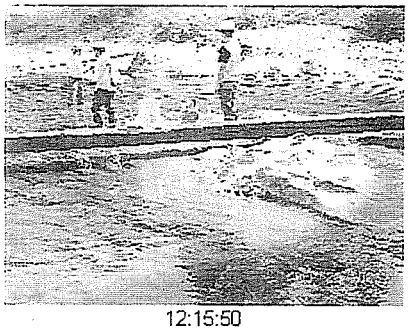

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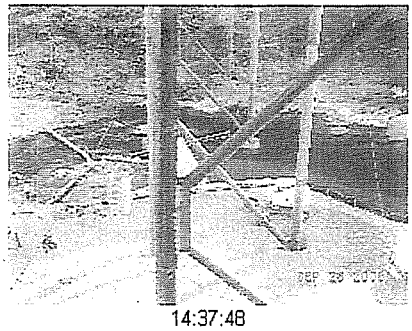

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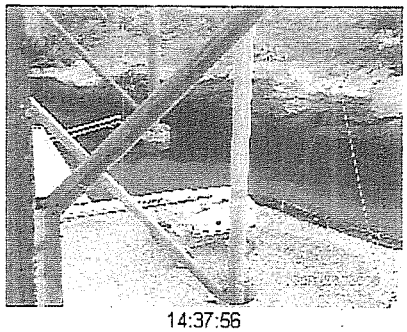

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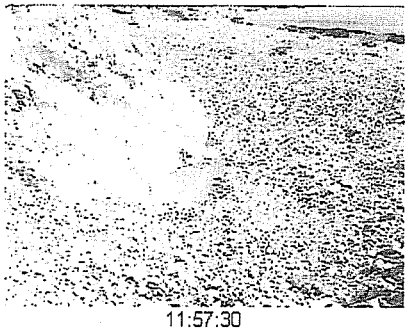

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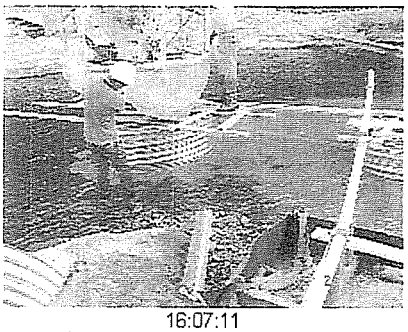

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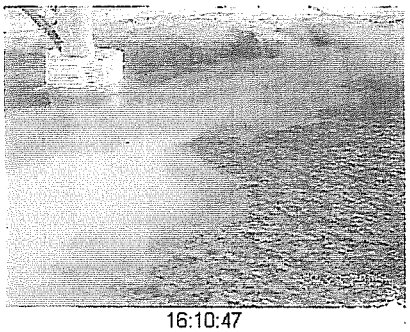

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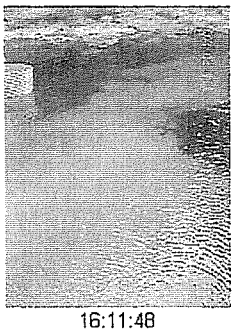

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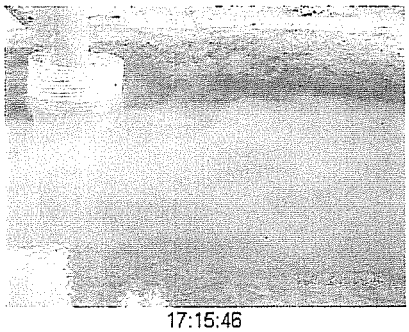

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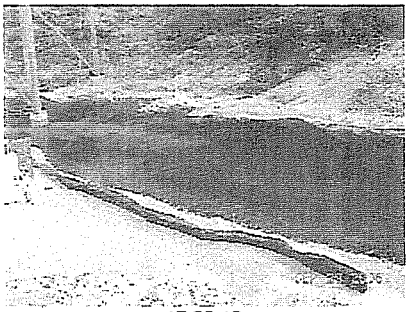
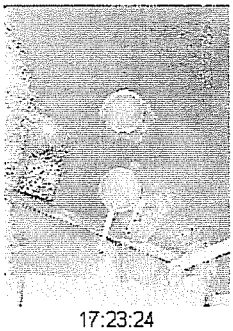


17:20:16
0 05 NORMAN 26 to 30 Sept 2006 Confusion Hil...



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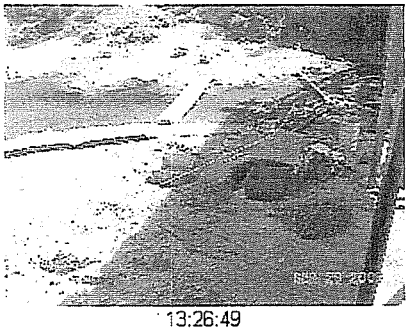
060929-06 NORMAN 26 to 30 Sept 2006 Confusion Hil...



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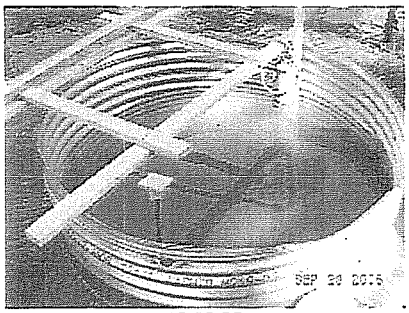

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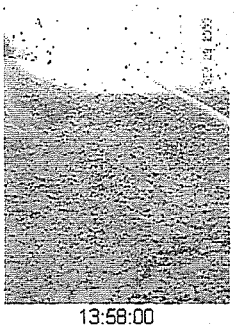

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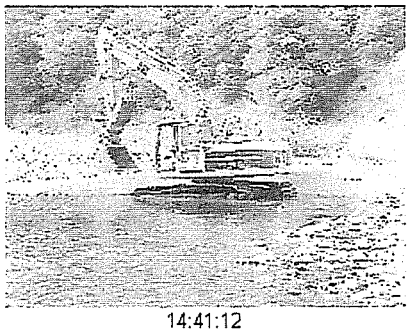

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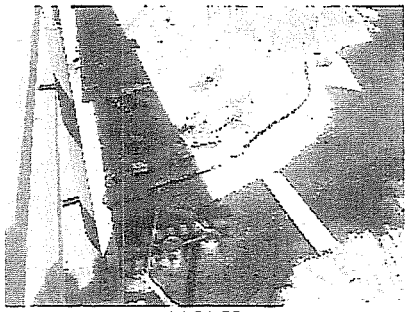

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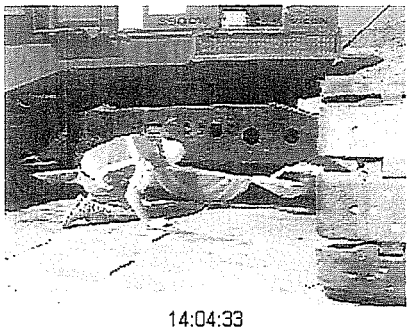

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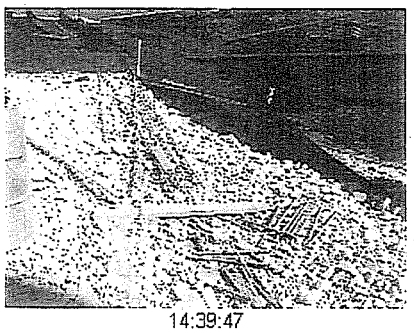

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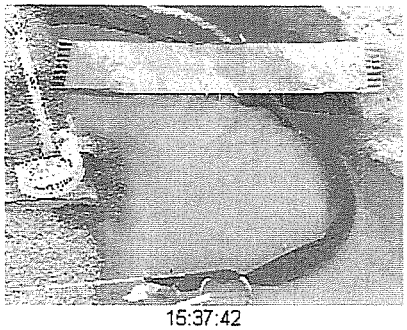

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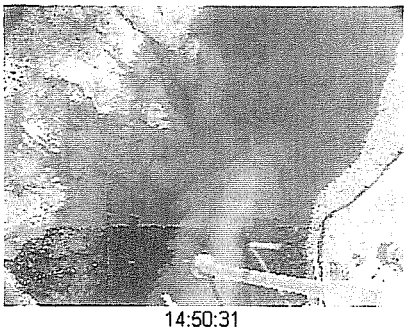

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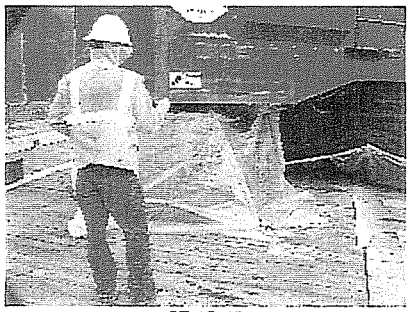

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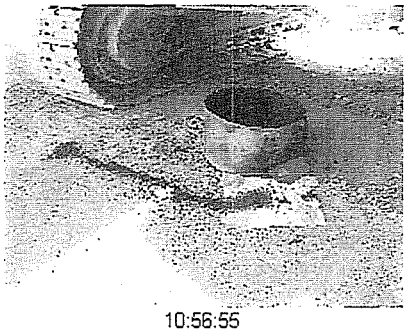

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061016-01 069 Final BMR Figure 31.jpg

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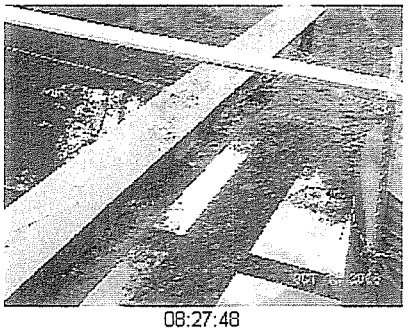

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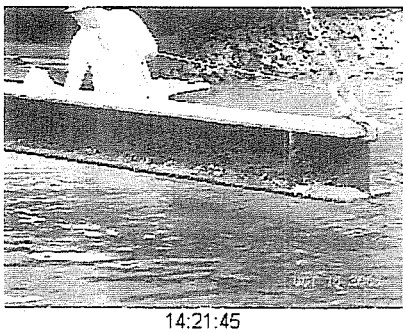

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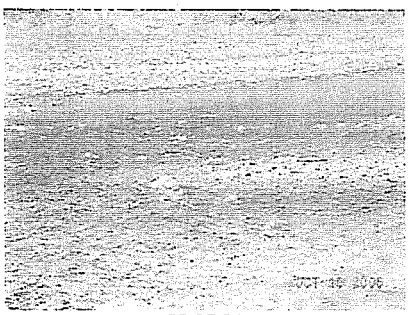

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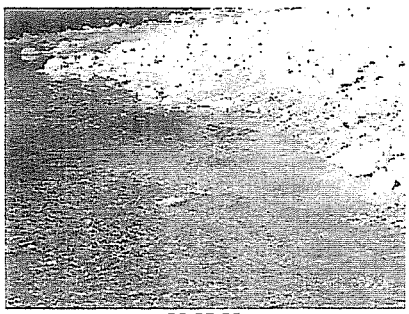

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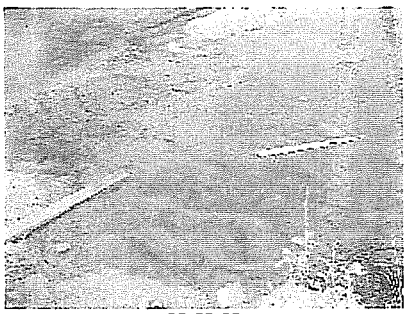

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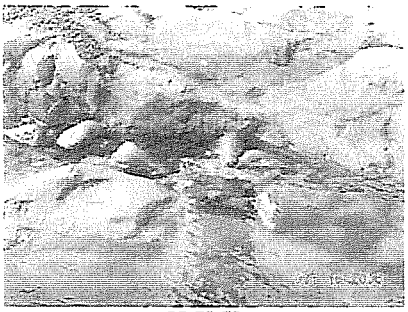

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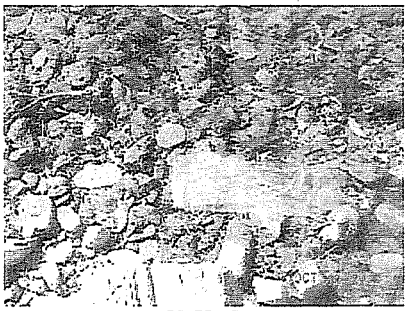

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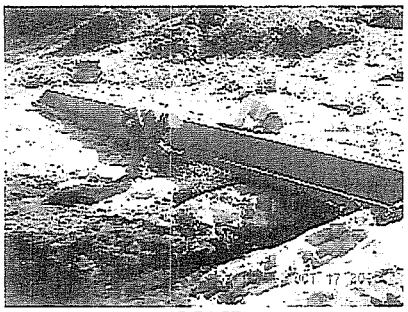

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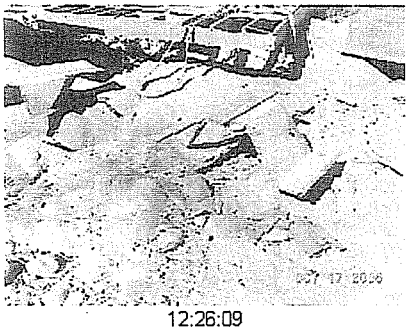

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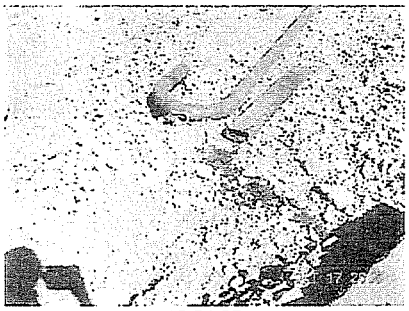

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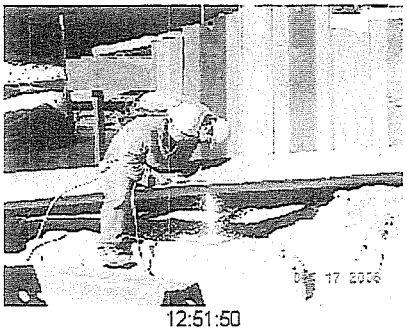

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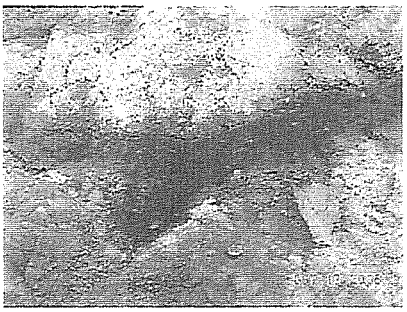

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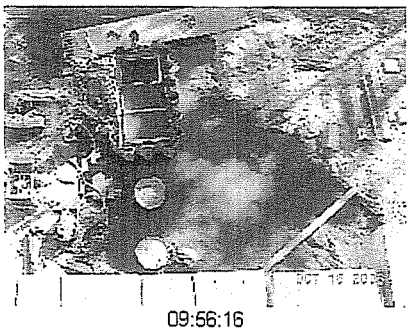

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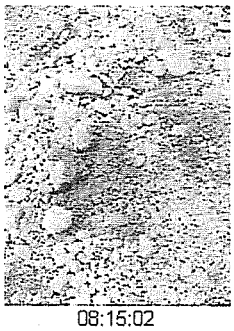

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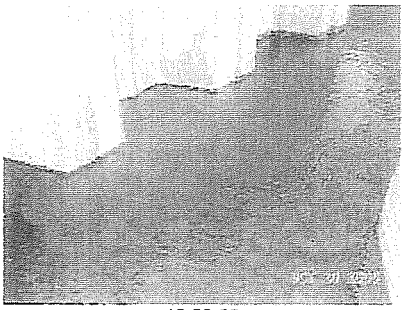

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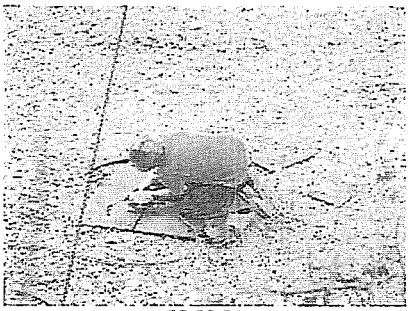

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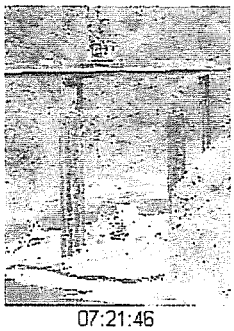

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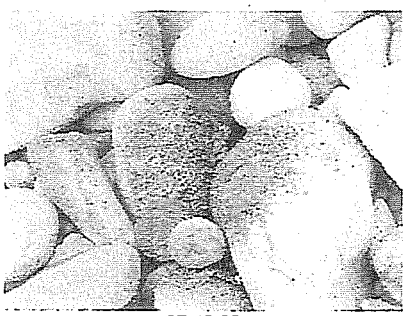

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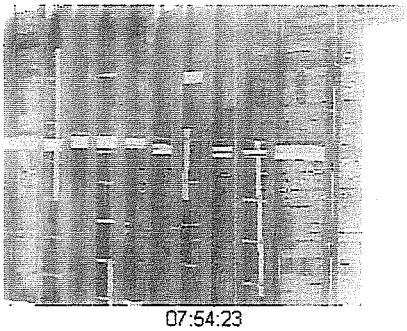

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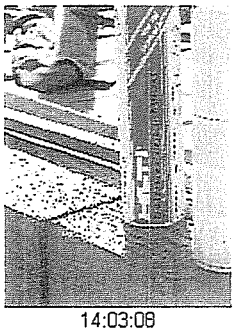

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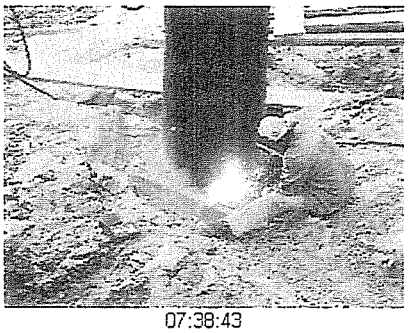

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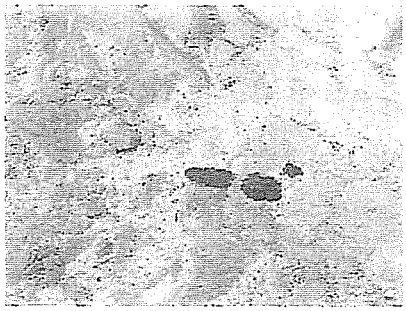

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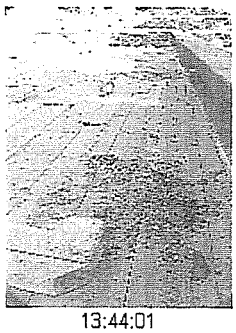
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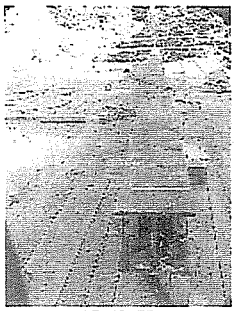
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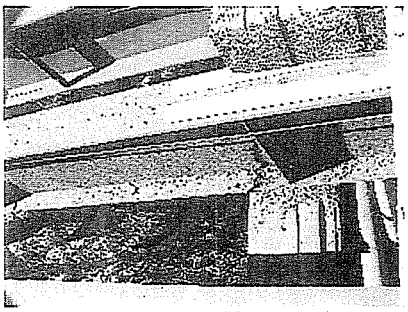
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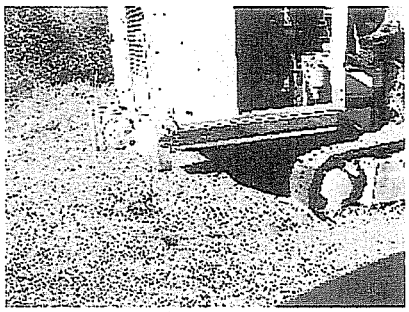
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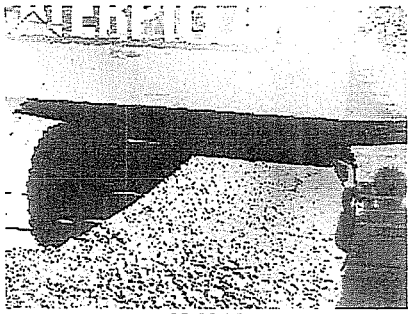
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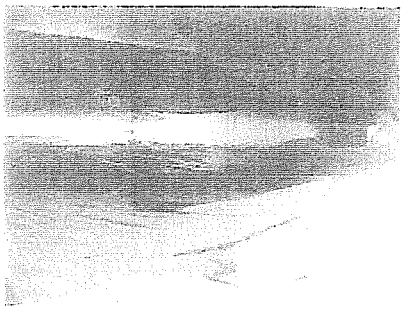
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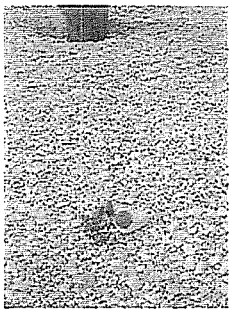
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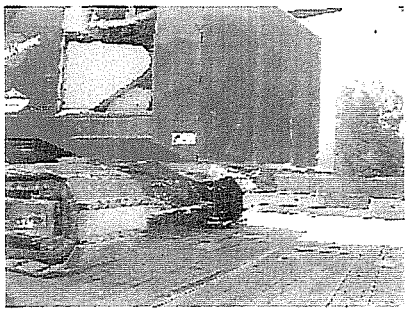
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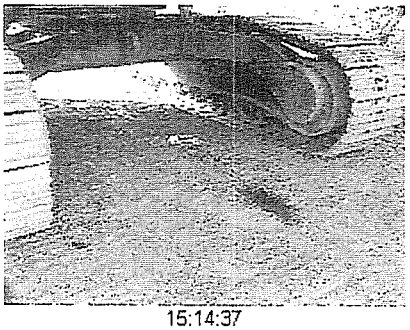
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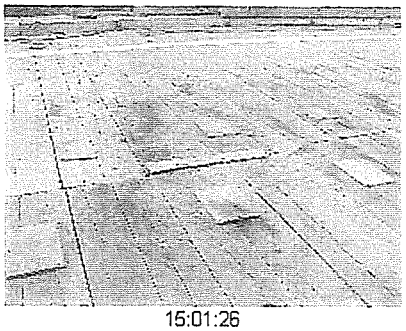
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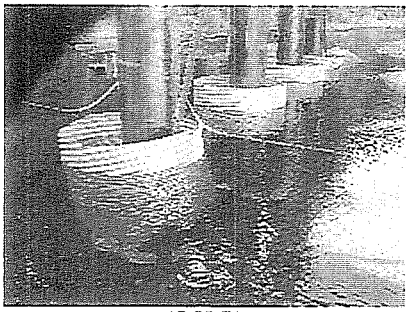
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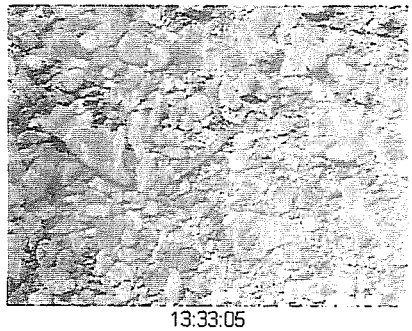
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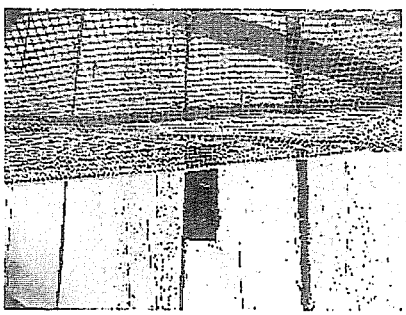
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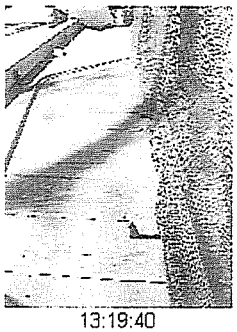
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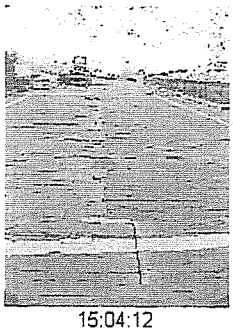
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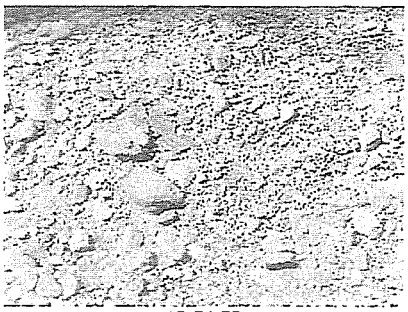
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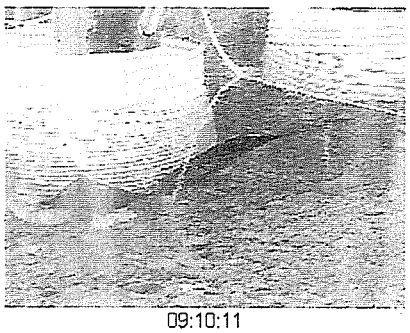
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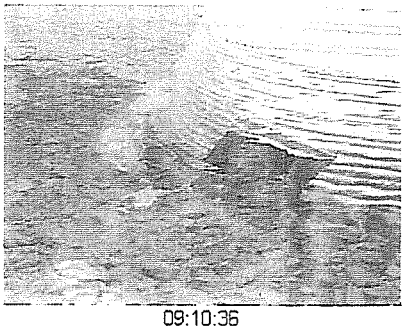
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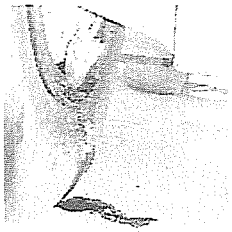

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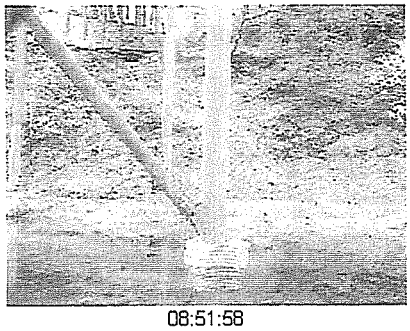

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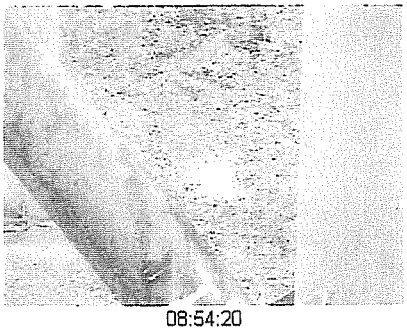

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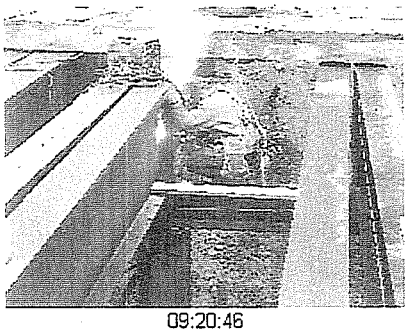

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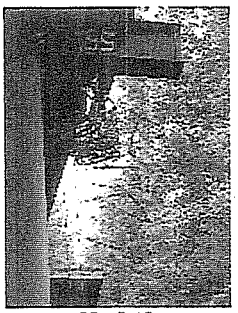

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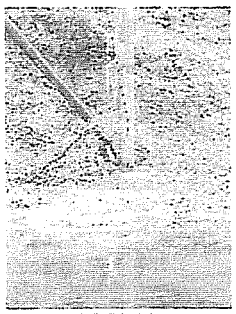

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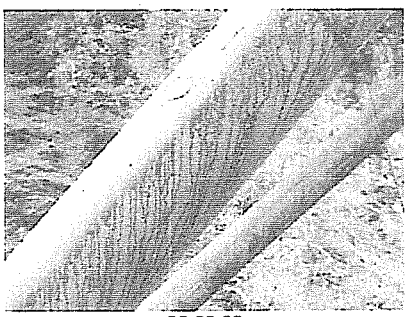

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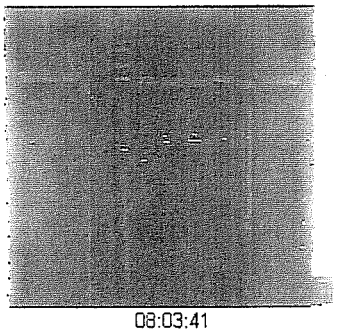

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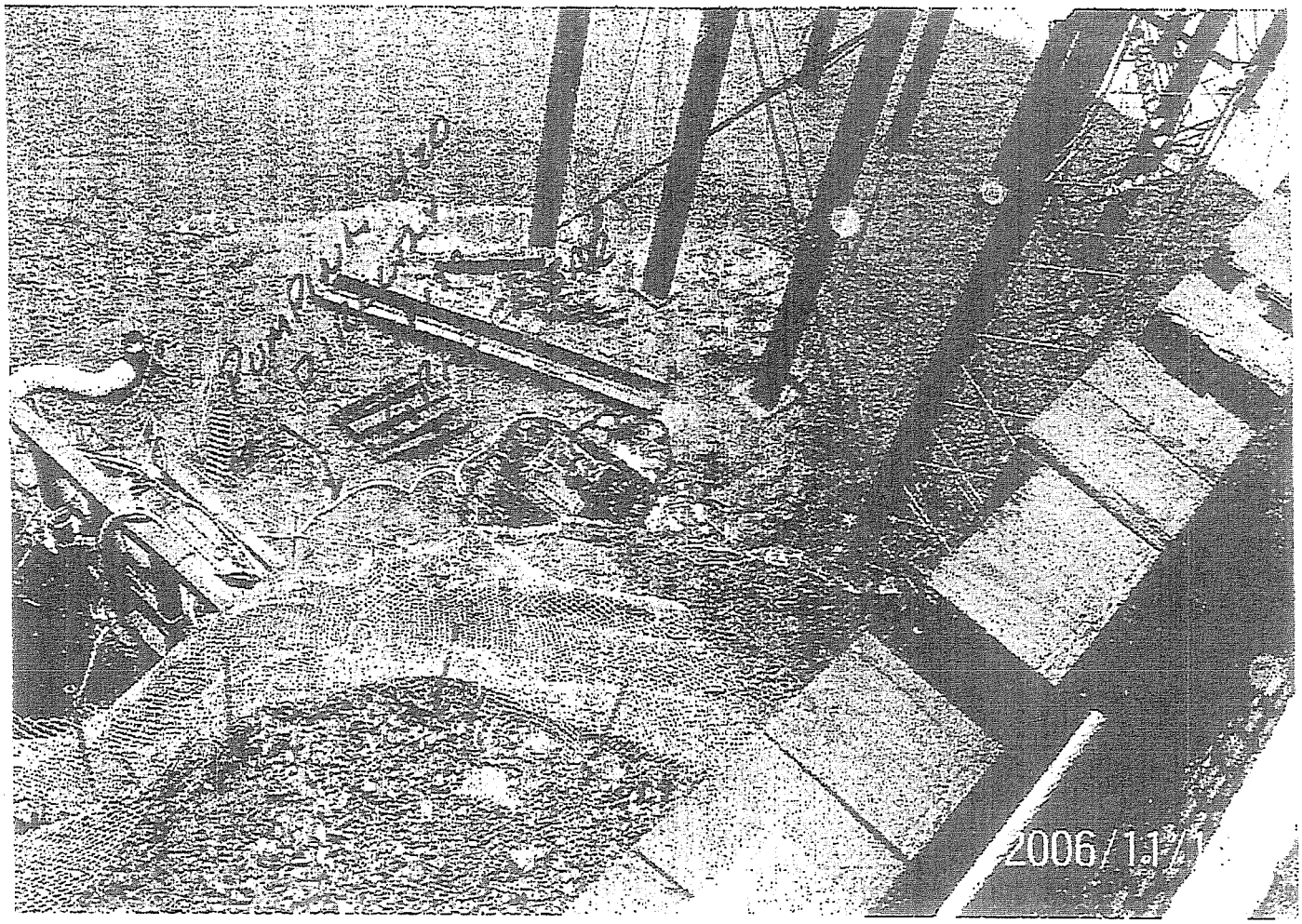

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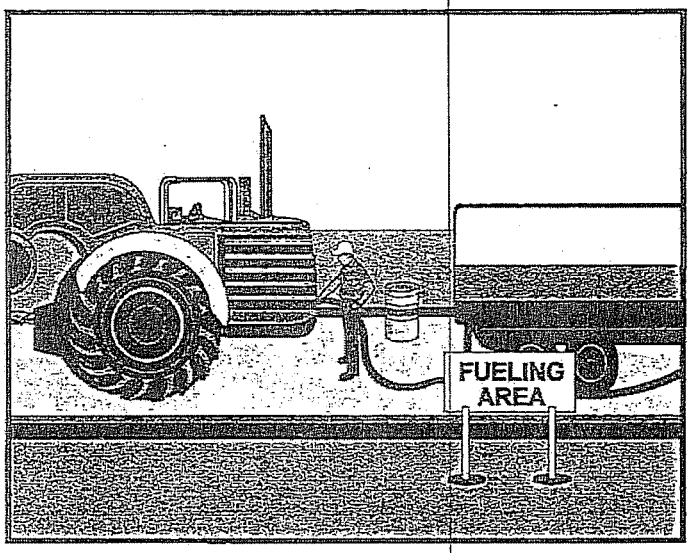
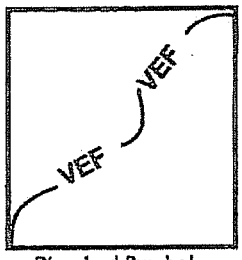
Vehicle and Equipment Fueling

NS-9





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ○ Materials and Waste Management

Definition and Purpose

Vehicle and equipment fueling procedures and practices are designed to minimize or eliminate the discharge of fuel spills and leaks into storm drain systems or to watercourses.

Appropriate Applications

These procedures are applied on all construction sites where vehicle and equipment fueling takes place.

Limitations

- Onsite vehicle and equipment fueling shall only be used where it's impractical to send vehicles and equipment off-site for fueling.

Standards and Specifications

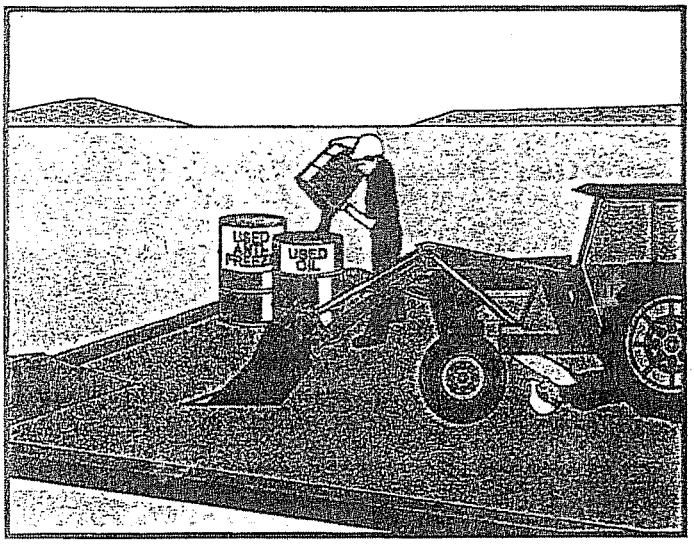
- When fueling must occur onsite, the contractor shall select and designate an area to be used, subject to approval of the Resident Engineer (RE).
- Absorbent spill clean-up materials and spill kits shall be available in fueling areas and on fueling trucks and shall be disposed of properly after use.
- Drip pans or absorbent pads shall be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.
- Dedicated fueling areas shall be protected from storm water run-on and runoff, and shall be located at least 15 m (50 ft) from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas.
- Nozzles used in vehicle and equipment fueling shall be equipped with an automatic shut-off to control drips. Fueling operations shall not be left unattended.
- Protect fueling areas with berms and/or dikes to prevent run-on, runoff, and to contain spills.

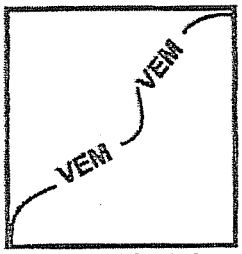
- Use vapor recovery nozzles to help control drips as well as air pollution where required by Air Quality Management Districts (AQMD). Ensure the nozzle is secured upright when not in use.
- Fuel tanks shall not be "topped-off."
- Vehicles and equipment shall be inspected on each day of use for leaks. Leaks shall be repaired immediately or problem vehicles or equipment shall be removed from the project site.
- Absorbent spill clean-up materials shall be available in fueling and maintenance areas and used on small spills instead of hosing down or burying techniques. The spent absorbent material shall be removed promptly and disposed of properly.
- Federal, state, and local requirements shall be observed for any stationary above ground storage tanks. Refer to WM-1, "Material Delivery and Storage."
- Mobile fueling of construction equipment throughout the site shall be minimized. Whenever practical, equipment shall be transported to the designated fueling area.

Maintenance and Inspection

- Fueling areas and storage tanks shall be inspected regularly.
- Keep an ample supply of spill cleanup material on the site.
- Immediately cleanup spills and properly dispose of contaminated soil and cleanup materials.

Vehicle and Equipment Maintenance NS-10





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ○ Materials and Waste Management

Definition and Purpose

Procedures and practices to minimize or eliminate the discharge of pollutants to the storm drain systems or to watercourses from vehicle and equipment maintenance procedures.

Appropriate Applications

These procedures are applied on all construction projects where an onsite yard area is necessary for storage and maintenance of heavy equipment and vehicles.

Limitations

- None identified.

Standards and Specifications

- Drip pans or absorbent pads shall be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable surface in a dedicated maintenance area.
- All maintenance areas are required to have spill kits and/or use other spill protection devices.
- Dedicated maintenance areas shall be protected from storm water run-on and runoff, and shall be located at least 15 m (50 ft) from downstream drainage facilities and watercourses.
- Drip Pans or plastic sheeting shall be placed under all vehicles and equipment placed on docks, barges, or other structures over water bodies when the vehicle or equipment is planned to be idle for more than one hour.
- Absorbent spill clean-up materials shall be available in maintenance areas and shall be disposed of properly after use. Substances used to coat asphalt transport trucks and asphalt-spreading equipment shall be non-toxic.
- Use off-site maintenance facilities whenever practical.

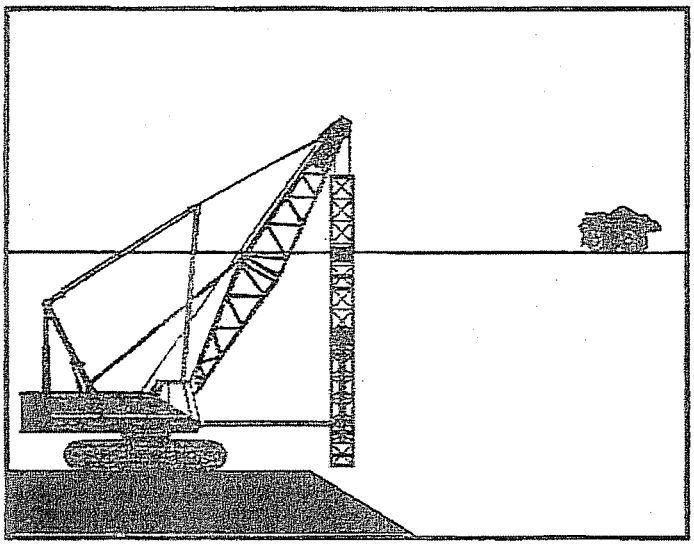
- For long-term projects, consider constructing roofs or using portable tents over maintenance areas.
- Properly dispose of used oils, fluids, lubricants, and spill cleanup materials.
- Do not dump fuels and lubricants onto the ground.
- Do not place used oil in a dumpster or pour into a storm drain or watercourse.
- Properly dispose or recycle used batteries.
- Do not bury used tires.
- Repair of fluid and oil leaks immediately.
- Provide spill containment dikes or secondary containment around stored oil and chemical drums.

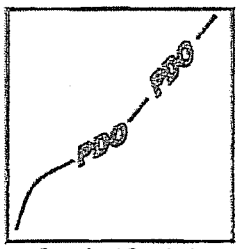
Maintenance and Inspection

- Maintain waste fluid containers in leak proof condition.
- Vehicle and equipment maintenance areas shall be inspected regularly.
- Vehicles and equipment shall be inspected on each day of use. Leaks shall be repaired immediately or the problem vehicle(s) or equipment shall be removed from the project site.
- Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.

Pile Driving Operations

NS-11





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ● Materials and Waste Management

Definition and Purpose

The construction and retrofit of bridges and retaining walls often include driving piles for foundation support and shoring operations. Driven piles are typically constructed of concrete, steel, or timber. Driven sheet piles are used for shoring and cofferdam construction. Proper control and use of equipment, materials, and waste products from pile driving operations will reduce the discharge of potential pollutants to the storm drain system or watercourses.

Appropriate Applications

These procedures apply to construction sites near or adjacent to a watercourse or groundwater where permanent and temporary pile driving operations (impact and vibratory) take place, including operations using pile shells for construction of cast-in-steel-shell and cast-in-drilled-hole piles.

Limitations

- None identified.

Standards and Specifications

- Use drip pans or absorbent pads during vehicle and equipment maintenance, cleaning, fueling, and storage. Refer to BMPs NS-9 "Vehicle and Equipment Fueling" and NS-10 "Vehicle and Equipment Maintenance."
- Have spill kits and cleanup materials available at all locations of pile driving. Refer to BMP WM-4 "Spill Prevention and Control."
- Keep equipment that is in use in streambeds; or on docks, barges, or other structures over water bodies, leak free.
- Park equipment over plastic sheeting or equivalent where possible. Plastic sheeting is not a substitute for drip pans or absorbent pads. The storage or use of equipment in streambeds or other bodies of water shall comply with all applicable permits.
- Implement other BMPs as applicable, such as NS-2 "Dewatering Operations," WM-5 "Solid Waste Management," WM-6 "Hazardous Waste Management," and WM-10 "Liquid Waste Management."

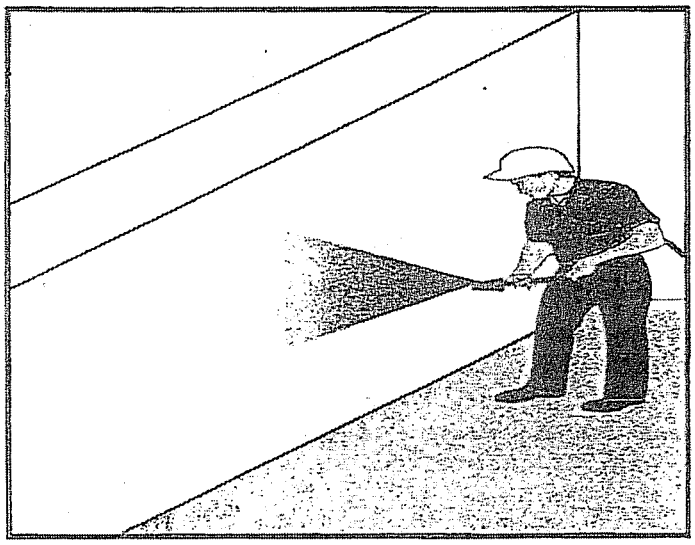
- When not in use, store pile driving equipment away from concentrated flows of storm water, drainage courses, and inlets. Protect hammers and other hydraulic attachments from run-on by placing them on plywood and covering them with plastic or a comparable material prior to the onset of rain.
- Use less hazardous products, e.g. vegetable oil instead of hydraulic fluid, when practicable.

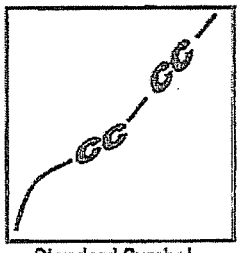
Maintenance and Inspection

- Inspect pile driving areas and equipment for leaks and spills on a daily basis.
- Inspect equipment routinely and repair equipment as needed (e.g., worn or damaged hoses, fittings, gaskets).

Concrete Curing

NS-12





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ● Materials and Waste Management

Definition and Purpose

Concrete curing is used in the construction of structures such as bridges, retaining walls, and pump houses. Concrete curing includes the use of both chemical and water methods. Proper procedures minimize pollution of runoff during concrete curing.

Appropriate Applications

All concrete elements of a structure (e.g., footings, columns, abutments, stems, soffit, deck) are subject to curing requirements.

Limitations

- None identified.

Standards and Specifications

Chemical Curing

- Avoid over-spray of curing compounds.
- Minimize the drift of chemical cure as much as possible by applying the curing compound close to the concrete surface. Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.
- Use proper storage and handling techniques for concrete curing compounds. Refer to BMP WM-1, "Material Delivery and Storage."
- Protect drain inlets prior to the application of curing compounds.
- Refer to WM-4, "Spill Prevention and Control."

Water Curing for Bridge Decks, Retaining Walls, and other Structures

- Direct cure water away from inlets and watercourses to collection areas for removal as approved by the RE and in accordance with all applicable permits.

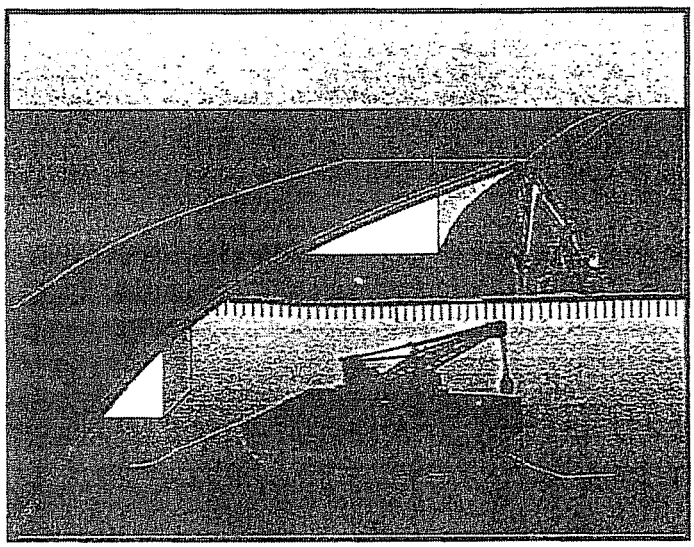
- Collect cure water and transport or dispose of water in a non-erodible manner. See BMPs SS-9, "Earth Dikes/Drainage Swales & Lined Ditches," SS-10, "Outlet Protection/Velocity Dissipation Devices," and SS-11, "Slope Drains."
- Utilize wet blankets or a similar method that maintains moisture while minimizing the use and possible discharge of water.

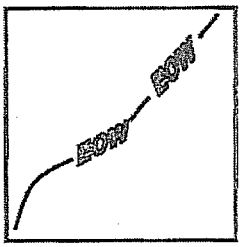
Maintenance and Inspection

- Ensure that employees and subcontractors implement appropriate measures for storage, handling, and use of curing compounds.
- Inspect any temporary diversion devices, lined channels, or swales for washouts, erosion, or debris. Replace lining and remove debris as necessary.
- Inspect cure containers and spraying equipment for leaks.

Material and Equipment Use Over Water

NS-13





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
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- ● Materials and Waste Management

Definition and Purpose

Procedures for the proper use, storage, and disposal of materials and equipment on barges, boats, temporary construction pads, or similar locations that minimize or eliminate the discharge of potential pollutants to a watercourse.

Appropriate Applications

These procedures shall be implemented for construction materials and wastes (solid and liquid) and any other materials that may be detrimental if released. Applies where materials and equipment are used on barges, boats, docks, and other platforms over or adjacent to a watercourse.

Limitations

- None identified.

Standards and Specifications

- Refer to BMPs WM-1, "Material Delivery and Storage" and WM-4, "Spill Prevention and Control."
- Use drip pans and absorbent materials for equipment and vehicles and ensure that an adequate supply of spill cleanup materials is available.
- Drip pans shall be placed under all vehicles and equipment placed on docks, barges, or other structures over water bodies when the vehicle or equipment is expected to be idle for more than one hour.
- Maintain equipment in accordance with BMP NS-10, "Vehicle and Equipment Maintenance." If a leaking line cannot be repaired, remove equipment from over the water.
- Provide watertight curbs or toe boards to contain spills and prevent materials, tools, and debris from leaving the barge, platform, dock, etc.
- Secure all materials to prevent discharges to receiving waters via wind.

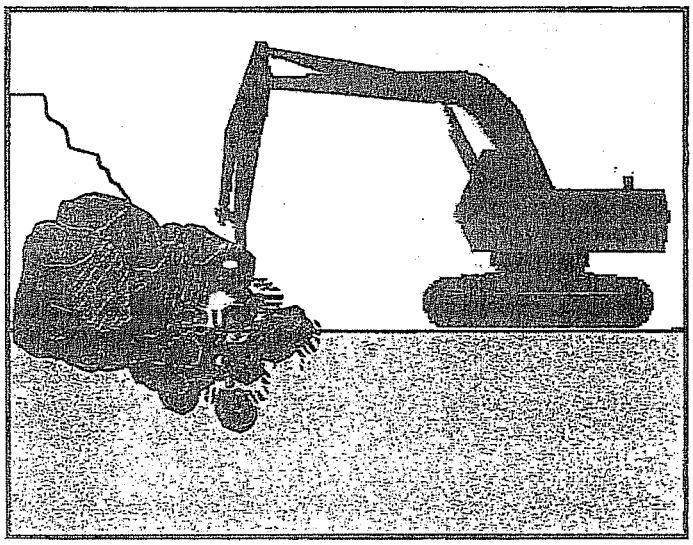
- Identify types of spill control measures to be employed, including the storage of such materials and equipment. Ensure that staff are trained regarding the deployment and access of control measures and that measures are being used.
- Ensure the timely and proper removal of accumulated wastes. Refer to BMPs WM-5, "Solid Waste Management" (non-hazardous) and WM-6, "Hazardous Waste Management."
- Comply with all necessary permits required for construction within or near the watercourse, such as RWQCB, U.S. Army Corps of Engineers, Department of Fish and Game and other local permitting agencies.
- Discharges to waterways shall be reported to the RE immediately upon discovery. A written discharge notification must follow within 7 days.
- Refer to BMP NS-15, "Structure Demolition/Removal Over or Adjacent to Water."

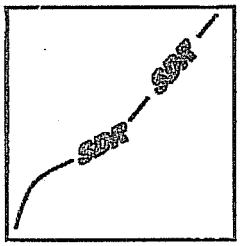
Maintenance and Inspection

- Inspect equipment for leaks and spills on a daily basis, and make necessary repairs.
- Ensure that employees and subcontractors implement appropriate measures for storage and use of materials and equipment.
- Inspect and maintain all associated BMPs and perimeter controls to ensure continuous protection of the watercourse.

Structure Demolition/Removal Over or Adjacent to Water

NS-15





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ● Materials and Waste Management

Definition and Purpose

Procedures to protect water bodies from debris and wastes associated with structure demolition or removal over or adjacent to watercourses.

Appropriate Applications

Full bridge demolition and removal, partial bridge removal (e.g., barrier rail, edge of deck) associated with bridge widening projects, concrete channel removal, or any other structure removal that could potentially affect water quality.

Limitations

- Specific permit requirements may be included in the contract documents.

Standards and Specifications

- Do not allow demolished material to enter waterway.
- Refer to BMP NS-5, "Clear Water Diversion" to direct water away from work areas.
- Use attachments on construction equipment such as backhoes to catch debris from small demolition operations.
- Use covers or platforms to collect debris.
- Platforms and covers are to be approved by the RE.
- Stockpile accumulated debris and waste generated during demolition away from watercourses and in accordance with BMP WM-3, "Stockpile Management."
- Ensure safe passage of wildlife, as necessary.
- Discharges to waterways shall be reported to the RE immediately upon discovery. A written discharge notification must follow within 7 days.

Structure Demolition/Removal Over or Adjacent to Water

NS-15

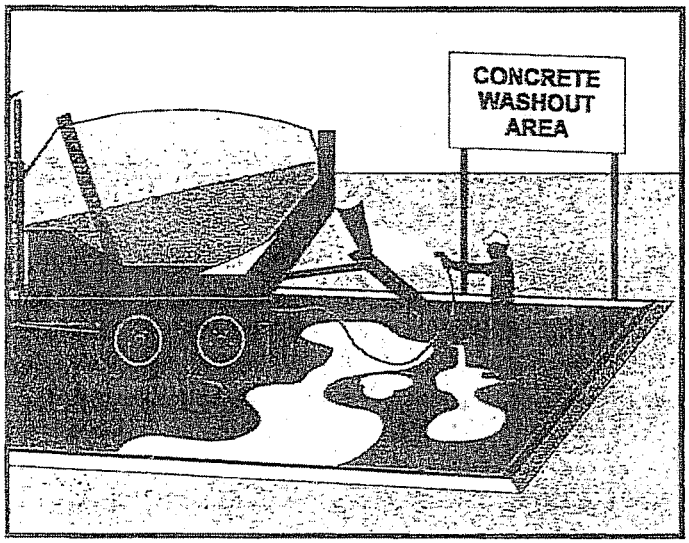
- For structures containing hazardous materials (e.g., lead paint or asbestos) refer to BMP WM-6, "Hazardous Waste Management." For demolition work involving soil excavation around lead-painted structures, refer to BMP WM-7, "Contaminated Soil Management."

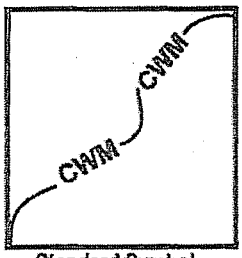
Maintenance and Inspection

- Contractor must inspect demolition areas over or near adjacent watercourses on a daily basis.
- Any debris-catching devices shall be emptied regularly. Collected debris shall be removed and stored away from the watercourse and protected from run-on and runoff.

Concrete Waste Management

WM-8





Standard Symbol

BMP Objectives

- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ● Materials and Waste Management

Definition and Purpose

These are procedures and practices that are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or watercourses.

Appropriate Applications

- Concrete waste management procedures and practices are implemented on construction projects where concrete is used as a construction material or where concrete dust and debris result from demolition activities.
- Where slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from sawcutting, coring, grinding, grooving, and hydro-concrete demolition.
- Where concrete trucks and other concrete-coated equipment are washed on site, when approved by the Resident Engineer (RE). See also NS-8, "Vehicle and Equipment Cleaning."
- Where mortar-mixing stations exist.

Limitations

- None identified.

Standards and Specifications

Education

- Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.
- The Contractor's Water Pollution Control Manager (WPCM) shall oversee and enforce concrete waste management procedures.

Concrete Slurry Wastes

- PCC and AC waste shall not be allowed to enter storm drains or watercourses.

- PCC and AC waste shall be collected and properly disposed of outside the highway right-of-way in conformance with Standard Specifications Section 7-1.13 or placed in a temporary concrete washout facility as shown in the figures on Pages 5 and 6.

- Disposal of hardened PCC and AC waste shall be in conformance with Standard Specifications Section 15-3.02.

- A sign shall be installed adjacent to each temporary concrete washout facility to inform concrete equipment operators to utilize the proper facilities as shown on Page 6.

- A foreman and/or construction supervisor shall monitor onsite concrete working tasks, such as saw cutting, coring, grinding and grooving to ensure proper methods are implemented.

- Do not allow saw-cut PCC slurry to enter storm drains or watercourses. See also BMP NS-3, "Paving and Grinding Operations;" and BMP WM-10, "Liquid Waste Management." Residue from grinding operations shall be picked up by means of a vacuum attachment to the grinding machine. Saw cutting residue shall not be allowed to flow across the pavement, and shall not be left on the surface of the pavement.

- Vacuum slurry residue and dispose in a temporary facility (as described in Onsite Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures, below) and allow slurry to dry. Dispose of dry slurry residue in accordance with BMP WM-5, "Solid Waste Management", or, for on-site disposal, in accordance with Standard Specification 15-3.02, Removal Methods.

- Collect and dispose of residue from grooving and grinding operations in accordance with Standard Specifications Section 42-1.02 and 42-2.02.

Onsite Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures

- Temporary concrete washout facilities shall be located a minimum of 15 m (50 ft) from storm drain inlets, open drainage facilities, and watercourses, unless determined infeasible by the RE. Each facility shall be located away from construction traffic or access areas to prevent disturbance or tracking.

- A sign shall be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities. The sign shall be installed as shown on the plans and in conformance with the provisions in Standard Specifications Section 56-2, Roadside Signs.

- Temporary concrete washout facilities shall be constructed above grade or below grade at the option of the Contractor. Temporary concrete washout facilities shall be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.

- Temporary washout facilities shall have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.

- Perform washout of concrete mixer trucks in designated areas only.

- Wash concrete only from mixer truck chutes into approved concrete washout facility. Washout may be collected in an impermeable bag for disposal.

- Pump excess concrete in concrete pump bin back into concrete mixer truck.

- Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed offsite.

- Once concrete wastes are washed into the designated area and allowed to harden, the concrete shall be broken up, removed, and disposed of per BMP WM-5, "Solid Waste Management", and in conformance with the provisions in Standard Specifications Section 15-3.02, "Removal Methods."

Temporary Concrete Washout Facility Type "Above Grade"

- Temporary concrete washout facility Type "Above Grade" shall be constructed as shown on Page 5 or 6, with a recommended minimum length and minimum width of 3 m (10 ft), but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, at the Contractor's expense, upon approval from the RE.

- Straw bales, wood stakes, and sandbag materials shall conform to the provisions in BMP SC-9, "Straw Bale Barrier."

- Plastic lining material shall be a minimum of 10-mil polyethylene sheeting and shall be free of holes, tears or other defects that compromise the impermeability of the material.

- Portable delineators shall conform to the provisions in Standard Specifications Section 12-3.04, "Portable Delineators.". The delineator bases shall be cemented to the pavement in the same manner as provided for cementing pavement markers to pavement in Standard Specifications Section 85-1.06, "Placement." Portable delineators shall be applied only to a clean, dry surface.

Temporary Concrete Washout Facility (Type Below Grade)

- Temporary concrete washout facility Type "Below Grade" shall be constructed as shown on page 6, with a recommended minimum length and minimum width of 3m (10 ft). The quantity and volume shall be sufficient to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, at the Contractor's expense, upon approval of the RE. Lath and flagging shall be commercial type.

- Plastic lining material shall be a minimum of 10-mil polyethylene sheeting and shall be free of holes, tears or other defects that compromise the impermeability of the material.

- The soil base shall be prepared free of rocks or other debris that may cause tears or holes in the plastic lining material.

Removal of Temporary Concrete Washout Facilities

- When temporary concrete washout facilities are no longer required for the work, as determined by the RE, the hardened concrete shall be removed and disposed of in conformance with the provisions in Standard Specifications Section 15-3.02. Disposal of PCC slurries or liquid waste shall be disposed of outside the highway right-of-way in conformance with provisions of Standard Specifications Section 7-1-13. Materials used to construct temporary concrete washout facilities shall become the property of the Contractor, shall be removed from the site of the work, and shall be disposed of outside the highway right-of-way in conformance with the provisions of the Standard Specifications, Section 7-1.13.

- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and repaired in conformance with the provisions in Standard Specifications Section 15-1.02, "Preservation of Property."

Maintenance and Inspection

- The Contractor's Water Pollution Control Manager (WPCM) shall monitor on site concrete waste storage and disposal procedures at least weekly or as directed by the RE.

- The WPCM shall monitor concrete working tasks, such as saw cutting, coring, grinding and grooving daily to ensure proper methods are employed or as directed by the RE.

- Temporary concrete washout facilities shall be maintained to provide adequate holding capacity with a minimum freeboard of 100 mm (4 inches) for above grade facilities and 300 mm (12 inches) for below grade facilities. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials shall be removed and disposed of in conformance with the provisions in Standard Specifications Section 15-3.02, "Removal Methods."

- Existing facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.

- Temporary concrete washout facilities shall be inspected for damage (i.e. tears in PVC liner, missing sand bags, etc.). Damaged facilities shall be repaired.

EXHIBIT

C

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

California Regional Water Quality Control Board
North Coast Region
John W. Corbett, Chairman

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

n C. Lloyd, Ph.D.
Agency Secretary

Arnold
Schwarzenegger
Governor

February 16, 2006

Ms. Susan Leroy
CDOT Eureka
1656 Union Street
Eureka, CA 95501

Dear Ms. Leroy:

Subject: Issuance of Clean Water Act Section 401 Certification (Water Quality Certification) for the Confusion Hill Bypass Project

File: CDOT – Hwy 101, Confusion Hill Bypass
WDID No. 1B05153WNME

This Order by the California Regional Water Quality Control Board, North Coast Region (Regional Water Board), is being issued pursuant to Section 401 of the Clean Water Act (33 USC 1341), in response to your request, on behalf of the California Department of Transportation (applicant), for Water Quality Certification for activities related to the Confusion Hill Bypass Project in Mendocino County. On November 29, 2005, the Regional Water Board received your application and a $500.00 processing fee. On December 29, 2005, we sent you a letter stating the application was incomplete. You submitted additional information during the first week of January 2006, including a Notice of Determination and maps that show the area of potential impact from the project is larger than the area that was used to calculate the initial fee. On January 11, 2006, we deemed the application complete and posted information describing the project on the Regional Water Board's website for a 21-day public review and comment period. We did not receive any comments on this project. On January 12, 2006, we received an additional $6510.00 that covers the remaining balance of the application fee.

Project Description: The project is located approximately 18.5 miles south of Garberville and 8 miles north of Leggett. Highway 101 currently bisects an ancient and active rockslide in the area known as Confusion Hill. The purpose of the project is to provide a safe and reliable transportation route around the landslide area by relocating the highway from the east side of the South Fork Eel River to the west side. Relocating the highway requires construction of two new bridges and a new section of highway between the new bridges. The existing section of highway will be de-commissioned following completion of the bypass.

The south bridge will be a segmental, cast-in-place, pre-stressed box girder structure. The south bridge will be 43 feet wide, 1355 feet long, and 255 feet above the center of the river channel. The foundation for the south bridge will be constructed on cast-in-drilled-hole piles. The north bridge will be a cast-in-place pre-stressed box girder structure with pier shaft foundations. The north bridge will be 43 feet wide, 580 feet long, and 150 feet above the center of the river. Both bridges are designed such that all piers and associated foundations will be located above the 100-year flood elevation of the river and the new section of highway will be at least 150-feet above the river.

Temporary access roads and temporary bridges will be constructed at each end of the project to allow access for personnel and various construction equipment including cranes, drill rigs, and excavation equipment. The applicant has identified two 1.5-acre areas near each end of the project as places where activities related to construction of access roads and temporary bridges could impact waters of the United States. The temporary bridges will be constructed 3 feet above the elevation of the 100-year storm event or they will be designed to withstand the 100-year storm event and would be overtopped at the elevation of a 50-year storm event. Activities related to construction of the temporary bridges include rotating, vibrating, drilling or a combination of these methods to install sheet piles or casings and drilling holes into the bedrock to build support piers for the temporary bridges.

A seasonal temporary bridge may also be installed near the south bridge. A railroad flatcar or similar bridge deck will be placed on river rock abutments; or wooden, steel or concrete piles will be placed in the channel to support a wood deck. The river rock abutments may extend several feet into the channel. All the bridges are designed to allow for fish passage and passage for recreational boating.

A portable concrete batch plant will be located near the southern end of Route 271 at an elevation above the 100-year storm event. A concrete pipeline or "slick line" may be used to transport concrete from the batch plant. A typical slick line is made of 6-inch diameter steel pipe; a secondary containment pipe or trough would be used to contain any concrete spills. All concrete wastes and water that contacts fresh concrete must be fully contained and disposed of properly in order to prevent any discharge to surface water or ground water.

All permanent and temporary impacts to waters of the United States from this project will occur within two designated 1.5-acre areas; however, the actual area of impact to waters of the United States is anticipated to be much smaller. The area of anticipated temporary impacts to waters of the United States from access road and temporary bridge placement and removal activities will be approximately 0.16-acre at each end of the project. All support piers installed for the temporary bridges will be removed to the level of bedrock. The only area of permanent impact to waters of the United States is anticipated to be from the sections of temporary bridge piers that will remain below the top of bedrock following removal of the temporary bridges. The area of permanent impact to waters of the United States from these pier remnants will be less than 0.01 acre. The new bridges and new highway section will not permanently impact waters of the United States.

The new section of highway will be placed in a large through-cut. Approximately 385,000 cubic yards of excess earthen material will be generated by excavation of the through-cut. The applicant has identified five areas along Highway 101 near the north end of the project that are above the elevation of the 100-year storm event where permanent disposal of the excess excavation material will occur. Best Management Practices (BMPs) for sediment and turbidity control will be implemented at the disposal areas during construction activities and all the disposal areas will be planted with native shrubs upon completion of the project.

The proposed project will not affect any wetlands. Existing vegetation will be preserved to the maximum extent possible and all disturbed areas will be seeded and replanted. To compensate for potential impacts this project may have on salmonids, a culvert modification project will be implemented on Red Mountain Creek to restore fish passage and provide access to historic spawning and rearing habitat.

Receiving Waters:	South Fork Eel River in the Benbow Hydrologic Subarea No. 111.32.
Filled or Excavated Area:	Area Temporarily Impacted: 0.32 acres of stream bank and stream channel Area Permanently Impacted: 0.01 acre of stream channel
Total Linear Impacts:	Length temporarily impacted: 150 feet Length permanently impacted: none

Federal Permit: U.S. Army Corps of Engineers Nationwide Permit No. 33

Compensatory Mitigation: To compensate for potential impacts to salmonids as a result of the Confusion Hill Bypass project construction activities, the applicant will fund a project to improve fish passage through the culvert at Red Mountain Creek. Highway 101 crosses Red Mountain Creek at the north end of the project where the new alignment will conform to the existing alignment. During a wide range of typical stream flows, the existing culvert at Red Mountain Creek prevents salmonids from accessing historic spawning and rearing habitat located upstream of the culvert. The fish passage improvement project will incorporate National Marine Fisheries Service and California Department of Fish and Game (CDF&G) fish passage criteria. The mitigation project is subject to approval by those agencies.

Modifications to improve fish passage through the existing culvert will likely include installation of concrete/rock weirs (baffles) in the bottom of the culvert to reduce flow velocities through the culvert. The baffles are likely to be composed of large rocks and concrete. The existing road leading to the culvert outlet will be used to gain access to through the culvert and inlet area.

Noncompensatory Mitigation: Noncompensatory mitigation for this project includes the use of BMPs for waste handling, sediment and turbidity control, and heavy equipment use and concrete use near a waterway. The applicant has applied for a Lake or Streambed Alteration Agreement (1600 Permit) from the CDF&G.

CEQA Compliance: The California Department of Transportation, as the lead agency for CEQA, certified an Environmental Impact Report (SCH# 200405201) for this project on December 15, 2005.

Standard Conditions: Pursuant to Title 23, California Code of Regulations, Section 3860 (23 CCR 3860), the following three standard conditions shall apply to this project:

1) This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code and 23 CCR 3867.

2) This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy

Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3) The validity of any nondenial certification action (actions 1 and 2) shall be conditioned upon total payment of the full fee required under 23 CCR 3833, unless otherwise stated in writing by the certifying agency.

Additional Conditions: Pursuant to 23 CCR 3859(a), the applicant shall comply with the following additional conditions:

1) The applicant shall notify the Regional Water Board in writing at least five working days (working days are Monday – Friday) prior to the commencement of the project, with details regarding the schedule of operations, to allow staff the opportunity to be present onsite and to answer any public inquiries that may arise regarding the project.

2) All conditions listed in this Water Quality Certification must be included in the Plans and Specifications prepared by the applicant for the Contractor. All conditions shall be implemented according to the submitted application and this Water Quality Certification.

3) A copy of this permit must be provided to the contractor and all subcontractors conducting the work, and a copy must be in their possession at the work site. It is the applicant's responsibility to ensure that the contractor and all subcontractors are provided a copy of this permit.

4) A copy of the Storm Water Pollution Prevention Plan (SWPPP) shall be submitted to the attention of Regional Water Board staff Dean Prat at least 30 days prior to the start of the project.

5) The Red Mountain Creek mitigation project shall be completed by October 31, 2010. The applicant shall notify the Regional Water Board in writing at least five working days (working days are Monday – Friday) prior to the commencement of the Red Mountain Creek mitigation project, with details regarding the schedule of operations, to allow staff the opportunity to be present onsite and to answer any public inquiries that may arise regarding the project.

6) The Red Mountain Creek mitigation project shall comply with all conditions in this Water Quality Certification.

7) Adequate BMPs for sediment and turbidity control shall be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters surface waters.

8) If, at any time, an unauthorized discharge to surface waters occurs, or any water quality problem arises, the project shall cease immediately and Regional Water Board staff shall be notified promptly.

9) No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this permit, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State.

10) All materials used for cleaning concrete from tools and equipment, and any wastes generated by this activity, shall be adequately contained to prevent contact with soil and surface water and shall be disposed of properly.

11) When operations are completed, any excess material or debris shall be removed from the work area and disposed of properly. No rubbish shall be deposited within 150 feet of the high water mark of any stream.

12) If construction dewatering is found to be necessary, the applicant will use a method of water disposal other than disposal to surface waters (such as land disposal) or the applicant shall apply for coverage under the General Construction Dewatering Permit and receive notification of coverage to discharge to surface waters.

13) Fueling, lubrication, maintenance, operation, storage and staging of vehicles and equipment shall be outside of waters of the United States and shall not result in a discharge or a threatened discharge to waters of the United States. At no time shall the applicant use any vehicle or equipment, which leaks any substance that may impact water quality.

14) Project activities shall comply with provisions in the North Coast Region Water Quality Control Plan (Basin Plan).

15) The project site may be visited and assessed by Regional Water Board staff to document compliance with this certification.

16) All work within waters of the United States shall not commence until May 15th and shall be completed prior to October 31st.

17) All activities, BMPs, and associated mitigation will be conducted as described in this Permit and the application submitted by the applicant for this project.

18) The applicant shall take photos of all areas disturbed by project activities, including all excess materials disposal areas, after the first rainfall event that generates visible runoff from these areas in order to demonstrate that erosion control measures have been successful. A report containing these photos shall be submitted within 60 days of the first rainfall event that generates runoff from the disturbed areas.

19) Visual observations of the South Fork Eel River shall be conducted whenever a project activity has the potential to mobilize sediment and increase the turbidity of the South Fork Eel River. Field turbidity measurements shall be collected whenever a project activity causes turbidity of the South Fork Eel River to be increased above background concentrations in order to demonstrate compliance with receiving water limitations.

    Whenever turbidity in the South Fork Eel River is increased above background as a result of project activities, turbidity measurements shall be collected upstream (within 50 feet) of project activities (background) and downstream (within 100 feet) of the source of turbidity. The frequency of turbidity monitoring shall be a minimum of every hour during periods of increased turbidity and shall continue until turbidity measurements demonstrate compliance with receiving water limitations and turbidity levels are no longer increasing as a result of project activities. If turbidity levels are greater than 20 percent above background 100 feet downstream of the source of turbidity, all necessary steps shall be taken to install, repair, and/or modify BMPs to control the source(s) of sediment and the overall distance from the source of

turbidity to the downstream extent of the increased turbidity (20 percent above background) shall be measured.

Turbidity monitoring results shall be reported to appropriate Regional Water Board staff by telephone within 1 hour of taking any turbidity measurement that shows turbidity levels are 20 percent above background 100 feet or more downstream of the source of turbidity. All recorded visual observation and all field turbidity measurements collected for the purpose of this condition shall be submitted in a report to the Regional Water Board by November 15th each year and within 45 days of project completion.

20) This Order is not transferable. In the event of any change in control of ownership of land presently owned or controlled by the applicant, the applicant shall notify the successor-in-interest of the existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board at the above address.

To discharge dredged or fill material under this Order, the successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, address, and telephone number of the person(s) responsible for contact with the Regional Water Board. The request must also describe any changes to the Project proposed by the successor-in-interest or confirm that the successor-in-interest intends to implement the Project as described in this Order.

Water Quality Certification: I hereby issue an order [23 CCR Subsection 3831(e)] certifying that any authorized discharge from the Confusion Hill Bypass Project, (Facility No. 1B05153WNME) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 (" Toxic and Pretreatment Effluent Standards") of the Clean Water Act [33 USC Subsection 1341 (a)(1)], and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited and all proposed mitigation being completed in strict compliance with the applicant's project description, and b) compliance with all applicable requirements of the Regional Water Board's Water Quality Control Plan for the North Coast Region (Basin Plan).

Expiration: The authorization of this certification for any dredge and fill activities expires on February 16, 2011. Conditions and monitoring requirements outlined in this certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

Please notify Dean Prat of our staff at (707) 576-2801 prior to construction (pursuant to Additional Condition No. 1 above) so that we can answer any public inquiries about the work.

Sincerely,

Catherine Kuhlman
Executive Officer

021406_DLP_hwy101confusionhill401cert.doc

Enclosure:
State Water Resources Control Board Order No. 2003-0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification"

cc: Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 333 Market Street, San Francisco, CA 94599
U.S. Army Corps of Engineers, District Engineer, P.O. Box 4863, Eureka, CA 95502

STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ORDER NO. 2003 - 0017 - DWQ

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DREDGED OR FILL DISCHARGES THAT HAVE RECEIVED STATE WATER QUALITY CERTIFICATION (GENERAL WDRs)

The State Water Resources Control Board (SWRCB) finds that:

1. Discharges eligible for coverage under these General WDRs are discharges of dredged or fill material that have received State Water Quality Certification (Certification) pursuant to federal Clean Water Act (CWA) section 401.

2. Discharges of dredged or fill material are commonly associated with port development, stream channelization, utility crossing land development, transportation water resource, and flood control projects. Other activities, such as land clearing, may also involve discharges of dredged or fill materials (e.g., soil) into waters of the United States.

3. CWA section 404 establishes a permit program under which the U.S. Army Corps of Engineers (ACOE) regulates the discharge of dredged or fill material into waters of the United States.

4. CWA section 401 requires every applicant for a federal permit or license for an activity that may result in a discharge of pollutants to a water of the United States (including permits under section 404) to obtain Certification that the proposed activity will comply with State water quality standards. In California, Certifications are issued by the Regional Water Quality Control Boards (RWQCB) or for multi-Region discharges, the SWRCB, in accordance with the requirements of California Code of Regulations (CCR) section 3830 et seq. The SWRCB's water quality regulations do not authorize the SWRCB or RWQCBs to waive certification, and therefore, these General WDRs do not apply to any discharge authorized by federal license or permit that was issued based on a determination by the issuing agency that certification has been waived. Certifications are issued by the RWQCB or SWRCB before the ACOE may issue CWA section 404 permits. Any conditions set forth in a Certification become conditions of the federal permit or license if and when it is ultimately issued.

5. Article 4, of Chapter 4 of Division 7 of the California Water Code (CWC), commencing with section 13260(a), requires that any person discharging or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the State,[1] file a report of waste discharge (ROWD). Pursuant to Article 4, the RWQCBs are required to prescribe waste discharge requirements (WDRs) for any proposed or existing discharge unless WDRs are waived pursuant to CWC section 13269. These General WDRs fulfill the requirements of Article 4 for proposed dredge or fill discharges to waters of the United States that are regulated under the State's CWA section 401 authority.

[1] "Waters of the State" as defined in CWC Section 13050(e)

IT IS HEREBY ORDERED that WDRs are issued to all persons proposing to discharge dredged or fill material to waters of the United States where such discharge is also subject to the water quality certification requirements of CWA section 401 of the federal Clean Water Act (Title 33 United States Code section 1341), and such certification has been issued by the applicable RWQCB or the SWRCB, unless the applicable RWQCB notifies the applicant that its discharge will be regulated through WDRs or waivers of WDRs issued by the RWQCB. In order to meet the provisions contained in Division 7 of CWC and regulations adopted thereunder, dischargers shall comply with the following:

1. Dischargers shall implement all the terms and conditions of the applicable CWA section 401 Certification issued for the discharge. This provision shall apply irrespective of whether the federal license or permit for which the Certification was obtained is subsequently deemed invalid because the water body subject to the discharge has been deemed outside of federal jurisdiction.

2. Dischargers are prohibited from discharging dredged of fill material to waters of the United States without first obtaining Certification from the applicable RWQCB or SWRCB.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 19, 2003.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton
Nancy H. Sutley

NO: None.

ABSENT: None.

ABSTAIN: None.

Debbie Irvin
Clerk to the Board

EXHIBIT

D

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE WATER RESOURCES CONTROL BOARD

ORDER NO. 99 - 06 - DWQ
NPDES NO. CAS000003

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
STATEWIDE STORM WATER PERMIT
AND
WASTE DISCHARGE REQUIREMENTS (WDRs)
FOR THE
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS)

The State Water Resources Control Board (SWRCB) finds that:

1. **NPDES PERMIT APPLICATION:** On September 5, 1996, Caltrans, located at 1120 N Street, Sacramento, California 95814 submitted an NPDES Permit application for storm water discharges from the Caltrans highways, properties, facilities, and activities throughout the State of California for Caltrans headquarters and for the District offices including: the North Coast region (District 1), Northern Central Valley and Far Northeastern region (District 2), Sacramento area (District 3), San Francisco Bay area (District 4), Central Coast (District 5), Lower Central Valley (District 6), Los Angeles Basin (District 7), San Bernardino area (District 8), Mono/Inyo area (District 9), Middle Central Valley (District 10), San Diego area (District 11), and Orange County (District 12). The application was accepted on October 4, 1996. As part of the application, Caltrans submitted a Storm Water Management Plan (SWMP) and Monitoring Plan. The SWMP and Monitoring Plan were amended in March 1997 and again in April 1998. The application is considered an application for permit reissuance because Caltrans is currently under permit in all of the parts of the State for which a Municipal Separate Storm Sewer System (MS4) permit is currently required. The MS4 permits that Caltrans holds, the permitting agency, the adoption date, and expiration date are shown in Table 1.

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STATE WATER RESOURCES CONTROL BOARD
901 P STREET
SACRAMENTO, CALIFORNIA
JULY 15, 1999

FACT SHEET
FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER DISCHARGES FROM THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) PROPERTIES, FACILITIES, AND ACTIVITIES (ORDER NO. 99 – 06 - DWQ)

BACKGROUND

In 1972, The Federal Water Pollution Control Act [also referred to as the Clean Water Act (CWA)] was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful, unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added section 402(p) which directs that storm water discharges are point source discharges and establishes a framework for regulating municipal and industrial storm water discharges under the NPDES program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) promulgated final regulations that establish the storm water permit requirements.

Pursuant to these regulations, storm water permits are required for discharges from a municipal separate storm sewer system (MS4) serving a population of 100,000 or more. USEPA defined MS4 to include road systems owned by states which are in an area with a population greater than 100,000. The regulations also specified a requirement for storm water permits from 11 categories of industry, including construction activities where the construction activity disturbs five acres or more.

In California, the MS4s were issued individual NPDES permits by the Regional Water Quality Control Boards (RWQCB). Caltrans is currently under permit in all of the areas of California that have been determined to require an MS4 permit with the exception of the Salinas area. Industrial activities are covered by General Permits that have been adopted by the State Water Resources Control Board (SWRCB). Caltrans currently seeks coverage under the NPDES General Permit for Construction Activities (Construction General Permit) for construction activities that are over five acres. The exception to this is in the Lake Tahoe area, where the RWQCB adopted its own Construction General Permit for projects over five acres and Waste Discharge Requirements (WDRs) for projects under five acres.

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5537
Mailing Address: P.O. Box 1977 • Sacramento, California • 95812-1977
FAX (916) 341-5543 • Internet Address: http://www.waterboards.ca.gov/stormwtr/index.html

Arnold Schwarzenegger
Governor

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR
STORM WATER DISCHARGES ASSOCIATED WITH
CONSTRUCTION ACTIVITY (GENERAL PERMIT)
WATER QUALITY ORDER 99-08-DWQ

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STATEWIDE STORM WATER MANAGEMENT PLAN

CTSW-RT-02-008

California Department of Transportation
Division of Environmental Analysis
1120 N Street
Sacramento, California 95814

May 2003

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

NOTICE TO CONTRACTORS

AND

SPECIAL PROVISIONS

FOR CONSTRUCTION ON STATE HIGHWAY IN

MENDOCINO COUNTY NEAR LEGGETT

FROM 2.9 KM SOUTH TO 0.3 KM NORTH OF RED MOUNTAIN CREEK

DISTRICT 01, ROUTE 101

For Use in Connection with Standard Specifications Dated JULY 1999, Standard Plans Dated JULY 2004, and Labor Surcharge and Equipment Rental Rates.

CONTRACT NO. 01-397514

01-Men-101-159.6/162.0

Federal Aid Project
ER-37B2(004)E

Bids Open: April 26, 2006
Dated: February 27, 2006

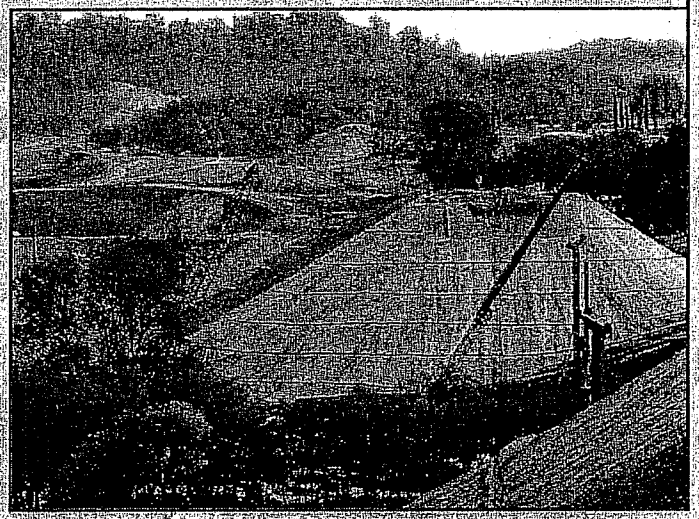
OSD

Storm Water Quality Handbooks

Project Planning and Design Guide

Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual

Construction Site Best Management Practices (BMPs) Manual



Caltrans

State of California
Department of Transportation

March 2003

EXHIBIT

E

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

Summary of 11-29-05 Meeting with Dean Prat at North Coast Regional Quality Control Board Office

Please note that this summary is compiled from my notes on the meeting and memory.

My first notes indicate a question by Dean about the Wild and Scenic Rivers status and Susan explained that we have received a clearance letter from USFWS. Dean suggested that we attach the letter to the application package. We discussed CEQA, and his need to verify compliance with CEQA. That there is risk associated with submitting an application without CEQA being complete. The implication was that if project description is not consistent with CEQA, we could get in a situation where we would have to restart the process.

He mentioned that he does not want to see massive Disturbed Soil Area (DSA) all at once. ~Stage~ Susan explained that the earthwork would be done after the bridges.

Dean suggested that perhaps CT could set aside some funds for Water Pollution Control on jobs that CT would expend/use for situations like Van Duzen where the contractor does not want to implement the controls we feel are necessary. We could then implement the controls to keep ourselves in compliance without having to fight with the contractor about what is necessary or required.

He said something about not being that concerned about the temporary crossings, but that the care is clean equipment, keeping oil out of the river. We need to either discuss clean equipment in the project description or he can make conditions in the certification to ensure that we do not run into oil problems on the river bar. Perhaps a requirement for daily inspection logs incorporated into the specs?

Good specific project description to explain how concrete waste water will be handled. One suggestion he made was that we neutralize and use for dust control. This led to the question about how many cubic yards of concrete we expect on this job. The dilemma on concrete is that he cannot tell us how to handle it and we can't tell the contractor how to do it. We talked about using the disposal areas for spraying the concrete wastewater, but came to the conclusion that this likely would not work because the concrete work is early in the job and most of the excavation/disposal is late. If we propose percolation it's going to take longer and lots of info. This led to a discussion of lined basins. He told us about how a facility has used twin impermeable basins for their concrete waste. When the first basin reaches capacity, the second basin is utilized using the water from the first basin to wash the equipment. This serves to dewater the sludge, making it easily disposable (can add it to base), and limits the amount of water that will require disposal. Contain and recycle. This ties right in with their mantra: avoid, minimize, mitigate. We could then take the water and surface apply in amounts that do not cause runoff. Timing/volume on washout. (I wrote this down in my notes, but I'm not precisely sure what I meant other than careful planning could help make this an non issue.) Minimize the amount of water

generated.

We talked about the slick line and wondered how much water would be generated from cleaning it. We should come up with some sort of estimate and a method to handle that volume.

We then moved on to a discussion of the item we knew would be coming: Post Construction Storm Water Treatment for the new section of road. It won't fly – need treatment BMP's. How each discharge point is being treated. Need to show that we are not going to create gullies leading to the river. Minimize the amount of rock, maximize vegetation. He's interested in the transition from rock to vegetation to river. It was at this point that we thought a site visit may be appropriate. Looking for topo lines and discharge points to approximate flowlines. We talked about providing the drainage sheets and he suggested referencing the plan sheets to the narrative.

Susan will write a draft public notice to help move the application along.

That concludes the expansion of notes I wrote down during the meeting. Other items discussed were the general schedule of this project, the difficulty of certifying a project while we have a Notice of Violation and a Cleanup and Abatement Order pending. This indicates to me the necessity to take those actions seriously and do everything we can to comply in a timely manner. The overall mood of the meeting was very pleasant, not highly tense. We discussed again the need to send a letter to get his priorities rearranged. I discussed this with Dave Melendrez upon our return and believe that he has already had Matt Brady send an email regarding this matter. He has Caltrans projects on his desk from July, this application is behind seven others, so without the reprioritization, there is virtually no hope of getting the certification by February 20, 2006.

Susan Leroy did an excellent job of describing the project elements to Dean during the meeting. There is no way I could have come close with my current knowledge of the project. I'm sure she has additional memories of the meeting and her input should be heeded.

Alex Arévalo
District 1 NPDES Storm Water Coordinator
December 1, 2005

EXHIBIT

F

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPO... ATION
DISTRICT 1, P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 441-5729
FAX (707) 441-5733
TTY (Teletypewriter #707-445-6463)

NCRWQCB

MAY 3 0 2006

Flex your power!
Be energy efficient!

May 18, 2006

☐ EO ☐ WMgmt ☐ Admin
☐ AEO ☐ Timber ☐ Legal 01-39751
☐ Reg/NPS ☐ Cleanups ☐ Confusion Hill Realignment
☐ Date

Dear Mr. Prat:

MEETING CANCELLATION:

Due to scheduling conflicts, the interagency meeting scheduled for May 24, 2006, has been canceled. The meeting has been rescheduled for June 8, 2006, from 12:00pm to 1:30pm at the Garberville Veterans Hall in Garberville. The meeting focus will remain as an open discussion regarding the physical, geologic and environmental conditions, constraints and commitments that exist and have been incorporated into the project plans, specifications and resource agency permits. Please see attached agenda for details.

We respectfully request an RSVP by June 1, 2006. I encourage you or your designee's attendance at this important meeting. Please feel free to contact me if you have any comments or questions, at (707) 441-5729.

Sincerely,

John C Bull

JOHN BULINSKI
Project Manager

Attachment

Agenda

Interagency Pre-Construction Meeting
Confusion Hill Realignment
01-39751 – Hum-101

June 8, 2006
12:00pm – 3:00pm
Garberville Veterans Hall, Garberville CA

1. Introduction - John Bulinski, Project Manager **12:00pm – 12:15pm**

- Purpose of Meeting
- Project Summary / Status
- Communication Protocol

2. Environmental Permits – Resource Agencies **12:15pm – 1:15pm**
Susan Leroy, Natural Resources

- **Archaeological Guidelines**
- **Mendocino County Air Quality Management District** - Meeting 30 days prior to start of construction.
- **Fish and Game** - Construction Schedule, weekly status report, work windows, blasting monitoring plan, grading within floodplain, heavy equipment within floodplain, wet fords, nesting, staging, fueling.
- **RWQCB** - 5 day notification, SWPPP 30 days prior to start of project, BMP implementation, dewatering, fueling, photos of disturbed areas, increase turbidity monitoring
- **Army Corps** - ESA delineation, storage and staging within 100 flood elevation, work below OHW, trestles, biologist.
- **NOAA-NMFS** - Qualified Biologist, project commencement date 14 days prior to implementation, worker education program, monitor in channel activities, hydro-acoustic monitoring program, biological monitoring plan, document status by January 15, water drafting specifications.

3. MCM Presentation **1:15pm – 1:30pm**

- General Construction Methodology
- Construction Schedule

BREAK 1:30pm – 1:40pm

4. Construction Items & Considerations / Open Discussion **1:40pm – 2:45pm**

- **Access** - Access Roads, River Fording, North Bridge Trestle, Low Water Crossings, Staging and Storage Areas.
- **Grading Activities** - Concrete Batch Plant, Rock Splitting/Pile Installation, Dewatering, Water Drafting, Excavation, Storm Water Pollution Prevention Plan and BMP's, and work within 100 year flood elevation.

5. Wrap Up/Adjourn - John Bulinski, Project Manager **2:45pm – 3:00pm**

EXHIBIT

G

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

California Regional Water Control Board

North Coast Region

---oOo---

In the Matter of:

ADMINISTRATIVE CIVIL LIABILITY
COMPLAINT NO. R1-2009-0095.

_____/

Deposition Of:

KASON VERNE GRADY

Thursday, October 21st, 2010

Reported by: Stephanie Anne Fox, CSR #4640

COASTAL REPORTING SERVICES
131-A STONY CIRCLE, SUITE 500
SANTA ROSA, CALIFORNIA 95401
(707) 573-9766

1 The deposition of KASON VERNE GRADY was taken
2 pursuant to agreement at the NORTH COAST REGIONAL WATER
3 QUALITY CONTROL BOARD, 5550 Skylane Boulevard, Suite A,
4 in the City of Santa Rosa, County of Sonoma, State of
5 California, on Thursday, the 21st of October, 2010,
6 commencing at the hour of 9:17 a.m. thereof, before
7 Stephanie Anne Fox, CSR No. 4640, a California Certified
8 Shorthand Reporter.
9
10 APPEARANCES
11
12 For the California Regional Water Quality Control Board,
North Coast Region:
13
14 State Water Resources Control Board
1001 I Street, 16th Floor
15 Sacramento, California 95814
(916) 341-6847
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By: Julie E. Macedo
17 Attorney at Law
18 For MCM Construction, Inc.:
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Diepenbrock Harrison
20 Attorneys at Law
A Professional Corporation
21 400 Capitol Mall, Suite 1800
Sacramento, California 95814
22 (916) 492-5050
23 By: Sean K. Hungerford
Attorney at Law
24
25

1 For MCM Construction, Inc.:

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General Engineering Contractors
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North Highlands, California 95660
4 (916) 334-1221

5 By: Edmundo A. Puchi
Assistant General Counsel
6
For the State of California, Department of
7 Transportation:

8 State of California
Department of Transporation
9 Legal Division
595 Market Street, Suite 1700
10 San Francisco, California 94105
(415) 904-5700
11
By: Ardine Zazzeron
12 Deputy Attorney
and
13 Douglas C. Jensen
Attorney at Law
14
15
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20
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13 hypothetical, equipment would have been used which
14 leaked a substance that could impact water quality.
15 That portion would be violated.
16 Further, if it was being operated, then
17 operation of the equipment would have resulted in both a
18 discharge, depending on the location of the leak, either
19 a discharge directly to waters of the United States or a
20 threatened discharge to waters of the United States.
21 Q. I'll represent to you that to my knowledge,
22 it's impossible to make construction equipment one
23 hundred percent leak free, and that as just purely an
24 operational matter, as good as you can maintain
25 equipment, it still will leak. Do you have any reason

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1 to disbelieve that statement?
2 A. I have no reason to disbelieve that statement.
3 I could, I could speak as -- I would want to ask a
4 question as to why MCM and Caltrans did not petition
5 this permit if they believed that they couldn't achieve
6 the requirements of the permit.
7 Q. And I'm not going to answer that simply because
8 I'm not the person being deposed here.
9 A. Sure.
10 Q. It's probably a reasonable question that can be
11 answered a number of different ways, but I think the
12 situation is this, that it's impossible to keep
13 equipment a hundred percent leak free, and in this case,

EXHIBIT

H

Declaration of Kason Grady

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

In response refer to:
151422SWR2006SR00125:DJL

APR 10 2006

Gene K. Fong
Division Administrator
United States Department of Transportation
Federal Highway Administration
980 Ninth Street, Suite 400
Sacramento, California 95814-2724

Lena Ashley, North Region Chief
California Department of Transportation
Environmental Management Division
P.O. Box 3700
Eureka, CA 95502

Dear Mr. Fong and Ms. Ashley:

This letter is in response to the water drafting activities proposed by the California Department of Transportation (CalTrans) for the Highway 101 relocation at the Confusion Hill site in Mendocino County. On November 4, 2005, NOAA's National Marine Fisheries Service (NMFS) issued a biological opinion and incidental take statement for the Confusion Hill project (NMFS File No. 151422SWR04SR9151). In a March 15, 2006, letter to CalTrans, NMFS determined that the proposed addition of water drafting to the Confusion Hill project had no adverse effects to Southern Oregon/Northern California Coast coho salmon (*Oncorhynchus kisutch*), California Coastal Chinook salmon (*O. tshawytscha*), Northern California steelhead (*O. mykiss*), or designated critical habitat for those species.

In contrast, the incidental take statement included with the November 4, 2005, biological opinion prohibited water drafting in term and condition 3(e). As described above, our letter to you dated March 15, 2006, concluded that water drafting could be incorporated into the Confusion Hill project without additional adverse effects to listed species. We reached that determination based on the following:

- The maximum amount of water drafting proposed by CalTrans (14,000 gal/d) is about 0.15 percent of the daily flow at 14 ft^3/s (the threshold proposed by CalTrans to use an alternative water source.) The more important metric to consider, though, is the instantaneous rate of pumping. The maximum rate of pumping proposed by CalTrans is 250 gal/min, which is 0.56 ft^3/s, or about 4 percent of 14 ft^3/s. At a rate of 250 gal/min, a 4000 gal tanker truck will take 16 minutes to fill – a short duration for withdrawal. The

effect of the project is greatest during the summer months, a period when the South Fork Eel River (SFER) surface flow is the lowest.

- SONCC coho salmon, CC Chinook salmon, and NC steelhead use the project area primarily as a migration corridor en route to the Pacific Ocean to mature to adulthood or to travel, from the ocean, upstream to spawn (only Chinook salmon are likely to spawn in the project area). The proposed water drafting will have no effect on adult salmonid migration, as stream flow during the migration period (October through May, depending upon the species) is high and the amount of water removed by the water drafting is expected to be insignificant, with no effect on migration. Also, the pumping apparatus is small and will not create a physical barrier to migration. The pumping activities will have no effect on Chinook salmon eggs, as CalTrans will not be taking sufficiently large amounts of water to dewater redds

- Juvenile coho salmon do not rear at the Confusion Hill site in the SFER. Juvenile Chinook salmon from the SFER emigrate to the Eel River estuary and Pacific Ocean shortly after emergence from redds. In some years, juvenile NC steelhead rear at the Confusion Hill site. Relatively poor habitat conditions (high water temperature) in the general location limit juvenile NC steelhead densities. The small impacts on habitat space from pumping are not expected to affect NC steelhead, as habitat space is not in short supply given the small numbers of fish present. The pumping apparatus will be constructed, maintained, and operated to meet or exceed NMFS and CDFG screening criteria and water drafting operational guidelines. Therefore, no juvenile salmonids are expected to become impinged on the screen apparatus.

- Smolting salmonids of all three species pass by the Confusion Hill site. Smolting salmonids are sufficiently large and developed enough to easily avoid the pumping apparatus, and the amount of water removed by the water drafting will allow sufficient water depth for migration of smolts.

- NMFS does not expect additional adverse effects to occur when the impacts of the project change are added to those analyzed previously (turbidity, increased sound levels, toxic chemicals, fish relocation, stream dewatering and diversion, and wet channel crossings). For example, the small fluctuations in flow from water drafting are unlikely to change the number of steelhead exposed to crushing (or the ability of steelhead to avoid crushing) in the wet crossing areas, should these events occur concurrently. As above, water drafting is unlikely to affect habitat space to the extent that juvenile steelhead distribution would change.

To remedy the inconsistency between the original incidental take statement and the conclusion of the March 15, 2005 letter, NMFS amends the November 4, 2005, incidental take statement by removing term and condition 3(e) "Water for dust abatement, if necessary, must be acquired from an off-site source. Water drafting from the action area is not permitted"; all other elements of the incidental take statement remain unchanged. The amended incidental take statement is included as an enclosure to this letter. This amended incidental take statement replaces the incidental take statement provided in the November 4, 2005, biological opinion.

As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action (including the project change) has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action (including the project change) that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action (including the project change) is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in the biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the identified action (including the project change). In instances where the amount or extent of incidental take is exceeded, formal consultation shall be reinitiated immediately.

If you have any questions about this ESA consultation, or if you require additional information, please contact Mr. Daniel Logan at (707) 575-6053.

Sincerely,

Russell M Strach

for Rodney R. McInnis
Regional Administrator

Enclosure

cc: Russell Strach, NMFS
Susan Leroy, CalTrans
Corinne Gray, California Department of Fish and Game

Enclosure

ACTION AGENCY:	Federal Highway Administration, California Division, and the California Department of Transportation
ACTION:	Relocation of Highway 101 at Confusion Hill in Mendocino County, California.
CONSULTATION CONDUCTED BY:	National Marine Fisheries Service, Southwest Region
FILE NUMBER:	151422SWR2006SR00125
DATE AMENDED:	April 10, 2006

IX. INCIDENTAL TAKE STATEMENT

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by NMFS as an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are nondiscretionary, and must be undertaken by the FHWA, CalTrans, and their designees for the exemption in section 7(o)(2) to apply. The FHWA and CalTrans have a continuing duty to regulate the activity covered by this incidental take statement. If the FHWA and CalTrans: (1) fail to assume and implement the terms and conditions, or (2) fail to require any designee to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to any permit, grant document, or contract, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the FHWA and CalTrans must report the progress of the action and its impact on the species to NMFS as specified in the incidental take statement (50 CFR §402.14(i)(3)).

A. Amount or Extent of Take

The realignment of Highway 101 at Confusion Hill is expected to result in minimal incidental take of threatened SONCC coho salmon, CC Chinook salmon, and NC steelhead. Fish in the vicinity of the project could be adversely affected by the project construction activities. Juvenile salmonids that are relocated or that have fled the area to avoid disturbances may suffer an increase risk of competition.

The number of ESA-listed salmonids that may be incidentally taken during project activities cannot be accurately quantified due to: (1) the precise number of fish that may be present is unknown; (2) the precise number of fish that may be stranded is unknown; and (3) the level of harm that might occur when juvenile fish are relocate or displaced to other habitat areas of the stream. In instances where NMFS cannot quantify the amount of incidental take, the extent of habitat affected or modified by the proposed action is used.

Therefore, take is quantified as: All fish present in the areas to be dewatered between May 15 and October 31 during the years that the project occurs may be captured by relocation activities. Based on the low mortality rates for relocation efforts and the small number of salmonids present in the action area, NMFS anticipates no more than one percent of juvenile salmonids handled will be harmed or killed during relocation efforts. NMFS expects that the number of juvenile salmonids that will be killed as a result of stranding during dewatering activities will be less than those killed during relocation. This is due to the small area affected, the relocation efforts, and the low numbers of juvenile salmonids expected to be present within the action area. NMFS anticipates that no salmonids will be harmed by sound levels generated by pile placement or blasting. NMFS anticipates that all of the juvenile steelhead at the area of the wet crossings and pile placement will be exposed to crushing and may perish. However, the amount of area exposed to instream construction activities is small, the instream activities are infrequent and of short duration, the activities are done slowly giving juvenile steelhead an opportunity to escape, and the habitat is not heavily used by juvenile steelhead during the anticipated instream activities. Therefore, NMFS anticipates that no more than 50 juvenile, non-smolting steelhead will be killed during instream construction activities.

B. Effect of the Take

In the accompanying opinion, NMFS determined that this level of anticipated take is not likely to result in jeopardy to the species.

C. Reasonable and Prudent Measures

NMFS believes the following reasonable and prudent measures are necessary and appropriate to minimize take of SONCC coho salmon, CC Chinook salmon, and NC steelhead:

1. Undertake measures to ensure that harm and mortality to listed salmonids resulting from fish relocation and dewatering activities is low.

2. Undertake measures to minimize harm to listed salmonids resulting from construction activities.

3. Undertake measures to assure that adverse effects to water quality are minimized.

4. Prepare and submit an annual report to document effects of construction and relocation activities and performance.

D. Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the FHWA, CalTrans, and their designees must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are nondiscretionary.

1. The following terms and conditions implement Reasonable and Prudent Measure 1 to ensure that harm and mortality to listed salmonids resulting from fish relocation and dewatering activities is low:

   a. The FHWA and CalTrans shall retain a qualified biologist with expertise in the areas of anadromous salmonid biology, including handling, collecting, and relocating salmonids; salmonid/habitat relationships; and biological monitoring of salmonids. The FHWA and CalTrans shall ensure that all biologists working on this project be qualified to conduct fish collections in a manner which minimizes all potential risks to ESA-listed salmonids. Electrofishing, if used, shall be performed by a qualified biologist and conducted according to the *NOAA Fisheries Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act*, June 2000.

   b. The biologist shall monitor the construction site during placement and removal of cofferdams to ensure that any adverse effects to salmonids are minimized. The biologist shall be on site during all dewatering events to ensure that all ESA-listed salmonids are captured, handled, and relocated safely. The biologist shall notify NMFS biologist Daniel Logan at (707) 575-6053 or dan.logan@noaa.gov one week prior to capture activities in order to provide an opportunity for NMFS staff to observe the activities.

   c. ESA-listed fish shall be handled with extreme care and kept in water to the maximum extent possible during rescue activities. All captured fish shall be kept in cool, shaded, aerated water protected from excessive noise, jostling, or overcrowding any time they are not in the stream and fish shall not be removed from this water except when released. To avoid predation the biologist shall have at least two containers and segregate young-of-year fish from larger age-classes and other potential aquatic predators. Captured salmonids will be relocated, as soon as possible, to a suitable instream location in which suitable habitat condition are present to allow for adequate survival of transported fish and fish already present.

   d. If any salmonids are found dead or injured, the biologist shall contact NMFS biologist Daniel Logan by phone immediately at (707) 575-6053 or the NMFS Santa Rosa Area Office at (707) 575-6050. The purpose of the contact is to

review the activities resulting in take and to determine if additional protective measures are required. All salmonid mortalities shall be retained, placed in an appropriately-sized sealable plastic bag, labeled with the date and location of collection, fork length, and be frozen as soon as possible. Frozen samples shall be retained by the biologist until specific instructions are provided by NMFS. The biologist may not transfer biological samples to anyone other than NMFS Santa Rosa Area Office without obtaining prior written approval from the Santa Rosa Area Office, Supervisor of the Protected Resources Division. Any such transfer will be subject to such conditions as NMFS deems appropriate.

2. The following terms and conditions implement Reasonable and Prudent Measure 2 to minimize harm to listed salmonids resulting from bridge and roadway construction:

   a. The FHWA or CalTrans shall notify the NMFS Santa Rosa Area Office, by letter stating the project commencement date, at least fourteen days prior to implementation: The letter shall be sent to the NMFS Santa Rosa Area Office, Attention: Supervisor of Protected Resources Division 777 Sonoma Avenue, Room 325, Santa Rosa, California, 95404-6528.

   b. The FHWA or CalTrans shall allow any NMFS employee(s) or any other person(s) designated by NMFS, to accompany field personnel to visit the construction sites during activities provided for in this opinion.

   c. The FHWA or CalTrans shall conduct a worker education program prior to construction activities on the importance of protecting salmonids and their habitat and the project measures to do so.

   d. A biologist shall monitor inchannel activities and performance of sediment control or detention devices for the purpose of identifying and reconciling any condition that could adversely affect salmonids or their habitat. The FHWA or CalTrans and their contractors, upon notification from the biologist, shall halt the work activity causing the condition affecting salmonids and recommend measures for avoiding the condition. Work can resume when NMFS agrees that the proposed measures are appropriate for avoiding the condition.

   e. Prior to commencement of work on the Red Mountain Creek fish passage improvement component, FHWA or CalTrans shall submit the final engineering design for the structures related to fish passage to NMFS for evaluation and approval prior to implementation. The designs should be sent to the NMFS Santa Rosa Area Office, Attention: Supervisor of Protected Resources Division, 777 Sonoma Avenue, Room 325, Santa Rosa, California, 95404-6528.

   f. The standard for success for revegetation activities shall be 80 percent survival of plantings or 80 percent ground cover for broadcast planting of seed after a period of three years. If either success criteria is not met, FHWA and CalTrans shall collaborate with NMFS to develop and undertake a satisfactory plan for revegetation.

g. Prior to any work within the 100-year flood plain of the South Fork Eel River or any blasting related to the Confusion Hill project, FHWA or CalTrans shall ensure that a hydroacoustic monitoring program is implemented at the project site. FHWA and CalTrans shall work collaboratively with NMFS and CDFG to create a satisfactory hydroacoustic monitoring program. The hydroacoustic monitoring plan shall include, at a minimum, measurements of underwater sound levels, both peak decibels and root mean square decibels, at several locations in the wetted channel. The hydroacoustic monitoring plan shall include an emergency response protocol and include annual reporting requirements.

h. Prior to any work within the 100-year flood plain of the South Fork Eel River, FHWA or CalTrans shall ensure and provide funding for implementation of minimization and mitigation measures and for monitoring compliance and effectiveness of those measures in a form and amount acceptable to and approved in writing by NMFS and CDFG.

i. Prior to any work within the 100-year flood plain of the South Fork Eel River, FHWA or CalTrans shall develop a biological monitoring plan which shall be approved in writing by NMFS and CDFG. The biological monitoring plan shall include annual reporting requirements.

j. Once construction is finished for each construction season, all project introduced material (pipe, gravel, false work, filter fabric, demolition debris, etc.) must be removed, leaving the creek as it was before construction. Excess materials will be disposed of at an approved disposal site.

3. The following terms and conditions implement Reasonable and Prudent Measure 3 to assure that adverse effects to water quality are minimized.

a. Contractors must have a supply of erosion control materials onsite to facilitate a quick response to unanticipated storm events or emergencies.

b. Bentonite shall be prevented from entering the stream channel. Any bentonite that does enter the stream during construction shall be immediately removed in a manner that has minimal impact to the streambed and water quality.

c. Water that comes in contact with wet concrete and has a pH greater than 9.0 must not be allowed to enter the ground or stream but shall be either: (1) pumped to a separate, lined basin, and then pumped to a truck or upland for disposal or treatment (not within the bank to bank of any waterway); or (2) pumped directly to a truck for disposal at a site that is not within the top of bank to top of bank of any waterway.

d. Construction equipment used within the creek channel will be checked each day prior to work within the creek channel (top of bank to top of bank) and if necessary action will be taken to prevent fluid leaks. If leaks occur during work in the channel (top of bank to top of bank), FHWA, CalTrans, or their contractor will contain the spill and remove the affected soils.

4. The following term and condition implements Reasonable and Prudent Measure 4 to document status of construction and relocation activities and performance.

a. FHWA and CalTrans shall provide a written report to NMFS by January 15 following completion of each construction season. The report shall be submitted to the NMFS Santa Rosa Area Office Attention: Supervisor of Protected Resources Division, 777 Sonoma Avenue, Room 325, Santa Rosa, California, 95404-6528. The report shall contain, at a minimum, the following information:

Construction related activities -- The report shall include the dates construction began and was completed; a discussion of any unanticipated effects or unanticipated levels of effects on salmonids, a description of any and all measures taken to minimize those unanticipated effects and a statement as to whether or not the unanticipated effects had any affect on ESA-listed fish; the number of salmonids killed or injured during the project action; and photographs taken before, during, and after the activity from photo reference points.

Revegetation -- The report shall include a description of the locations planted or seeded, the area (m^2) revegetated, a plant palette, planting or seeding methods, the efforts taken to ensure success of new plantings, performance or success criteria, and pre- and post-planting color photographs of the revegetated area.

Fish Relocation -- The report shall include a description of the location from which fish were removed and the release site including photographs; the date and time of the relocation effort; a description of the equipment and methods used to collect, hold, and transport salmonids; if an electroshocker was used for fish collection, a copy of the logbook must be included; the number of fish relocated by species; the number of fish injured or killed by species and a brief narrative of the circumstances surrounding ESA-listed fish injuries or mortalities; and a description of any problems which may have arisen during the relocation activities and a statement as to whether or not the activities had any unforeseen effects.

Sound -- The report shall include elements related to the hydroacoustic monitoring discussed in section IX, D, 2, g of this opinion.

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

REED SATO, Director (SBN 87685)
CHRISTIAN CARRIGAN, Senior Staff Counsel (SBN 197045)
JULIE E. MACEDO, Senior Staff Counsel (SBN 211375)
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Telephone: 916-323-6847
Fax: 916-341-5896
E-mail: jmacedo@waterboards.ca.gov

Attorney for Regional Water Quality Control Board,
North Coast Region

BEFORE THE CALIFORNIA WATER QUALITY CONTROL BOARD
NORTH COAST REGION

In the Matter of: California Department of Transportation, Confusion Hill Bypass Project, WDID No. 1B05153WNME	)))))	ACLC Order No. R1-2007-0095 DECLARATION OF JULIE MACEDO

I, Julie Macedo, declare as follows:

1. I am Senior Staff Counsel in the Office of Enforcement, State Water Resources Control Board. I represent the Regional Water Quality Control Board, North Coast Region in this matter.

2. The Administrative Record for this matter consists of the materials contained in the public enforcement file, available for review at the North Coast Regional Water Quality Control Board ("Water Board") offices located at 5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403. The enforcement file becomes part of the administrative record consistent with the Notice of Hearing Procedures, "Evidentiary Documents and File," pg. 7. The enforcement file is generally grouped as follows:

- 4 redwell folders, comprised of correspondence regarding the Confusion Hill Project and arranged in general chronological order;
- 3 binders, comprised of Caltrans Engineering Diaries;

- 1 Accordion file, comprise of documents submitted by Caltrans to the Regional Board;
- 1 white binder, comprised of Caltrans' response to a Water Board §13267 Order.
- 1 white binder, comprised of the Confusion Hill Stormwater Pollution Prevention Plan ("SWPPP").
- 1 cd of documents copied and shared with Caltrans and MCM during discovery.
- 1 cd of documents provided by Caltrans on November 20, 2006.
- Approximately 11 cds of photographs: 7 from the Caltrans Biological Monitor; 1 from a Regional Board staff inspection, 1 Brown and Caldwell CD provided by Caltrans and 2 others provided by Caltrans.
- Approximately two boxes of documents produced through the discovery process by MCM, consisting of correspondence between MCM and Caltrans or subcontractors, copies of permits/maps, and contract change orders. These materials are also on a single cd.
- Approximately ½ of a box of documents produced through the discovery process by Caltrans. These documents were responsive to certain demands for production of documents, and are grouped according to the numbered demand.
- The materials submitted by the Dischargers through this Hearing Brief will also be added to the enforcement file, and thus the administrative record. *See* Hearing Procedures, pg. 7.

3. I was responsible for copying the documents described above as produced through the discovery process by MCM, and directed the copying/scanning of the same in December 2010 from the MCM offices in North Highlands, CA.

4. I was the recipient of the documents described above as produced through the discovery process by Caltrans.

5. Several of the documents described in Paragraphs 4 and 5 are attached to this declaration. The documents are true and accurate copies that I received or directed to be copied or scanned. Many of these documents had not been produced to the Regional Board prior to discovery, and so the documents were not in the enforcement file redwell folders until received in late 2010.

6. The entire document, when available, has been provided, although I have provided brackets or page numbers to make review more efficient.

7. Attached as Exhibit A is a true and correct copy of October 7, 2008 MCM correspondence to Mercer-Fraser regarding the removal of Justin Porteous as SWPPP manager on the Confusion Hill Project.

8. Attached as Exhibit B is a true and correct copy of October 6, 2008 Caltrans correspondence to MCM regarding the removal of Justin Porteous as SWPPP manager on the Confusion Hill Project.

9. Attached as Exhibit C is a true and correct copy of August 20, 2008 email correspondence from Sebastian Cohen, Caltrans' Resident Engineer on the Confusion Hill Project at the time, to Evan Paine of MCM mentioning Mr. Joe Cartwright.

10. Attached as Exhibit D is a true and correct copy of November 4, 2008 correspondence from MCM to Mercer-Fraser regarding Caltrans' administrative deduction.

11. Attached as Exhibit E is a true and correct copy of October 7, 2008 email correspondence from Sebastian Cohen to Evan Paine (MCM) and Daniel Stiles regarding Caltrans implementing a "retention."

12. Attached as Exhibit F is a true and correct copy of September 30, 2008 email correspondence from Sebastian Cohen to Evan Paine and Justin Porteous (Mercer-Fraser) regarding Caltrans taking a "% deduct."

13. Attached as Exhibit G is a true and correct copy of June 12, 2007 correspondence from Caltrans to MCM stating "Effective today, 06/12/07, no additional sandblasting operations will be allowed on the project. The suspension of this activity is

effective until an acceptable SWPPP amendment has been submitted (SWPPP Amendment #8).

14. Attached as Exhibit H is a true and correct copy of January 8, 2008 correspondence from Caltrans to Evan Paine regarding "the immediate termination of grouting operations on this Bridge."

15. Attached as Exhibit I is a true and correct copy of a January 4, 2007 Session Report between MCM and Caltrans; see p .4.

16. Attached as Exhibit J is a true and correct copy of April 19, 2007 draft correspondence from Caltrans to MCM related to the "lack of consistent enforcement of environmental and safety requirements" with handwritten notes, presumably Evan Paine's, indicating the correspondence had been retracted "per 4/27/07 mtg."

17. Attached as Exhibit K is a true and correct copy of May 24, 2007 Caltrans correspondence to Evan Paine including the statement, "The fact that the operation took place with no measures to minimize deposition of material, and the fact that it took place prior to the presence of Caltrans staff appears to have been a deliberate attempt to violate the permit. MCM had clear direction that the operations, as initially planned, were not to take place."

18. Attached as Exhibit L is a true and correct copy of August 29, 2006 email correspondence from Ron Den Heyer, the Caltrans Resident Engineer at the time, to Evan Paine. One of the recipients of the email sent by Walt Dragaloski, embedded in Mr. Den Heyer's email, is Alex Arevalo.

19. Attached as Exhibit M is a true and correct copy of June 13, 2007 MCM correspondence to Caltrans regarding BMPs.

20. Attached as Exhibit N is a true and correct copy of December 7, 2006 correspondence from MCM to Caltrans. Please refer to paragraph 8 on page 2 and the concluding paragraph on page 4.

21. Attached as Exhibit O is a true and correct copy of November 10, 2006 correspondence from Mercer-Fraser to MCM regarding recent comments by Caltrans on the SWPPP. Please refer to paragraph 11 on page 3.

22. Attached as Exhibit P is a true and correct copy of November 15, 2006 correspondence from MCM to Caltrans regarding BMPs for welding slag.

23. Attached as Exhibit Q is a true and correct copy of the State Water Resources Control Board Water Quality Enforcement Policy with an effective date of May 20, 2010. Please refer to pages 17-18 related to the calculation of the number of violations, and page 20 regarding staff costs.

24. Attached as Exhibit R is a true and correct copy of July 3, 2007 correspondence from Caltrans to MCM.

25. Attached as Exhibit S is a true and correct copy of May 8, 2008 correspondence from Mercer-Fraser to MCM regarding BMPs.

26. Attached as Exhibit T is a true and correct copy of a June 13, 2007 "Initial Notice of Potential Claim" from MCM to Caltrans regarding compensation for SWPPP work.

27. Attached as Exhibit U is a true and correct copy of April 2, 2009 correspondence from Caltrans to MCM regarding BMPs for whip blasting operations.

28. Attached as Exhibit V is a true and correct copy of November 9, 2006 correspondence from Ladd and Associates to Mercer-Fraser regarding SWPPP issues, wherein Ladd states, "Your company removed that item and other related SWPPP items of work from our scope of work at the writing of our subcontract...".

29. Attached as Exhibit W is a true and correct copy of August 29, 2006 correspondence from Mercer-Fraser to MCM regarding SWPPP considerations.

30. Attached as Exhibit X is a true and correct copy of January 8, 2008 correspondence from Caltrans to MCM regarding grouting operations.

31. Attached as Exhibit Y is a true and correct copy of January 11, 2008 correspondence from MCM to Schwager Davis, Inc. regarding grouting operations.

32. Attached as Exhibit Z is a true and correct copy of a written Notice of Discharge dated June 13, 2008 submitted to the Regional Board by Caltrans, along with contemporaneous emails, including photographs.

33. Attached as Exhibit AA is a true and correct copy of a Caltrans Construction SWPPP Inspection Report dated January 9, 2009; please refer to page 2.

34. Attached as Exhibit BB is a true and correct copy of a Rainy Season Inspection Report for the Confusion Hill Project dated February 25, 2009.

35. Attached as Exhibit CC is a true and correct copy of a Rainy Season Inspection Report for the Confusion Hill Project dated January 12, 2009.

36. I estimate I estimate that I spent approximately 500 hours since August 2010 in preparing for the March 2011 administrative hearing. This time includes the time spent to prepare staff members for deposition, the time spent to propound discovery and review responsive documents, and preparation of the Prosecution Team's Case in Chief brief, supporting declarations and selection of exhibits.

I declare under penalty of perjury pursuant to the laws of the State of California that the foregoing is true and correct.

Executed this 11th day of February, 2011, at Sacramento, California.

Julie Macedo

Julie Macedo

EXHIBIT

A

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 file 18.2

MCM CONSTRUCTION, INC.
GENERAL ENGINEERING CONTRACTORS
SACRAMENTO, CA

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P.O. BOX 867 / 19010 Slover Ave. / Bloomington / CA 92316
(909) 875-0533 Engineering / Accounting FAX (909) 875-2243

FAXED (707) 443-0277

October 7, 2008

Mercer Fraser
PO Box 1006
Eureka, Ca 95502

LTR 285-193

Re: Contract 01-397514
Confusion Hill 101 Realignment
SWPPP Manager

Attn: Mr. Justin Zable/Mr. Justin Porteous

Gentlemen:

Per our discussion yesterday, attached is Caltrans letter dated October 6, 2008 directing the removal of Mr. Justin Porteous as the SWPPP manager on this project. This direction is effective immediately. Please advise immediately who your replacement will be as SWPPP manager. If you would like to discuss this further with Caltrans let me know, and a meeting will be established.

Please call with any questions or comments at (916) 334-1221 or (916) 869-4423.

Sincerely,

MCM CONSTRUCTION, INC.,

Evan Paine

EVAN PAINE
Project Manager

Justin replaced with
Charly Anderson
10/8/08

Cc: JC, HDM, RM, J. Ham
285 File 9.1

EXHIBIT

B

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
ARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

Flex your power!
Be energy efficient!

Date: 10/6/08

Contract: 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY - CONFUSION HILL

Mr. Evan Paine
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

RE: **SWPPP Manager--Letter#133**

Faxed: (916) 334-0562 & mailed

Evan:

In accordance with Section 5-1.12, "Character of Workers," of the Standard Specifications and Section 10-1.02, "Water Pollution Control," of the Special Provisions, due to continual inadequate implementation of SWPPP measures and insufficient preparation of BMPs on the site, the removal and replacement of Justin Porteous as the project SWPPP Manager is required. This change has become necessary due to longstanding and reoccurring problems regarding timely and appropriate implementation of necessary SWPPP measures. The Department has had to force the Contractor to implement and maintain several of the necessary BMPs and to attempt to comply with the project permit requirements. The amount of resources that have been allocated towards managing the SWPPP requirements has long been under-allocated.

The main premise behind having a SWPPP Manager, and the listed project duties and requirements listed in the Special Provisions, is to ensure that all of the Contractor's operations (sub's and prime's) are being performed within compliance of the numerous permit requirements. It is necessary for this person to perform their many duties in a proactive manner; continuously analyzing the site conditions and the proposed work; understand the permit requirements and the reporting duties; and to make sure that all necessary and appropriate BMPs are in place and that the SWPPP is maintained and complied with. To date, this has not been sufficiently performed.

Effective immediately, a new SWPP Manager is required. Mr. Porteous is not being required to be removed from the project as Mercer-Frasier's Project Manager, or person of contact for other responsibilities. It solely necessary that someone new be appointed to fulfill the numerous duties of SWPPP Manager, per Section 10-1.02, "Water Pollution Control," of the Special Provisions.

If additional meetings are desired to discuss any of the stated points or issues of this letter, or any related matter, please call. I am available for a meeting with management from both Mercer Frasier and MCM.

Sincerely,

Sebastian

SEBASTIAN COHEN
Resident Engineer

cc: Project Assistants (2)
D Stokes
B Thomas
T Davis

EXHIBIT

C

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 Fi 6 18.2

Evan Paine (epaine@mcmconstructioninc.com) - Fri, ~~08/22/08 10:07:00 -0700~~

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Attn: JAMES/JOE
FROM: EVAN

From: Sebastian Cohen <sebastian_cohen@dot.ca.gov>
To: epaine@mcmconstructioninc.com
Subject: Confusion SWPPP issues
Date: Wed 08/20/08 02:18 PM

Evan-

We have had way too many of the same reoccurring SWPPP issues and my staff
and I are completely fed up with asking and trying to enforce compliance -
just as you are tired of hearing about it.

Along with participating in funding a portion of Joe Cartwright's position
to ensure and enforce SWPPP compliance, for which there already is a funded
SWPPP manager on this contract (Portius), we have been very reasonable when
it comes to allowing you to get the work done and make sure any and all
impacts are cleaned up afterwards. In response to this, we receive WOAs
for NOPC 13 for picking up slag and placing plastic under generators.

When I visit the site in the evenings and find piles of sandblasting sand,
oil stains, slag piles, excessive piles of garbage etc,.. that were all
asked to be cleaned up several weeks ago and in some cases months ago, I
become quite frustrated.

Drill Tech was recently shut down due to re-occurring leaking equipment;
several other mini-memos for various items of work were required to be
submitted threatening work-shutdown to bring about permit compliance;
Portious has been significantly absent; the SWPPP document itself is not
up-to-date with amendments; we have had several concrete containment issues
(which have all been discussed repetitively); and the general attitude
towards SWPPP compliance has generally deteriorated in the last few months.

As usual, a majority of the issue are easily achievable with only a little
effort and forethought on the part of the Contractor(s), yet the same
issues continue to occur. In short- Ham's attitude and guidance to all
staff on the project is in need of alteration and a renewed willingness to
comply.

In accordance with Section 10-1.02, "Water Pollution Control- Retention of
Funds," I am providing 30 days notice of my intent to begin to retain a
maximum of 25% of the monthly progress pay until the SWPPP is complied
with, maintained and all water pollution control has been adequately
controlled, as determined by the Engineer.

We basically have a month or so to go before rain is possible and we

must
ave the site prepared for sediment control. At the next project mtg, along with discussing the required submittals for SWPPP implementation (9/10 and 9/20 are two important due dates for plan and implementation-see
pg 145) I would like to discuss and plan for drainage system installation(s), planned disposal slope coverage, and our plan of attack for handling winter storm events and the areas of work that will be active
throughout the winter.

Give me a call regarding any clarification or questions,

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
707-496-4096-cell

Evan Paine (epaine@mcmconstructioninc.com) - Fri, 08/22/08 10:07:00 -0700

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EXHIBIT

D

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

MCM CONSTRUCTION, INC.
GENERAL ENGINEERING CONTRACTORS
SACRAMENTO, CA

Main Office
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(909) 875-0533 Engineering / Accounting FAX (909) 875-2243

FAXED (707) 443-0277

November 4, 2008

Mercer Fraser
PO Box 1006
Eureka, Ca 95502

LTR 285-200

Re: Contract 01-397514
Confusion Hill 101 Realignment
Administrative Deduction

Attn: Mr. Justin Zable/Mr. Justin Porteous

Gentlemen:

Reference the MCM letter 285-193 dated October 7, 2008 with the Caltrans October 6, 2008 letter attached. Also reference the Caltrans emails that were forwarded to you on October 7, 2008.

In the above referenced correspondence Caltrans has indicated that the SWPP measures were supposed to be in place by September 20, 2008. As of October 7, 2008 most of the items were still not addressed. It was not until after Caltrans directed the removal of the SWPP manager did the required SWPP measures get placed. Caltrans has taken a 15% administrative deduction for the SWPP that was not in place. This deduction occurred in the October 20, 2008 pay estimate No. 33. For this period the Mercer Fraser balance due of $50,158.80 does not cover the administrative deduction of $323,231.41. Mercer Fraser shall issue MCM a check in the amount of $273,072.61 until the administrative deduction is returned by Caltrans. If Mercer Fraser does not issue MCM the above payment interest will be charged at 10% per annum until the deduction is released.

Please call with any questions or comments at (916) 334-1221 or (916) 869-4423.

Sincerely,

MCM CONSTRUCTION, INC.,

EVAN PAINE,
Project Manager

Cc: JC, HDM, RM, J. Ham, Ed Puchi
285 File 911

EXHIBIT

E

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

Evan Paine (epaine@mcmconstructioninc.com) - Tue, 10/07/08 14:35:47 -0700

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From: Sebastian Cohen <sebastian_cohen@dot.ca.gov>
To: epaine@mcmconstructioninc.com
Cc: daniel.stiles@parsons.com
Subject: WaterBoard Inspection on Thursday AM
Date: Tue 10/07/08 01:03 PM

Evan-

In short, the philosophical subject of this e-mail is "same-shit, different day." I'm figuring out that all I can do is change how I respond to the shit, and hope that others change their behavior so the shit quits coming around.

There will be several individuals from the WaterBoard on site Thursday AM - early. So, we need to have all necessary work (BMPs) in place and well maintained by tomorrow evening. I spent several hours yesterday with Arvin and Dan Wing reviewing a majority of the project site. We have several areas that have not been addressed at all, and others that have been partially winterized. Unfortunately, almost all of the things we looked at yesterday are things that we provided in our list several weeks ago (which is clearly listed in the SWPPP Manager's duties), indicating what needed to be done by the 20th of Sept. The Specials are quite clear that all of that was to be 100% complete by 9/20. As of yesterday we still have several things remaining, and this is after we had several inches of rain on Oct 2-4.

Arvin and Dan are hot on forcing everyone from MCM / LADD / and Mercer Fraser to get the remaining work completed by Thursday, via any and all methods at our disposal.

I am very close to simply writing a letter shutting down all operations on the project until everything is complete. I obviously am too much of a softy, and have yet to get so pissed off that I have to do this, but I'm pretty close. I know that you and I both don't need or want this extra work of dealing with this stuff, but its a reality.

As I mentioned last week, i will be taking a retention on the next estimate for lack of implementation of all required SWPPP measures. as long as we get a new SWPPP manager and get all appropriate SWPPP measures in-place and comply with the permits (have the BMPs that we, the Department, have stated are required), the retention will be returned on the following estimate.

:f we are able to get everything completed by Thursday and we have a good
review from the WaterBoard, we will be much better-off for the remaining
winter months, and we will likely be left alone. the only reason they are
reviewing us right now is because they must respond due the Private
Complaint. On the other hand, if we get a bad review, we are likely to be
paying for it for the remainder of the winter (i.e., we are likely to have
several more reviews, with many of them unannounced).

Along with getting all of the remaining work on our list completed, you
also should remain aware of what operations you are doing on Thursday. I
would make sure everyone on the project is aware of all their waste. I
imagine that the hot topics will be:

welding slag containment
sand blasting containment , which your guys have been good at lately
on the SB (the rail blasting operations) They have a barrier up and
are sweeping it up immediately afterwards.
concrete and concrete wash water containment, especially at the plant
and at wall 1902. Note that wall 1902 needs better containment for
the tie-back operation. Concrete and concrete waste must be
separately and imperviously contained - separate from rain water.
The plant area is always high on their list. especially, how they
are keeping the rain water separate from rain waters. We have stated
many, many, many times what needs to occur here.
appropriate coverage of all disturbed soil / slopes. This is very
close to being complete. Some areas are very well protected, others
are bare, and some are incompletely covered. Not having this done
when they visit will be impossible to explain away. This is
something that needed to be 100% complete by the 9/20. Its not very
hard to do, we simply need to plan the work and then go do the work.
sediment basins. Showing that we have sufficiently sized,
appropriately located, and well maintained basins will necessary and
will also be viewed as inexcusable. again, this is something that we
have repetitively repeated, and is still partially complete. On
Friday, when it was raining, we were out there digging some of these
basins.

Proper containment of all petrol products of any kind, including: oils;
concrete sealers; oil stains; etc.. They will be looking for drip pans
under all equipment (cranes, generators, etc.....) This is nothing new.
there are several pieces of equipment without containment.

If you'd like to discuss this, give me a call.

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
707-496-4096-cell

Evan Paine (epaine@mcmconstructioninc.com) - Tue, 10/07/08 14:35:47 -0700

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EXHIBIT

F

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 file 18.2

Evan Paine (epaine@mcmconstructioninc.com) - Tue, 09/30/08 09:15:29 -0700

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Attn: James/Joe
FYI
EVAN

From: Sebastian Cohen <sebastian_cohen@dot.ca.gov>
To: epaine@mcmconstructioninc.com,jporteous@mercerfraser.com
Subject: Fw: Confusion Hill Winterization
Date: Tue 09/30/08 09:02 AM

Evan-

I think I screwed up in the address section of the e-mail. I'm not sure if
Justin received it or not. My guys in the field said that they have been
talking with Cartwright and Hamm about some of the issues. As my e-mail
states, we just need to be prepared for the upcoming rains, which sounds
like it will start tommorrow PM. There is still a lot of uncovered
disturbed soil areas. Some of the areas are extra work, but that doesn't
change the fact that we need to get it done.

thanks.....

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
07-496-4096-cell

----- Forwarded by Sebastian Cohen/D01/Caltrans/CAGov on 09/30/2008 08:21 AM -----

	Sebastian Cohen/D01/Caltrans/CAGov	
	09/29/2008 05:21 PM	
To		epaine@mcmconstructioninc.com"Justin Porteous" <jporteous@mercerfraser.com>
cc		
Subject		Confusion Hill Winterization (Document link: Sebastian Cohen)

Evan & Justin-

We were essentially suppose to have all of the 'winterization plan' in place by the 20th, and 100% complete by a drop dead date of Oct 1. It sounds like we could be getting a fairly good storm come this Wednesday. The first week after our winterization meeting we did fairly well at getting things going. We sprayed several areas with bonded fiber matrix (some areas were a little thin, and some were completely missed, but much
of it was done we cleared and organized some specific problem areas on 271,
but not completely to the level needed; and we began the task of getting all of the necessary BMPs implemented/replaced/refurbished at other spots.
With that said, all of the measures we went over for the winterization lan
ust be implemented by Wednesday COB. For the measures that are 100% CCO,
we have CCO #5,#17, as well as others that can be utilized (ask Arvin or Dan Wing). I am not in anyway trying to act in a threatening manner, or come off as advisarial, but my staff and I are completely done when it comes to waiting and asking about the SWPPP implementation. The contract
makes it fairly clear that this is your responsibility to get implemented.

If all measures are not implemented by COB Wednesday, i will be taking a %
deduct on the next estimate period. I do not want to, but this seems to be
the only way to get everyone's attention. So, lets get as many crews as we
need out in the field and get all of that work done. Arvin and Dan have a
substantial list of what we went over and what still needs to be done. Justin and Joe C know of all areas, except the specific ones that Dan Wing
and myself went over with LADD, and I believe that those are almost all complete - with a few exceptions. There are a few new locations and there
will be a few that we missed that will need attention on Wed when it rains.
We must be ready to respond and fix problems on the first day when it rains. Make sure we have several bodies ready to respond. Being
nprepared, in terms of available bodies and materials (hay bails; fiber

rolls; silt fencing; plastic, etc...) will not be a valid excuse. The ite
is much different this year compared to last, which means it will have different drainage patterns, and in fact it will likely be much easier, but we must act to take advantage of this.

Arvin & Dan have a full list, so if you have questions please ask them. I
will be down on site tomorrow (Tues) if you'd like to meet or discuss the
issues.

My recommendations are to get two or three crews doing work ASAP.

CCO work that is highest priority that is solely on Caltrans includes covering the small slipout in the thru cut on the north end (slide four slipout); installing culvert and downdrain on new access road/new 271 intersection; and new DI and culvert and downdrain on paved access road below Pier 2 SB.

Other high priorities are drainage systems at abutments; covering all disturbed spoil areas that aren't under active work; making sure all thru-cut runoff water does not leave the cut but rather flows into large saed basins within the cut; and creating non-erosive concentrated flow paths at all other areas. Also- we need to decommission the upper access
road to A4SB (the one that never got used:)

Justin-One of the biggest issues yet to be implemented is how we plan to eal with concrete overflow water from the small two-bay washout immediately at the plant. As of now, the water does not have a specific flow path to an unlined basin or ???, which would contain it. This is very
high on the water boards priority list. With the new contours in this area, we need a new lined basin somewhere to contain this water. I recommend just digging a new hole near the new low spot and place a new empty tank that could be used if the two basins fill up (which they will)-
and then when they flow to the new lined basin, we can say that your plan
is to pump this into the tanks until its gone off. Flowing to the new drainage system #5 under the trestle road is not an acceptable plan.

FYI- You all should read Condition 19 of the 401 permit (water board permit). In short, it states that I must take pictures of BMPs and submit
report showing that we meeting their requirements. They have stated to me
that they are very interested in this, so I want to make the report and pictures show that we are on the ball. I was supposably late last year and
provided insufficient info to them.

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
07-925-6217-office

707-496-4096-cell

Evan Paine (epaine@mcmconstructioninc.com) - Tue, 09/30/08 09:15:29 -0700

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EXHIBIT

G

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

285 fi68.0

Flex you power!
Be energy efficient!

Date: 06/12/07

Contract: 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY - CONFUSION HILL

Mr. Evan Paine
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

RE: **Sandblasting – Letter#107**

Faxed: (916) 334-0562 and mailed

Evan:

Effective today, 06/12/07, no additional sandblasting operations will be allowed on the project. The suspension of this activity is effective until an acceptable SWPPP amendment has been submitted (SWPPP Ammendment #8). The amendment, at a minimum, must illustrate how proper and adequate sandblasting operations will be conducted and how appropriate BMP measures will be initiated and maintained. Note that the BMP measures must meet or exceed those that are necessary to meet permit compliance.

To date, there have been several verbal and written communications between the State and MCM regarding sandblasting operations, what BMPs are appropriate, and who has the responsibility to implement them. The State has written two letters, dated 05/24/07 and 05/31/07, where we have requested an amendment to the SWPPP for sandblasting operations. The 05/31/07 letter gave a conditional approval for planned sandblasting operations for the remainder of that week, as the State did not want to delay the Contractor's operations. The letter indicated that no additional sandblasting operations were considered acceptable until such a time that an approved SWPPP amendment had been submitted and processed. As of today, no SWPPP amendments have been submitted, and therefore no additional sandblasting operations will be allowed.

As previously discussed, the use of appropriate BMPs to meet permit compliance, for all item work on the project, is considered to be the responsibility of the Contractor. MCM has requested that direction be given in terms of what BMP measures are necessary and that a Change Order be issued for implementation of the BMP work. Again, no Change Order will be issued, but guidance in terms of what type of measures would seem appropriate and have been implemented on other projects will be conveyed. If MCM feels that the use of BMPs for this work is inappropriate or excessive, please utilize the NOPC process to protest. Lack of meeting all requirements and obligations under the existing permits is not an option.

RECEIVED
JUN 18 2007
MCM MAIN OFFICE

As previously mentioned in the 05/31/07 letter, options for your SWPPP amendment includes the following, where viable and appropriate:

- Placement of toe kick boards (plywood or 2x6 boards or other),
- Placement of visquine and/or filter fabric as horizontal and vertical barriers
- Minimization of environmentally friendly sand
- Operations during non-windy conditions
- In sensitive operations, such as immediately above rivers or other protected areas, use of horizontal platforms directly below the work area have also been utilized.

Please call with any questions regarding this matter.
Office:(707) 925-6403 Cell: (707) 496-4096.

Sincerely,

SEBASTIAN COHEN
Resident Engineer

cc: Project Records 5.5
MCM/JHam
TDavis
DStiles
DThomas

EXHIBIT

H

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

28 file 8.0

STATE OFF CALIFORNIA-BUSINESS, TRANSPO ON AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

285 file 9.3

Attn: Rudy SDI.
faxed 408 281 9301 ✓
1:05pm
1/8/08

Flex you power!
Be energy efficient!

January 8, 2008

cc: J. Ham

Contract 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY @ CONFUSION HILL

Mr. Evan Paine
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

Faxed (916) 334-0562 and mailed

Dear Mr. Paine:

Bridge 10-300 Grouting Operation

Due to current methods being utilized; current weather conditions; and subsequent concerns regarding the quality of the product being provided, the immediate termination of grouting operations on this Bridge has been implemented.

The existing field conditions indicate that the grout tubes contain a substantial amount of water from ongoing precipitation events. During the current grouting operations being utilized, the vent tubes are spilling and depositing cementatious material onto the bridge deck and subsequently into "Water of the State", a definite permit violation. The lack of containment of cementatious material during grouting operations at the vent locations is unacceptable.

As you probably know, the ducts that haven't been grouted are completely full of water, which is out of compliance with Standard Specification 50-1.07. Your sub-contractor, Schwager Davis, has indicated that they believe it would be acceptable to displace the water during grouting. This will not be acceptable. The ducts will be free of water and debris prior to grouting in accordance with Standard Specification 50-1.09.

Furthermore, due to the submerged state of the tendons, proof shall be provided by MCM Construction that rusting of the prestressing steel is not occurring. Rejection of the tendons is eminent in accordance with Section 50-1.05.

Lastly, the grout pump used by your subcontractor has an oil leak that leaks continuously while the pump is running. This equipment must be repaired or removed and replaced prior to further grouting.

We are available to discuss this situation at your earliest convenience.

Items were addressed and verbal approval from Dan Stiles was given ~ 3:00 pm to resume work. Last two tubes were grouted last night on the North Bridge 10-0300.

E Paine

RECEIVED TIME JAN. 8. 1:12PM

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DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

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Bridge 10-300 Grouting Operation

Sincerely,

DAN STILES
Structures Representative

SEBASTIAN COHEN
Resident Engineer

cc: Project Records 5
OSC

RECEIVED TIME JAN. 8. 1:12PM

EXHIBIT

I

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 f16 8.0

PARTNERING

Highway 101 Garberville

EXECUTIVE TEAM SESSION

MCM Construction
Caltrans

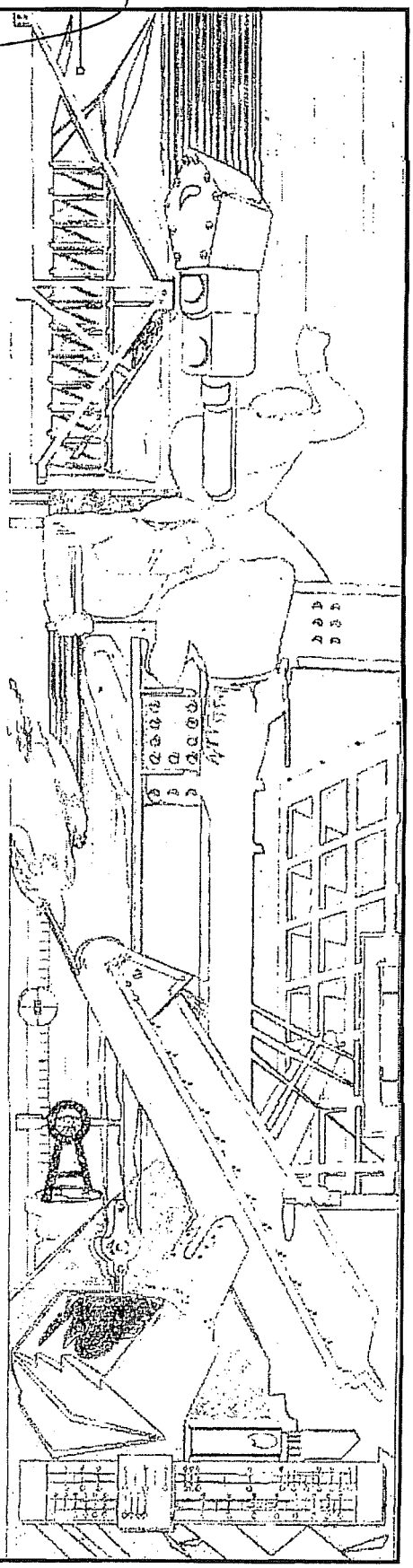
SESSION REPORT

Facilitated by

Sue Dyer

ORG•METRICS

291 McLeod Street
Livermore, CA 94550
(925) 449-8300



MCM Construction, Inc. and Caltrans
Highway 101 Garberville Project
Executive Team Partnering Session
Ukiah Conference Center
January 4, 2007

As recorded on the flip charts

WHAT'S WORKING? WHAT'S HINDERING?

What's Working?

- Production
- Trestle and falsework in the river on time
- Communication
- Things go well when we can work
- Getting constructed on schedule
- Construction crews get work done when work is available
- Crews are working – it looks good
- Able to work through the winter
- Response to notice of violation
- Good support from RE
- Ladd comes each week
- Mobilization paid
- Paved the lower road

What's Hindering?

- Not meeting each other's needs
- Permit compliance (agency expectations)
- Submittal concerns
- Geological conditions (cave-in – costs)
- Commitments to respond
- Decisions not made fast enough
- Slide made things worse
- Timeliness of decisions
- Communication is the biggest hindrance (internal and external)
- Commitments not followed through
- Communication and follow through on commitments
- Lack of cooperation between MCM and Caltrans
- Environmental awareness
- Caltrans' ability to deal with agencies
- Slide areas
- Difficult to work in river during the rain
- Difficult to bridge gap between agencies and project
- Water drafting (no water, no compensation)
- Footing investigation (CCO not what was expected)
- Submittals
- Slide (1 month and still no answers)
- Extra material from slide –marooned on peninsula
- Rock at abutment #4
- 5 NOPCs and 2 more coming for total of $200K
  - LD's are $25K/day
- North end of trestle – how to protect?
- S bridge plans
- Attitudes!

OUTSTANDING PROJECT ISSUES

Group 1
- Slide at 21+70
  - North bridge abutment #1
  - Brush disposal
- Redesign of abutment #1 north of bridge
- Redesign of abutment #1 south of bridge
- Submittals
- Water drafting
- Access road runoff
- Crane parking on trestle – loading
- Compliance with environmental permit conditions

Group 2
- Pier 3 north falsework submittal/approval
- Pier 2 south falsework platform approval
- Slide's abutment #1 north
- Water
- Permit compliance November's Cal-OSHA
- Slide material disposal

CRITICAL ISSUES

1. Water (Need 80K/day at peak)

2. Slide
   a. Redesign abutment
   b. Deal with slide material
   c. Where to put material
   d. Water control

3. Falsework at Pier 3N and Pier 2S – work platform

4. Shaft at slope failure Pier 3N

[5. Attitudes toward permit compliance and being "fair"]

6. Submittals

COMMITMENTS AND AGREEMENTS

Environmental Permits

1. We will move the crane off the bridge before it rains so that no oil (or potential oil) can flow into the river. We will develop a protocol for monitoring and cleaning drips.
2. MCM and Caltrans will be sensitive to the requirements of the permits.

Water

3. Caltrans will write a CCO and pay for the water that has been used so far.
4. We will elevate the water issue
   Who: Terry will take the lead

Slide

5. Slide Material – We will temporarily move the material to the meadow area on top if pier 3. Brush and timber will be moved to highway 101 and a sign will be placed in it indicating that it belongs to the state. We will haul the material offsite when the water permits. We agree that this is "extra" material and Caltrans will pay for its disposal. Melinda will check to see if we can punch a road under the NE quadrant of Bear Pin undercrossing.
6. Water Control – We will redirect the water off the access road using a ditch and the appropriate BMP's. We will amend the SWPPP.
7. Due to the slide we must redesign the abutment #1 on the north side (larger slide). Caltrans will work to redesign the abutment and will immediately develop a remediation plan by 1/5/07. Caltrans will then issue a NTP and CCO.
8. Pier #2 is not safe (smaller slide). Once it is safe (when upper slide material has been removed), we will start working. GeoTech will provide a "fix". In two weeks GeoTech will make recommendations and then redesign.

Falsework at Pier3N and Pier 2S

9. Pier 3N – Structures are approved. MCM will write a letter saying it is OK to haul across the bridge. MCM will address the comments received on Pier 3N by 1/5/07.
10. CCO #12 –1/4/07
11. Crane Platform Pier 2 South Bridge – MCM will give Caltrans their calculations and procedure for the crane operation on 1/4/07. If the calculations are correct, we are in agreement.

Shaft at Slope Failure Pier 3N

12. Pier 3 North – The slide filled the shaft with approximately 500 yards of material. We estimate that it will take two weeks or 8-10 sifts to remove. We will need to stabilize the slope, clean above, dewater and clean the shaft, and export the material. We will resolve this issue quickly.

Attitudes Toward Permit Compliance and Being "Fair"

13. Our goal is to be proactive in complying with permit requirements. We will also be proactive in writing CCO's for changes being required to meet environmental needs so that it is fair.
14. To meet the project needs, Caltrans will have the proper staffing for the Field office so they can respond in a timely manner.
15. We will improve our project meetings so that they are more productive. Weekly meetings may be implemented.

Submittals

16. The following submittals are at issue:

Submittal/CCO	*Status/Agreement*
Trestle	Approved
Pier 3 NB	Dan and Evan will handle this in one week
Pier 2S platform	Crane platform OK if MCM writes a letter stating it is OK
AB form travelers	First part of next week
CCO #12	Rewrite using MCM's # - Abt. #1 SB rock face reinforcement
CCO for welding	Will be issued

NEXT STEPS

We will elevate these issues to the Executive Level in 30 days if we don't see the Field Team able to resolve these issues.

Mitch and Ron will act as the Partnering Champions for the project. They are charged with watching to make sure that working relationships are constructive and productive. If they are not they will take action.

PARTNERING – A MEDIATIVE PROCESS

California Evidence Code

§ 1119. Mediation confidentiality

1119. Except as otherwise provided in this chapter:

(a) No evidence of anything said or any admission made for the purpose of, in the course of, or pursuant to, a mediation or a mediation consultation is admissible or subject to discovery, and disclosure of the evidence shall not be compelled, in any arbitration, administrative adjudication, civil action, or other noncriminal proceeding in which, pursuant to law, testimony can be compelled to be given.

(b) No writing, as defined in Section 250, that is prepared for the purpose of, in the course of, or pursuant to, a mediation or a mediation consultation, is admissible or subject to discovery, and disclosure of the writing shall not be compelled, in any arbitration, administrative adjudication, civil action, or other noncriminal proceeding in which, pursuant to law, testimony can be compelled to be given.

(c) All communications, negotiations, or settlement discussions by and between participants in the course of a mediation or a mediation consultation shall remain confidential.

THANK YOU FOR LETTING ME BE OF SERVICE

Please visit the International Partnering Institute on the web at

www.PartneringInstitute.com

The International Partnering Institute (a division of ORG·METRICS) was founded by Sue Dyer as an educational organization dedicated to teaching and reinforcing partnering concepts worldwide.

Partnering and dispute prevention skills are key to being better players in today's economy. Fortunately, these skills can be learned. The Institute offers training programs and materials for the construction and design industries - and the public agencies they serve.

IPI has an extensive selection of books, booklets, special reports and white papers that teach the concepts necessary to make partnering a business reality. The institute also acts as an advocate

A Division of ORG·METRICS

International Partnering Institute

Please call if I can help in any way

Sue Dyer

ORG•METRICS
291 McLeod Street
Livermore, CA 94550

(925) 449-8300 FAX (925) 449-0945
email: SueDyer@orgmet.com

www.orgmet.com
www.PartneringInstitute.com
www.ConstructionScorecard.com

MCM Construction and Caltrans

Highway 101 Garberville Project
Executive Team Partnering Session
Ukiah Conference Center
January 4th, 2006

AGENDA

9:00 am	Welcome and Partnering Ground Rules
	How is the project going?
	Review of the December Construction Scorecard
	Are you committed to success?
	Where do we have any outstanding issues? Core Project Issues
	Issue Resolution Commitments/Actions
	Are we doing what we said we would do? Do we need to adjust? Goals, Vision, Partnering Commitments
	Dispute Resolution Ladder Update
	Do we want to change any other measures? Do we want to meet again (Exec and Team?)
	Final Thoughts and Thanks
Noon	Session Ends

EXHIBIT

J

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OFF CALIFORNIA-BUSINESS, TRANSPORTA. AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
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GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

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April 19, 2007

Contract 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY@CONFUSION HILL

Mr. Evan Paine
Jim Carter
MCM Construction Inc.
6413 32nd Street
P.O. Box 620
North Highlands, CA 95660

Faxed (916) 334-0562 and mailed.

Safety and Permit Compliance Enforcement

Dear Messrs. Paine & Carter:

Attached is a draft letter we are planning to send addressing the lack of consistent enforcement of environmental and safety requirements on the Confusion Hill project. As agreed at previous partnering meetings, we want to meet with you to discuss these issues prior to sending this letter. Please plan on meeting with us after our next biweekly meeting on Tuesday, April 24, 2007 to discuss this letter and how MCM will deal with these issues to prevent them from occurring in the future.

If you have comments or questions, please contact me at (707) 925-6217

Sincerely,

Ronald J. den Heyer
Resident Engineer

Cc; Terry Davis
John Rodrigues
Project Records

RECEIVED
RJD
APR 23 2007
MCM MAIN OFFICE

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April 19, 2007

Contract 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY @ CONFUSION HILL

Mr. Evan Paine
Mr. Jim Carter
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

Faxed (916) 334-0562 and mailed

Dear Messrs. Paine & Carter:

Lack of Consistent Enforcement of Environmental and Safety Requirements

There has been a ongoing lack of consistent enforcement of both environmental permit requirements and safety requirements on this project. Reference Caltrans' letter dated December 1, 2006, regarding fall protection, safety, permit compliance and superintendence. The following examples are representative of the ongoing problems.

Fall Protection

A. Caltrans has observed workers on the span 2 lower level falsework working beyond the handrailing while wearing harness but without being attached to a safety line, and who, when something is said to them, will tie off to something where they are, then release and walk back to a safe area without fall protection.
B. Caltrans has observed workers improperly using their "Y" lanyards—they hook only one lanyard hook while climbing, so they are not protected when re-hooking the lanyard.
C. There is temporary compliance when we bring this to the attention of the worker, a foreman, or Supt. James Ham. Mr. Ham's reaction to our notifications is that he tells them every day and he gets tired of telling them.

Permit Compliance

A. Last Wednesday Supt. James Ham's reaction to Mr. Richard Thompson's notification to him of sawdust on a steep access road was that he didn't care, that it was far from the river, and Justin Porteous, standing with Mr. Ham, said that there are three silt fences between the sawdust and the river. Mr. Thompson said that wasn't the point of the permit, the point was that the sawdust was to be cleaned up so it couldn't wash down the hill to the silt fence. The sawdust has not been cleaned up.
B. Another example from last week is the lack of attempt to contain weld splatter and oxy-acetylene cutting slag/debris at Pier 3, Br. No. 10-0300, and ignoring Caltrans' requests to clean it up from the rock below the pier.

C. On Friday, April 13, or Monday morning, April 16, a wood form was sprayed with form oil while on the trestle, noticeable by the pattern of overspray on the filter fabric covering the deck. Another example of the lack of concern. The oil laden filter fabric was removed and replaced this afternoon, only after it was brought to the attention of Mr. Ham.

Mr. Francisco Cordero is one of the major fall protection violators. He has been observed climbing up and down the column cage at Pier 3, Br. 10-0300, wearing a harness but without using the lanyard. He has also been observed using only one of the two lanyard ends when climbing around, leaving himself unprotected while rehooking the one lanyard end. Because of this behavior and his position as a labor foreman, he should be enforcing safety practices not being a bad example to subordinate employees.

The Engineer directs that Mr. Cordero be discharged from the project in accordance with Section 5-1.12, "Character of Workers," of the Standard Specifications for his lack of attention to and enforcement of permit and safety requirements. This is to be effective by end of business on Friday April 20, 2007.

In addition, if Supt. James Ham, MCM's full time representative at the project having responsibility for compliance with project environmental permits and MCM's Illness & Injury Prevention Program, cannot establish and maintain compliance with these requirements, then Caltrans will be forced to direct Mr. Ham's discharge in accordance with Section 5-1.12, "Character of Workers".

If you desire a meeting to discuss the criteria to be used in evaluating Mr. Ham's ability to enforce and maintain compliance with these requirements, please call Mr. Ron den Heyer at (707) 925-6217, or cell phone (707) 496-6608.

Sincerely,

RONALD J. DEN HEYER
Resident Engineer

GARRY TOLEN
Structure Representative

cc: Project Records 5.5; 6.0
MCM/EOrsi
ec: OSC/DThomas/RMelko
NRC/TDavis/EYarbrough/TStrahan

STATE OFF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
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FAX (707) 925-6391

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April 19, 2007

Contract 01-397514
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Mr. Evan Paine
Jim Carter
MCM Construction Inc.
6413 32nd Street
P.O. Box 620
North Highlands, CA 95660

Faxed (916) 334-0562 and mailed.

[Retracted per 4/24/07 Mtg]

Safety and Permit Compliance Enforcement

Dear Messrs. Paine & Carter:

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If you have comments or questions, please contact me at (707) 925-6217

Sincerely,

Ronald J. den Heyer
Resident Engineer

Cc; Terry Davis
John Rodrigues
Project Records

RJD
E.Orsi
E Purchi

RECEIVED TIME APR. 19. 9:32AM

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor
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NORTH REGION CONSTRUCTION
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PHONE (707) 925-6218
FAX (707) 925-6391

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April 19, 2007

Contract 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY @ CONFUSION HILL

Mr. Evan Paine
Mr. Jim Carter
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

Faxed (916) 334-0562 and mailed

Retracted per 4/24/07 Mtg w/ T. Davis, R. den Hayer, G. Tolbert, Ed Fuchs, Evan Paine

Dear Messrs. Paine & Carter:

Lack of Consistent Enforcement of Environmental and Safety Requirements

There has been a ongoing lack of consistent enforcement of both environmental permit requirements and safety requirements on this project. Reference Caltrans' letter dated December 1, 2006, regarding fall protection, safety, permit compliance and superintendence. The following examples are representative of the ongoing problems.

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A. Caltrans has observed workers on the span 2 lower level falsework working beyond the handrailing while wearing harness but without being attached to a safety line, and who, when something is said to them, will tie off to something where they are, then release and walk back to a safe area without fall protection.
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EXHIBIT

K

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 file 8.
285 file 14.13

TATE OFF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

Blow dust
Carpet while
River bar

cc: JC
HOM
RM
James H.
Joe C.
Nick K.

Flex you power!
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Date: 05/24/07

Contract: 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY - CONFUSION HILL

Mr. Evan Paine
Mr. James Ham
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

RE: **Sandblasting – Letter#100**

Faxed: (916) 334-0562 and mailed

Responded MCM letter 5/29/07 EP

Gentlemen:

Regarding yesterday's events surrounding the sandblasting operation at the Pier 3 location of the north bridge, I am writing to inform you that both the Regional Water Quality Control Board (RWQCB) and the California Department of Fish & Game (CDFG) have been contacted and told that sandblasting material was deposited upon the river bar. A formal report stating the permit violations and the subsequent result will be forthcoming.

The disturbing aspect of yesterdays events are that MCM staff was directly informed that the sandblasting operations, as being planned during the end of the day on Tuesday, 5/22/07, were going to require appropriate BMPs to minimize the impacts of the sandblasting operation. No specific BMPs were discussed at the time and no direction was given in writing, but clear indication that some measures were needed was given, and was apparently received, as MCM staff apparently stated that the issue would be put off until the next day. Upon arrival at the north bridge early Wednesday, 5/23/07, Caltrans staff found that the sandblasting operation had taken place with no BMPs of any kind in place. No action or even a good-faith effort was attempted to contain the material. The fact that the operation took place with no measures to minimize deposition of material, and the fact that it took place prior to the presence of Caltrans staff appears to have been a deliberate attempt to violate the permit. MCM staff had clear direction that the operations, as initially planned, were not to take place.

The requirement for minimization of impacts and requirement to comply with all permits on this project are clearly stated both within the project Special Provisions and in the project SWPPP. Full permit compliance, including all methods that meet and fulfill the appropriate level of compliance is MCM's responsibility.

Due to the events that have taken place and based upon the past level of compliance with the permits, as interpreted by Caltrans, no further sandblasting operations will be allowed until a revised plan regarding sandblasting operations and minimization of the impact from the operations is submitted to

this office, and approved. This request should be considered to be a request for an amendment to the SWPPP (SWPPP amendment #8).

Additionally, if further disregard and/or intentional violation of any of the permits on this project occur, immediate personnel changes will be required and project suspension will be contemplated until such a time that adequate measures are taken to ensure that no future violations will occur. If MCM has the position that inappropriate interpretation of the permits is taking place, or that BMPs that are being required by the contract are excessive or are not an industry standard practice, the Notice of Potential Claim process is the appropriate avenue to pursue such disagreements. Disregard for direction given from Caltrans staff, regarding any contractual or compliance issue, will not be tolerated on this project.

I understand that MCM is concerned with setting a precedent for future projects or for future work on this project; specifically, how future sandblasting work on the superstructure will occur and what the necessary BMPs will be. My immediate response to such issues or concerns is that proposed measures for the work should be contemplated and appropriate BMPs proposed and reviewed with Caltrans staff, regarding their effectiveness. At a minimum, a good faith effort is required.

As previously discussed in various conversations, it my position that permit compliance can be obtained via a constructive and proactive approach. MCM and Caltrans have partnered to cooperatively bring Joe Cartwright on-board as an assistant or Co-Superintendent to assist with project SWPPP oversight and BMP installation. This effort appears to have been in vain, as Mr. Cartwright's job is to oversee all contractor operations and make sure that appropriate measures are in place to minimize impacts and ensure permit compliance. It is necessary that he is aware of all proposed operations and that necessary measures are in place to minimize impacts. If it is unclear as to weather a proposed BMP is appropriate or will be effective, Caltrans staff are available to meet and confer. I am available and more than willing to meet with any contractor staff.

If it is not MCM's intent to give Mr. Cartwright the appropriate level of oversight and input as to affect a proactive approach to comply with all permits, it is my position that the cost of having him on the project is not cost-effective.

I plan to meet today with Joe Cartwright and James Ham to discuss the operations that took place, how future communication of operations will happen, and how appropriate BMPs will be implemented.

Please call with any questions regarding this matter.
Office:(707) 925-6403
Cell: (707) 496-4096.

Sincerely,

SEBASTIAN COHEN
Resident Engineer

cc: Project Records 5.5
MCM/JHam
TDavis

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EXHIBIT

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Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

Evan Paine (epaine@mcmconstructioninc.com) - Wed, 08/30/06 07:28:04 -0700

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285 file 8.0

cc: Justin Porteous MF
Tom Copenhaver LADD
James Ham (707)925-6096
Jim Carter

emailed 8/29/06

From: Ron Den Heyer <ron_den_heyer@dot.ca.gov>
To: epaine@mcmconstructioninc.com
Subject: Fw: SWPPP issues at Confusion Hill
Date: Tue 08/29/06 05:53 PM

Evan,

I thought you might be interested in this email from Walt. Check out who
he cc it to. I had a long discussion with him today about sending anything
pertaining to the project only to me and his direct supervision (he reports
directly to Terry Davis).

RdH
----- Forwarded by Ron Den Heyer/D01/Caltrans/CAGov on 08/29/2006 05:48 PM

Walt Dragaloski

To: Ron Den eyer/D01/Caltrans/CAGov@DOT, Gene Leo/D01/Caltrans/CAGov@DOT
08/25/2006 01:07 cc: Terry Davis/D01/Caltrans/CAGov@DOT, Alex
PM
Arevalo/D01/Caltrans/CAGov@DOT, Melinda L Molnar/D01/Caltrans/CAGov@DOT

Subject: SWPPP issues at Confusion Hill

Ron,

On Tuesday, August 22, 2006, I performed a site inspection for SWPPP compliance. The following deficiencies were observed:

Equipment is being fueled on the riverbar at the north bridge. Our permit with the Regional Water Quality Control Board explicitly states that fueling must only occur outside of waters of the United States. At the PDT James Hamm acknowledged that they were fueling a compressor, generator, man-lift and backhoe.
A discharge of oil occurred from the backhoe directly onto the riverbar.
Equipment that has even minor leaks must not be allowed to operate in sensitive areas such as the riverbar. This discharge should have been reported to the RE and cleanup up immediately. There were no BMP's in

place to prevent the discharged oil from reaching the riverbar.
Careless discarding of welding rods is occurring onto the riverbar.
A temporary sedimentation basin has been constructed and used within 100
feet of the live stream channel. Page 144 of the Special Provisions
states, "temporary sedimentation basins for dewatering...shall be
located a minimum of 32 meters away from the live stream channel."
Fueling is occurring in the TCE near the RE's office without use of ANY
BMP's. Ladd personnel were fueling the tracked hoe and claimed they had
no training or knowledge of required fueling practices and have been
fueling their equipment for weeks in such a manner.
There is no stabilized construction entrance at the south bridge
approach where dirt is tracking onto the highway due to trucks entering
and leaving the work site. The stabilized entrance should be constructed
prior to dirt hauling activities in the area.
Linear sediment barriers should be constructed along highway 271 where
disturbed soil areas exist.

In addition to the above described deficiencies, please consider the following requests and recommendations:

The Water Pollution Control Manager (WPCM) should amend the SWPPP by
submitting the information described on Page 144 of the Special
Provisions to graphically depict the dewatering process that the
contractor is using to construct the temporary trestle at the north
bridge. The graphic needs to show a sectional and plan view that details
the removal techniques for pumping groundwater. It should define the
flow path and placement of pipes, hoses, pumps, and other equipment used
to convey the discharge. The graphic shall also show the general
position of the apparatus relative to the pile or cofferdam, the point
of pumped groundwater discharge, and the distance to the live river
channel. The description should also include an estimate of the
discharge volume, flow rate, and frequency; location of the discharge;
and the inspection and monitoring procedures related to the discharge.
During a phone conversation on Thursday, August 24, 2006, Mr. Hamm
indicated that pumped groundwater that had come into contact with wet
cement would be treated and then sprayed on the riverbar as a dust
palliative. This is unacceptable and would be a violation of the RWQCB
permit since the water would most likely still contain cementitious
material. If the pH were adjusted to be within tolerance and no
cementitious material were present in the water, this procedure would be
unnecessary since dust emissions are not a problem on the riverbar for
this work.
I strongly urge you to re-evaluate your decision to use aggregate
ase

for both the stabilized construction entrance and the stabilized construction roadways. The access roads are steep and there will be a high probability that fines will be washed out of the aggregate base during heavy rainfall leading to concentrated flows, higher flow velocity, and increased erosion after leaving the roadway. In addition,
using base for the construction entrance may exacerbate tracking problems during the winter. Although the BMP manual calls for 1 foot thick of 3-inch to 6-inch cobbles, I recommend that you use 1-inch to 2-inch crushed rock, a minimum of 3-inches thick. The crushed rock will
stay in place under equipment loading on steep roads and the lack of fines will allow surface water to penetrate the surface, thus reducing
it's velocity and allowing sheet flow along the out-sloped edge.

Walt Dragaloski, P.E.
District 1 Construction Stormwater Coordinator
5601 South Broadway, Eureka, CA 95503
(707) 445-6697 office
(707) 496-6356 cell

Evan Paine (epaine@mcmconstructioninc.com) - Wed, 08/30/06 07:28:04 -0700

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EXHIBIT

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Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

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SACRAMENTO, CA

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(909) 875-0533 Engineering / Accounting FAX (909) 875-2243

FAXED (707) 925-6257 June 13, 2007

State of California
Department of Transportation
PO Box 699
Garberville, CA 95542

LTR No. 255

Attn: Sebastian Cohen, R. E.

Re: Contract 01-397514
US 101 at Confusion Hill
NOPC 13 Additional SWPPP

Gentlemen:

Reference the Caltrans letters dated June 12, 2007 and May 31, 2007 regarding a SWPPP amendment for sandblasting and the MCM letter dated May 29, 2007.

MCM responded to the Caltrans request for a SWPPP Amendment for additional sandblasting measures with SWPPP Amendment No. 8. However, it is unclear to MCM how Caltrans believes they can direct additional work, above and beyond the BMP's in the approved SWPPP, the language in the Special Provisions, and the newly interpreted language of the Agency permits, while at the same time denying additional compensation for the additional work. It is well know that the direction from Caltrans for this SWPPP Amendment is a direct result of pressure from the various agencies and that Caltrans is being directed to implement additional measures inconsistent with the Contract and inconsistent with previous projects with this same permit language. It is also well know that Caltrans is just as surprised with the level of implementation that is being required, as stated by numerous Caltrans personnel, and the fact that this type and extent of implementation is not represented anywhere in the Contract.

This project is more than just the 14 page Section 10-1.02, "Water Pollution Control" of the Special Provisions and the three pages discussing Relations with the various agencies. Most notably it is the other 268 pages of the Special Provisions discussing a project with two very large structures with a substantial amount of earthwork that must be built in a specific time frame. Caltrans is directing that the most basic functions of bridge building (sandblasting, welding, etc.), that are required by the Caltrans Specifications, be done in manner that requires additional work. In some cases this additional work may be no more than spreading out a piece of visquene, but with the latest direction and the latest comments from the Department of Fish and Game, it is clear that the additional work will be extensive. MCM has no problem doing this additional work, and MCM will work with Caltrans to come up with solutions to these new requirements; however, Caltrans must understand that this is additional work and MCM must be compensated. Since the acceptance criteria for the new BMP's is a moving target and neither MCM nor Caltrans know what level of BMP's will ultimately be acceptable, the additional cost could be hundreds of thousands of dollars, and depending on what type of containment is required for sandblasting the superstructures the costs could exceed 1 million dollars. Caltrans has already seen the cost of some of the additional SWPPP requirements in Contract Change Order 5 for additional SWPPP, which MCM and Subcontractors have billed over $200,000. The Caltrans response to that cost, as of May 22, 2007, is that

no more work will be authorized under CCO 5. From the project partnering point of view we are going in reverse.

The various agencies are holding Caltrans to level of SWPPP implementation above what MCM and Caltrans expected, based on broad permit conditions, and even going so far as to applying these criteria to elements of the work outside of the 100 year elevation. MCM has been " ected by Caltrans to fill out discharge reports for several instances that do not meet the definition of a discharge, as described in the approved SWPPP Section 600.2. MCM was directed to not pour Pier 3 North due to weather concerns, a pour that is above the 100 year and not an element subject to the weather criteria as stated in the permits. MCM is being directed to contain all sandblasting and welding material by not even allowing the material to reach the 100 year zone, regardless if the material can be picked up after the work.

The direction for the Sandblasting SWPPP Amendment No. 8 stated the following:

"The following additional measures will be implemented where viable and appropriate, above and beyond BMP NS-14 of the approved SWPPP, in accordance with the direction in the Caltrans May 31 and June 12, 2007 letters.

1. Placement of toe kick boards (plywood or 2x6 boards or other)
2. Placement of visquine and/or filter fabric as horizontal and vertical barriers
3. Minimization of environmentally friendly sand
4. Operations during non-windy conditions
5. In sensitive operations, such as immediately above rivers or other protected areas, use of horizontal platforms directly below the work area have also been utilized."

This language was duplicated from the Caltrans June 12, 2007 letter. But the problem with this language is that it is no better than the broad language of the permits. The statement, "The following additional measures will be implemented where viable and appropriate" is a perfect example of the reason this issue is so problematic. The terms "Viable and appropriate" is going to be a different situation for every person that walks on the job. Even if MCM and Caltrans come to some agreement there is no doubt that the issue will be questioned by the first agency that walks on the job. Beyond that, there is a good chance that the next agency that walks on the job is going to disagree with the first. This has already happened.

The peculiarities of the agencies start with the permits themselves. Under the Project Descriptions in both the Department of Fish and Game permit and the Regional Water Quality Control Board permit the work required for this project is explained in detail. The description includes the large bridges and the trestle and falsework construction within the 100 year in order to build the bridges, including drilling CIDH foundations, river crossings and grading the riverbars for access. In the Special Conditions the favorite Caltrans quote from the RWQCB permit Condition #9 states;

"No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction activity of whatever nature, <u>other than that authorized by this permit</u>, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State."

Caltrans typically excludes the underlined portion of this condition and neglects Condition #11 that states;

"When operations are completed, any excess material or debris shall be removed from the work area and disposed of properly."

The Department of Fish and Game has similar language. Clearly the intent of the permits is that there will be construction that takes place within the 100 year, as described in the project description, that there will be impacts due to the grading and construction, and that any debris is to be cleaned up when the work is done. Any impacts to the water are to be quantified by turbidity and sedimentation measurements. The curious aspect here is that there has not been ANY turbidity or sedimentation in the river caused by sandblasting or welding and as long as the material is cleaned up there is not any permit violations.

MCM has stated that MCM will fill out a discharge report whenever directed by Caltrans, but if the incident does not fall under the definition of a discharge MCM will submit a bill. Caltrans has verbally stated that there is a forthcoming CCO 26 for the Pier 3 pour delay, however a change order has yet to be issued. Caltrans has sent numerous letters, and direction for additional containment, but stated there will not be a change order for this work. Since there is not a forthcoming change order, in order to protect our rights, MCM has no choice but to file a Notice of Potential Claim.

Accordingly, this letter will serve as our Notice of Potential Claim No. 13, filed in accordance with Section 9-1.04, "Notice of Potential Claim" of the Amendments to the Standard Specifications for additional SWPPP requirements and for all of the associated delays and impacts. Attached is Form CEM-6201A.

Please call with any questions or comments (916) 334-1221 or cell (916) 869-4423.

Sincerely,

MCM CONSTRUCTION, INC.

EVAN PAINE,
Project Manager

Cc: JC, HDM, RM, James Ham, N. King, F. Toews, Joe Cartwright
285 File 7.0
285 File 14.13
285 File 18.1
Justin Porteous-Mercer Fraser-Faxed 707-443-0277

EXHIBIT

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Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

MCM CONSTRUCTION, INC.
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SACRAMENTO, CA

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FAXED (707) 925-6391

December 7, 2006

State of California
Department of Transportation
PO Box 699
Garberville, CA 95542

Attn: Ron den Heyer, R. E.

Re: Contract 01-397514
US 101 at Confusion Hill
RWQCB NOV November 27, 2006

Gentlemen:

Reference the Caltrans letter dated December 1, 2006 and the MCM letter dated November 9, 2006.

The Notice of Violation (NOV) dated November 27, 2006, received from the California Regional Water Quality Control Board (RWQCB), is addressing the same activities as the RWQCB NOV dated October 30, 2006 with the exception of the excavator crossing the river. The foundation activities were addressed in the MCM response dated November 27, 2006.

To summarize, MCM employed numerous BMPs, including a design with minimal impact, an aggressive work schedule to minimize impacts, cofferdams, silt screens, sandbags, etc. to accomplish an extensive amount of work in a very short period with very minimal impact. The first two foundations in the water were completed with no impacts and Caltrans/Agencies were enthusiastic about the methods being utilized. As the work continued the previously successful methods developed some additional challenges so the methods were modified and the work continued successfully. We do not believe the work violated any permits as the work under question is work authorized by the permits and the impacts were minimized to the greatest extent possible.

The RWQCB NOV lists the following conditions with the MCM response:

7. Adequate Best Management Practices (BMPs) for sediment and turbidity control shall be implemented and in place prior to, during, and after construction in order to ensure that no silt or sediment enters the surface waters.

MCM Response – Any BMP utilized to do the work necessary to place the foundations in the water, in the original placement of the BMP, will cause some silt or sediment. In the strictest sense just placing a BMP would be a violation of the permit. It is generally accepted that placing a BMP, while generating some sediment, is acceptable. MCM placed BMPs prior to the work with successful results. As the river got deeper and more gravel was encountered, the previously successful method had to be modified. It was, and the remaining foundations were constructed successfully.

8. If, at any time, an unauthorized discharge to surface waters occurs, or any water quality problem arises, the project shall cease immediately and Regional Water Board staff shall be notified promptly.

MCM Response – As stated in the response to Condition 7, and also as stated in Condition 9 below, when some impacts have been anticipated by the Contract and the permits, and it is impossible to do any work without some impact, it is somewhat arbitrary on what constitutes a water quality concern. The Confusion Hill slide that cascaded into the river only a couple of weeks after the date of the activities listed in this NOV, that turned the entire river brown and saturated the water with silt and sedimentation for weeks, would seem to qualify as a water quality concern. Activities expected and approved, that may have minor impacts measured in minutes, do not qualify as water quality concerns. Nonetheless, MCM did stop and modify and improve the activities that resulted in even less impact. There is also no shortage of pictures, reports and notifications on this job.

9. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic material from any construction or associated activity of whatever nature, OTHER THAN THAT AUTHORIZED BY THIS PERMIT, shall be allowed to enter into or be placed where it may be washed by rainfall into Waters of the State.

MCM Response – The following is a direct quote from the project description in the CRWQCB permit dated February 16, 2006;

"The applicant has identified two 1.5-acre areas near each end of the project as places where activities related to construction of access roads and temporary bridges could impact waters of the United States…Activities related to construction of the temporary bridges include rotating, vibrating, drilling, or a combination of these methods to install sheet piles or casings and drilling holes into the bedrock to build support piers for the temporary bridges."

The permit clearly describes the work required at the temporary trestle and clearly indicates that their may be impacts, yet the permit was still issued that authorized

the work to proceed. MCM lessened these impacts with a proactive design that not only had fewer pile than allowed by the Contract, but also a foundation design that minimized exposure and impacts even further. There were some minimal impacts, AS ANTICIPATED BY THE PERMIT, but these impacts were well within any reasonable expectations of the enormous amount of work that was accomplished in a very short time.

13. Fueling, lubrication, maintenance, operation, storage and staging of vehicles and equipment shall be outside of Waters of the United States and shall not result in a discharge or a threatened discharge to Waters of the United States. At no time shall the applicant use any vehicle or equipment, which leaks any substance that may impact water quality.

MCM Response – This Condition 13 is not even quoted correctly, as this condition was amended by the RWQCB letter dated April 18, 2006. The amended Condition 13 is as follows:

"Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be outside waters of the United States and operation of vehicles and equipment shall not result in a discharge or a threatened discharge to Waters of the United States. At no time shall the applicant use any vehicle or equipment, which leaks any substance that may impact water quality."

This amendment, as stated in the same April 18, 2006 letter, was a clarification to allow the authorized operations within the waters of the United States. Again, reference the MCM response to Condition 9 about the project description in the RWQCB permit, as well as the following, "A seasonal temporary bridge may also be installed at the south bridge…wooden, steel, or concrete piles will be placed in the channel to support a wood deck. The river rock abutments may extend several feet into the channel." In order to construct these crossings, everyone is aware that several crossings would have been required, as indicated in the Contract Special Provisions Section 5-1.16, "Access to Work". There would have been additional impacts if the abutments were constructed with additional supports in the river, as allowed by the RWQCB permit, however all of this was mitigated by not building the north crossing this year and limiting the total number of crossings to less than what was allowed. Caltrans was aware of the crossing prior to the event and it was approved.

As far as the second sentence of this Condition 13, in the most literal sense it is impossible to comply with. Even the Caltrans inspection pickups would not meet the condition. The intent is to not have extensive leaks, clean up any leaks that may happen, and to not work leak prone equipment in the water. The excavator

in the water was extensively cleaned and inspected prior to the crossing and did not impact the water quality.

If each condition is taken for the most literal sense then the project is simply unbuildable. There must be some consideration for the size and type of equipment and foundations that the magnitude of this construction requires. It is impossible to have no impacts and this is acknowledged in the project description of the RWQCB permit. MCM has been very proactive in both in the planning and construction phases to limit the impacts to the greatest extent possible. The activities listed in the NOV are well within the scope of the permit and do not qualify as water quality concerns. If these activities are going to be construed as violations of the permit, then the work required to build this project, as well as driving any pickup on the job, is a violation of the permit and the job should be suspended.

Attached is the water drafting logs for a total of 27 loads of 2000 gallons for a total of 54,000 gallons.

Please call with any questions or comments (916) 334-1221 or cell (916) 869-4423.

Sincerely,

MCM CONSTRUCTION, INC.

EVAN PAINE,
Project Manager

Cc: JC, HDM, RM, Ed P., James Ham, Justyn Webster
285 File 7.0

EXHIBIT

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Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

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MERCER-FRASER COMPANY

General Contractors and Engineers
Since 1870
P.O. Box 1006, Eureka, CA 95502-1006
(707) 443-6371 Fax (707) 443-0277

November 10, 2006

MCM Construction
Attn: Evan Paine
6413 32nd Street
North Highlands, CA 95660

Sent to CTarm
MCM letter
11/10/06

Reference: Contract 01-397514, Confusion Hill

Subject: Response to SWPPP Letter dated Nov. 8, 2006

Dear Mr. Paine,

This correspondence is in response to the RE's letter with Walt Dragolowski's SWPPP comments dated November 8, 2006. The response is itemized as follows:

1. A sediment plume was observed emanating from a culvert outlet located just upstream from the Bear Pen Disposal area. This sediment plume was traced back to run-on coming from the Hwy 101 under crossing just north of the staging area on Hwy 271. MCM is directed to place an AC berm diagonally across Hwy 271, north of the access gate. Since this source is not the responsibility of the Contractor, the AC berm placement work would be performed under contract change order.

   Justin Porteous of Mercer-Fraser Company met with the RE and Gene Leo at the proposed dike location on the afternoon of November 9, 2006. The State was unable to determine the best location for the placement of the dike and decided to refer to Caltrans hydraulic department for recommendation. When the State determines the appropriate construction for the diversion of run-on, Mercer-Fraser Company will perform the required construction under CCO # 5 on a Force Account basis.

2. The silt fence and hay bale check dam located below Ordinary High Water at the bottom of the Bear Pen river access road are still in place. MCM is directed to remove the BMPs at this location.

   The BMPs below Ordinary High Water at the Bear Pen river access road were removed and disposed of appropriately.

3. The Bear Pen access road is currently super-elevated along the top portion and concentrates run-off along the inboard edge. MCM is directed to out slope the access road to allow sheet flow along the entire road and prevent concentrated run-off.

The super-elevation will be corrected this afternoon to allow sheet flow along the entire outboard edge of the road.

4. The silt fence along the top of slope, on the river side of the Bear Pen river access gate allows run-off to flow around the lower end. MCM is directed to extend the silt fence toward the gate to filter all run-off.

   The silt fence was extended toward the river access gate and a sand bag was placed at the end of the extended silt fence to eliminate any potential for storm water to bypass the silt fence.

5. Run-off from the staging area adjacent to Hwy 271 above Bear Pen disposal area is being diverted by the crushed rock that was placed from the highway to the disposal area. The run-off is running down the disposal area road and discharging at the low point in the access road. MCM is directed to construct a swale through the crushed rock approach to channel water across it or a berm should be placed at the top of the access road to the disposal area.

   Mercer-Fraser Company requires clarification of the location of the proposed swale or berm at the staging area adjacent to Hwy 271.

6. Currently there are three access points to the fueling/maintenance area at the north end of Hwy 271. Pea gravel has been placed at two of the access points to stabilize the entrances/exits. The pea gravel layer is very thin and susceptible to displacement by wheel loads and will be insufficient during higher intensity rainfall events. MCM is directed to place a layer of crushed rock at the access points to create stabilized construction entrances/exits.

   Mercer-Fraser Company has directed Ladd and Associates to construct temporary construction entrances/exits per BMP TC-2 of the approved SWPPP.

7. Storm water currently flows along the dike on the river side of Hwy 271 south of the Bear Pen disposal area. The velocity of the water is unchecked and has the potential to transport sediment and gravel. MCM is directed to place check dams along the dike to reduce the storm water velocity and capture entrained sediment and gravel.

   Gravel bag berms were placed along the dike on the west side of Hwy 271 yesterday afternoon. Additional gravel bag berms will be installed in the existing ditch along the west side of Hwy 271.

8. The concrete secondary containment structure for the fuel tank on the east side of Hwy 271 has no walls to prevent the capture of storm water. The drip containment barrel for the fuel nozzle is currently located against the outside edge of the structure and is receiving rainfall directly into the barrel. In order to reduce the amount of water that the barrel captures for off-site treatment, MCM is directed to relocate the barrel away from the outside edge of the structure.

   The secondary containment structure for the fuel tank is the property of MCM Construction. Mercer-Fraser Company assumes no responsibility for water

pollution control associated with this structure. It is Mercer-Fraser Company's understanding that MCM is aware of the disposal requirement for any storm water that comes into contact or is collected within the containment.

9. The gravel bag and hay bale check dams placed in the ditch line to the drainage inlet located just north of the contractor's office trailers has been completely knocked over by the storm water flows. Additionally, storm water is also bypassing the drain inlet. MCM is directed to place a gravel bag berm at the entrance to the ditch line to prevent bypass.

   Straw bale check dams were removed from the ditch line and replaced with sand bag check dams reinforced with steel reinforcing bar. Gravel bag berms were placed at the top of the ditch line to direct water into the ditch and eliminate bypassing of storm water.

10. The temporary trestle still has open space between decking that would allow material to enter the channel. The Contractor has attempted to place expanding foam into some of the cracks but not all cracks are filled and those that are filled still show daylight through portions and appear (to) have lost adherence during deck loading. MCM is directed to seal the deck to prevent in a manner to prevent any material to enter the channel.

    The temporary trestle is the property and responsibility of the prime contractor. It is the belief of Mercer-Fraser Company that the prime contractor is aware of open spaces in the decking and is currently developing a remedy to eliminate discharge to the channel.

11. The crane being used on the trestle has leaking fluids. This has been noted may times earlier. The contractor has attached a piece of plastic under the crane, but the plastic catches both oil leaks and storm water. There is evidence on the trestle deck that oil that has leaked off of the plastic. MCM is directed to repair the crane or discontinue its use.

    The crane is the property of the prime contractor who holds responsibility for its water pollution potential. Evan Paine assured Mercer-Fraser Company that MCM will remedy the fluid leaks.

12. The access roads on the peninsula have not been stabilized with rock as required by the Special Provisions. MCM is directed to stabilize the access road on the peninsula.

    Mercer-Fraser Company has discussed and investigated the issue with the RE. We determined that existing rock is satisfies the requirements of the Special Provisions. Rock from current hard rock excavation with excavator and hammer will be placed on the access road where necessary. Additionally, BMPs exist between the access road and the channel.

13. On the peninsula above abutment 1 of the north bridge, BMPs are required on the large amount of disturbed soil area (DSA). There is sufficient area for desilting basins and temporary erosion control should be applied to all areas that are

inactive, or expect to be inactive due to rainy weather. MCM is directed to install appropriate BMPs in this area in accordance with the approved SWPPP. In addition, exposed slopes shall be stabilized with bonded fiber matrix or other approved method.

The area was inspected yesterday afternoon with the RE and storm water inspectors. Ladd and Associates is directed to construct a desilting basin and Mercer-Fraser Company will install additional silt fence. When the temporary trestle is completed, bonded fiber matrix will be installed on inactive DSAs.

14. The current amount of DSA is estimated to be greater than the 5-acres allowed by the Special Provisions. The current DSA areas need to be stabilized before further clearing and grubbing or any other DSA work is performed.

    Mercer-Fraser Company has sent a letter to the prime contractor requesting an authorized increase of the allowed disturbed soil area. Additionally, DSAs are currently receiving appropriate stabilization.

15. Two culverts have been placed on the lower peninsula access road. These culverts will concentrate run-off. The culverts do not extend to the bottom of the slopes and do not appear to be well attached to the slope. There are no energy dissipation device(s) at the bottom of the culverts, although silt fence has been placed on the flat section near the toe of the slope. MCM is directed to extend the culverts to the tow of the slope, be well secured to the slope, and an energy dissipater be placed at the outlet.

    During a subsequent water pollution inspection, the RE directed Mercer-Fraser to extend the culvert an additional 20-feet and install rock energy dissipaters with local rock. The culvert additions will be secured to the slope with rebar and rope. Additionally, the culvert inlets will receive drain inlet protection per Item 10 – "temporary drainage inlet protection" of the Special Provisions. All culvert work will be performed on Monday, November 10, 2006.

16. The fiber rolls placed at the north end of the peninsula access road to the north bridge abutment 1 are not entrenched or staked.

    The fiber rolls were installed at the RE's direction. The fiber rolls are staked to the slope at three points so that the fiber rolls can be easily removed and replaced instead of destroyed by equipment traffic.

17. The inboard ditch adjacent to the steep section of paved road to the south bridge is susceptible to high flow velocity. During earlier visits, I discussed with Justin Porteous, the need to protect the v-ditch along the steep portion by lining with rock. No rock lining has been placed. Due to paving of the south access road, run-off velocity will be increased along the entire length of the out-sloped road. There are not BMP's currently installed along the outer edge of the road. MCM is directed to install silt fence along the entire length of the outside edge in all locations where the road is out-sloped.

The ditch adjacent to the steep section of paved road to the south bridge will be lined with rock today and has had check dams installed. Silt fence will be installed on the outer edge of the access road where the road is out-sloped.

18. During construction of the work platform for the south bridge, pier 2, loose soil was pushed over the edge of the bank. The soil cascaded all the way to the toe of the slope, which is below the Ordinary High Water elevation. The loose soil along the entire chute should be stabilized or removed. MCM is directed to remove the loose soil below the OHW elevation.

    Mercer-Fraser Company has attempted to remove the loose soil from the top of the chute but the attempt proved unsuccessful without dislodging additional soil below OHW. Silt fence was installed at the hinge point and again further down the slope above OHW. Additionally, the slope was stabilized with bonded fiber matrix. Mercer-Fraser Company has directed Ladd and Associates to remove any loose soil they may have dislodged during the excavation for footing construction at pier 2.

19. The construction entrances/exits were not constructed according to the Special Provisions. There is no evidence of large amounts of soil tracking onto the highway, however, during higher intensity rainfall events and increased construction traffic, tracking may become an issue. The State recommends that the stabilized construction entrances/exits be built according to the Special Provisions.

    Mercer-Fraser Company will direct Ladd and Associates to install temporary construction entrances/exits per the Special Provisions.

20. The retention basin located adjacent to the concrete batch plant does not have any means of conveying water should it overfill. An old culvert used to connect to the basin, however during improvement of the road, an excavator could not find the inlet. If the basin overfilled, a portion of the north access road would be at rish of being washed into Red Mountain Creek. MCM is directed to monitor the basin and, if necessary, install an overfill drain connected to the existing down drain on the outer slope of the basin.

    Mercer-Fraser Company will monitor the basin and install and outlet to the existing down drain if observation show potential for overtopping.

21. The flasework trestle footings and bents have been erected. The Notice of Violation sent by the RWQCB identifies direct discharge of welding slag to the river. Currently there is no written plan to prevent the discharge of welding slag. MCM is directed to discontinue welding within the 100-year flood elevation until MCM submits a plan, and approved by the Engineer, to contain the welding slag. The SWPPP shall be amended to include the approved welding containment plan.

    Welding was performed by the prime contractor who will furnish the welding containment plan. Once approved, Mercer-Fraser Company will include the welding plan in the SWPPP by amendment.

22. Currently the SWPPP Water Pollution Control Drawings are not up-to-date. MCM shall modify drawings to show the current configuration of BMPs.

    Mercer-Fraser Company will update the Water Pollution Control Drawings to reflect the all new BMPs installed, additional WPCD illustrating staging areas and clearing and grubbing areas.

23. Cut slopes on the peninsula access road have not been stabilized. MCM is directed to stabilize exposed cut-slopes not entirely composed of rock with temporary erosion control.

    Mercer-Fraser Company is currently installing straw mats on fill slopes located along the peninsula access road. Bonded fiber matrix will be applied to cut and fill slopes when completion of the temporary high trestle allows access to the peninsula.

If you have any questions, please contact me at (707) 443-6371.

Sincerely,
MERCER-FRASER COMPANY

Justin Porteous
Engineer

cc: Job File

EXHIBIT

P

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

MCM CONSTRUCTION, INC.
GENERAL ENGINEERING CONTRACTORS
SACRAMENTO, CA

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FAXED (707) 925-6391

November 15, 2006

State of California ~~[illegible]~~
Department of Transportation
PO Box 699
Garberville, CA 95542

Attn: Ron den Heyer, R. E.
Garry Tolen, S. R.

Re: Contract 01-397514
US 101 at Confusion Hill
Welding Containment Plan

Gentlemen:

Reference the Caltrans letter requesting a welding containment plan.

MCM is unfamiliar with this request. This is a new requirement, not covered by the plans, permits or BMP's. Please provide additional information as to what would be acceptable.

Please keep in mind that this work often occurs at extreme heights, on very narrow work areas, and any additional apparatus the welders may have to deal with becomes a safety concern. Please also keep in mind that a man lift does not provide the access required to do all of the welding. Please also keep in mind that, in order to minimize any impact to the river channel most of the welding on the structural members occurs away from the channel. However, in order to do the final installation of clips and bracing welding must occur in the channel zone.

Please call with any questions or comments (916) 334-1221 or cell (916) 869-4423.

Sincerely,

MCM CONSTRUCTION, INC

EVAN PAINE,
Project Manager

Cc: JC, HDM, RM, GS, James Ham, Justyn Webster
285 File 7.0

EXHIBIT

Q

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ENFORCEMENT POLICY

Effective May 20, 2010

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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INTRODUCTION

The State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (Regional Water Boards) (together "Water Boards") have primary responsibility for the coordination and control of water quality in California. In the Porter-Cologne Water Quality Control Act (Porter-Cologne), the Legislature declared that the "state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation...." (Wat. Code, § 13000). Porter-Cologne grants the Water Boards the authority to implement and enforce the water quality laws, regulations, policies, and plans to protect the groundwater and surface waters of the State. Timely and consistent enforcement of these laws is critical to the success of the water quality program and to ensure that the people of the State have clean water. The goal of this Water Quality Enforcement Policy (Policy) is to protect and enhance the quality of the waters of the State by defining an enforcement process that addresses water quality problems in the most efficient, effective, and consistent manner. In adopting this Policy, the State Water Board intends to provide guidance that will enable Water Board staff to expend its limited resources in ways that openly address the greatest needs, deter harmful conduct, protect the public, and achieve maximum water quality benefits. Toward that end, it is the intent of the State Water Board that the Regional Water Boards' decisions be consistent with this Policy.

A good enforcement program relies on well-developed compliance monitoring systems designed to identify and correct violations, help establish an enforcement presence, collect evidence needed to support enforcement actions where there are identified violations, and help target and rank enforcement priorities. Compliance with regulations is critical to protecting public health and the environment, and it is the preference of the State Water Board that the most effective and timely methods be used to assure that the regulated community stays in compliance. Tools such as providing assistance, training, guidance, and incentives are commonly used by the Water Boards and work very well in many situations. There is a point, however, at which this cooperative approach should make way for a more forceful approach.

This Policy addresses the enforcement component (i.e. actions that take place in response to a violation) of the Water Boards' regulatory framework, which is an equally critical element of a successful regulatory program. Without a strong enforcement program to back up the cooperative approach, the entire regulatory framework would be in jeopardy. Enforcement is a critical ingredient in creating the deterrence needed to encourage the regulated community to anticipate, identify, and correct violations. Appropriate penalties and other consequences for violations offer some assurance of equity between those who choose to comply with requirements and those who violate them. It also improves public confidence when government is ready, willing, and able to back up its requirements with action.

In furtherance of the water quality regulatory goals of the Water Boards, this Policy:

- Establishes a process for ranking enforcement priorities based on the actual or potential impact to the beneficial uses or the regulatory program and for using progressive levels of enforcement, as necessary, to achieve compliance;

- Establishes an administrative civil liability assessment methodology to create a fair and consistent statewide approach to liability assessment;

- Recognizes the use of alternatives to the assessment of civil liabilities, such as supplemental environmental projects, compliance projects, and enhanced compliance actions, but requires standards for the approval of such alternatives to ensure they provide the expected benefits;

- Identifies circumstances in which the State Water Board will take action, even though the Regional Water Boards have primary jurisdiction;

- Addresses the eligibility requirements for small communities to qualify for carrying out compliance projects, in lieu of paying mandatory minimum penalties pursuant to California Water Code section 13385;

- Emphasizes the recording of enforcement data and the communication of enforcement information to the public and the regulated community; and

- Establishes annual enforcement reporting and planning requirements for the Water Boards.

The State's water quality requirements are not solely the purview of the Water Boards and their staffs. Other agencies, such as, the California Department of Fish and Game have the ability to enforce certain water quality provisions in state law. State law also allows members of the public to bring enforcement matters to the attention of the Water Boards and authorizes aggrieved persons to petition the State Water Board to review most actions or failures to act of the Regional Water Boards. In addition, state and federal statutes provide for public participation in the issuance of orders, policies, and water quality control plans. Finally, the federal Clean Water Act (CWA) authorizes citizens to bring suit against dischargers for certain types of CWA violations.

I.
FAIR, FIRM, AND CONSISTENT ENFORCEMENT

It is the policy of the State Water Board that the Water Boards shall strive to be fair, firm, and consistent in taking enforcement actions throughout the State, while recognizing the unique facts of each case.

A. Standard and Enforceable Orders

The Water Board orders shall be consistent except as appropriate for the specific circumstances related to the discharge and to accommodate differences in applicable water quality control plans.

B. Determining Compliance

The Water Boards shall implement a consistent and valid approach to determine compliance with enforceable orders.

C. Suitable Enforcement

The Water Boards' enforcement actions shall be suitable for each type of violation, providing consistent treatment for violations that are similar in nature and have similar water quality impacts. Where necessary, enforcement actions shall also ensure a timely return to compliance.

D. Environmental Justice

The Water Boards shall promote enforcement of all health and environmental statutes within their jurisdictions in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority and low-income populations in the state.

Specifically, the Water Boards shall pursue enforcement that is consistent with the goals identified in Cal-EPA's Intra-Agency Environmental Justice Strategy, August 2004 (http://www.calepa.ca.gov/EnvJustice/Documents/2004/Strategy/Final.pdf) as follows:

- Ensure meaningful public participation in enforcement matters;
- Integrate environmental justice considerations into the enforcement of environmental laws, regulations, and policies;
- Improve data collection and availability of violation and enforcement information for communities of color and low-income populations; and,
- Ensure effective cross-media coordination and accountability in addressing environmental justice issues.

E. Facilities Serving Small Communities

The State Water Board has a comprehensive strategy for facilities serving small and/or disadvantaged communities that extends beyond enforcement and will revise that strategy as necessary to address the unique compliance challenges faced by these communities (see State Water Resources Control Board Resolution No. 2008-0048). Consistent with this strategy, reference in this Section E. to small communities is intended to denote both small and disadvantaged small communities.

Publicly owned treatment works (POTWs) and sewage collection systems that serve small communities must comply with water quality protection laws. The State Water Board recognizes that complying with environmental laws and regulations will require higher per capita expenditures in small communities than in large communities. When water quality violations occur, traditional enforcement practices used by the Water Boards may result in significant costs to these communities and their residents, thereby limiting their ability to achieve compliance without suffering disproportionate hardships.

In recognition of these factors, informal enforcement or compliance assistance will be the first steps taken to return a facility serving a small community to compliance, unless the Water Board finds that extenuating circumstances apply. Informal enforcement is covered in Appendix A. Compliance assistance activities are based on a commitment on the part of the entity to achieve compliance and shall be offered in lieu of enforcement when an opportunity exists to correct the violations. Compliance activities that serve to bring a facility into compliance include, but are not limited to:

- Education of the discharger and its employees regarding their permit, order, monitoring/reporting program, or any applicable regulatory requirements;
- Working with the discharger to seek solutions to resolve violations or eliminate the causes of violations; and,
- Assistance in identifying available funding and resources to implement measures to achieve compliance.

Further, the Water Boards recognize that timely initiation of progressive enforcement is important for a noncompliant facility serving a small community. When enforcement is taken before a large liability accumulates, there is greater likelihood the facility serving the small community will be able to address the liability and return to compliance within its financial capabilities.

II.
ENFORCEMENT PRIORITIES FOR DISCRETIONARY ENFORCEMENT ACTIONS

It is the policy of the State Water Board that every violation results in the appropriate enforcement response consistent with the priority of the violation established in accordance with this Policy. The Water Boards shall rank violations and then prioritize cases for formal discretionary enforcement action to ensure the most efficient and effective use of available resources.

A. Ranking Violations

The first step in enforcement ranking is determining the relative significance of each violation. The following criteria will be used by the Water Boards to identify and classify significant violations in order to help establish priorities for enforcement efforts.

1. Class I Priority Violations

Class I priority violations are those violations that pose an immediate and substantial threat to water quality and that have the potential to cause significant detrimental impacts to human health or the environment. Violations involving recalcitrant parties who deliberately avoid compliance with water quality regulations and orders are also considered class I priority violations because they pose a serious threat to the integrity of the Water Boards' regulatory programs.

Class I priority violations include, but are not limited to, the following:

a. Significant measured or calculated violations with lasting effects on water quality objectives or criteria in the receiving waters;

b. Violations that result in significant lasting impacts to existing beneficial uses of waters of the State;

c. Violations that result in significant harm to, or the destruction of, fish or wildlife;

d. Violations that present an imminent danger to public health;

e. Unauthorized discharges that pose a significant threat to water quality;

f. Falsification of information submitted to the Water Boards or intentional withholding of information required by applicable laws, regulations, or enforceable orders;

g. Violation of a prior enforcement action-- such as a cleanup and abatement order or cease and desist order--that results in an unauthorized discharge of waste or pollutants to water of the State; and

h. Knowing and willful failure to comply with monitoring requirements as required by applicable laws, regulations, or enforceable orders because of knowledge that monitoring results will reveal violations.

2. Class II Violations

Class II violations are those violations that pose a moderate, indirect, or cumulative threat to water quality and, therefore, have the potential to cause detrimental impacts on human health and the environment. Negligent or inadvertent noncompliance with water quality regulations that has the potential for causing or allowing the continuation of an unauthorized discharge or obscuring past violations is also a class II violation.

Class II violations include, but are not limited to, the following:

a. Unauthorized discharges that pose a moderate or cumulative threat to water quality;

b. Violations of acute or chronic toxicity requirements where the discharge may adversely affect fish or wildlife;

c. Violations that present a substantial threat to public health;

d. Negligent or inadvertent failure to substantially comply with monitoring requirements as required by applicable laws, regulations, or enforceable orders, such as not taking all the samples required;

e. Negligent or inadvertent failure to submit information as required by applicable laws, regulations, or an enforceable order where that information is necessary to confirm past compliance or to prevent or curtail an unauthorized discharge;

f. Violations of compliance schedule dates (e.g., schedule dates for starting construction, completing construction, or attaining final compliance) by 30 days or more from the compliance date specified in an enforceable order;

g. Failure to pay fees, penalties, or liabilities within 120 days of the due date, unless the discharger has pending a timely petition pursuant to California Water Code section 13320 for review of the fee, penalty, or liability, or a timely request for an alternative payment schedule, filed with the Regional Water Board;

h. Violations of prior enforcement actions that <u>do not</u> result in an unauthorized discharge of waste or pollutants to waters of the State;

i. Significant measured or calculated violations of water quality objectives or promulgated water quality criteria in the receiving waters; and

j. Violations that result in significant demonstrated impacts on existing beneficial uses of waters of the State.

3. Class III Violations

Class III violations are those violations that pose only a minor threat to water quality and have little or no known potential for causing a detrimental impact on human health and the environment. Class III violations include statutorily required liability for late reporting when such late filings do not result in causing an unauthorized discharge or allowing one to continue. Class III violations should only include violations by dischargers who are first time or infrequent violators and are not part of a pattern of chronic violations.

Class III violations are all violations that are not class I priority or class II violations. Those include, but are not limited to, the following:

a. Unauthorized discharges that pose a low threat to water quality;

b. Negligent or inadvertent late submission of information required by applicable laws, regulations, or enforceable orders;

c. Failure to pay fees, penalties, or liabilities within 30 days of the due date, unless the discharger has pending a timely petition pursuant to California Water Code section 13320 for review of the fee, penalty or liability; or a timely request for an alternative payment schedule, filed with the Regional Water Board;

d. Any "minor violation" as determined pursuant to California Water Code section 13399 et seq. (see Appendix A. C.1a);

e. Negligent or inadvertent failure to comply with monitoring requirements when conducting monitoring as required by applicable laws, regulations, or enforceable orders, such as using an incorrect testing method;

f. Less significant (as compared to class II violations) measured or calculated violations of water quality objectives or promulgated water quality criteria in the receiving waters; and

g. Violations that result in less significant (as compared to class II violations) demonstrated impacts to existing beneficial uses of waters of the State.

B. Enforcement Priorities for Individual Entities

The second step in enforcement ranking involves examining the enforcement records of specific entities based on the significance and severity of their violations, as well as other factors identified below. Regional Water Board senior staff and management, with support from the State Water Board Office of Enforcement, shall meet on a regular basis, no less than bi-monthly, and identify their highest priority enforcement cases. To the greatest extent possible, Regional Water Board shall target entities with class I priority violations for formal enforcement action.

In determining the importance of addressing the violations of a given entity, the following criteria should be used:

1. Class of the entity's violations;

2. History of the entity

   a. Whether the violations have continued over an unreasonably long period after being brought to the entity's attention and are reoccurring;

   b. Whether the entity has a history of chronic noncompliance;

   c. Compliance history of the entity and good-faith efforts to eliminate noncompliance;

3. Evidence of, or threat of, pollution or nuisance caused by violations;

4. The magnitude or impacts of the violations;

5. Case-by-case factors that may mitigate a violation;

6. Impact or threat to high priority watersheds or water bodies (e.g., due to the vulnerability of an existing beneficial use or an existing state of impairment);

7. Potential to abate effects of the violations;

8. Strength of evidence in the record to support the enforcement action; and

9. Availability of resources for enforcement.

C. Automated Violation Priorities

It is the goal of the State Water Board to develop data algorithms to assign the relative priority of individual violations consistent with this Policy by January 1, 2012. This automated system should simplify the ranking of violations and facilitate prioritization of cases for enforcement.

D. Setting Statewide and Regional Priorities

On an annual basis, the State Water Board will propose statewide enforcement priorities. These priorities may be based on types of violations, individual regulatory programs, particular watersheds, or any other combined aspect of the regulatory framework in which an increased enforcement presence is required. These priorities will be documented in an annual enforcement report and reevaluated each year.

As part of the State Water Board's annual enforcement prioritization process, each Regional Water Board will identify and reevaluate its own regional priorities on an annual basis. This will also be included in a regional annual enforcement report.

E. Mandatory Enforcement Actions

In addition to these criteria for discretionary enforcement, the Water Boards will continue to address mandatory enforcement obligations imposed by the law (e.g. Wat. Code § 13385, subds.(h) and (i)). As detailed in Section VII, these mandatory actions should be taken within 18 months of the time that the violations qualify for the assessment of mandatory minimum penalties.

III.
ENFORCEMENT ACTIONS

The Water Boards have a variety of enforcement tools to use in response to noncompliance by dischargers. With certain specified exceptions California Water Code section 13360, subdivision (a) prohibits the State Water Board or Regional Water Board from specifying the design, location, type of construction, or particular manner in which compliance may be had with a particular requirement. For every enforcement action taken, the discharger's return to compliance should be tracked in the Water Board's enforcement database. See Appendix A for additional information.

IV.
STATE WATER BOARD ENFORCEMENT ACTION

The Regional Water Boards have primary responsibility for matters directly affecting the quality of waters within their region. The State Water Board has oversight authority in such matters and may, from time to time, take enforcement action in lieu of the Regional Water Board as follows:

- In response to petitions alleging inaction or ineffective enforcement action by a Regional Water Board;
- To enforce statewide or multi-regional general permits;
- To address violations by the same discharger in more than one region;
- Where the Regional Water Board's lead prosecutor has requested that the State Water Board take over the enforcement action;
- Where a Regional Water Board is unable to take an enforcement action because of quorum problems, conflicts of interest, or other administrative circumstances;
- Where a Regional Water Board has not investigated or initiated an enforcement action for a class I priority violation in a manner consistent with this Policy; and
- Actions where the Executive Director has determined that enforcement by the State Water Board is necessary and appropriate.

Where the State Water Board decides to pursue such enforcement, the Office of Enforcement will coordinate investigation of the violations and preparation of the enforcement action with the staff of the affected Regional Water Board to ensure that the State Water Board will not duplicate efforts of the Regional Water Board. Except under unusual circumstances, the Regional Water Board enforcement staff will have the opportunity to participate and assist in

any investigation and the Office of Enforcement will seek input from the Regional Water Board enforcement staff in the development of any resulting enforcement action. Such action may be brought before the State Water Board or the Regional Water Board, as may be deemed appropriate for the particular action. The decision as to where to bring the enforcement action will be discussed with the affected Regional Water Board enforcement staff. Enforcement actions requiring compliance monitoring or long-term regulatory follow-up will generally be brought before the appropriate Regional Water Board.

V.
COORDINATION WITH OTHER REGULATORY AGENCIES

A. Hazardous Waste Facilities

At hazardous waste facilities where the Regional Water Board is the lead agency for corrective action oversight, the Regional Water Board shall consult with Department of Toxics Substance Control (DTSC) to ensure, among other things, that corrective action is at least equivalent to the requirements of the Federal Resource, Conservation, and Recovery Act (RCRA).

B. Oil Spills

The Water Boards will consult and cooperate with the Office of Spill Prevention and Response at the Department of Fish and Game (OSPR) for any oil spill involving waters under the jurisdiction of OSPR.

C. General

The Water Boards will work cooperatively with other local, state, regional, and federal agencies when violations, for which the agency itself is not responsible, occur on lands owned or managed by the agency. Where appropriate, the Water Boards will also coordinate enforcement actions with other agencies that have concurrent enforcement authority.

VI.
MONETARY ASSESSMENTS IN ADMINISTRATIVE CIVIL LIABILITY (ACL) ACTIONS

A. Penalty Calculation Methodology

As a general matter, where, as in the California Water Code, a civil penalty structure has been devised to address environmental violations, civil penalties do not depend on proof of actual damages to the environment. Courts in reviewing similar environmental protection statutes have held that a plaintiff need not prove a loss before recovering a penalty; instead, the defendant must demonstrate that the penalty should be less than the statutory maximum. In certain cases, a strong argument can be made that consideration of the statutory factors can support the statutory maximum as an appropriate penalty for water quality violations, in the absence of any other mitigating evidence. Moreover, as discussed below, the Porter-Cologne Act requires that certain civil liabilities be set at a level that accounts for any "economic benefit or savings" violators gained through their violations. (Wat. Code, § 13385, subd. (e).) Economic benefit or savings is a factor to be considered in determining the amount of other civil liabilities. (Wat. Code, § 13327.) The Water Boards have powerful liability provisions at their disposal which the Legislature and the public expect them to fairly and consistently implement for maximum enforcement impact to address, correct, and deter water quality violations.

While it is a goal of this Policy to establish broad consistency in the Water Boards' approach to enforcement, the Policy recognizes that, with respect to liability determinations, each Regional Water Board, and each specific case, is somewhat unique. The goal of this section is to provide a consistent approach and analysis of factors to determine administrative civil liability. Where violations are standard and routine, a consistent outcome can be reasonably expected using this Policy. In more complex matters, however, the need to assess all of the applicable factors in liability determinations may yield different outcomes in cases that may have many similar facts.

Liabilities imposed by the Water Boards are an important part of the Water Boards' enforcement authority. Accordingly, any assessment of administrative civil liability, whether negotiated pursuant to a settlement agreement or imposed after an administrative adjudication, should:

- Be assessed in a fair and consistent manner;
- Fully eliminate any economic advantage obtained from noncompliance;[1]
- Fully eliminate any unfair competitive advantage obtained from noncompliance;
- Bear a reasonable relationship to the gravity of the violation and the harm to beneficial uses or regulatory program resulting from the violation;
- Deter the specific person(s) identified in the ACL from committing further violations; and
- Deter similarly situated person(s) in the regulated community from committing the same or similar violations.

The liability calculation process set forth in this chapter provides the decision-maker with a methodology for arriving at a liability amount consistent with these objectives. This process is applicable to determining administratively-adjudicated assessments as well as those obtained through settlement. In reviewing a petition challenging the use of this methodology by a Regional Water Board, the State Water Board will generally defer to the decisions made by the Regional Water Boards in calculating the liability amount unless it is demonstrated that the Regional Water Board made a clear factual mistake or error of law, or that it abused its discretion.

The following provisions apply to all discretionary administrative civil liabilities (ACLs). Mandatory Minimum Penalties (MMPs) required pursuant to California Water Code section 13385, subdivisions (h) and (i), are discussed in Chapter VII.

General Approach

A brief summary of each step is provided immediately below. A more complete discussion of each step is presented later in this section.

<u>Step 1.</u> *Potential for Harm for Discharge Violations* – Calculate Potential for Harm considering: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) the discharge's susceptibility to cleanup or abatement.

---

[1] When liability is imposed under California Water Code § 13385, Water Boards are statutorily obligated to recover, at a minimum, all economic benefit to the violator as a result of the violation.

Step 2. *Per Gallon and Per Day Assessments for Discharge Violations* – For discharges resulting in violations, use Table 1 and/or Table 2 to determine Per Gallon and/or Per Day Assessments. Depending on the particular language of the ACL statute being used, either or both tables may be used. Multiply these factors by per gallon and/or per day amounts as described below. Where allowed by code, both amounts should be determined and added together. This becomes the initial amount of the ACL for the discharge violations.

Step 3. *Per Day Assessments for non-Discharge Violations* – For non-discharge violations, use Table 3 to determine per day assessments. Multiply these factors by the per day amount as described below. Where allowed by the California Water Code, amounts for these violations should be added to amounts (if any) for discharge violations from Step 2, above. This becomes the initial amount of the ACL for the non-discharge violations.

Step 4. *Adjustment Factors* – Adjust the initial amounts for each violation by factors addressing the violator's conduct, multiple instances of the same violation, and multiple day violations.

Step 5. *Total Base Liability Amount* – Add the adjusted amounts for each violation from Step 4.

Thereafter, the Total Base Liability amount may be adjusted, based on consideration of the following:

Step 6. *Ability to Pay and Ability to Continue in Business* – If the ACL exceeds these amounts, it may be adjusted downward provided express findings are made to justify this.

Step 7. *Other Factors as Justice May Require* – Determine if there are additional factors that should be considered that would justify an increase or a reduction in the Total Base Liability amount. These factors must be documented in the ACL Complaint. One of these factors is the staff costs of investigating the violations and issuing the ACL. The staff costs should be added to the amount of the ACL.

Step 8. *Economic Benefit* – The economic benefit of the violations must be determined based on the best available information, and the amount of the ACL should exceed this amount. (Note that the Economic Benefit is a statutory minimum for ACLs issued pursuant to California Water Code section 13385.)

Step 9. *Maximum and Minimum Liability Amounts* - Determine the statutory maximum and minimum amounts of the ACL, if any. Adjust the ACL to ensure it is within these limits.

Step 10. *Final Liability Amount* – The final liability amount will be assessed after consideration of the above factors. The final liability amount and significant considerations regarding the liability amount must be discussed in the ACL Complaint and in any order imposing liability.

STEP 1 - Potential for Harm for Discharge Violations

Calculating this factor is the initial step for discharge violations. Begin by determining the actual or threatened impact to beneficial uses caused by the violation using a three-factor scoring

system to quantify: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) the discharge's susceptibility to cleanup or abatement for each violation or group of violations.

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 or contaminants in the illegal discharge, in light of the statutory factors of the nature, circumstances, extent and gravity of the violation or violations. The score evaluates direct or indirect harm or potential for harm from the violation. A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm is negligible (0), minor (1), below moderate (2), moderate (3), above moderate (4), or major (5).

0 = Negligible - no actual or potential harm to beneficial uses.

1 = Minor - low threat to beneficial uses (i.e., no observed impacts but potential impacts to beneficial uses with no appreciable harm).

2 = Below moderate – less than moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected, harm to beneficial uses is minor).

3 = Moderate - moderate threat to beneficial uses (i.e., impacts are observed or reasonably expected and impacts to beneficial uses are moderate and likely to attenuate without appreciable acute or chronic effects).

4 = Above moderate – more than moderate threat to beneficial uses (i.e., impacts are observed or likely substantial, temporary restrictions on beneficial uses (e.g., less than 5 days), and human or ecological health concerns).

5 = Major - high threat to beneficial uses (i.e., significant impacts to aquatic life or human health, long term restrictions on beneficial uses (e.g., more than five days), high potential for chronic effects to human or ecological health).

Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge

The characteristics of this discharge factor are scored based on the physical, chemical, biological, and/or thermal nature of the discharge, waste, fill, or material involved in the violation or violations. A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material, as outlined below. For purposes of this Policy, "potential receptors" are those identified considering human, environmental and ecosystem health exposure pathways.

0 = Discharged material poses a negligible risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material are benign and will not impact potential receptors).

1 = Discharged material poses only minor risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material are relatively benign or are not likely to harm potential receptors).

2 = Discharged material poses a moderate risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of concern regarding receptor protection).

3 = Discharged material poses an above-moderate risk or a direct threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material exceed known risk factors and /or there is substantial concern regarding receptor protection).

4 = Discharged material poses a significant risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material far exceed risk factors cr receptor harm is considered imminent).

Factor 3: Susceptibility to Cleanup or Abatement

A score of 0 is assigned for this factor if 50% or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned for this factor if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the violator.

Final Score – "Potential for Harm"

The scores for the factors are then added to provide a Potential for Harm score for each violation or group of violations. The total score is used in the "Potential for Harm" axis for the Penalty Factor in Tables 1 and 2. The maximum score is 10 and the minimum score is 0.

STEP 2 - Assessments for Discharge Violations

For violations of NPDES permit effluent limitations, the base liability should be established by calculating the mandatory penalty required under Water Code section 13385(h) and (i). The mandatory penalty should be adjusted upward where the facts and circumstances of the violation warrant a higher liability.

This step addresses per gallon and per day assessments for discharge violations. Generally, it is intended that effluent limit violations be addressed on a per day basis only. Where deemed appropriate, such as for a large scale spill or release, both per gallon and per day assessments may be considered.

Per Gallon Assessments for Discharge Violations

Where there is a discharge, the Water Boards shall determine an initial liability amount on a per gallon basis using on the Potential for Harm score and the extent of Deviation from Requirement of the violation. These factors will be used in Table 1 below to determine a Per Gallon Factor for the discharge. Except for certain high-volume discharges discussed below, the per gallon assessment would then be the Per Gallon Factor multiplied by the number of gallons subject to penalty multiplied by the maximum per gallon penalty amount allowed under the California Water Code.

TABLE 1 - Per Gallon Factor for Discharges

	Potential for Harm									
Deviation from Requirement	1	2	3	4	5	6	7	8	9	10
Minor	0.005	0.007	0.009	0.011	0.060	0.080	0.100	0.250	0.300	0.350
Moderate	0.007	0.010	0.013	0.016	0.100	0.150	0.200	0.400	0.500	0.600
Major	0.010	0.015	0.020	0.025	0.150	0.220	0.310	0.600	0.800	1.000

The Deviation from Requirement reflects the extent to which the violation deviates from the specific requirement (effluent limitation, prohibition, monitoring requirement, construction deadline, etc.) that was violated. The categories for **Deviation from Requirement** in Table 1 are defined as follows:

Minor – The intended effectiveness of the requirement remains generally intact (e.g., while the requirement was not met, there is general intent by the discharger to follow the requirement).

Moderate – The intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved.

Major – The requirement has been rendered ineffective (e.g., discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).

For requirements with more than one part, the Water Boards shall consider the extent of the violation in terms of its adverse impact on the effectiveness of the most significant requirement.

High Volume Discharges

The Water Boards shall apply the above per gallon factor to the maximum per gallon amounts allowed under statute for the violations involved. Since the volume of sewage spills and releases of stormwater from construction sites and municipalities can be very large for sewage spills and releases of municipal stormwater or stormwater from construction sites, a maximum amount of $2.00 per gallon should be used with the above factor to determine the per gallon amount for sewage spills and stormwater. Similarly, for releases of recycled water that has been treated for reuse, a maximum amount of $1.00 per gallon should be used with the above factor. Where reducing these maximum amounts results in an inappropriately small penalty, such as dry weather discharges or small volume discharges that impact beneficial uses, a higher amount, up to the maximum per gallon amount, may be used.

Per Day Assessments for Discharge Violations

Where there is a discharge, the Water Boards shall determine an initial liability factor per day based on the Potential for Harm score and the extent of Deviation from Requirement of the violation. These factors will be used in Table 2, below, to determine a Per Day Factor for the violation. The per day assessment would then be the Per Day Factor multiplied by the maximum per day amount allowed under the California Water Code. Generally, it is intended that effluent limit violations be addressed on a per day basis. Where deemed appropriate, such

as for a large scale spill or release, it is intended that Table 2 be used in conjunction with Table 1, so that both per gallon and per day amounts be considered under Water Code section 13385. Where there is a violation of the permit not related to a discharge incident, Step 3/Table 3 below should be used instead.

TABLE 2 - Per Day Factor for Discharges

	Potential for Harm									
Deviation from Requirement	1	2	3	4	5	6	7	8	9	10
Minor	0.005	0.007	0.009	0.011	0.060	0.080	0.100	0.250	0.300	0.350
Moderate	0.007	0.010	0.013	0.016	0.100	0.150	0.200	0.400	0.500	0.600
Major	0.010	0.015	0.020	0.025	0.150	0.220	0.310	0.600	0.800	1.000

The categories for **Deviation from** Requirement in Table 2 are defined as follows:

Minor – The intended effectiveness of the requirement remains generally intact (e.g., while the requirement was not met, there is general intent by the discharger to follow the requirement).

Moderate – The intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved).

Major – The requirement has been rendered ineffective (e.g., discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).

For requirements with more than one part, the Water Boards shall consider the extent of the violation in terms of the adverse impact on the effectiveness of the most significant requirement.

The Water Boards shall apply the above per day factor to the maximum per day amounts allowed under statute for the violations involved. Where allowed by code, both the per gallon and the per day amounts should be determined and added together. This becomes the initial amount of the ACL for the discharge violations.

STEP 3 - Per Day Assessments for Non-Discharge Violations

The Water Boards shall calculate an initial liability factor for each non-discharge violation, considering Potential for Harm and the extent of deviation from applicable requirements. These violations include, but are not limited to, the failure to conduct routine monitoring and reporting, the failure to provide required information, and the failure to prepare required plans. While these violations may not directly or immediately impact beneficial uses, they harm or undermine the regulatory program. The Water Boards shall use the matrix set forth below to determine the initial liability factor for each violation. The per day assessment would then be the Per Day Factor multiplied by the maximum per day amount allowed under the California Water Code. For multiple day violations, please refer to the Adjustment Factors in Step 4, below.

Table 3 shall be used to determine the initial penalty factor for a violation. The Water Boards should select a penalty factor from the range provided in the matrix cell that corresponds to the appropriate Potential for Harm and the Deviation from Requirement categories. The numbers in parenthesis in each cell of the matrix are the midpoints of the range.

TABLE 3 - Per Day Factor

	Potential for Harm		
Deviation from Requirement	Minor	Moderate	Major
Minor	0.1 (0.15) 0.2	0.2 (0.25) 0.3	0.3 (0.35) 0.4
Moderate	0.2 (0.25) 0.3	0.3 (0.35) 0.4	0.4 (0.55) 0.7
Major	0.3 (0.35) 0.4	0.4 (0.55) 0.7	0.7 (0.85) 1

The categories for **Potential for Harm** in Table 3 are:

Minor – The characteristics of the violation present a minor threat to beneficial uses, and/or the circumstances of the violation indicate a minor potential for harm.

Moderate – The characteristics of the violation present a substantial threat to beneficial uses, and/or the circumstances of the violation indicate a substantial potential for harm. Most incidents would be considered to present a moderate potential for harm.

Major –The characteristics of the violation present a particularly egregious threat to beneficial uses, and/or the circumstances of the violation indicate a very high potential for harm. Additionally, non-discharge violations involving particularly sensitive habitats should be considered major.

The categories for **Deviation from** Requirement in Table 3 are:

Minor – The intended effectiveness of the requirement remains generally intact (e.g., while the requirement was not met, there is general intent by the discharger to follow the requirement).

Moderate – The intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is only partially achieved).

Major – The requirement has been rendered ineffective (e.g., discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).

For requirements with more than one part, the Water Boards shall consider the extent of the violation in terms of the adverse impact on the effectiveness of the most significant requirement.

For any given requirement, the Deviation from Requirements may vary. For example, if a facility does not have a required response plan or has not submitted a required monitoring report, the deviation would be major. If a facility has a prepared a required plan or submitted the required monitoring report, but significant elements are omitted or missing, the deviation would be moderate. If a facility has a required plan or submitted the required monitoring report with only minor elements missing, the deviation would be minor.

STEP 4 – Adjustment Factors

Violator's Conduct Factors

There are three additional factors that should be considered for modification of the amount of the initial liability: the violator's culpability, the violator's efforts to cleanup or cooperate with regulatory authorities after the violation, and the violator's compliance history. Not all factors will apply in every liability assessment.

TABLE 4 – Violator's Conduct Factors

Factor	Adjustment
Culpability	Discharger's degree of culpability regarding the violation. Higher liabilities should result from intentional or negligent violations than for accidental, non-negligent violations. A first step is to identify any performance standards (or, in their absence, prevailing industry practices) in the context of the violation. The test is what a reasonable and prudent person would have done or not done under similar circumstances. Adjustment should result in a multiplier between **0.5 to 1.5**, with the lower multiplier for accidental incidents, and higher multiplier for intentional or negligent behavior.
Cleanup and Cooperation	Extent to which the discharger voluntarily cooperated in returning to compliance and correcting environmental damage, including any voluntary cleanup efforts undertaken. Adjustment should result in a multiplier between **0.75 to 1.5,** with the lower multiplier where there is a high degree of cleanup and cooperation, and higher multiplier where this is absent.
History of Violations	Prior history of violations. Where there is a history of repeat violations, a minimum multiplier of **1.1** should be used to reflect this.

After each of the above factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Multiple Violations Resulting From the Same Incident

By statute, certain situations that involve multiple violations are treated as a single violation per day, such as a single operational upset that leads to simultaneous violations of more than one pollutant parameter. (Water Code § 13385, sub. (f)(1).) For situations not addressed by statute, a single base liability amount can also be assessed for multiple violations at the discretion of the Water Boards, under the following circumstances:

a. The facility has violated the same requirement at one or more locations within the facility;

b. A single operational upset where violations occur on multiple days;

c. The violation continues for more than one day;

d. When violations are not independent of one another or are not substantially distinguishable. For such violations, the Water Boards may consider the extent of the violation in terms of the most egregious violation;

e. A single act may violate multiple requirements, and therefore constitute multiple violations. For example, a construction dewatering discharge to a dewatering basin located on a gravel bar next to stream may violate a requirement that mandates the use of best management practices (BMPs) for sediment and turbidity control, a requirement prohibiting the discharge of soil silt or other organic matter to waters of the State, and a requirement that temporary sedimentation basins be located at least 100 feet from a stream channel. Such an act would constitute three distinct violations that may be addressed with a single base liability amount.

If the violations do not fit the above categories, each instance of the same violation shall be calculated as a separate violation.

Except where statutorily required, multiple violations shall not be grouped and considered as a single base liability amount when those multiple violations each result in a distinguishable economic benefit to the violator.

Multiple Day Violations

For violations that are assessed a civil liability on a per day basis, the initial liability amount should be assessed for each day up to thirty (30) days. For violations that last more than thirty (30) days, the daily assessment can be less than the calculated daily assessment, provided that it is no less than the per day economic benefit, if any, resulting from the violation. For these cases, the Water Board must make express findings that the violation:

a. Is not causing daily detrimental impacts to the environment or the regulatory program;

b. Results in no economic benefit from the illegal conduct that can be measured on a daily basis; or,

c. Occurred without the knowledge or control of the violator, who therefore did not take action to mitigate or eliminate the violation.

If one of the above findings is made, an alternate approach to penalty calculation for multiple day violations may be used. In these cases, the liability shall not be less than an amount that is calculated based on an assessment of the initial Total Base Liability Amount for the first day of the violation, plus an assessment for each five day period of violation until the 30th day, plus an assessment for each thirty (30) days of violation. For example, a violation lasting sixty-two (62) days would accrue a total of 8 day's worth of violations, based on a per day assessment for day 1, 5, 10, 15, 20, 25, 30, and 60. Similarly, a violation lasting ninety-nine (99) days would accrue a total of 9 day's worth of violations, based on a per day assessment for day 1, 5, 10, 15, 20, 25, 30, 60, and 90.

STEP 5 – Determination of Total Base Liability Amount

The Total Base Liability Amount will be determined by adding the amounts above for each violation, though this may be adjusted for multiple day violations as noted above. Depending on the statute controlling the liability assessment for a violation, the liability can be assessed as either a per day penalty, a per gallon penalty, or both.

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

If the Water Boards have sufficient financial information necessary to assess the violator's ability to pay the Total Base Liability Amount or to assess the effect of the Total Base Liability Amount on the violators ability to continue in business, the Total Base Liability Amount may be adjusted to address the ability to pay or to continue in business.

The ability of a discharger to pay an ACL is determined by its revenues and assets. In most cases, it is in the public interest for the discharger to continue in business and bring its operations into compliance. If there is strong evidence that an ACL would result in widespread hardship to the service population or undue hardship to the discharger, the amount of the assessment may be reduced on the grounds of ability to pay. For a violation addressed pursuant to California Water Code section 13385, the adjustment for ability to pay and ability to continue in business can not reduce the liability to less than the economic benefit amount.

If staff anticipates that the discharger's ability to pay or ability to continue in business will be a contested issue in the proceeding, staff should conduct a simple preliminary asset search prior to issuing the ACL complaint. Staff should submit a summary of the results (typically as a finding in the Complaint or as part of staff's initial transmittal of evidence to the discharger), in order to put some evidence about these factors into the record for the proceeding and to give the discharger an opportunity to submit additional financial evidence if it chooses. If staff does not put any financial evidence into the record initially and the discharger later contests the issue, staff may then either choose to rebut any financial evidence submitted by the discharger, or submit some financial evidence and provide an opportunity for the discharger to submit its own rebuttal evidence. In some cases, this may necessitate a continuance of the proceeding to provide the discharger with a reasonable opportunity to rebut the staff's evidence. As a general practice, in order to maintain the transparency and legitimacy of the Water Boards' enforcement programs, any financial evidence that the discharger chooses to submit in an enforcement proceeding will generally be treated as a public record.

STEP 7 – Other Factors As Justice May Require

If the Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require," but only if express finding are made to justify this. Examples of circumstances warranting an adjustment under this step are:

a. The discharger has provided, or Water Board staff has identified, other pertinent information not previously considered that indicates a higher or lower amount is justified.

b. A consideration of issues of environmental justice indicates that the amount would have a disproportionate impact on a particular disadvantaged group.

c. The calculated amount is entirely disproportionate to assessments for similar conduct made in the recent past using the same Enforcement Policy.

Costs of Investigation and Enforcement Adjustment

The costs of investigation and enforcement are "other factors as justice may require", and should be added to the liability amount. These costs may include the cost of investigating the violation, preparing the enforcement action, participating in settlement negotiations, and putting on a hearing, including any expert witness expenses. Such costs are the total costs incurred by

the Water Boards enforcement or prosecution staff, including legal costs that are reasonably attributable to the enforcement action. Costs include the total financial impact on the staff of the Water Board, not just wages, and should include benefits and other indirect overhead costs.

STEP 8 – Economic Benefit

The Economic Benefit Amount shall be estimated for every violation. Economic benefit is any savings or monetary gain derived from the act or omission that constitutes the violation. In cases where the violation occurred because the discharger postponed improvements to a treatment system, failed to implement adequate control measures (such as BMPs), or did not take other measures needed to prevent the violations, the economic benefit may be substantial. Economic benefit should be calculated as follows:

a. Determine those actions required to comply with a permit or order of the Water Boards, an enforcement order, or an approved facility plan, or that were necessary in the exercise of reasonable care, to prevent a violation of the Water Code. Needed actions may have been such things as capital improvements to the discharger's treatment system, implementation of adequate BMPs, or the introduction of procedures to improve management of the treatment system.

b. Determine when and/or how often these actions should have been taken as specified in the order or approved facility plan, or as necessary to exercise reasonable care, in order to prevent the violation.

c. Estimate the type and cost of these actions. There are two types of costs that should be considered; delayed costs and avoided costs. Delayed costs include expenditures that should have been made sooner (e.g., for capital improvements such as plant upgrades and collection system improvements, training, development of procedures and practices) but that the discharger is still obligated to perform. Avoided costs include expenditures for equipment or services that the discharger should have incurred to avoid the incident of noncompliance, but that are no longer required. Avoided costs also include ongoing costs such as needed additional staffing from the time determined under step "b" to the present, treatment or disposal costs for waste that cannot be cleaned up, and the cost of effective erosion control measures that were not implemented as required.

d. Calculate the present value of the economic benefit. The economic benefit is equal to the present value of the avoided costs plus the "interest" on delayed costs. This calculation reflects the fact that the discharger has had the use of the money that should have been used to avoid the instance of noncompliance. This calculation should be done using the USEPA's BEN [2]computer program (the most recent

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[2] USEPA developed the BEN model to calculate the economic benefit a violator derives from delaying and/or avoiding compliance with environmental statutes. Funds not spent on environmental compliance are available for other profit-making activities or, alternatively, a defendant avoids the costs associated with obtaining additional funds for environmental compliance. BEN calculates the economic benefits gained from delaying and avoiding required environmental expenditures such as capital investments, one-time non-depreciable expenditures, and annual operation and maintenance costs.

BEN uses standard financial cash flow and net present value analysis techniques based on generally accepted financial principles. First, BEN calculates the costs of complying on time and of complying late adjusted for inflation and tax deductibility. To compare the on time and delayed compliance costs in a common measure, BEN calculates the present value of both streams of costs, or "cash flows," as of the date of initial noncompliance. BEN derives these values by discounting the annual cash flows at an

(Continued)

version is accessible at http://www.waterboards.ca.gov/plnspols/docs/wqplans/benmanual.pdf) unless the Water Board determines, or the discharger demonstrates to the satisfaction of the Water Board, that, based on case-specific factors, an alternate method is more appropriate for a particular situation. However, in more complex cases, such as where the economic benefit may include revenues from continuing production when equipment used to treat discharges should have been shut down for repair or replacement, the total economic benefit should be determined by experts available from the Office of Research Planning and Performance or outside experts retained by the enforcement staff.

e. Determine whether the discharger has gained any other economic benefits. These may include income from continuing production when equipment used to treat discharges should have been shut down for repair or replacement.

The Water Boards should not adjust the economic benefit for expenditures by the discharger to abate the effects of the unauthorized conduct or discharge, or the costs to come into or return to compliance. In fact, the costs of abatement may be a factor that demonstrates the economic extent of the harm from the violation and, therefore, may be a factor in upwardly adjusting any monetary liability as a benefit from noncompliance. The discharger's conduct relating to abatement is appropriately considered under "cleanup and cooperation" liability factor.

The Economic Benefit Amount should be compared to the adjusted Total Base Liability Amount. The adjusted Total Base Liability Amount shall be at least 10 percent higher than the Economic Benefit Amount so that liabilities are not construed as the cost of doing business and that the assessed liability provides a meaningful deterrent to future violations.

STEP 9 – Maximum and Minimum Liability Amounts

For all violations, the statute sets a maximum liability amount that may be assessed for each violation. For some violations, the statute also requires the assessment of a liability at no less than a specified amount. The maximum and minimum amounts for each violation must be determined for comparison to the amounts being proposed, and shall be described in any ACL complaint and in any order imposing liability. Where the amount proposed for a particular violation exceeds to statutory maximum, the amount must be reduced to that maximum. Similarly, the minimum statutory amount may require raising the amount being proposed unless there is a specific provision that allows assessment below the minimum. In such cases, the reasons for assigning a liability amount below this minimum must be documented in the resolution adopting the ACL.

STEP 10 – Final Liability Amount

The final liability amount consists of the added amounts for each violation, with any allowed adjustments, provided the amounts are within the statutory minimum and maximum amounts.

The administrative record must reflect how the Water Board arrived at the final liability amount. In particular, where adjustments are made to the initial amount proposed in the ACL complaint, the record should clearly reflect the Water Board's considerations, as the staff report or complaint may not reflect those considerations, or for any adjustments that are made at hearing

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average of the cost of capital throughout this time period. BEN can then subtract the delayed-case present value from the on-time-case present value to determine the initial economic benefit as of the noncompliance date. Finally, BEN compounds this initial economic benefit forward to the penalty payment date at the same cost of capital to determine the final economic benefit of noncompliance.

that are different from those recommended in the ACL complaint or that further support the final liability amount in the administrative civil liability order.

B. Settlement Considerations

The liabilities resulting from the above methodology are for adoption by the Water Boards after formal administrative proceedings. The calculated liabilities may be adjusted as a result of settlement negotiations with a violator. It is not the goal of the Enforcement Policy to address the full range of considerations that should be entertained as part of a settlement. It is appropriate to adjust the administrative civil liabilities calculated pursuant to the methodology in consideration of hearing and/or litigation risks including: equitable factors, mitigating circumstances, evidentiary issues, or other weaknesses in the enforcement action that the prosecution reasonably believes may adversely affect the team's ability to obtain the calculated liability from the administrative hearing body. Ordinarily, these factors will not be fully known until after the issuance of an administrative civil liability complaint or through pre-filing settlement negotiations with an alleged violator. These factors shall be generally identified in any settlement of an administrative civil liability that seeks approval by a Water Board or its designated representative.

Factors that should not affect the amount of the calculated civil liability sought from a violator in settlement include, but are not limited to, the following:

1. A general desire to avoid hearing or minimize enforcement costs;

2. A belief that members of a Water Board will not support a proposed liability before that Water Board has considered the specific merits of the enforcement case or a similar case;

3. A desire to avoid controversial matters;

4. The fact that the initiation of the enforcement action is not as timely as it might have been under ideal circumstances (timeliness of the action as it affects the ability to present evidence or other timeliness considerations are properly considered); or

5. The fact that a water body affected by the violation is already polluted or impaired.

Except as specifically addressed in this Policy, nothing in this Policy is intended to limit the use of Government Code 11415.60

C. Other Administrative Civil Liability Settlement Components

In addition to a reduction of administrative civil liabilities, a settlement can result in the permanent suspension of a portion of the liability in exchange for the performance of a Supplemental Environmental Project (see the State Water Board's Water Quality Control Policy on Supplemental Environmental Projects) or an Enhanced Compliance Action (see Section IX).

As far as the scope of the settlement is involved, the settlement resolves only the claims that are made or could have been made based on the specific facts alleged in the ACL complaint. A settlement shall never include the release of any unknown claims or a waiver of rights under Civil Code section 1542.

VII.
MANDATORY MINIMUM PENALTIES FOR NPDES VIOLATIONS

Mandatory penalty provisions are required by California Water Code section 13385, subdivisions (h) and (i) for specified violations of NPDES permits. For violations that are subject to mandatory minimum penalties, the Water Boards must assess an ACL for the mandatory minimum penalty or for a greater amount. California Water Code section 13385(h) requires that a mandatory minimum penalty of $3,000 be assessed by the Regional Water Boards for each serious violation. A serious violation is any waste discharge that exceeds the effluent limitation for a Group I pollutant by 40 percent or more, or a Group II pollutant by 20 percent or more (see Appendices C and D), or a failure to file certain discharge monitoring reports for a complete period of 30 days (Wat. Code §§ 13385, subd. (h)(2), 13385.1.). Section VII.D. of this Policy addresses special circumstances related to discharge monitoring reports. Section VII.E. of this Policy addresses situations where the effluent limitation for a pollutant is less than or equal to the quantitation limit.

California Water Code section 13385(i) requires that a mandatory minimum penalty of $3,000 be assessed by the Regional Water Boards for each non-serious violation, not counting the first three violations. A non-serious violation occurs if the discharger does any one of the following four or more times in any period of 180 days:

(a) violates a WDR effluent limitation;
(b) fails to file a report of waste discharge pursuant to California Water Code section 13260;
(c) files an incomplete report of waste discharge pursuant to California Water Code section 13260; or
(d) violates a whole effluent toxicity effluent limitation where the WDRs do not contain pollutant-specific effluent limitations for any toxic pollutants.

A. Timeframe for Issuance of Mandatory Minimum Penalties (MMPs)

The intent of these provisions of the California Water Code is to assist in bringing the State's permitted facilities into compliance with WDRs. The Water Boards should issue MMPs within eighteen months of the time that the violations qualify as mandatory minimum penalty violations. The Water Boards shall expedite MMP issuance if (a) the discharger qualifies as a small community with financial hardship, or (b) the total proposed mandatory penalty amount is $30,000 or more. Where the NPDES Permit is being revoked or rescinded because the discharger will no longer be discharging under that permit, the Water Boards should ensure that all outstanding MMPs for that discharger are issued prior to termination of its permit to discharge.

B. MMPs for Small Communities

Except as provided below, the Water Boards do not have discretion in assessing MMPs and must initiate enforcement against all entities that accrue a violation. However, California Water Code section 13385, subdivision (k), provides an alternative to assessing MMPs against a POTW that serves a small community. Under this alternative, the Regional Water Boards may allow the POTW to spend an amount equivalent to the MMP toward a compliance project that is designed to correct the violation.

A POTW serving a small community is a POTW serving a community that has a financial hardship and that:

1. Has a population of 10,000 or fewer people or

2. Lies completely within one or more rural counties.[3]

A POTW serving incorporated areas completely within one or more rural counties is considered a POTW serving a small community.

"Financial hardship" means that the community served by the POTW meets one of the following criteria:

- Median household income[4] for the community is less than 80 percent of the California median household income;

- The community has an unemployment rate[5] of 10 percent or greater; or

- Twenty percent of the population is below the poverty level.[6]

"Median household income," "unemployment rate," and "poverty level" of the population served by the POTW are based on the most recent U.S. Census block group[7] data or a local survey approved by the Regional Water Board in consultation with the State Water Board.

"Rural county" means a county classified by the Economic Research Service, United States Department of Agriculture (ERS, USDA) with a rural-urban continuum code of four through nine. The table below identifies qualified rural counties at the time this Policy was adopted. The list of qualified rural counties may change depending on reclassification by ERS, USDA. Consult the classification by ERS, USDA in effect at the time the enforcement action is taken.

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[3] The determination of the size of population served by the POTW and "rural county" status shall be made as of the time the penalty is assessed, not as of the time the underlying violations occurred.

[4] **Median household income**
The median income divides the income distribution into two equal groups, one having incomes above the median and the other having incomes below the median.

[5] **Unemployed**
All civilians, 16 years and older, are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, (2) were actively looking for work during the last 4 weeks, and (3) were available to accept a job. Also included as unemployed are civilians who (1) did not work at all during the reference week, (2) were waiting to be called back to a job from which they had been laid off, and (3) were available for work except for temporary illness.

[6] **Poverty**
Following the Office of Management and Budget's Directive 14, the Census Bureau uses a set of income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

[7] **Block group**
A subdivision of a census tract (or, prior to 2000, a block numbering area). A block group is the smallest geographic unit for which the Census Bureau tabulates sample data. A block group consists of all the blocks within a census tract beginning with the same number. Example: block group 3 consists of all blocks within a 2000 census tract numbering from 3000 to 3999. In 1990, block group 3 consisted of all blocks numbered from 301 to 399Z.

Qualified Rural Counties		
Alpine	Inyo	Nevada
Amador	Lake	Plumas
Calaveras	Lassen	Sierra
Colusa	Mariposa	Siskiyou
Del Norte	Mendocino	Tehama
Glenn	Modoc	Trinity
Humboldt	Mono	Tuolumne
Based on 2003 USDA Rural-Urban Continuum Codes for California		

For purposes of California Water Code section 13385, subdivision (k)(2), the Regional Water Boards are hereby delegated the authority to determine whether a POTW, that depends primarily on residential fees (e.g., connection fees, monthly service fees) to fund its wastewater treatment facility (operations, maintenance, and capital improvements), is serving a small community, in accordance with the requirements set forth in this Policy.

The State Water Board will continue to make the determination of whether a POTW, that does not depend primarily on residential fees to fund its wastewater treatment facility, is serving a small community for purposes of California Water Code section 13385 (k)(2).

If a POTW believes that the U.S. Census data do not accurately represent the population served by the POTW or that additional factors such as low population density in its service area should be considered, the POTW may present an alternative justification to the State or Regional Water Board for designation as a "POTW serving a small community." The justification must include a map of service area boundaries, a list of properties, the number of households, the number of people actually served by the POTW, and any additional information requested by the State or Regional Water Board. The Regional Water Board shall consult with the State Water Board when making a determination based upon these additional, site-specific considerations.

C. Single Operational Upset

In accordance with California Water Code section 13385, subdivision (f)(2), for the purposes of MMPs only, a single operational upset that leads to simultaneous violations of one or more pollutant parameters over multiple days shall be treated as a single violation. The Regional Water Board shall apply the following US EPA Guidance in determining if a single operational upset occurred: "Issuance of Guidance Interpreting Single Operational Upset" Memorandum from the Associate Enforcement Counsel, Water Division, U.S.EPA, September 27, 1989 (excerpted below).

US EPA defines "single operational upset" as "an exceptional incident which causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one CWA effluent discharge pollutant parameter. Single operational upset does not include... noncompliance to the extent caused by improperly designed or inadequate treatment facilities". The US EPA Guidance further defines an "exceptional" incident as a "non-routine malfunctioning of an otherwise generally compliant facility." Single operational upsets include such things as an upset caused by a sudden violent storm, some other exceptional event, or a bursting tank. A single upset may result in violations of multiple pollutant parameters. The discharger has the burden of demonstrating that the violations were caused by a single operational upset. A finding that a single operational upset has occurred is not a defense to liability, but may affect the number of violations.

D. Defining a "Discharge Monitoring Report" in Special Circumstances Under California Water Code 13385.1

Section 13385.1(a)(1) states "for the purposes of subdivision (h) of section 13385, a 'serious violation' also means a failure to file a discharge monitoring report required pursuant to section 13383 for each complete period of 30 days following the deadline for submitting the report, if the report is designed to ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations."

The legislative history of section 13385.1 indicates that the Legislature enacted the statute primarily to ensure better reporting by dischargers who might otherwise avoid penalties for violations of their NPDES permits by failing to submit monitoring reports that could disclose permit violations.

Because penalties under section 13385.1 are assessed for each complete period of thirty days following the deadline for submitting a report, penalties may potentially accrue for an indefinite time period. Dischargers who fail to conduct their required monitoring cannot go back and recreate and submit the data for a prior monitoring period. In such a case, an MMP for a missing report will continue to be assessed and reassessed for each 30 day period following the deadline for submission until an Administrative Civil Liability Complaint for MMPs is issued. This Policy is designed to assist dischargers by stopping the accrual of penalties for late or missing reports under the special circumstances described below. Nevertheless, under these circumstances, the discharger has the burden of submitting the required documentation pursuant to this Policy.

The following subsections provide additional guidance on the definition of a "discharge monitoring report," for the purposes of subdivision (a) of section 13385.1 only, in situations where: (1) there was a discharge to waters of the United States, but the discharger failed to conduct any monitoring during that monitoring period, or (2) there was no discharge to waters of the United States during the relevant monitoring period.

1. Defining a "Discharge Monitoring Report" Where There Is a Discharge to Waters of the United States and the Discharger Fails to Conduct Any Monitoring During the Monitoring Period

For purposes of section 13385.1, in circumstances where a discharge to waters of the United States did occur, but where the discharger failed to conduct any monitoring during the relevant monitoring period, a "discharge monitoring report" shall include a written statement to the Regional Water Board, signed under penalty of perjury in accordance with 40 CFR 122.41(k) and 40 CFR 122.22(a)(1), stating:

a. That no monitoring was conducted during the relevant monitoring period;

b. The reason(s) the required monitoring was not conducted; and

c. If the written statement is submitted after the deadline for submitting the discharge monitoring report, the reason(s) the required discharge monitoring report was not submitted to the Regional Water Board by the requisite deadline.

Upon the request of the Regional Water Board, the discharger may be required to support the written statement with additional explanation or evidence. Requiring a discharger to state under penalty of perjury that it did not conduct monitoring for the required period ensures that the discharger is not conducting monitoring and withholding data indicating there are effluent

limitation violations. This approach may not be used if the discharger did conduct monitoring during the monitoring period that it is required to report to the Regional Water Board because the results of that monitoring, even if incomplete, must be submitted to the Regional Water Board. This approach is consistent with the original legislative purpose of section 13385.1.

The written statement shall be treated as a "discharge monitoring report" for purposes of section 13385.1(a). MMPs for late or missing discharge monitoring reports assessed for each 30 day period will cease accruing upon the date the written statement is received by the Regional Water Board. While the submission of the written statement provides a cut-off date for MMPs assessed under 13385.1, the Regional Water Board may impose additional discretionary administrative civil liabilities pursuant to section 13385(a)(3).

2. Defining a "Discharge Monitoring Report" Where There Is No Discharge to Waters of the United States

Some waste discharge requirements or associated monitoring and reporting programs for episodic or periodic discharges require the submission of either a discharge monitoring report, if there were discharges during the relevant monitoring period, or a report documenting that no discharge occurred, if there were no discharges.

A report whose submittal is required to document that no discharge to waters of the United States occurred during the relevant monitoring period is not a "discharge monitoring report" for purposes of section 13385.1(a). Under these circumstances, that report would not ensure compliance with limitations contained in waste discharge requirements that contain effluent limitations, and therefore, the late submittal of such a report would be subject to discretionary civil liabilities, but would not be subject to MMPs.

As a matter of practice, however, if such a report has not been received, the Regional Water Board may presume that there were discharges during the relevant monitoring period and should consider imposing MMPs for the failure to timely submit a discharge monitoring report. The Regional Water Board shall not take final action to impose the MMP if the discharger submits a written statement to the Regional Water Board, signed under penalty of perjury in accordance with 40 CFR 122.41(k) and 40 CFR 122.22(a)(1), stating:

a. That there were no discharges to waters of the United States during the relevant monitoring period; and

b. The reason(s) the required report was not submitted to the Regional Water Board by the deadline.

Upon the request of the Regional Water Board, the discharger may be required to support the written statement with additional explanation or evidence. Requiring a discharger to state under penalty of perjury that it did not discharge during the relevant monitoring period ensures that a discharger is not discharging and conducting monitoring and then withholding data indicating there are effluent limitation violations.

If such a statement is submitted, discretionary administrative civil liabilities, which the Regional Water Boards may assess under section 13385(a)(3), will cease upon the date the written statement is received by the Regional Water Board.

E. Defining a "Serious Violation" in Situations Where the Effluent Limitation Is Less Than or Equal to the Quantitation Limit

1. For discharges of pollutants subject to the State Water Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California," or the "California Ocean Plan", where the effluent limitation for a pollutant is lower than the applicable Minimum Level, any discharge that: (1) equals or exceeds the Minimum Level; and (2) exceeds the effluent limitation by 40 percent or more for a Group 1 pollutant or by 20 percent or more for a Group 2 pollutant, is a serious violation for the purposes of California Water Code section 13385(h)(2).

2. For discharges of pollutants that are not subject to the State Water Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California," or the California Ocean Plan (e.g., pollutants that are not addressed by the applicable plan) where the effluent limitation for a pollutant is lower than the quantitation limit specified or authorized in the applicable waste discharge requirements or monitoring requirements, any discharge that: (1) equals or exceeds the quantitation limit; and (2) exceeds the effluent limitation by 40 percent or more for a Group 1 pollutant or by 20 percent or more for a Group 2 pollutant, is a serious violation for the purposes of California Water Code section 13385(h)(2).

VIII.
COMPLIANCE PROJECTS (CPs)

A Compliance Project (CP) is a project designed to address problems related to the violation and bring the discharger back into compliance in a timely manner. CPs shall only be considered where they are expressly authorized by statute. At the time of the development of this Policy, CPs are expressly authorized by statute only in connection with MMPs for small communities with a financial hardship. (Wat. Code, § 13385, subd. (k).) Unless expressly authorized by future legislation, CPs may not be considered in connection with other ACLs. Absent such statutory authorization, if the underlying problem that caused the violations addressed in the ACL has not been corrected, the appropriate manner for compelling compliance is through an enforcement order with injunctive terms such as a Cleanup and Abatement Order (CAO), Cease and Desist Order (CDO), or Time Schedule Order (TSO).

It is the policy of the State Water Board that the following conditions shall apply to CPs authorized under California Water Code section 13385, subdivision (k):

1. The amount of the penalty that is suspended shall not exceed the cost necessary to complete the CP;

2. The discharger must spend an amount of money on the CP that is equal to or greater than the amount of the penalty that is suspended. Grant funds may be used only for the portion of the cost of the CP that exceeds the amount of the penalty to be suspended;

3. Where implementation of the CP began prior to the assessment of an MMP, all or a portion of the penalty may be suspended under these conditions:

    a. The cost of the CP yet to be expended is equal to or greater than the penalty that is suspended;

    b. The problem causing the underlying violations will be corrected by the project;

c. The underlying violations occurred during, or prior to the initiation of, project implementation;

d. The completion date of the project is specified by an enforcement order (a CDO, CAO, TSO, or ACL Order) adopted at or before the time the penalty is assessed; and

e. The deadline for completion of the project is within 5 years of the date of the assessment of the MMP.

4. CPs may include, but are not limited to:

   a. Constructing new facilities;

   b. Upgrading or repairing existing facilities;

   c. Conducting water quality investigations or monitoring;

   d. Operating a cleanup system;

   e. Adding staff;

   f. Providing training;

   g. Conducting studies; and

   h. Developing operation, maintenance, or monitoring procedures.

5. CPs shall be designed to bring the discharger back into compliance in a five-year period and to prevent future noncompliance.

6. A CP is a project that the discharger is otherwise obligated to perform, independent of the ACL.

7. CPs must have clearly identified project goals, costs, milestones, and completion dates and these must be specified in an enforceable order (ACL Order, CDO, CAO, or TSO).

8. CPs that will last longer than one year must have quarterly reporting requirements.

9. Upon completion of a CP, the discharger must submit a final report declaring such completion and detailing fund expenditures and goals achieved.

10. If the discharger completes the CP to the satisfaction of the Water Board by the specified date, the suspended penalty amount is dismissed.

11. If the CP is not completed to the satisfaction of the Water Board on the specified date the amount suspended becomes due and payable to the State Water Pollution Cleanup and Abatement Account (CAA) or other fund or account as authorized by statute.

12. The ACL complaint or order must clearly state that payment of the previously suspended amount does not relieve the discharger of its independent obligation to take necessary actions to achieve compliance.

IX.
ENHANCED COMPLIANCE ACTIONS (ECAs)

Enhanced Compliance Actions (ECAs) are projects that enable a discharger to make capital or operational improvements beyond those required by law, and are separate from projects designed to merely bring a discharger into compliance. The Water Boards may approve a settlement with a discharger that includes suspension of a portion of the monetary liability of a discretionary ACL for completion of an ECA. Except as specifically provided below, any such settlement is subject to the rules that apply to Supplemental Environmental Projects.

For these ECAs the Water Boards shall require the following:

1. ECAs must have clearly identified project goals, costs, milestones, and completion dates and these must be specified in the ACL order.

2. ECAs that will last longer than one year must have at least quarterly reporting requirements.

3. Upon completion of an ECA, the discharger must submit a final report declaring such completion and detailing fund expenditures and goals achieved.

4. If the discharger completes the ECA to the satisfaction of the Water Board by the specified date, the suspended amount is dismissed.

5. If the ECA is not completed to the satisfaction of the Water Board on the specified date the amount suspended becomes due and payable to the CAA or other fund or account as authorized by statute.

6. The ACL complaint or order must clearly state that payment of the previously suspended amount does not relieve the discharger of its independent obligation to take necessary actions to achieve compliance.

If an ECA is utilized as part of a settlement of an enforcement action against a discharger, the monetary liability that is not suspended shall be no less than the amount of the economic benefit that the discharger received from its unauthorized activity, plus an additional amount that is generally consistent with the factors for monetary liability assessment to deter future violations.

X.
DISCHARGER VIOLATION REPORTING

For permitted discharges, all violations must be reported in self-monitoring reports in a form acceptable to the Regional Water Board. Voluntary disclosure of violations that are not otherwise required to be reported to the Water Boards shall be considered by the Water Boards when determining the appropriate enforcement response.

Falsification or misrepresentation of such voluntary disclosures shall be brought to the attention of the appropriate Regional Water Board for possible enforcement action.

XI.
VIOLATION AND ENFORCEMENT DATA

The Water Boards will ensure that all violations and enforcement actions are documented in the appropriate Water Board data management system. Sufficient information will be collected and maintained regarding regulated facilities and sites to allow preparation of internal and external reporting of violation and enforcement information, and development and reporting of performance measures regarding the Water Boards' enforcement activities. To ensure timely collection of this information, all violations will be entered within 10 days of discovery of the violation, and all enforcement actions will be entered within 20 days of the date of the enforcement action.

XII.
ENFORCEMENT REPORTING

In order to inform the public of State and Regional Water Boards' performance with regard to enforcement activities, there are a number of legislatively mandated and elective reports the Water Boards are committed to producing on a regular basis.
See Appendix B for additional information on these reports.

XIII.
POLICY REVIEW AND REVISION

It is the intent of the State Water Board that this Policy be reviewed and revised, as appropriate, at least every five years. Nothing in this Policy is intended to preclude revisions, as appropriate, on an earlier basis.

APPENDIX A: ENFORCEMENT ACTIONS

A. Standard Language

In order to provide a consistent approach to enforcement throughout the State, enforcement orders shall be standardized to the extent appropriate. The State Water Board will create model enforcement orders containing standardized provisions for use by the Regional Water Boards. Regional Water Boards shall use the models, modifying terms and conditions only as appropriate to fit the specific circumstances related to a discharge and to be consistent with Regional Water Board plans and policies.

B. Informal Enforcement Actions

An informal enforcement action is any enforcement action taken by Water Board staff that is not defined in statute or regulation. Informal enforcement action can include any form of communication (oral, written, or electronic) between Water Board staff and a discharger concerning an actual, threatened, or potential violation. Informal enforcement actions cannot be petitioned to the State Water Board.

The purpose of an informal enforcement action is to quickly bring an actual, threatened, or potential violation to the discharger's attention and to give the discharger an opportunity to return to compliance as soon as possible. The Water Board may take formal enforcement action in place of, or in addition to, informal enforcement actions. Continued noncompliance, particularly after informal actions have been unsuccessful, will result in the classification of the next violation as either class I priority or a class II violation.

1. Oral and Written Contacts

For many violations, the first step is an oral contact. This involves contacting the discharger by phone or in person and informing the discharger of the specific violations, discussing how and why the violations have occurred or may occur, and discussing how and when the discharger will correct the violation and achieve compliance. Staff must document such conversations in the facility case file and in the enforcement database.

A letter or email is often appropriate as a follow-up to, or in lieu of, an oral contact. Letters or emails, signed by staff or by the appropriate senior staff, should inform the discharger of the specific violations and, if known to staff, discuss how and why the violations have occurred or may occur. This letter or email should ask how and when the discharger will correct the violation and achieve compliance. The letter or email should require a prompt response and a certification from the discharger that the violation(s) has been corrected. In many cases, an email response may not be sufficient and a formal written response will be required. Correction of the violation by the discharger shall be recorded in the enforcement database.

Oral enforcement actions and enforcement letters or emails shall not include language excusing the violation or modifying a compliance date in waste discharge requirements (WDRs) or other orders issued by the Water Boards.

2. Notices of Violation (NOV)

The NOV letter is the most significant level of informal enforcement action and should be used only where a violation has actually occurred. An NOV must be signed by the appropriate staff and mailed to the discharger(s) by certified mail. In cases where the discharger has requested that its consultant be notified of Regional Water Board actions, the consultant should also receive a copy of the NOV. The NOV letter shall include a description of specific violation, a summary of potential enforcement options available to address noncompliance (including potential ACL assessments), and a request for a certified, written response by a specified date that either confirms the correction of the violation or identifies a date by which the violation will be corrected. The NOV can be combined with a request for technical information pursuant to California Water Code section 13267. The summary of potential enforcement options must include appropriate citations to the California Water Code and must specify that the Regional Water Board reserves the right to take any enforcement action authorized by law. When combining NOVs and CWC section 13267 requests, it should be noted that only requests made pursuant to section 13267 are petitionable to the State Water Board.

C. Formal Enforcement Actions

Formal enforcement actions are statutorily based actions to address a violation or threatened violation of water quality laws, regulations, policies, plans, or orders. The actions listed below present options available for enforcement.

1. Notices to Comply

Water Code section 13399 *et seq.* deals with statutorily defined "minor" violations. When dealing with such a "minor" violation, a Notice to Comply is generally the only means by which the State Water Board or Regional Water Board can commence an enforcement action. Because these "minor" violations are statutorily defined, they do not directly correlate with the classification system defined in Section II of this Policy. Typically, however, "minor" violations may be considered equivalent to Class III violations.

A violation is determined to be "minor" by the State Water Board or the Regional Water Board after considering factors defined in California Water Code section 13399, subdivisions (e) and (f), and the danger the violation poses to, or the potential that the violation presents for endangering human health, safety, welfare, or the environment.

a. Under most circumstances the violations listed below are considered to be "minor" violations:

   (1) Inadvertent omissions or deficiencies in recordkeeping that do not prevent a Water Board from determining whether compliance is taking place.

   (2) Records (including WDRs) not being physically available at the time of the inspection, provided the records do exist and can be produced in a reasonable time.

   (3) Inadvertent violations of insignificant administrative provisions that do not involve a discharge of waste or a threat thereof.

   (4) Violations that result in an insignificant discharge of waste or a threat thereof; provided, however, that there is no significant threat to human health, safety, welfare, or the environment.

b. A violation is not considered "minor" if it is a class I priority violation as described in Section II of this Policy or includes any of the following:

(1) Any knowing, willful, or intentional violation of Division 7 (commencing with Section 13000) of the California Water Code.

(2) Any violation that enables the violator to benefit economically from noncompliance, either by realizing reduced costs or by gaining an unfair competitive advantage.

(3) Chronic violations or violations committed by a recalcitrant violator.

(4) Violations that cannot be corrected within 30 days.

2. Notices of Stormwater Noncompliance

The Stormwater Enforcement Act of 1998 (Wat. Code, § 13399.25 et seq.) requires that each Regional Water Board provide a notice of noncompliance to any stormwater dischargers who have failed to file a notice of intent to obtain coverage, a notice of non-applicability, a construction certification, or annual reports. If, after two notices, the discharger fails to file the applicable document, the Regional Water Board shall issue a complaint for administrative civil liability against the discharger. Alternatively, the Water Boards may enforce most of these violations under Water Code section 13385.

3. Technical Reports and Investigations

California Water Code sections 13267, subdivision (b), and 13383 allow the Water Boards to conduct investigations and to require technical or monitoring reports from any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste in accordance with the conditions in the section. When requiring reports pursuant to Water Code section 13267, subdivision (b), the Water Board must ensure that the burden, including costs of the reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from them. Further, the Water Board shall provide a written explanation with regard to the need for the reports and identify the evidence that supports requiring them.

Failure to comply with requirements made pursuant to California Water Code section 13267, subdivision (b), may result in administrative civil liability pursuant to California Water Code section 13268. Failure to comply with orders made pursuant to California Water Code section 13383 may result in administrative civil liability pursuant to California Water Code section 13385. Sections 13267, subdivision (b) and 13383 requirements are enforceable when signed by the Executive Officer or Executive Director of the Water Boards or their delegates.

4. Cleanup and Abatement Orders (CAOs)

Cleanup and Abatement Orders (CAOs) are adopted pursuant to California Water Code section 13304. CAOs may be issued to any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a Regional Water Board or the State Water Board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the State and creates, or threatens to create, a condition of pollution or nuisance (discharger). The CAO requires the discharger to clean up the waste or abate the effects of the waste, or both, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

Regional Water Boards shall comply with State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304," in issuing CAOs. CAOs shall require dischargers to clean up the pollution to background levels or the best water quality that is reasonable if background levels of water quality cannot be restored in accordance with Resolution No. 92-49. At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the Regional Water Board allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the CAO shall require the discharger(s) to abate the effects of the discharge.

Violations of CAOs should trigger further enforcement in the form of an ACL, a TSO under California Water Code section 13308, or a referral to the Attorney General for injunctive relief or monetary remedies.

5. Section 13300 Time Schedule Orders (TSOs)

Pursuant to California Water Code section 13300, a Regional Water Board can require the discharger to submit a time schedule that sets forth the actions the discharger will take to address actual or threatened discharges of waste in violation of requirements. Typically, those schedules, after any appropriate adjustments by the Regional Water Board, are then memorialized in an order. TSOs that require submission of technical and monitoring reports should state that the reports are required pursuant to California Water Code section 13267.

6. Section 13308 Time Schedule Orders (13308 TSOs)

California Water Code section 13308 authorizes the Regional Water Board to issue a Section 13308 Time Schedule Order (13308 TSO) that prescribes, in advance, a civil penalty if compliance is not achieved in accordance with the time schedule. The Regional Water Board may issue a 13308 TSO if there is a threatened or continuing violation of a cleanup and abatement order, cease and desist order, or any requirement issued under California Water Code sections 13267 or 13383. The penalty must be set based on an amount reasonably necessary to achieve compliance and may not contain any amount intended to punish or redress previous violations. The 13308 TSO provides the Regional Water Boards with their primary mechanism for motivating compliance, and if necessary, assessing monetary penalties against federal facilities. Orders under this section are an important tool for regulating federal facilities.

If the discharger fails to comply with the 13308 TSO, the discharger is subject to a complaint for Administrative Civil Liability. The State Water Board may issue a 13308 TSO if the violation or threatened violation involves requirements prescribed by a State Water Board Order.

7. Cease and Desist Orders (CDOs)

Cease and Desist Orders (CDOs) are adopted pursuant to California Water Code sections 13301 and 13303. CDOs may be issued to dischargers violating or threatening to violate WDRs or prohibitions prescribed by the Regional Water Board or the State Water Board.

Section 4477 of the California Government Code prohibits all state agencies from entering into contracts of $5,000 or more for the purchase of supplies, equipment, or services from any nongovernmental entity who is the subject of a CDO that is no longer under review and that was issued for violation of WDRs or which has been finally determined to be in violation of federal laws relating to air or water pollution. If the CDO contains a time schedule for compliance and

the entity is adhering to the time schedule, the entity is not subject to disqualification under this section. A list of such entities is maintained by the State Water Board.

CDOs shall contain language describing likely enforcement options available in the event of noncompliance and shall specify that the Regional Water Board reserves its right to take any further enforcement action authorized by law. Such language shall include appropriate California Water Code citations. Violations of CDOs should trigger further enforcement in the form of an ACL, 13308 TSO, or referral to the Attorney General for injunctive relief or monetary remedies.

8. Modification or Rescission of Waste Discharge Requirements (WDRs)

In accordance with the provisions of the California Water Code, a Regional Water Board may modify or rescind WDRs in response to violations. Depending on the circumstances of the case, rescission of WDRs may be appropriate for failure to pay fees, penalties, or liabilities; a discharge that adversely affects beneficial uses of the waters of the State; and violation of the State Water Board General WDRs for discharge of bio-solids due to violation of the Background Cumulative Adjusted Loading Rate. Rescission of WDRs generally is not an appropriate enforcement response where the discharger is unable to prevent the discharge, as in the case of a POTW.

9. Administrative Civil Liabilities (ACLs)

Administrative Civil Liabilities (ACLs) are liabilities imposed by a Regional Water Board or the State Water Board. The California Water Code authorizes the imposition of an ACL for certain violations of law. The factors used to assess the appropriate penalties are addressed in Section VI.

In addition to those specific factors that must be considered in any ACL action, there is another factor that ought to be considered. When the underlying problem that caused the violation(s) has not been corrected, the Water Board should evaluate whether the liability proposed in the ACL complaint is sufficient to encourage necessary work by the discharger to address problems related to the violation. If not, the Water Board should consider other options. An ACL action may be combined with another enforcement mechanism such as a CAO, a CDO, or other order with a time schedule for obtaining compliance. The appropriate orders to bring a discharger into compliance via an enforcement action will vary with the circumstances faced by the Water Boards.

It is the policy of the State Water Board that a 30 day public comment period shall be posted on the Board's website prior to the settlement or imposition of any ACL, including mandatory minimum penalties, and prior to settlement of any judicial civil liabilities. In addition, for civil liabilities that are expected to generate significant public interest, the Board may consider mailing or e-mailing the notice to known interested parties, or publishing the notice in a local newspaper. The notice should include a brief description of the alleged violations, the proposed civil liability, the deadline for comments, the date of any scheduled hearing, a process for obtaining additional information, and a statement that the amount of the civil liability may be revised. Only one notice need be posted for each civil liability.

Upon receipt of an ACL Complaint, the discharger(s) may waive its right to a public hearing and pay the liability; negotiate a settlement; or appear at a Board hearing to dispute the Complaint. If the discharger waives its right to a public hearing and pays the liability, a third party may still comment on the Complaint at any time during the public comment period. Following review of the comments, the Executive Officer or his or her delegate may withdraw the ACL Complaint. An ACL Complaint may be redrafted and reissued as appropriate.

D. Petitions of Enforcement Actions

Persons affected by most formal enforcement actions or failures to act by Regional Water Boards may file petitions with the State Water Board for review of such actions or failures to act. The petition must be received by the State Water Board within 30 days of the Regional Water Board action. A petition on the Regional Water Board's failure to act must be filed within 30 days of either the date the Regional Water Board refuses to act or a date that is 60 days after a request to take action has been made to the Regional Water Board. Actions taken by the Executive Officer of the Regional Water Board, if pursuant to authority delegated by the Regional Water Board (e.g., CAOs, ACL orders), are considered final actions by the Regional Water Board and are also subject to the 30-day time limit. In addition, significant enforcement actions by a Regional Water Board Executive Officer may, in some circumstances, be reviewed by the Regional Water Board at the request of the discharger, though such review does not extend the time to petition the State Water Board. The State Water Board may, at any time and on its own motion, review most actions or failures to act by a Regional Water Board. When a petition is filed with the State Water Board challenging an ACL assessment, the assessment is not due or owing during the State Water Board review of the petition. In all other cases, the filing of a petition does not stay the obligation to comply with the Regional Water Board order.

APPENDIX B: ENFORCEMENT REPORTING

In order to inform the public of State and Regional Water Boards performance with regard to enforcement activities, there are a number of legislatively mandated and elective reports the Water Boards are committed to producing on a regular basis.

A. Legislatively Mandated Enforcement Reporting

The following list summarizes legislatively mandated enforcement reporting requirements and State Water Board interpretations thereof:

- Section 13225, subdivision (e) - requires each Regional Water Board to report rates of compliance for regulated facilities. In accordance with the "Implementation Plan Regarding Information Reporting Requirements for Regional Board Enforcement Outputs" (January, 2008) compliance rates will be reported in the Annual Enforcement Report.

- Section 13225, subdivision (k) - requires each Regional Water Board, in consultation with the State Water Board, to identify and post on the Internet a summary list of all enforcement actions undertaken in that regional and the disposition of each action, including any civil penalty assessed. This list must be updated at least quarterly.

- Section 13225, subdivision (k) and Section 13225, subdivision (e) – In accordance with the "Implementation Plan Regarding Information Reporting Requirements for Regional Board Enforcement Outputs" (January, 2008) each Regional Water Board must post the information required by these sections on its website as a single table and update it quarterly.

- Section 13323, subdivision (e) requires information related to hearing waivers and the imposition of administrative civil liability, as proposed and as finally imposed, to be posted on the Internet.

- Section 13385, subdivision (o) – requires the State Water Board to continuously report and update information on its website, but at a minimum, annually on or before January 1, regarding its enforcement activities. The required information includes all of the following:

    - A compilation of the number of violations of waste discharge requirements in the previous calendar year, including stormwater enforcement violations;

    - A record of the formal and informal compliance and enforcement actions taken for each violation, including stormwater enforcement actions; and

    - An analysis of the effectiveness of current enforcement policies, including mandatory minimum penalties.

- Government Code Section 65962.5, subdivision (c) – requires that the State Water Board annually compile and submit to Cal/EPA a list of:

    - All underground storage tanks for which an unauthorized release report is filed pursuant to Health and Safety Code Section 25295.

    - All solid waste disposal facilities from which there is a migration of hazardous waste and for which a Regional Water Board has notified the Department of

Toxic Substances Control pursuant to subdivision (e) of California Water Code section 13273.

- All CDOs issued after January 1, 1986, pursuant to California Water Code Section 13301, and all CAOs issued after January 1, 1986, pursuant to California Water Code section 13304, which concern the discharge of wastes that are hazardous materials.

B. Elective Enforcement Reporting

To present a more comprehensive view of the Water Boards' enforcement activities and to identify enforcement goals and priorities, the Water Boards will prepare an annual integrated water quality enforcement report that will, at a minimum, address the following subjects:

- Budgetary and staff resources available for water quality enforcement at the Water Boards, as compared with the total resources for the regulatory programs and activities that they support, and the types of enforcement actions taken with those enforcement resources during the reporting period.

- All enforcement information required by statute to be reported to the public every year.

- The effectiveness of the Water Boards' compliance and enforcement functions using metrics such as those identified in the Annual Enforcement Report (to the extent that the information is available in the Water Boards' data base system), below.

Recommended Performance Measures For Water Boards' Enforcement Programs

Measure Name	Measure Description
Self-Monitoring Report Evaluation	Number of self-monitoring reports due, received, and reviewed and percentage of reports reviewed
Inspection Monitoring	Number of inspections and the percentage of facilities inspected
Compliance Rates	Percentage of facilities in compliance, based upon the number of facilities evaluated
Enforcement Response	Percentage of facilities in violation that received an enforcement action requiring compliance
Enforcement Activities	Number and type of enforcement actions
Penalties Assessed and Collected	The amount of penalties assessed and collected, SEPs approved, and injunctive relief
MMP Violations Addressed	Number of facilities with MMP violations receiving a penalty at or above the minimum penalty assessed
Recidivism	Number and percentage of facilities returning to non-compliance for the same violation(s) addressed through an enforcement action
Environmental Benefits *(as a result of an enforcement action)*	Estimated pounds of pollutants reduced/removed through cleanup (soil or water), and wetlands/stream/beach/creek/river miles protected/restored (acres, miles, etc.)

From FY 2007-2008 Annual Enforcement Report
http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/annual_enf_rpt_032609.pdf

- Proposed enforcement priorities for the State Water Boards for the next reporting period and staff's basis for these proposals.
- The extent of progress on enforcement priorities identified in prior Annual Enforcement Reports.
- Recommendations for improvements to the Water Boards' enforcement capabilities, including additional performance metrics, and an evaluation of efforts to address prior staff recommendations for enforcement improvements.

APPENDIX C: GROUP 1 POLLUTANTS

This list of pollutants is based on Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations.

Oxygen Demand
Biochemical Oxygen Demand (BOD)
Chemical Oxygen Demand (COD)
Total Oxygen Demands
Total Organic Carbon
Other*

Solids
Total Dissolved Solids (TDS)
Total Suspended Solids (TSS)
Other*

Nutrients
Inorganic Phosphorous Compounds
Inorganic Nitrogen Compounds
Other*

Detergents and Oils
Methylene Blue Active Substances
Nitrillotriacetic Acid
Oil and Grease
Other Detergents or Algicides*

Minerals
Calcium
Chloride
Fluoride
Magnesium
Sodium
Potassium
Sulfur
Sulfate
Total Alkalinity
Total Hardness
Other Minerals*

Metals
Aluminum
Cobalt
Iron
Vanadium

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* The following list of pollutants is hereby included as Group 1 pollutants (pursuant to Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations) under the classifications of "other."

5-DAY SUM OF WLA VALUES
5-DAY SUM OF BOD5 DISCHARGED
7-DAY SUM OF WLA VALUES
7-DAY SUM OF BOD5 DISCHARGED
ACIDITY
ACIDITY, CO2 PHENOL (AS CACO3)
ACIDITY-MINRL METHYL ORANGE (AS CACO3)
ACIDITY, TOTAL (AS CACO3)
ALGICIDES, GENERAL
ALKALINITY, BICARBONATE (AS CACO3)
ALKALINITY, CARBONATE (AS CACO3)
ALKALINITY, PHENOL-PHTHALINE METHOD
ALKALINITY, TOTAL (AS CACO3)
ALUMINUM
ALUMINUM, ACID SOLUABLE
ALUMINUM CHLORIDE, DISSOLVED, WATER
ALUMINUM, DISSOLVED (AS AL)
ALUMINUM, IONIC
ALUMINUM, POTENTIALLY DISSOLVD
ALUMINUM SULFATE
ALUMINUM, TOTAL RECOVERABLE
ALUMINUM, TOTAL
ALUMINUM, TOTAL (AS AL)
AMMONIA & AMMONIUM-TOTAL
AMMONIA (AS N) + UNIONIZED AMMONIA
AMMONIA, UNIONIZED
AVG. OF 7-DAY SUM OF BOD5 VALUES
BARIUM, SLUDGE, TOT, DRY WEIGHT (AS BA)
BICARBONATE ION-(AS HCO3)
BIOCHEMICAL OXYGEN DEMAND-5
BIOCIDES
BOD % OVER INFLUENT
BOD (ULT. 1ST STAGE)
BOD (ULT. 2ND STAGE)

BOD (ULT. ALL STAGES)
BOD, 5-DAY (20 DEG. C)
BOD, 5-DAY 20 DEG C PER CFS OF STREAMFLW
BOD, 5-DAY DISSOLVED
BOD, 5-DAY PERCENT REMOVAL
BOD, 5-DAY (20 DEG. C) PER PRODUCTION
BOD, 11-DAY (20 DEG. C)
BOD, 20-DAY (20 DEG. C)
BOD, 20-DAY, PERCENT REMOVAL
BOD 35-DAY (20 DEG. C)
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL
BOD, CARBONACEOUS 5 DAY, 5C
BOD, CARBONACEOUS (5-DAY, 20 DEG C)
BOD, CARBONACEOUS 05 DAY, 20C
BOD, CARBONACEOUS 20 DAY, 20C
BOD CARBONACEOUS, 25-DAY (20 DEG. C)
BOD, CARBONACEOUS, 28-DAY (20 DEG. C)
BOD, CARBONACEOUS, PERCENT REMOVAL
BOD, FILTERED, 5 DAY, 20 DEG C
BOD, MASS, TIMES FLOW PROP. MULTIPLIER
BOD, NITROG INHIB 5-DAY (20 DEG. C)
BOD, PERCENT REMOVAL (TOTAL)
BOD-5 LB/CU FT PROCESS
BORIC ACID
BORON, DISSOLVED (AS B)
BORON, SLUDGE, TOTAL DRY WEIGHT (AS B)
BORON, TOTAL
BORON, TOTAL (AS B)
BORON, TOTAL RECOVERABLE
BROMIDE (AS BR)
BROMINE REPORTED AS THE ELEMENT
CALCIUM IN BOTTOM DEPOSITS
CALCIUM, DISSOLVED (AS CA)
CALCIUM, PCT EXCHANGE
CALCIUM, PCT IN WATER, (PCT)
CALCIUM, TOTAL RECOVERABLE
CARBON DIOXIDE (AS CO2)
CARBON, TOTAL (AS C)
CARBON, TOTAL INORGANIC (AS C)
CARBON, TOT ORGANIC (TOC)
CARBON, TOT ORGANIC (TOC) PER 1000 GALS.
CARBONACEOUS BOD, 5 DAY, 20 DEG C FILTRD
CARBONACEOUS OXYGEN DEMAND, % REMOVAL
CARBONATE ION- (AS CO3)
CBOD5 / NH3-N
CHEM. OXYGEN DEMAND (COD) % REMOVAL
CHEM. OXYGEN DEMAND PER PRODUCTION
CHEMICAL OXYGEN DEMAND (COD)
CHEMICAL OXYGEN DEMAND, SOLUBLE
CHLORIDE
CHLORIDE (AS CL)
CHLORIDE, DISSOLVED (AS CL)
CHLORIDE, DISSOLVED IN WATER
CHLORIDE, PERCENT REMOVAL
CHLORIDE, PER CFS OF STREAMFLOW
CHLORIDE, SLUDGE, TOTAL DRY WEIGHT
CHLORIDES & SULFATES
CHLORINE DEMAND, 1 HR
CHLORITE
COBALT, DISSOLVED (AS CO)
COBALT, TOTAL (AS CO)
COBALT, TOTAL RECOVERABLE (AS CO)
COPPER, SLUDGE, TOT, DRY WEIGHT (AS CU)
DIGESTER SOLIDS CONTENT, PERCENT
DITHIOCARBAMATE, RPTD AS DITHIOCARBONATE
DRILLED SOLIDS IN DRILLING FLUIDS
ENDRIN KETONE, IN WATER
FERROCHROME LIGNO-SULFONATED
FRWTR MUD
FERROCYANIDE
FERROUS SULFATE
FIRST STAGE OXYGEN DEMAND, % REMOVAL
FLUORIDE-FREE
FLUORIDE, DISSOLVED (AS F)
FLUORIDE, TOTAL (AS F)
FLUOROBORATES
FREE ACID, TOTAL
HARDNESS, TOTAL (AS CACO3)
HYDROCHLORIC ACID
HYDROGEN PEROXIDE
HYDROGEN PEROXIDE (T) DILUTION RATIO
HYDROGEN SULFIDE
HYDROGEN SULFIDE UNIONIZED
IODIDE (AS I)
IRON
IRON AND MANGANESE-SOLUBLE
IRON AND MANGANESE-TOTAL
IRON, DISSOLVED (AS FE)
IRON, DISSOLVED FROM DRY DEPOSITION
IRON, FERROUS
IRON, POTENTIALLY DISSOLVED
IRON, SLUDGE, TOTAL, DRY WEIGHT (AS FE)
IRON, SUSPENDED
IRON, TOTAL (AS FE)
IRON, TOTAL PER BATCH
IRON, TOTAL PERCENT REMOVAL
IRON, TOTAL PER PRODUCTION

LIGHTLY TREATED LIG-NOSULFONATED MUD
LITHIUM, DISSOLVED (AS LI)
LITHIUM, TOTAL (AS LI)
MACROINVERTEBRATE ASSESSMENT
MAGNESIUM, DISSOLVED (AS MG)
MAGNESIUM, IN BOTTOM DEPOSITS
MAGNESIUM, PCT EXCHANGE
MAGNESIUM, TOTAL RECOVERABLE
MANGANESE IN BOTTOM DEPOSITS (DRY WGT)
MANGANESE, POTENTIALLY DISSOLVED
MANGANESE, DISSOLVED (AS MN)
MANGANESE, SUSPENDED
MANGANESE, TOTAL
MANGANESE, TOTAL (AS MN)
MANGANESE, TOTAL RECOVERABLE
METHYLENE BLUE ACTIVE SUBSTANCES
MICROSCOPIC ANALYSIS
MOLYBDENUM, DRY WEIGHT
MONOBORO CHLORATE
NICKEL, DRY WEIGHT
NITRILOTRIACETIC ACID (NTA)
NITRITE NITROGEN, DISSOLVED (AS N)
NITRITE PLUS NITRATE DISSOLVED 1 DET.
NITRITE PLUS NITRATE IN BOTTOM DEPOSITS
NITRITE PLUS NITRATE TOTAL 1 DET. (AS N)
NITROGEN (AS NO3) SLUDGE SOLID
NITROGEN OXIDES (AS N)
NITROGEN SLUDGE SOLID
NITROGEN SLUDGE TOTAL
NITROGEN, AMMONIA DISSOLVED
NITROGEN, AMMONIA IN BOTTOM DEPOSITS
NITROGEN, AMMONIA, PERCENT REMOVAL
NITROGEN, AMMONIA PER CFS OF STREAMFLW
NITROGEN, AMMONIA TOTAL (AS N)
NITROGEN, AMMONIA TOTAL (AS NH4)
NITROGEN, AMMONIA, SLUDGE, TOT DRY WGT
NITROGEN, AMMONIA, TOT UNIONIZED (AS N)
NITROGEN, DISSOLVED
NITROGEN, KJELDAHL DISSOLVED (AS N)
NITROGEN, KJELDAHL TOTAL
NITROGEN, KJELDAHL TOTAL (AS N)
NITROGEN, NITRATE DISSOLVED
NITROGEN, NITRATE TOTAL
NITROGEN, NITRATE TOTAL (AS N)
NITROGEN, NITRATE TOTAL (AS NO3)
NITROGEN, NITRITE TOTAL (AS N)
NITROGEN, NITRITE TOTAL (AS NO2)
NITROGEN, ORGANIC TOTAL (AS N)
NITROGEN, SLUDGE, TOT, DRY WT. (AS N)
NITROGEN, TOTAL AS NO3 + NH3
NITROGEN, TOTAL KJELDAHL, % REMOVAL
NITROGEN, INORGANIC TOTAL
NITROGEN, OXIDIZED
NITROGEN-NITRATE IN WATER, (PCT)
NITROGEN-NITRITE IN WATER, (PCT)
NITROGENOUS OXYGEN DEMAND, % REMOVAL
NITROGENOUS OXYGEN DEMAND (20-DAY, 20C)
NON-IONIC DISPERSANT (NALSPERSE 7348)
NON-NITROGENOUS BOD
OIL & GREASE
OIL & GREASE AROMATIC
OIL & GREASE, HEXANE EXTR METHOD
OIL & GREASE (FREON EXTR.-IR METH) TOT, RC
OIL & GREASE, NON POLAR MATERIAL
OIL & GREASE % REMOVAL
OIL & GREASE PER CFS OF STREAMFLW
OIL & GREASE, PER 1000 GALLONS
OIL & GREASE PER PRODUCTION
OIL & GREASE (POLAR)
OIL & GREASE (SOXHLET EXTR.) TOT.
OIL & GREASE VISUAL
OXYGEN DEMAND, CHEM. (COD), DISSOLVED
OXYGEN DEMAND, CHEM. (HIGH LEVEL) (COD)
OXYGEN DEMAND, CHEM. (LOW LEVEL) (COD)
OXYGEN DEMAND, DISSOLVED
OXYGEN DEMAND FIRST STAGE
OXYGEN DEMAND, NITROGENOUS, ULTIMAT
OXYGEN DEMAND, SUM PRODUCT
OXYGEN DEMAND, TOTAL
OXYGEN DEMAND, TOTAL (TOD)
OXYGEN DEMAND, ULT. CARBONACEOUS (UCOD)
OXYGEN DEMAND, ULT., PERCENT REMOVAL
OXYGEN DEMAND, ULTIMATE
OZONE
OZONE-RESIDUAL
PENTACHLOROPHENOL, REMOVAL EFFICIENCY
PHOSPHATE TOTAL SOLUBLE
PHOSPHATE, DISSOLVED COLOR METHOD (AS P)
PHOSPHATE, DISSOLVED/ORTHOPHOSPHATE(AS P)
PHOSPHATE, ORTHO (AS P)
PHOSPHATE, ORTHO (AS PO4)
PHOSPHATE, POLY (AS PO4)
PHOSPHATE, TOTAL (AS PO4)

PHOSPHATE, TOTAL COLOR. METHOD (AS P)
PHOSPHORUS, DISSOLVED
PHOSPHORUS, DISSOLVED REATIVE (DRP AS P)
PHOSPHOROUS, IN TOTAL ORTHOPHOSPHATE
PHOSPHORUS (REACTIVE AS P)
PHOSPHOROUS 32, TOTAL
PHOSPHOROUS, TOTAL ELEMENTAL
PHOSPHOROUS, TOTAL, IN BOTTOM DEPOSITS
PHOSPHOROUS, TOTAL ORGANIC (AS P)
PHOSPHORUS, TOTAL (AS P)
PHOSPHORUS, TOTAL PERCENT REMOVAL
PHOSPHORUS, TOTAL SOLUBLE (AS PO4)
POTASSIUM, DISSOLVED (AS K)
POTASSIUM, IN BOTTOM DEPOSITS
POTASSIUM, PCT EXCHANGE
POTASSIUM, TOTAL PCTIN WATER, (PCT)
POTASSIUM, TOTAL RECOVERABLE
PROPARGITE
RATIO FECAL COLIFORM & STREPTOCOCCI
RESIDUE, SETTLEABLE
RESIDUE, TOTAL FILTERABLE
RESIDUE, TOTAL NON-SETTLEABLE
RESIDUE, TOTAL VOLATILE
RESIDUE, VOLATILE NONFILTERABLE
SEAWATER GEL MUD
SETTLEABLE SOLIDS PERCENT REMOVAL
SILICA, DISSOLVED (AS SIO2)
SILICON, TOTAL
SILICA, TOTAL (AS SIO2)
SLUDGE BUILD-UP IN WATER
SLUDGE, RATE OF WASTING
SLUDGE SETTLEABILITY 30 MINUTE
SLUDGE VOLUME DAILY INTO A WELL
SODIUM ADSORPTION RATIO
SODIUM ARSENITE
SODIUM CHLORIDE (SALT)
SODIUM, DISSOLVED (AS NA)
SODIUM HEXAMETA-PHOSPHATE
SODIUM IN BOTTOM DEP (AS NA) (DRY WGT)
SODIUM NITRITE
SODIUM, %
SODIUM, % EXCHANGE- ABLE SOIL, TOTAL
SODIUM, SLUDGE, TOT, DRY WEIGHT (AS NA)
SODIUM SULFATE, TOTAL
SODIUM, TOTAL (AS NA)
SODIUM, TOTAL RECOVERABLE
SOLIDS ACCUMULATION RATE TOT DRY WEIGHT
SOLIDS, FIXED DISSOLVED
SOLIDS, FIXED SUSPENDED
SOLIDS, SETTLEABLE
SOLIDS, SETTLEABLE, NET VALUE
SOLIDS, SLUDGE, TOT, DRY WEIGHT
SOLIDS, SUSPENDED PERCENT REMOVAL
SOLIDS, TOTAL
SOLIDS, TOTAL DISSOLVED
SOLIDS, TOTAL DISSOLVED (TDS)
SOLIDS, TOTAL DISSOLVED-180 DEG.C
SOLIDS, TOTAL DISSOLVED PERCENT BY WEIGHT
SOLIDS, TOTAL DISSOLVED (INORGANIC)
SOLIDS, TOTAL FIXED
SOLIDS, TOTAL SUSPD. NON-VOLATILE
SOLIDS, TOTAL SUSPENDED
SOLIDS, TOTAL VOLATILE
SOLIDS, TOTAL DISSOLVED, TOTAL TONS
SOLIDS, TOTAL NON-VOLATILE, NON-FIXED
SOLIDS, TOTAL SUSP PER PRODUCTION
SOLIDS, TOTAL SUSP. PER 1000 GALLONS
SOLIDS, TOTAL SUSP. PER BATCH
SOLIDS, TOTAL SUSP. PER CFS OF STREAMFLW
SOLIDS, TOTAL SUSPENDED, LOADING RATE
SOLIDS, TOTAL SUSPENDED, NET VALUE
SOLIDS, VOLATILE DISSOLVED
SOLIDS, VOLATILE SUSPENDED
SOLIDS, VOLATILE SUSPENDED, % REMOVAL
SOLIDS, VOLATILE SUSP., IN MIXED LIQUOR
SOLIDS, DRY, DISCHARGE TO SOL. HANDLING SYS.
SOLIDS, DRY, INCIN. AS% OF DRY SOL. FROM TRMTPLT
SOLIDS, DRY, REMOVED FROM SOL. HANDLING SYS.
SOLIDS, TOT. VOLATILE PERCENT REMOVAL
SOLIDS, VOLATILE % OF TOTAL SOLIDS
SOLIDS-FLOTNG-VISUAL DETRMNTN-# DAYS OBS
SULFATE
SULFATE (AS S)
SULFATE, DISSOLVED (AS SO4)
SULFATE IN SEDIMENT
SULFATE, TOTAL (AS SO4)
SULFIDE, DISSOLVED, (AS S)
SULFIDE, TOTAL
SULFIDE, TOTAL (AS S)
SULFITE (AS S)
SULFITE (AS SO3)
SULFITE WASTE LIQUOR PEARL BENSON INDEX
SULFUR DIOXIDE TOTAL
SULFUR, TOTAL
SULPHUR, TOTAL ELEMENTAL

SUM BOD AND AMMONIA, WATER
SURFACTANTS, AS CTAS
SURFACTANTS (LINEAR ALKYLATE SULFONATE)
SURFACTANTS (MBAS)
SUSPENDED SOLIDS
SUSPENDED SOLIDS, TOTAL ANNUAL
SUSPENDED SOLIDS, TOTAL DISCHARGE
TOTAL CHLORIDE RESIDUAL, BROMINE
TOTAL SUSP. SOLIDS-LB/CU FT PROCESS
TRIARYL PHOSPHATE
ULTRAVIOLET LIGHT TRANSMITTANCE
VANADIUM, DISSOLVED (AS V)
VANADIUM, SUSPENDED (AS V)
VANADIUM, TOTAL
VANADIUM, TOTAL (AS V)
VANADIUM, TOTAL DRY WEIGHT (AS V)
VANADIUM, TOTAL RECOVERABLE
VEGETATIVE COVER
WLA BOD-5 DAY VALUE

APPENDIX D: GROUP 2 POLLUTANTS

Group 2 Pollutants. This list of pollutants is based on Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations.

Metals
All metals not specifically listed under Group 1.

Inorganics
Cyanide
Total Residual Chlorine

Organics
All organics not specifically listed under Group 1.

Other*

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* The following list of pollutants are hereby included as Group 2 pollutants (pursuant to Appendix A to Section 123.45 of Title 40 of the Code of Federal Regulations) under the classifications of "other."

1, 2, 4-TRIMETHYL-BENZENE
1, 3, 5-TRIMETHYL-BENZENE
1,1 DICHLORO 1,2,2,2 TETRAFLUOROETHANE
1,1 DICHLORO 2,2,2-TRIFLUOROETHANE
1,1,1 TRICHLORO-2,2,2-TRIFLUOROETHANE
1,1,1,2,2-PENTA-FLUOROETHANE
1,1,1,3,3-PENTA-FLUOROBUTANE
1,1,1-TRICHLORO-ETHANE
1,1,1-TRICHLOROETHANE, DRY WEIGHT
1,1,1-TRIFLUORO- ETHANE
1,1,2,2-TETRACHLORO-ETHANE
1,1,2,2-TETRACHLOROETHANE, DRY WEIGHT
1,1,2,2-TETRACHLOROETHYLENE
1,1,2-TRICHLORO-ETHANE
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
1,1,2-TRICHLOROETHANE, DRY WEIGHT
1,1-DICHLORO-1-FLUOROETHANE
1,1-DICHLOROETHANE
1,1-DICHLOROETHANE, DRY WEIGHT
1,1-DICHLOROETHENE
1,1-DICHLOROETHYLENE
1,1-DICHLOROETHYLENE, DRY WEIGHT
1,1-DIMETHYL-HYDRAZINE
1,2,3 TRICHLORO-BENZENE
1,2,3 TRICHLORO-ETHANE
1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOX
1,2,3,4,6,7,8-HEPTA CHLORODIBENZOFURAN
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXN
1,2,3,4,7,8,9-HEPTA CHLORODIBENZOFURAN
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN
1,2,3,7,8-PENTACHLORODIBENZOFURAN
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN
1,2,3-TRICHLOROPROPANE
1,2,4,5-TETRACHLORO-BENZENE
1,2,4,5-TETRAMETHYL-BENZENE
1,2,4-TRICHLORO-BENZENE
1,2,4-TRICHLOROBENZENE, DRY WEIGHT
1,2-BIS(2-CHLOROETH-ONY) ETHANE
1,2-CIS-DICHLORO-ETHYLENE
1,2-DICHLORO-1,1,2-T
1,2-DICHLOROBENZENE
1,2-DICHLOROBENZENE, DRY WEIGHT

1,2-DICHLOROETHANE
1,2-DICHLOROETHANE, DRY WEIGHT
1,2-DICHLOROETHANE, TOTAL WEIGHT
1,2-DICHLOROPROPANE
1,2-DICHLOROPROPANE, DRY WEIGHT
1,2-DICHLOROPROPENE
1,2-DIPHENYL-HYDRAZINE
1,2-DIPHENYL-HYDRAZINE, DRY WEIGHT
1,2-PROPANEDIOL
1,2-TRANS-DICHLORO- ETHYLENE
1,2-TRANS-DICHLOROETHYLENE, DRY WEIGHT
1,3 DICHLOROPROPANE
1,3 DICHLOROPROPYLENE
1,3-DIAMINOUREA
1,3-DICHLOROBENZENE
1,3-DICHLOROBENZENE, DRY WEIGHT
1,3-DICHLOROPROPENE, TOTAL WEIGHT
1,4 DICHLOROBUTANE
1,4_____DIOXANE
1,4-DDT (O,P-DDT)
1,4-DICHLOROBENZENE
1,4-DICHLOROBENZENE, DRY WEIGHT
1,4-XYLENE
1-BROMO-2-CHLOROETHANE
1-CHLORO-1,1-DIFLUOROETHANE
1-ETHOXY-2-METHYLPROPANE
1-HYDROXY-ETHYLIDENE
1-METHYLNAPHTHALENE
1-NITROSOPIPERIDINE
2,2-DIBROMO-3-NITRILOPROPIONAMIDE
2,2-DICHLOROPROPANE
2,2-DICHLOROVINYL DIMETHYLPHOSPHATE
2,2-DIMETHYL-2,3-DI-HYDRO-7-BENZOFURANOL
2,3 DICHLOROPROPYLENE
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN
2,3,4,6-TETRACHLORO-PHENOL
2,3,4,7,8-PENTACHLORODIBENZOFURAN
2,3,7,8 CHLORO-DIBENZOFURAN
2,3,7,8 TETRACHLORO-DIBENZO FURAN (TCDF)
2,3,7,8 TETRACHLORODIBENZO-P-DIOXIN
2,3,7,8 TETRACHLORODIBENZO-P-DIOXIN SED,
2,4,5 - T
2,4,5, TP(SILVEX)
2,4,5-TP(SILVEX) ACIDS/SALTS WHOLE WATER SAMPLE
2,4,5 - TRICHLORO- PHENOL
2,4,5-TRICHLOROPHENOXYPROPIONIC ACID
2,4,6 TRICHLOROPHENOL, DRY WEIGHT
2,4,6-TRICHLORO-PHENOL
2,4-D SALTS AND ESTERS
2,4-DB
2,4-DICHLOROPHENOL
2,4-DICHLOROPHENOXYACETIC ACID
2,4-DIMETHYLPHENOL
2,4-DINITROPHENOL
2,4-DINITROTOLUENE
2,4-DINITROTOLUENE, DRY WEIGHT
2,4-TOLUENEDIAMINE
2,5-TOLUENEDIAMINE
2,6-DINITROTOLUENE
2,6-DINITROTOLUENE, DRY WEIGHT
2-ACETYL AMINO- FLOURCENE
2-BUTANONE
2-BUTANONE PEROXIDE
2-CHLOROANILINE
2-CHLOROETHANOL
2-CHLOROETHYL VINYL ETHER, DRY WEIGHT
2-CHLOROETHYL VINYL ETHER (MIXED)
2-CHLORONAPHTHALENE
2-CHLOROPHENOL
2-ETHYL-1-HEXANOL
2-ETHYL-2-METHYL-DIOXOLANE
2-HEXANONE
2-METHYL-2-PROPANOL (TBA)
2-METHYL-4,6-DINITROPHENOL
2-METHYL-4-CHLOROPHENOL
2-METHYLNAPHTHALENE
2-METHYLPENTANE
2-METHYLPHENOL
2-METHYLPYRIDINE
2-NAPHTHYLAMINE
2-NITROANILINE
2-NITROPHENOL
2-PROPANONE
2-SECONDARY BUTYL-4,6-DINITROPHENOL
3,3-DICHLORO- BENZIDINE
3,3-DICHLOROBENZIDINE, DRY WEIGHT
3,4 BENZOFLUORAN-THENE
3,4,5 TRICHLORO- GUACACOL
3,4,6-TRICHLORO-CATECHOL
3,4,6-TRICHLORO-GUAIACOL
3-CHLOROPHENOL
3-METHYLHEXANE
3-METHYLPENTANE
3-METHYLPYRIDINE
3-NITROANILINE, TOTAL IN WATER
4,4-BUTYLDENEBIS-(6-T-BUTYL-M-CRESOL)
4,4-DDD (P,P-DDD)
4,4-DDE (P,P-DDE)
4,4-DDT (P,P-DDT)
4,6-DINITRO-O-CRESOL
4-BROMOPHENYL PHENYL ETHER
4-CHLORO-3, 5-DIMETHYLPHENOL
4-CHLORO-3-METHYL PHENOL
4-CHLOROPHENYL PHENYL ETHER
4-METHYLPHENOL

4-NITRO-M-CRESOL
4-NITRO-N-METHYLPHTHALIMIDE, TOTAL
4-NITROPHENOL
9,10 DICHLOROSTEARIC ACID
9,10 EPOXYSTEARIC ACID
A-BHC-ALPHA
ABIETIC ACID
ACENAPHTHENE
ACENAPHTHENE, SED (DRY WEIGHT)
ACENAPHTHYLENE
ACEPHATE (ORTHENE, ORTRAN)
ACETALDEHYDE
ACETAMINOPHEN
ACETIC ACID
ACETONE
ACETONE, DRY WEIGHT
ACETONE IN WASTE
ACETOPHENONE
ACID COMPOUNDS
ACIDS, TOTAL VOLATILE (AS ACETIC ACID)
ACROLEIN
ACROLEIN, DRY WEIGHT
ACRYLAMIDE MONOMER
ACRYLIC ACID
ACRYLONITRILE
ACRYLONITRILE, DRY WEIGHT
ACTINIUM 228
A-ENDOSULFAN-ALPHA
ALACHLOR (BRAND NAME-LASSO)
ALACHLOR, DISSOLVED
ALDICARB
ALDICARB SULFONE
ALDICARB SULFOXIDE
ALDRIN
ALDRIN + DIELDRIN
ALDRIN, DRY WEIGHT
ALKYL BENZENE SULFONATED (ABS)
ALKYLDIMETHYL ETHYL AMMONIUM BROMIDE
ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE
ALPHA ACTIVITY
ALPHA EMITTING RADI-UM ISOTOPES, DISSOL.
ALPHA GROSS RADIOACTIVITY
ALPHA, DISSOLVED
ALPHA, SUSPENDED
ALPHA, TOTAL
ALPHA, TOTAL, COUNTING ERROR
ALPHABHC DISSOLVED
ALPHA-ENDOSULFAN
AMETRYN ORGANIC PESTICIDE
AMIBEN (CHLORAMBEN)
AMINES, ORGANIC TOTAL
AMINOTROL - METHYLENE PHOSPHATE
AMYL ALCOHOL
ANILINE
ANTHRACENE
ANTIMONY IN BOTTOM DEPOSITS (DRY WGT)
ANTIMONY, DISSOLVED (AS SB)
ANTIMONY, TOTAL (AS SB)
ANTIMONY, TOTAL RECOVERABLE
AROMATICS, SUBSTITUTED
AROMATICS, TOTAL PURGEABLE
ARSENIC, POTENTIALLY DISSOLVED
ARSENIC, DISSOLVED (AS AS)
ARSENIC, DRY WEIGHT
ARSENIC, TOTAL (AS AS)
ARSENIC, TOTAL RECOVERABLE
ASANA
ASBESTOS
ASBESTOS (FIBROUS)
A-TERPINEOL
ATRAZINE
ATRAZINE, DISSOLVED
AZIDE
AZOBENZENE
BALAN (BENEFIN)
BARIUM IN BOTTOM DEPOSITS (DRY WGT)
BARIUM, POTENTIALLY DISSOLVED
BARIUM, DISSOLVED (AS BA)
BARIUM, TOTAL (AS BA)
BARIUM, TOTAL RECOVERABLE
BASE NEUTRALS & ACID (METHOD 625), TOTAL
BASE NEUTRALS & ACID (METHOD 625), EFFLNT
BASE/NEUTRAL COMPOUNDS
BAYER 73 LAMPREYCIDE IN WATER
B-BHC-BETA
B-BHC-BETA DISSOLVED
B-ENDOSULFAN-BETA
BENFLURALIN, (ORG. PESTICIDE ACT. INGD)
BENOMYL & CARBEND. ORGANIC PESTICIDE
BENTAZON, TOTAL
BENZENE
BENZENE (VOLATILE ANALYSIS)
BENZENE HEXACHLORIDE
BENZENE SULPHONIC ACID
BENZENE, DISSOLVED
BENZENE, DRY WEIGHT
BENZENE, HALOGENATED
BENZENE, TOLUENE, XYLENE IN COMBINATION
BENZENE, ETHYL BENZENE TOLUENE, XYLENE COMBINATION
BENZENE HEXACHLORIDE
BENZIDINE
BENZIDINE, DRY WEIGHT
BENZISOTHIAZOLE

BENZO(A) FLUORANTHENE
BENZO(A) ANTHRACENE
BENZO(A) PYRENE
BENZO(A) PYRENE, DRY WEIGHT
BENZO(B) FLUORANTHENE (3,4-BENZO)
BENZO(GHI) PERYLENE
BENZO(K) FLUORANTHENE
BENZOFURAN
BENZY CHLORIDE
BENZYL ALCOHOL
BENZYL CHLORIDE
BERYLLIUM IN BOTTOM DEPOSITS (DRY WGT)
BERYLLIUM, DISSOLVED (AS BE)
BERYLLIUM, POTENTIALLY DISSOLVED
BERYLLIUM, TOTAL (AS BE)
BERYLLIUM, TOTAL RECOVERABLE (AS BE)
BETA, DISSOLVED
BETA, SUSPENDED
BETA, TOTAL
BETA, TOTAL, COUNTING ERROR
BETASAN(N-2-MERCAPTO ETHYL BENZENE SULFAMID
BEZONITRILE (CYANOBENZENE)
BHC, TOTAL
BHC-ALPHA
BHC-BETA
BHC-DELTA
BHC-GAMMA
BIFENTHRIN
BIS -- PHENOL-A (ALPHA)
BIS (2-CHLORO- ISOPROPYL) ETHER
BIS (2-CHLOROETHOXY) METHANE
BIS (2-CHLOROETHOXY) METHANE, DRY WT.
BIS (2-CHLOROETHYL) ETHER
BIS (2-ETHYLHEXYL) PHTHALATE
BIS (2-ETHYLHEXYL) PHTHALATE, DRY WGT
BIS (CHLOROMETHYL) ETHER
BIS (TRICHLOROMETHYL) SULFONE
BIS ETHER
BISMUTH 214
BISMUTH, TOTAL (AS BI)
BISPHENOL-A
BROMACIL
BROMACIL (HYVAR)
BROMACIL, LITHIUM
BROMOCHLOROMETHANE
BROMODICHLOROETHANE
BROMOFORM
BROMOFORM, DRY WGT
BROMOMETHANE
BROMOXYNIL ORGANIC PESTICIDE
BROMOXYNIL OCTANOATE
BUSAN 40 ORGANIC PESTICIDE
BUSAN 85 ORGANIC PESTICIDE
BUTACHLOR
BUTANE
BUTANOIC ACID
BUTANOL
BUTANONE
BUTHDIENE TOTAL
BUTOXY ETHOXY ETHANOL TOTAL
BUTYL ACETATE
BUTYL BENZYL PHTHALATE
BUTYLATE (SUTAN)
CADMIUM
CADMIUM TOTAL RECOVERABLE
CADMIUM IN BOTTOM DEPOSITS (DRY WGT)
CADMIUM SLUDGE SOLID
CADMIUM SLUDGE TOTAL
CADMIUM, POTENTIALLY DISSOLVD
CADMIUM, DISSOLVED (AS CD)
CADMIUM, PERCENT REMOVAL
CADMIUM, SLUDGE, TOTAL DRY WGT (AS CD)
CADMIUM, TOTAL (AS CD)
CAFFEINE
CAPTAFOL
CAPTAN
CARBAMATES
CARBARYL TOTAL
CARBN CHLOROFRM EXT-RACTS, ETHER INSOLUBL
CARBOFURAN
CARBON DISULFIDE (CS2)
CARBON TETRACHLORIDE
CARBON TETRACHLORIDE, DRY WEIGHT
CARBON, CHLOROFORM EXTRACTABLES
CARBON, DISSOLVED ORGANIC (AS C)
CARBOSULFAN, TOTAL
CERIUM, TOTAL
CESIUM 137
CESIUM,TOTAL (AS CS)
CHIRAL
CHLOR, PHENOXY ACID GP, NONE FOUND
CHLORAL
CHLORAL HYDRATE
CHLORAMINE RESIDUAL
CHLORDANE (CA OCEAN PLAN DEFINITION)
CHLORDANE (TECH MIX & METABS), DRY WGT
CHLORDANE (TECH MIX. AND METABOLITES)
CHLORDANE, ALPHA, WHOLE WATER
CHLORDANE, GAMMA, WHOLE WATER
CHLORENDIC ACID
CHLORETHOXYFOS
CHLORINATED DIBENZO-FURANS, EFFLUENT
CHLORINATED DIBENZO-FURANS, SLUDGE

CHLORINATED DIBENZO-P-DIOXINS, EFFLUENT
CHLORINATED DIBENZO-P-DIOXINS, SLUDGE
CHLORINATED ETHANES
CHLORINATED HYDRO-CARBONS, GENERAL
CHLORINATED METHANES
CHLORINATED ORGANIC COMPOUNDS
CHLORINATED PESTI-CIDES, TOTAL
CHLORINATED PESTI-CIDES, TOTAL & PCBS
CHLORINATED PHENOLS
CHLORINATION
CHLORINE DIOXIDE
CHLORINE DOSE
CHLORINE RATE
CHLORINE USAGE
CHLORINE, COMBINED AVAILABLE
CHLORINE, FREE AVAILABLE
CHLORINE, FREE RESIDUAL, TOTAL EFFLUENT
CHLORINE, TOTAL RESIDUAL
CHLORINE, TOTAL RESIDUAL (DSG. TIME)
CHLORINE, TOTAL RES. DURATION OF VIOLATION
CHLOROBENZENE
CHLOROBENZENE, DRY WEIGHT
CHLOROBENZILATE
CHLOROBUTADIENE (CHLOROPRENE)
CHLORODIBROMOMETHANE
CHLORODIBROMOMETHANE, DRY WEIGHT
CHLORODIFLUORO-METHANE
CHLORODIMEFORM
CHLOROETHANE
CHLOROETHANE, TOTAL WEIGHT
CHLOROETHYLENE BISTHIOCYANATE
CHLOROFORM
CHLOROFORM EXTRACTABLES, TOTAL
CHLOROFORM, DISSOLVED
CHLOROFORM, DRY WEIGHT
CHLOROHEXANE, TOTAL
CHLOROMETHANE
CHLOROMETHYL BENZENE
CHLORONEB ORGANIC PESTICIDE
CHLORONITROBENZENE
CHLOROPHENOXY PROPANANOL
CHLOROSYRINGEALDEHYDE, EFFLUENT
CHLOROTHALONIL ORGANIC PESTICIDE
CHLOROTOLUENE
CHLOROXAZONE
CHLORPHENIRAMINE
CHLORPYRIFOS
CHROMIUM
CHROMIUM SLUDGE SOLID
CHROMIUM SLUDGE TOTAL
CHROMIUM TOTAL RECOVERABLE
CHROMIUM TRIVALENT IN BOTTOM DEPOSITS
CHROMIUM, DISSOLVED (AS CR)
CHROMIUM, DRY WEIGHT
CHROMIUM, HEXAVALENT
CHROMIUM, HEXAVALENT (AS CR)
CHROMIUM, HEXAVALENT DISSOLVED (AS CR)
CHROMIUM, HEXAVALENT IN BOT DEP (DRY WGT)
CHROMIUM, HEXAVALENT POTENTIALLY DISOLVED
CHROMIUM, HEXAVALENT TOT RECOVERABLE
CHROMIUM, SUSPENDED (AS CR)
CHROMIUM, TOTAL
CHROMIUM, TOTAL (AS CR)
CHROMIUM, TOTAL DRY WEIGHT (AS CR)
CHROMIUM, TOTAL IN BOT DEP (WET WGT)
CHROMIUM, TOTAL PERCENT REMOVAL
CHROMIUM, TRIVALENT (AS CR)
CHROMIUM, TRIVALENT, POTENTIALLY DISSOLVED
CHRYSENE
CIS-1,3-DICHLORO PROPENE
CITRIC ACID
CN, FREE (AMENABLE TO CHLORINE)
COLUMBIUM, TOTAL
COMBINED METALS SUM
COPPER
COPPER AS SUSPENDED BLACK OXIDE
COPPER IN BOTTOM DEPOSITS (DRY WGT)
COPPER SLUDGE SOLID
COPPER SLUDGE TOTAL
COPPER TOTAL RECOVERABLE
COPPER, DISSOLVED (AS CU)
COPPER, PERCENT REMOVAL
COPPER, POTENTIALLY DISSOLVED
COPPER, SUSPENDED (AS CU)
COPPER, TOTAL (AS CU)
COPPER, TOTAL PER BATCH
COUMAPHOS
CRESOL
CYANATE (AS OCN)
CYANAZINE
CYANIDE (A)
CYANIDE AND THIOCYANATE - TOTAL
CYANIDE COMPLEXED TO RANGE OF COMPOUND
CYANIDE FREE NOT AMENABLE TO CHLORIN.
CYANIDE IN BOTTOM DEPOSITS (DRY WGT)
CYANIDE SLUDGE SOLID
CYANIDE, FILTERABLE, TOTAL
CYANIDE, FREE AVAILABLE

CYANIDE, FREE-WATER PLUS
WASTEWATERS
CYANIDE, DISSOLVED STD METHOD
CYANIDE, FREE (AMEN. TO CHLORINATION)
CYANIDE, TOTAL (AS CN)
CYANIDE, TOTAL RECOVERABLE
CYANIDE, WEAK ACID, DISSOCIABLE
CYCLOATE (RONEET)
CYCLOHEXANE
CYCLOHEXANONE
CYCLOHEXYL AMINE (AMINO HEXAHYDRO)
CYCOHEXANONE
CYFLUTHRIN
DACONIL (C8CL4N2)
DACTHAL
DAZOMET
DCPA, ORGANIC PESTICIDE
DDD IN WHOLE WATER SAMPLE
DDE
DDT
DDT/DDD/DDE, SUM OF P, P & O,P ISOMERS
DECACHLOROBIPHENYL (DCBP) TOTAL
DECHLORANE PLUS
DEF, ORGANIC PESTICIDE
DEHYDROABIETIC ACID
DELNAV
DELTA BENZENE HEXACHLORIDE
DELTAMETHRIN
DEMETON
DIAZINON
DIBENZO (A,H) ANTHRACENE
DIBENZO (A,H) ANTHRACENE, DRY WEIGHT
DIBENZOFURAN
DIBROMOCHLORO-METHANE
DIBROMODICHLOROMETHANE
DIBROMOMETHANE
DICHLONE
DICHLORAN, TOTAL
DICHLOROBENZENE
DICHLOROBENZENE, ISOMER
DICHLOROBENZYLTRIFLUORIDE
DICHLOROBROMOMETHANE
DICHLOROBROMOMETHANE, DRY WEIGHT
DICHLOROBUTADIENE
DICHLOROBUTENE-(ISOMERS)
DICHLORODEHYDRO-ABEIETIC ACID
DICHLORODIBROMOMETHANE
DICHLORODIFLUORO-METHANE
DICHLOROETHENE, TOTAL
DICHLOROFLUORO METHANE
DICHLOROMETHANE
DICHLOROPROPYLENE, 1,2
DICHLOROTOLUENE
DICHLOROTRIFLUORO- ETHANE
DICHLORVOS, TOTAL
DICHLORVOS, TOTAL DISSOLVED
DICHLORVOS, TOTAL SED DRY WEIGHT
DICHLORVOS, TOTAL SUSPENDED
DICYCLOHEXYLAMINE, TOTAL
DICYCLOPENTADIENE
DIDECYLDIMETHYL AMMONIUM CHLORIDE
DIDROMOMETHANE, 1-2
DIELDRIN
DIELDRIN, DRY WEIGHT
DIETHL METHYL BENZENESULFONAMIDE
DIETHYL PHTHALATE
DIETHYL PHTHALATE, DRY WEIGHT
DIETHYLAMINE
DIETHYLAMINOETHANOL
DIETHYLBENZENE
DIETHYLENE GLYCOL DINITRATE, TOTAL
DIETHYLHEXYL PHTHALATE ISOMER
DIETHYLHEXYL- PHTHALATE
DIETHYLSTILBESTEROL
DIFOLATAN
DIISOPROPYL ETHER
DIMETHOXYBENZIDINE
DIMETHYL BENZIDINE
DIMETHYL DISULFIDE TOTAL
DIMETHYL NAPHTHALENE
DIMETHYL PHTHALATE
DIMETHYL PHTHALATE
DIMETHYL PHTHALATE, DRY WEIGHT
DIMETHYL SULFIDE TOTAL
DIMETHYLAMINE
DIMETHYLANILINE
DI-N-BUTYL PHTHALATE
DI-N-BUTYL PHTHALATE, DRY WEIGHT
DI-NITRO BUTYL PHENOL (DNBP)
DINITROTOLUENE
DI-N-OCTYL PHTHALATE
DI-N-OCTYL PHTHALATE, DRY WEIGHT
DINOSEB
DINOSEB (DNBP)
DIOXANE
DIOXATHION ORGANIC PESTICIDE
DIOXIN
DIOXIN (TCDD) SUSPENDED
DISSOLVED RADIOACTIVE GASSES
DISULFOTON
DIURON
DMDS
DOCOSANE
DODECYLGUANIDINE SALTS
DYPHYLLINE
EDTA
EDTA AMMONIATED
ENDOSULFAN SULFATE
ENDOSULFAN, ALPHA, IN WASTE
ENDOSULFAN, BETA, IN WASTE
ENDOSULFAN, TOTAL
ENDOTHALL SALTS & ESTERS, ORG. PEST.

ENDRIN
ENDRIN + ENDRIN ALDEHYDE (SUM)
ENDRIN ALDEHYDE
EPHEDRINE SULFATE
EPICHLOROHYDRIN
EPTC (EPTAM)
ESTRADIOL
ETHALFLURALIN WATER, TOTAL
ETHANE, 1,2-BIS (2- CLRETHXY), HOMLG SUM
ETHION
ETHOXYQUIN
ETHYL ACETATE
ETHYL BENZENE
ETHYL ETHER BY GAS CHROMATOGRAPH
ETHYL METHANESULFONATE
ETHYL METHYL-DIOXOLANE
ETHYL PARATHION
ETHYLBENZENE
ETHYLBENZENE, DRY WEIGHT
ETHYLENE
ETHYLENE CHLOROHYDRIN
ETHYLENE DIBROMIDE (1,2 DIBROMOETHANE)
ETHYLENE GLYCOL
ETHYLENE GLYCOL DINITRATE
ETHYLENE OXIDE
ETHYLENE THIOUREA (ETU)
ETHYLENE, DISSOLVED (C2H4)
EXPLOSIVE LIMIT, LOWER
EXPLOSIVES, COMBINED TNT + RDX + TETRYL
FENARIMOL ORGANIC PESTICIDE
FENVALERATE ORGANIC PESTICIDE
FERRICYANIDE
FLUORANTHENE
FLUORANTHENE, DRY WEIGHT
FLUORENE
FLUORENE, DRY WEIGHT
FLUORIDE-COMPLEX
FLUSILAZOLE
FOAMING AGENTS
FOLPET WATER TOTAL
FORMALDEHYDE
FORMIC ACID
FREON 113 (1,1,1-TRIFLOURO-2,2-
FREON, TOTAL
FUEL, DIESEL, #1
FURANS
FURFURAL
GALLIUM, TOTAL (AS GA)
GAMMA-BHC
GAMMA, TOTAL
GAMMA, TOTAL COUNTING ERROR
GASOLINE, REGULAR
GERMANIUM, TOTAL (AS GE)
GLYPHOSATE, TOTAL
GOLD, TOTAL (AS AU)
GROSS BETA
GUAFENSIN
GUANIDINE NITRATE
GUTHION
HALOGEN, TOTAL ORGANIC
HALOGEN, TOTAL RESIDUAL
HALOGENATED HYDRO-CARBONS, TOTAL
HALOGENATED ORGANICS
HALOGENATED TOLUENE
HALOGENS, ADSORBABLEORGANIC
HALOGENS, TOTAL ORGAN-ICS BOTTOM SEDIMENT
HALOGENS, TOTAL COMBINED
HALOMETHANES, SUM
HEPTACHLOR
HEPTACHLOR + HEPTACHLOR EPOXIDE
HEPTACHLOR, DRY WEIGHT
HEPTANE
HERBICIDES, TOTAL
HEXACHLOROBENZENE
HEXACHLOROBENZENE, DRY WEIGHT
HEXACHLOROBIPHENYL
HEXACHLOROBUTADIENE
HEXACHLOROBUTADIENE, DRY WEIGHT
HEXACHLOROCYCLOHEXANE (BHC) TOTAL
HEXACHLOROCYCLO-PENTADIENE
HEXACHLOROCYCLOPENTADIENE, DRY WEIGHT
HEXACHLOROETHANE
HEXACHLOROETHANE, DRY WEIGHT
HEXACHLOROPENTADIENE
HEXACHLOROPHENE
HEXADECANE
HEXAHYDROAZEPINONE
HEXAMETHYL-PHOSPHORAMINE (HMPA)
HEXAMETHYLBENZENE
HEXANE
HEXAZIMONE
HMX-1,3,5,7-TETRA ZOCINE (OCTOGEN)
HYDRAZINE
HYDRAZINES, TOTAL
HYDROCARBON, TOTAL RECOVERABLE
HYDROCARBONS NITRATED
HYDROCARBONS NITRATED, TOTAL
HYDROCARBONS, AROMATIC
HYDROCARBONS, TOTAL GAS CHROMATOGRAPH
HYDROCARBONS, IN H2O,IR,CC14 EXT. CHROMAT
HYDROGEN CYANIDE
HYDROQUINONE
HYDROXYACETOPHENONE
HYDROXYQUINOLINE TOTAL
HYDROXYZINE

INDENE
INDENO (1,2,3-CD) PYRENE
INDENO (1,2,3-CD) PYRENE, DRY WEIGHT
INDIUM
IODINE 129
IODINE RESIDUAL
IODINE TOTAL
ISOBUTYL ACETATE
ISOBUTYL ALCOHOL
ISOBUTYRALDEHYDE
ISODECYLDIPHENYL-PHOSPHATE
ISODRIN
ISO-OCTANE
ISOOCTYL 2,4,5-T
ISOOCTYL SILVEX
ISOPHORONE
ISOPHORONE, DRY WEIGHT
ISOPIMARIC ACID
ISOPRENE
ISOPROPALIN WATER, TOTAL
ISOPROPANOL
ISOPROPYL ACETATE
ISOPROPYL ALCOHOL (C3H8O), SED.
ISOPROPYLBENZENE
ISOPROPYL ETHER
ISOPROPYLBIPHENYL, TOTAL
ISOPROPYLIDINE DIOXYPHENOL
ISOTHIAZOLONE
ISOTHIOZOLINE, TOTAL
ISOXSUPRINE
KELTHANE
KEPONE
KN METHYL ORGANIC PESTICIDE
LANTHANUM, TOTAL
LEAD
LEAD TOTAL RECOVERABLE
LEAD 210
LEAD 210, TOTAL
LEAD 212
LEAD 214
LEAD SLUDGE SOLID
LEAD SLUDGE TOTAL
LEAD, DISSOLVED (AS PB)
LEAD, DRY WEIGHT
LEAD, POTENTIALLY DISSOLVD
LEAD, TOTAL (AS PB)
LEAD, TOTAL DRY WEIGHT (AS PB)
LINDANE
LINOLEIC ACID
LINOLENIC ACID
LINURON ORGANIC PESTICIDE
M-ALKYLDIMETHLBENZYLAMCL
MALATHION
MB 121
MCPA 2-ETHYLHEXYL ESTER
MERCAPTANS, TOTAL
MERCAPTOBENZOTHIAZOLE
MERCURY
MERCURY TOTAL RECOVERABLE
MERCURY, DISSOLVED (AS HG)
MERCURY, DRY WEIGHT
MERCURY (HG), IN BARITE, DRY WEIGHT
MERCURY, POTENTIALLY DISSOLVD
MERCURY, TOT IN BOT DEPOSITS (DRY WGT)
MERCURY, TOTAL (AS HG)
MERCURY, TOTAL (LOW LEVEL)
METALS TOXICITY RATIO
METALS, TOTAL
METALS, TOX PRIORITY POLLUTANTS, TOTAL
METAM POTASSIUM
META-XYLENE
METHAMIDOPHOS ORGANIC PESTICIDE
METHAM SODIUM (VAPAM)
METHANE
METHANOL, TOTAL
METHOCARBAMOL
METHOMYL
METHOXYCHLOR
METHOXYPROPYLAMINE
METHYL ACETATE
METHYL BROMIDE
METHYL METHANESULFONATE
METHYL BROMIDE, DRY WEIGHT
METHYL CHLORIDE
METHYL CHLORIDE, DRY WEIGHT
METHYL CYANIDE (ACETONITRILE)
METHYL ETHYL BENZENE
METHYL ETHYL KETONE
METHYL ETHYL SULFIDE
METHYL FORMATE
METHYL ISOBUTYL KETONE (MIBK)
METHYL MERCAPTAN
METHYL METHACRYLATE
METHYL NAPHTHALENE
METHYL PARATHION
METHYL STYRENE
METHYLAMINE
METHYLCYCLOPENTANE
METHYLENE BIS-THIOCYANATE
METHYLENE CHLORIDE
METHYLENE CHLORIDE, DRY WEIGHT
METHYLENE CHLORIDE, SUSPENDED
METHYLHYDRAZINE
METRIBUZIN (SENCOR), WATER, DISSOLVED
METRIOL TRINITRATE, TOTAL
MIREX
MOLYBDENUM DISSOLVED (AS MO)
MOLYBDENUM, TOTAL (AS MO)
MONOCHLOROACETIC ACID

MONO-CHLORO-BENZENES
MONOCHLOROBENZYLTRIFLUORIDE
MONOCHLORODEHYDRO- ABIETIC ACID
MONOCHLOROTOLUENE
MP062 (STEWARD)
NABAM, ORGANIC PESTICIDE
NABONATE
N-AMYL ACETATE
NAPHTHALENE
NAPHTHALENE, DRY WEIGHT
NAPHTHENIC ACID
NAPROPAMIDE (DEVRINOL)
N-BUTYL ACETATE
N-BUTYL-BENZENE SULFONAMIDE (IN WAT)
N-BUTYL-BENZENE (WHOLE WATER, UG/L
NEPTUNE BLUE
N-HEPTADECANE
NIACINAMIDE
NICKEL
NICKEL SLUDGE SOLID
NICKEL SLUDGE TOTAL
NICKEL TOTAL RECOVERABLE
NICKEL, DISSOLVED (AS NI)
NICKEL, POTENTIALLY DISSOLVED
NICKEL, SUSPENDED (AS NI)
NICKEL, TOTAL (AS NI)
NICKEL, TOT IN BOTTOM DEPOSITS (DRY WGT)
NICKEL, TOTAL PER BATCH
NICOTINE SULFATE
NITROBENZENE
NITROBENZENE, DRY WEIGHT
NITROCELLULOSE
NITROFURANS
NITROGEN, ORGANIC, DISSOLVED (AS N)
NITROGLYCERIN BY GAS CHROMATOGRAPHY
NITROGUANIDINE
NITROSODIPHENYLAMINE
NITROSTYRENE
N-METHYL-2-PYRROLIDONE
N-NITROSO COMPOUNDS, VOLATILE
N-NITROSODIBUTYL-AMINE
N-NITROSODIETHYL-AMINE
N-NITROSODIMETHYL-AMINE
N-NITROSODIMETHYL-AMINE, DRY WEIGHT
N,N-DIETHYL CARBANILIDE
N,N-DIMETHYL FORMAMIDE
N-NITROSODI-N-BUTYLAMINE
N-NITROSODI-N-PROPYLAMINE
N-NITROSODI-N-PROPYLAMINE, DRY WEIGHT
N-NITROSODIPHENYL-AMINE
N-NITROSODIPHENYLAMINE, DRY WEIGHT
N-NITROSOPYRROLIDINE
NONHALOGENATED VOLATILE ORGANICS
NONPURGEABLE ORGANIC HALIDES
NORFLURAZON ORGANIC PESTICIDE
N PENTANE
N-PROPYLBENZENE
O-CHLOROBENZYL CHLORIDE
OCTACHLORO-CYCLOPENTENE
OCTACHLORODIBENZO P DIOXIN
OCTACHLORODIBENZOFURAN
OCTYLPHENOXY POLYETHOXYETHANOL
OIL/GREASE CALCULATED LIMIT
OIL, PETROLEUM ETHER EXTRACTABLES
OLEIC ACID
ORDRAM (HYDRAM)
ORGANIC ACTIVE IN-GREDIENTS (40 CFR 455)
ORGANIC COMPOUNDS, CHLOROFORM EXTRACT.
ORGANIC HALIDES, TOTAL
ORGANIC PESTICIDE CHEMICALS (40 CFR 455)
ORGANICS, GASOLINE RANGE
ORGANICS, TOTAL
ORGANICS, TOTAL HALOGENS (TOX)
ORGANICS, TOTAL PURGE-ABLES (METHOD 624)
ORGANICS, TOTAL TOXIC (TTO)
ORGANICS-TOTAL VOLATILE (NJAC REG.7:23-17E)
ORGANICS, VOLATILE (NJAC REG. 7:23-17E)
ORTHENE
ORTHOCHLOROTOLUENE
ORTHO-CRESOL
ORTHO-XYLENE
O-TOLUIDINE
OXALIC ACID
OXYTETRACYCLINE HYDROCHLORIDE
P,P-DDE-DISSOLVED
P,P-DDT-DISSOLVED
PALLADIUM, TOTAL (AS PD)
P-AMINOBIPHENYL
PANTHALIUM, TOTAL
PARABEN (METHYL AND PROPYL)
PARACHLOROMETA CRESOL
PARA-DICHLOROBENZENE
PARAQUAT
PARATHION
PCB-1016 (AROCHLOR 1016)
PCB-1221 (AROCHLOR 1221)
PCB-1232 (AROCHLOR 1232)
PCB-1242 (AROCHLOR 1242)
PCB-1248 (AROCHLOR 1248)
PCB-1254 (AROCHLOR 1254)
PCB-1260 (AROCHLOR 1260)
PCB-1262
PCB, TOTAL SLUDGE, SCAN CODE
PCBS IN BOTTOM DEPS. (DRY SOLIDS)

PCNB, ORGANIC PEST.
P-CRESOL
P-DIMETHYLAMINO-AZOBENZENE
PEBULATE (TILLAM)
PENDIMETHALIN ORGANIC PESTICIDE
PENTACHLOROBENZENE
PENTACHLOROETHANE
PENTACHLOROPHENOL
PENTANE, TOTAL EFFLUENT
PERFLUOROBUTANE SULFONAMIDE
PERFLUOROBUTANOIC ACID
PERFLUOROBUTANOIC SULFONATE
PERFLUOROOCTANE SULFONAMIDE
PERFLUOROOCTANE SULFONATE
PERFLUOROOCTANOIC ACID
PERMETHRIN, TOTAL
PERTHANE
PESTICIDES, GENERAL
P-ETHYLTOLUENE
PETROL HYDROCARBONS, TOTAL RECOVERABLE
PHENACETIN
PHENANTHRENE
PHENANTHRENE, DRY WEIGHT
PHENOL, SINGLE COMPOUND
PHENOLIC COMPOUNDS, SLUDGE TOTAL, DRY WEIGHT
PHENOLIC COMPOUNDS, UNCHLORINATED
PHENOLICS IN BOTTOM DEPOSITS (DRY WGT)
PHENOLICS, TOTAL RECOVERABLE
PHENOLS
PHENOLS, CHLORINATED
PHENOXY ACETIC ACID
PHENYLPROPANOLAMINE
PHENYLTOLOXAMINE
PHORATE
PHOSMET, ORGANIC PESTICIDE
PHOSPHATED PESTICIDES
PHOSPHOROTHIOIC ACID 0,0,0-TRIETHYL ESTR
PHTHALATE ESTERS
PHTHALATES, TOTAL
PHTHALIC ACID
PHTHALIC ANHYDRIDE
PIRIMICARB
PLATINUM, TOTAL (AS PT)
POLONIUM 210
POLYACRILAMIDE CHLORIDE
POLYBROMINATED BIPHENYLS
POLYBROMINATED DIPHENYL OXIDES
POLYCHLORINATED BIPHENYLS (PCBS)
POLYMETHYLACRYLIC ACID
POLY-NUCLEAR AROMATICS (POLYRAM)
POTASSIUM 40
PRIORITY POLLUTANTS TOTAL EFFLUENT
PROFENOFOS
PROMETON, ORGANIC PESTICIDE
PROMETRYN, ORGANIC PESTICIDE
PRONAMIDE, ORGANIC PESTICIDE
PROPABHLOR (RAMROD) DISSOLVED
PROPACHLOR, ORGANIC PESTICIDE
PROPANE, 2-METHOXY-2-METHYL (MTBE)
PROPANIL
PROPAZINE, ORGANIC PESTICIDE
PROPRANE, TOTAL
PROPYL ACETATE
PROPYLENE OXIDE
PROPYLENGLYCOL, TOTAL
PROTACTINIUM 234, DRY WEIGHT
PURGEABLE AROMATICS METHOD 602
PURGEABLE HYDRO-CARBONS, METH. 601
PURGEABLE ORGANIC HALIDES
PYMETROZINE
PYRENE
PYRENE, DRY WEIGHT
PYRETHRINS
PYRIDINE
PYRIFENOX
QUARTERNARY AMMONIUM COMPOUNDS
QUINOLINE
RADIATION-GROSS ALPHA TOT DISSOLVED
RADIATION-GROSS ALPHA TOT SUSPENDED
RADIATION, GROSS BETA
RADIATION, GROSS ALPHA
RADIOACTIVITY
RADIOACTIVITY, GROSS
RADIUM 224
RADIUM 226 + RADIUM 228, TOTAL
RADIUM 226, DISSOLVED
RADIUM 228, TOTAL
RARE EARTH METALS, TOTAL
RATIO OF FECAL COLIFORM TO FECAL STREPOC
R-BHC (LINDANE) GAMMA
RDX, DISSOLVED
RDX, TOTAL
RESIN ACIDS, TOTAL
RESORCINOL
RHODIUM, TOTAL
ROTENONE
ROUNDUP
ROVRAL
RUBIDIUM, TOTAL (AS RB)
SAFROLE
SAMARIUM, TOTAL (AS SM IN WATER)
SELENIUM SLUDGE SOLID
SELENIUM, ACID SOLUBLE
SELENIUM, DISSOLVED (AS SE)
SELENIUM, DRY WEIGHT
SELENIUM, POTENTIALLY DISSOLVD

SELENIUM, SLUDGE, TOTAL DRY WEIGHT
SELENIUM, TOTAL (AS SE)
SELENIUM, TOTAL RECOVERABLE
SEVIN (CARBARYL) IN TISSUE
SEVIN (CARBRYL)
SILVER
SILVER TOTAL RECOVERABLE
SILVER IN BOTTOM DEPOSITS (DRY WGT)
SILVER, DISSOLVED (AS AG)
SILVER, IONIC
SILVER, POTENTIALLY DISSOLVED
SILVER, TOTAL (AS AG)
SILVER, TOTAL PER BATCH
SILVEX
SODIUM CHLORATE
SODIUM DICHROMATE
SODIUM DIMETHYL-DITHIOCARBAMATE, TOTAL
SODIUM-O-PPTH
SODIUM PENTACHLORO- PHENATE
SODIUM POLYACRYLATE, TOTAL
SOPP
SOPP, LOADING RATE
STIROFOS
STROBANE
STRONTIUM 90, TOTAL
STRONTIUM, DISSOLVED
STRONTIUM, TOTAL (AS SR)
STYRENE
STYRENE, TOTAL
SULFABENZAMIDE
SULFACETAMIDE
SULFATHIAZOLE
SULFOTEPP (BLADAFUME)
TANNIN AND LIGNIN
TCDD EQUIVALENTS
TCMTB
TEBUCONAZOLE
TEBUPIRIMFOS
TEBUTHIURON ORGANIC PESTICIDE
TECHNETIUM-99
TEFLUTHRIN
TELLURIUM, TOTAL
TEMEPHOS
TERBACIL
TERBUFOS
TERBUFOS (COUNTER) TOTAL
TERBUTHYLAZINE ORGANIC PESTICIDE
TERBUTRYN, ORGANIC PESTICIDE
TETRA SODIUM EDTA
TETRACHLORDIBENZOFURAN, 2378-(TCDF) SED,
TETRACHLOROBENZENE
TETRACHLOROETHANE, TOTAL
TETRACHLOROETHENE
TETRACHLOROETHYLENE
TETRACHLOROETHYLENE, DRY WEIGHT
TETRACHLOROGUAIACOL (4CG) IN WHOLE WATER
TETRAHYDRO-3,5-DIMETHYL-2-HYDRO-1,3,5-TH
TETRAHYDROFURAN
TETRAMETHYL AMMONIUM HYDROXIDE
TETRAMETHYLBENZENE
THALLIUM 208
THALLIUM IN BOTTOM DEPOSITS (DRY WGT)
THALLIUM, ACID SOLUBLE
THALLIUM, DISSOLVED (AS TL)
THALLIUM, POTENTIALLY DISSOLVED
THALLIUM, TOTAL (AS TL)
THALLIUM, TOTAL RECOVERABLE
THC, DRY & 02
THEOPHYLLINE
THIABENDAZOLE
THIOBENDAZOLE
THIOCARBAMATES
THIOCYANATE (AS SCN)
THIOSULFATE ION(2-)
THORIUM 230
THORIUM 232
THORIUM 232 PCI/G OF DRY SOLIDS
THORIUM 234
TIN
TIN, DISSOLVED (AS SN)
TIN, TOTAL (AS SN)
TIN, TOTAL RECOVERABLE
TIN, TRI-ORGANO-
TITANIUM, DISSOLVED (AS TI)
TITANIUM, TOTAL (AS TI)
TITANIUM, TOTAL DRY WEIGHT (AS TI)
TOLUENE
TOLUENE, DISSOLVED
TOLUENE, DRY WEIGHT
TOLUENE-2,4 -DIISOCYANITE
TOLYTRIAZOLE
TOPSIN
TOTAL ACID PRIORITY POLLUTANTS
TOTAL BASE/NEUTRAL PRIORITY POLLUTANTS
TOTAL PESTICIDES
TOTAL PHENOLS
TOTAL POLONIUM
TOTAL PURGEABLE HALOCARBONS
TOTAL TOXIC ORGANICS (TTO) (40 CFR 413)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 433)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 464A)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 464B)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 464C)

TOTAL TOXIC ORGANICS (TTO) (40 CFR 464D)
TOTAL TOXIC ORGANICS(TTO) (40 CFR 465)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 467)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 468)
TOTAL TOXIC ORGANICS (TTO) (40 CFR 469)
TOTAL VOLATILE PRIORITY POLLUTANTS
TOXAPHENE
TOXAPHENE, DRY WEIGHT
TOXICS, PERCENT REMOVAL
TRANS-1,2-DICHLORO-ETHYLENE
TRANS-1,3-DICHLORO PROPENE
TREFLAN (TRIFLURALIN)
TRIADIMEFON ORGANIC PESTICIDE
TRIBUTHYLAMINE
TRIBUTYLTIN
TRICHLOROBENZENE
TRICHLOROBENZENE 1,2,4 TOTAL
TRICHLOROETHANE
TRICHLOROETHENE
TRICHLOROETHYLENE
TRICHLOROETHYLENE, DISSOLVED
TRICHLOROETHYLENE, DRY WEIGHT
TRICHLOROFLUORO-METHANE
TRICHLOROGUAIACOL
TRICHLOROMETHANE
TRICHLOROPHENATE-(ISOMERS)
TRICHLOROPHENOL
TRICHLOROTOLUENE
TRICHLOROTRIFLUORO-ETHANE
TRICHOROFON
TRIETHANOLAMINE
TRIETHYLAMINE
TRIFLURALIN (C13H16F3N3O4)
TRIHALOMETHANE, TOT.
TRIMETHYL BENZENE
TRINITROTOLUENE (TNT), DISSOLVED
TRINITROTOLUENE (TNT), TOTAL
TRIPHENYL PHOSPHATE
TRITHION
TRITIUM (1 H3), TOTAL
TRITIUM, TOTAL
TRITIUM, TOTAL COUNTING ERROR (PC/L)
TRITIUM, TOTAL NET INCREASE H-3 UNITS
TUNGSTEN, DISSOLVED
TUNGSTEN, TOTAL
U-236 TOTAL WTR
URANIUM 235, DRY WEIGHT
URANIUM 238
URANIUM, POTENTIALLY DISSOLVD
URANIUM, 235 TOTAL
URANIUM, 238 TOTALURANIUM, NATURAL, DISSOLVED
URANIUM, NATURAL, TOTAL
URANIUM, NATURAL, TOTAL (IN PCI/L)
URANIUM, TOTAL AS U308
URANYL-ION
UREA
VERNAM (S-PROPYLDI-PROPYLTHIOCARBAMATE)
VINYL ACETATE
VINYL CHLORIDE
VINYL CHLORIDE, DRY WEIGHT
VOLATILE COMPOUNDS (GC/MS)
VOLATILE FRACTION ORGANICS (EPA 624)
VOLATILE HALOGENATED HYDROCARBONS
VOLATILE HALOGENATED ORGANICS (VHO), TOT
VOLATILE HYDROCARBONS
VOLATILE ORGANIC COMPOUND (VOC)
VOLATILE ORGANICS DETECTED
XANTHATES
XC POLYMER IN DRILLING FLUIDS
XYLENE
XYLENE, PARA-TOTAL
ZINC
ZINC IN BOTTOM DEPOSITS (DRY WGT)
ZINC SLUDGE SOLID
ZINC SLUDGE TOTAL
ZINC TOTAL RECOVERABLE
ZINC, DISSOLVED (AS ZN)
ZINC, DRY WEIGHT
ZINC, PERCENT REMOVAL
ZINC, POTENTIALLY DISSOLVED
ZINC, TOTAL
ZINC, TOTAL (AS ZN)
ZIRAM, ORGANIC PESTICIDE
ZIRCONIUM, TOTAL

EXHIBIT

R

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

CC: JC, HDM, RM
JOBSITE (J. Ham, J. Cartwright)

Flex you power!
Be energy efficient!

285 fi6 8.0
285 fi6 14.13
285 fi6 18.1

Date: 07/03/07

Contract: 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY - CONFUSION HILL

Mr. Evan Paine
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

RE: **SWPPP Amend#8&#9 – Letter#109**

Faxed: (916) 334-0562 and mailed

Evan:

As previously stated verbally on June 14, 2007; your submitted SWPPP amendments #8 and #9, dated 6/12/07 and 6/14/07, respectively, have been approved. Attached for your records are copies of the Resident Engineer's approval sheets.

Additionally, it is acknowledged that MCM has submitted Form CEM-6201A for NOPC #13, requesting reimbursement for inefficiencies experienced for implementing various BMPs. Although, the inefficiencies from the work necessary to minimize impacts for the various operations is apparent, it is Caltrans' position that the measures that are being requested are not extra work and will not be reimbursed via a Change Order. Our position is that such measures necessary to minimize the impacts, via containment, are inclusive in the cost / reimbursement of the specific item of work that causes the waste product.

Your stated position that all impacts as a result of the work of the project, which are necessary to construct the project, are permitted, without any containment measures in place, is not concurred with. It is necessary and expected that measures to minimize impacts prior to causing the said impact is what is expected from the language in the permits. The idea of allowing welding slag and sandblasting waste to deposit freely without containment measures, and then be cleaned from the river bar after construction is complete, is not what Caltrans and the permitting agencies consider to be an acceptable practice. Minimization prior to the causation of the deposition of waste and maximization of containment are the key components in a majority of BMPs, regardless of the waste product; the construction operation; or the specific BMP. I believe that you will find this to be true and respected as an industry standard practice for most projects in environmentally sensitive areas, of which our project site most definitely is.

With that said, since the implementation of the BMPs for welding slag and sandblasting containment, the impacts from your operations have substantially decreased. Your staff appears to have been informed of proper containment methods and is active at pursuing compliance. Caltrans is hopeful that this effort keeps up and that we do not return to a condition where Caltrans is having to constantly remind and force the contractor to implement BMPs that are either required by the approved SWPPP or otherwise necessary to provide the necessary containment measures.

Please give me a call so we can discuss the options and necessity of the road.
Office:(707) 925-6217 Cell: (707) 496-4096.

Sincerely,

SEBASTIAN COHEN
Resident Engineer

cc: Project Records 5.5
MCM/JHam
NRCO
TDavis
DStiles
DThomas

EXHIBIT

S

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 file 10.1

MERCER-FRASER COMPANY

General Contractors and Engineers
Since 1870
P.O. Box 1006, Eureka, CA 95502-1006
(707) 443-6371 Fax (707) 443-0277

May 8, 2008

MCM Construction, Inc.
Attn: Evan Paine
P.O. Box 620
North Highlands, CA 95660

Fax (916) 334-0562

Reference: Contract 01-397514, Confusion Hill

Subject: Backcharge Protest

Dear Mr. Paine,

Reference my letter dated April 17, 2008 and MCM's letter dated May 5, 2008. This correspondence is in protest to backcharges #189, 191 & 192. As explained in my April 17 letter, Mercer-Fraser Company will dispose of drill spoils from the Contractor's stockpile. We have always had men and equipment ready and on site to remove the drill spoils but your superintendent insisted that MCM would perform the spoils removal and backcharge Mercer-Fraser Company. We cannot be held financially responsible for your efforts to remove the spoils when your company would not let us perform. Additionally, per our subcontract, MCM owes Mercer-Fraser Company our contract price for all spoils removal, regardless of who performed the work. We consider the backcharges a violation of our subcontract.

Please call me at (707) 599-6365 if you have any questions.

Sincerely,
MERCER-FRASER COMPANY

Justin Porteous
Engineer

cc: Job File

EXHIBIT

T

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

INITIAL NOTICE OF POTENTIAL CLAIM

CEM-6201A (NEW 9/2002)

FOR STATE USE ONLY
Received By _____ Date _____
(For Resident Engineer)

TO	CONTRACT NUMBER	DATE	IDENTIFICATION #
Sebastian Cohen (Resident Engineer)	01-397514	June 13, 2007	NOPC #13

This is An initial Notice of Potential Claim for additional compensation submitted as required under the provisions of Section 9-1.04, "Notice of Potential Claim", of the Standard Specifications.
The act of the Engineer, or his/her failure to act, or the event, thing, occurrence, or other cause giving rise to the potential claim occurred on

DATE June 12, 2007

The particular nature and circumstances of this potential claim are described as follows:

Caltrans is directing additional SWPPP above and beyond the scope of the contract. While there are various circumstances and events leading up to this claim, the most notable as of late is the direction for additonal containment for sandblasting and welding. However, there has been some reference by Caltrans that their will be a forthcoming CCO 26 for the Pier 3 pour delay that occured over a month ago on May 2, 2007, but this CCO has yet to be issued. The direction not to pour was clearly additional SWPPP direction from Caltrans that is not consistent with the Contract.

Reference MCM letter dated June 13, 2007.

The undersigned originator (Contractor or Subcontractor as appropriate) certifies that the above statements a and attached documents made in full cognizance of the California False Claim Act, Government Code sections 12650 - 12655. The undersigned further understands and agrees that this potential claim to be further considered unless resolved, must fully conform to the requirements in Section 9-1.04 of the Standard Specifications and must be restated as a claim in the Contractor's written statement in conformance with Section 9-1.07B of the Standard Specifications.

MCM Construction, Inc

Subcontractor or Contractor

(Circle One)

(Authorized Representative)

For subcontractor notice of potential claim

This notice of potential claim is acknowledged and forwarded by

MCM CONSTRUCTION, INC.

PRIME CONTRACTOR

(Authorized Representative)

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 654-8410 or TDD (916) 654-3980 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento CA 95814

EXHIBIT

U

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

Flex your power!
Be energy efficient!

Date: 04/02/09

Contract: 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY - CONFUSION HILL

Mr. Evan Paine
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

RE: **Bridge Finish – Letter#140**

Faxed: (916) 334-0562 & mailed

Gentlemen:

As indicated in your last correspondence, dated March 17, 2009, your current plan to perform the necessary concrete finish work for Bridge No. 10-299 (South Bridge), such that the Contract Specifications are met and the appropriate appearance is achieved, is to provide access to the structure surfaces via a "snooper" style piece of equipment and conduct whip blasting operations. Although there are generally several methods for acquiring access and performing this type of work, the proposed method is considered to be a proven industry standard practice for achieving the required surface appearance. Per your Letter, the snooper will provide adequate and safe access, but will have limited load capacity, creating a situation where containment measures and a subsequent build-up of sandblasting waste material are limited.

It is understood that MCM has concerns about being able to perform the whip blasting operations efficiently and safely, and still contain large amounts of sandblasting waste. As indicated during other discussions, MCM feels that permitting agencies will interpret the existing permits as requiring complete and total containment of sandblasting waste, and will create a situation where containment costs become extreme. Specifically, MCM feels that the cost-effectiveness and/or the feasibility of BMPs are not taken into account.

As the finish work being planned is a standard practice in bridge building, the Department feels that performing this work is an activity that is covered in the approved Permits, and that development of BMPs that utilize common and standard methods or techniques are appropriate and expected by the agencies, and are therefore expected and required by the Department.

The fact that other projects at other locations around the State have implemented other BMPs, or in some cases, no BMPs, for similar types of operations, is not specifically relevant to this project and it's approved Permit(s). There are several factors, including permit language, experience of personnel, type of waste product, etc... which may have been different for the other projects. For this project, and for projects in our specific region, BMPs for sandblasting operations are considered standard are consistently required and implemented, as has been required for other sandblasting operations on this project.

The BMP must comply with the overall methodologies as described in the SWPPP document, and indicate what actions will be taken for the operation(s) being performed. The term Best Available Technology Economically Feasible, which is commonly referred to as BAT, is the standard that the BMP must meet. The position that every last grain of sand must be contained, or the permits are considered violated, is not a correct one. The agencies are aware that sandblasting operations are necessary on our projects, but they do consider the implementation of a BMP as a requirement.

Cost-prohibitiveness and feasibility are factors that are taken into account when dealing with impacts from construction activities and development of appropriate BMPs. The practicality of the BMP is a consideration. However, as has been stated many times before, not implementing and maintaining a BMP, simply because 100% of the waste material is not capable of being captured, or the fact that the BMP causes some inefficiencies to the contractor's operations, is not appropriate or acceptable, and would be considered a violation of the Permit.

Per the Department's interpretation, the Permits require that for any project activity, an appropriate BMP be developed; approved by the Engineer; included in the Project's SWPPP; and lastly must be implemented and maintained. The obvious first goal of any BMP is to prevent any impacts, if possible, and then to subsequently minimize any other non-preventable impacts. As has been discussed and described several times through the life of this project, requirements for BMPs are that they be effective to the maximum extent practical, not to the maximum extent possible.

Based on previous discussions, the main points that should be developed and conveyed in a BMP for the finish work are in the below bullets. Per the SWPPP, as required for previous sandblasting operations, a general or typical diagram with appropriate text describing what measures will be performed, with an appropriate section explaining the details of the BMP, is what is considered to be a minimum requirement. This document is considered to be an amendment to the SWPPP, and is appropriate to illustrate that Permit compliance is being taken seriously, and that the work being performed is in compliance with the SWPPP, and therefore in compliance with the Permits.

BMP Details Previously Discussed (provided for your consideration):

- Use of non-toxic materials. Note that if toxic materials are used in any type of work, the level of containment expected by all permitting agencies is drastically increased. When non-toxic materials are utilized, any justification and/or defensive position regarding potential impacts is substantially improved.
- Angling the nozzle to limit overspray, when possible. It is acknowledged that this is rather difficult, given the realistic need to angle the nozzle away from the person performing the whip blasting. Regardless, there are some situations where additional containment could be achieved via paying attention to the locations where overspray is being directed.

- Placing both or either horizontal and vertical barriers (filter fabric, visquine, plywood, etc....), when applicable, on the bridge or on the ground below, to first prevent and then subsequently to capture as much overspray as possible.
- Limit the work during high wind events, such that downwind migration of overspray material is minimized.

In general, as long as a practical BMP is developed; approved; implemented and maintained, The Department is confident that Permit compliance will be achieved.

As this work is planned to begin soon, the Department will perform a rapid review and return of the BMP after it is submitted. If you have any questions or comments, please give me a call.

Sincerely,

SEBASTIAN COHEN
Resident Engineer

cc: Project Records Cat 5,
DStiles

EXHIBIT

V

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

LADD AND ASSOCIATES GENERAL ENGINEERING CONTRACTOR

P.O. BOX 992750 REDDING, CA 96099-2750 530-241-6102 FAX 241-5492

Nov. 9, 2006

Mercer Frasier
P.O. Box 1006
Eureka, Ca 95502

Re: 01-Men-101-159.6/162.0
Contract 01-397514
Confusion Hill 101 Realignment

Re: Your letter of 11-09-06, regarding SWPPP issues

Attn: Justin Porteous, Mercer Frasier Project Engineer

Gentlemen:

In your letter of 11-09-06, you are specifically directing us to perform SWPPP operations. As you are aware, during bid time we submitted a sub-quotation to you that specifically included a price for SWPPP for our operations only (see attached bid proposal). Your company removed that item and other related SWPPP items of work from our scope of work at the writing of our subcontract (see attached final subcontract scope of work) and said that they would take care of all SWPPP on the project. Now you are telling us to take care of SWPPP issues that apply to our operations. This falls under your scope of work not ours. We had anticipated all weather operations and the resultant SWPPP required in our original quotation but it was removed from our scope.

We fully intend to cooperate and coordinate our operations with you so that the SWPPP impacts can be kept to a minimum. In regard to Issue #13 the areas involved are still active not idle. We are, as you know, trying to get the access established, excavating for the pier #2 and abutment #1, and stabilize the slide that occurred. All these activities involve stockpiling in the area mentioned and the area will remain being disturbed until these operations are completed. These are all contract items or required items of work that the SWPPP falls under your scope of work. The idea of a settlement basin might work as a temp bmp as well as silt fencing. When the access and the excavations are completed then temporary erosion control can be applied. The disturbed area here is 4.25 acres (1.72-hectares) well within the specifications. Issue #14 can be satisfied if the area around the Pier#3 South Bridge (Oak Tree) has temporary erosion control applied to it. Issue #18 involves MCM not Ladd, we had no involvement in the work platform work.

In regards to the Clearing and Grubbing operations, under Section 10-1.01, Order of Work, of the Contract Special Provisions, regarding work windows for cutting vegetation and performing clearing and grubbing operations, it states: "All trees and brush shall only be cut down from September 1st to February 1st of any year. This work window falls in the rainy season. Your statement that you did not anticipate clearing and grubbing operations in the rainy season is contrary to the specifications. Our

plan this year was to fall all the trees to get them on the ground so bird nesting could not take place. Also, to possibly clear enough of the upper cut areas to access the perimeter ditches for construction next year and to get access to Abt #4 of the South Bridge.

We are only trying to accomplish the work. We will minimize the impacts as much as possible and within specifications.

Sincerely,

Mark Christopher, Sr. Vice Pres

EXHIBIT

W

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 tiG 10.1

MERCER-FRASER COMPANY

General Contractors and Engineers
Since 1870
P.O. Box 1006, Eureka, CA 95502-1006
(707) 443-6371 Fax (707) 443-0277

August 29, 2006

MCM Construction
6413 32nd Street
North Highlands, CA 95660

CC: James H. 8/30/06
707 925 6096

Reference: Contract 01-397514

Subject: SWPPP Considerations

Sent Dewater Plan 8/31/06 ep

Dear Mr. Paine,

The Resident Engineer asked me, as the contractor's designated Water Pollution Control Manager, to attend a meeting concerning SWPPP issues this morning. I attended the meeting with the expectation that you, James Hamm, or other representation of MCM would be in attendance. Apparently, the State did not invite MCM personnel to the meeting with the understanding that I would represent the interests of your company; which I endeavor to do. I made a list of the points discussed, which I will itemize in this correspondence, but made no obligations on the part of MCM Construction or subcontractors. The following bulleted items comprise the key points discussed.

- The State exhibited frustration with MCM's cooperation with "house keeping" BMPs. Several State personnel (biologists, structures, inspectors, etc.) voiced concerns that MCM personnel have refused to employ appropriate BMPs when they point out what they believe are BMP deficiencies. Specifically, the State has photographs of minor equipment leaks and spills and produced photographs of spent welding rods on the gravel bar and areas surrounding the current trestle construction. In fact, they believe many used welding rods were discharged deliberately to contradict the wishes of the various State employees. The RE is concerned that MCM is not putting forth enough effort to appear in compliance with the various governing environmental permits and will attract undue attention to the project. They discussed when and under what conditions to issue a Stop Order if MCM fails to come into SWPPP compliance. No discussions of what specific actions MCM will need to take to avoid a Stop Order took place other than maintain a cleaner work site.

  My opinions are twofold: 1) daily SWPPP compliance issues should be brought to the contractor's attention from the inspectors and not from various other State employees, and 2) more visible house keeping BMPs (buckets for used welding rod, trash bins, removal of contaminated soil) would go a long way to relieving the heat from the whole SWPPP issue.

- Section 10-1.02 Water Pollution Control, Pile & Cofferdam Dewatering, of the Special Provisions requires a graphic depiction of how dewatering operations will

be performed. Please provide a brief narrative and graphic representation of your dewatering plan for inclusion in the SWPPP as amendment 1.

The general consensus is that MCM will place 6-foot diameter CMP into the water as a form for trestle footings. The inside bottom of the pipe will be lined with sandbags to minimize transfer of water across the CMP boundary. A tremie pour will seal the bottom of the pipe.

After much discussion, the RE suggested treating water in contact with concrete in the pipe with muriatic acid until the pH is below 8.5. The State will test the water with its calibrated pH meter. When the water pH is less than 8.5, the RE will allow the water to be discharged to the pier 2 shaft area or across the river to a desettling basin located at least 32 meters from the live stream. Also, the water may be removed from the pipe without any pH modification and used for dust control outside the 100-year flood elevation.

- The State is interested in acquiring the authorization to fuel equipment on the gravel bar. If MCM wishes to proceed with acquiring the authorization, the State recommends submitting the exact same BMP proposal to the RE as was proposed at your Van Duzen River Bridge project.

- The State requests manifests for shipping and disposal of contaminated material.

  I do not know the specification that requires the contractor to furnish manifests but I will investigate at a later date.

- The State will require a plan for handling of drilling spoils. Details of the requirements for the plan were not discussed.

- The State is concerned that sawdust and wood debris from trestle construction could fall into the South Fork Eel River. The RE recommends caution and diligent clean up of sawdust but will not require the operation of a vacuum during wood cutting and drilling.

If you have any questions, please contact me at (707) 599-6365.

Sincerely,
MERCER-FRASER COMPANY

Justin Porteous
Engineer

3-4" pump
HOG in channel

cc: Job File

EXHIBIT

X

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

28 file 8.0

STATE OFF CALIFORNIA-BUSINESS, TRANSPO ON AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

285 file 9.3

Attn: Rudy SDI.
faxed 408 281 9301 ✓
1:05pm
1/8/08

Flex you power!
Be energy efficient!

January 8, 2008

cc: S. Ham

Contract 01-397514
MEN-101-KP 159.6/162.0
REALIGN ROADWAY @ CONFUSION HILL

Mr. Evan Paine
MCM Construction, Inc.
PO Box 620
North Highlands, CA 95660

Faxed (916) 334-0562 and mailed

Dear Mr. Paine:

Bridge 10-300 Grouting Operation

Due to current methods being utilized; current weather conditions; and subsequent concerns regarding the quality of the product being provided, the immediate termination of grouting operations on this Bridge has been implemented.

The existing field conditions indicate that the grout tubes contain a substantial amount of water from ongoing precipitation events. During the current grouting operations being utilized, the vent tubes are spilling and depositing cementatious material onto the bridge deck and subsequently into "Water of the State", a definite permit violation. The lack of containment of cementatious material during grouting operations at the vent locations is unacceptable.

As you probably know, the ducts that haven't been grouted are completely full of water, which is out of compliance with Standard Specification 50-1.07. Your sub-contractor, Schwager Davis, has indicated that they believe it would be acceptable to displace the water during grouting. This will not be acceptable. The ducts will be free of water and debris prior to grouting in accordance with Standard Specification 50-1.09.

Furthermore, due to the submerged state of the tendons, proof shall be provided by MCM Construction that rusting of the prestressing steel is not occurring. Rejection of the tendons is eminent in accordance with Section 50-1.05.

Lastly, the grout pump used by your subcontractor has an oil leak that leaks continuously while the pump is running. This equipment must be repaired or removed and replaced prior to further grouting.

We are available to discuss this situation at your earliest convenience.

Items were addressed and verbal approval from Dan Stiles was given ~ 3:00pm to resume work. Last two tubes were grouted last night on the North Bridge 10-0300.

E Paine

RECEIVED TIME JAN. 8. 1:12PM

STATE OFF CALIFORNIA-BUSINESS, TRANSPOR ON AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
NORTH REGION CONSTRUCTION
PO BOX 699
GARBERVILLE CA 95542
PHONE (707) 925-6218
FAX (707) 925-6391

Flex you power!
Be energy efficient!

Bridge 10-300 Grouting Operation

Sincerely,

DAN STILES
Structures Representative

SEBASTIAN COHEN
Resident Engineer

cc: Project Records 5
OSC

RECEIVED TIME JAN 8 1:12PM

EXHIBIT

Y

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

MCM CONSTRUCTION, INC.
GENERAL ENGINEERING CONTRACTORS
SACRAMENTO, CA

Main Office
P.O. BOX 620 / 6413 32nd Street / North Highlands / CA 95660
(916) 334-1221 Estimating / Engineering FAX (916) 334-0562
Accounting FAX (916) 334-8355

Southern California Regional Office
P.O. BOX 867 / 19010 Slover Ave. / Bloomington / CA 92316
(909) 875-0533 Engineering / Accounting FAX (909) 875-2243

285 269.3

FAXED 408-281-9301

January 11, 2008

SCHWAGER DAVIS, INC.
198 Hillsdale Avenue
San Jose, CA 95136

LTR No. 285-141

Re: Contract 01-397514
Confusion Hill 101 Realignment
Job Performance

Attn: Guido Schwager/Rudy Schmidt

Gentlemen:

Reference the Caltrans letter dated January 8, 2008 that was previously faxed to you and the attached email from Caltrans dated January 9, 2008.

In addition to the attached, there have been numerous correspondences between, Caltrans, MCM and SDI regarding containment. When Mr. Schmidt attended the job meeting approximately two months ago containment was one of Caltrans main concerns. The events on January 8, 2008 nearly required a discharge report for the uncontained grout falling into the river which does nothing but cause discontent with Caltrans and the various agencies, not to mention legal and financial ramifications. This will not be tolerated. Efforts must be made to contain your grout especially when it comes to the Segmental Bridge.

Once the grout is contained it must also be properly disposed. Attached are several photos of your grout that was neither contained nor cleaned up. Proper containment of the grout will then only require minimal cleanup. As you have witnessed, not containing and cleaning your work areas could potentially suspend work. Attached also is a picture of strand left over from the North bridge. This material should also be picked and removed. Strand has been left at the South bridge for weeks. SDI has stated that they are making provisions to have dump bins and/or recyclers for this material. However, material containment and removal must be practiced daily throughout the remainder of the job. You are reminded of the required waste disposal and recycling report that I faxed you earlier per our Subcontract Special Provision 23.

Dealing with the SDI grout mess, the SDI left over duct and the SDI left over strand is SDI's responsibility. Our Superintendent, James Ham, has made numerous requests for SDI to manage this issue that has gone largely ignored until Caltrans nearly shut the SDI operation down. This type of performance during the Segmental construction will have severe consequences. Attached is a list documenting specific instances of questionable performance.

Attn: Evan Paine

1. Do not make any attempt to clean up or pick up trash and debris at north or south locations.

2. When asked to move equipment have a total misunderstanding of contract they think MCM is supposed to move rig tie down load on their truck and handle all their equipment and all their materials with out them even present on site.

3. They have Ben ask to clean up the site at north bridge since their work started their month ago but ignore to pick up their extra duct leaving it for MCM to pick up.

4. At south bridge there is stand lying all over the ground for over 4 weeks. They have Ben asked to pick it up.

5. Do not ever have the right material such as grout tubes and extensions to extend their vent tubes they made no attempt to contain their grout.

6. On North Bridge work was very sloppy excessive grout spilled all over top of back wall 5" deep and all over geo drain.

7. SDI has left the job numerous times with out clean up with out getting pre paired for next phase of their work with out communicating when they would be back or what they needed from MCM.

8. Extra work bill on at least 4 occasions they have signed them on site in front of us then ripped their copy up and threw it in trash can.

9. On January 2nd I James Ham had extensive conversations with foreman James and with Rudy about their responsibility to clean up job at 3:30PM I offered to SDI James that he could use our 3 dumpster only today because I did not have them full and they where scheduled to be picked up in the morning and because of vacation I did not have forces to fill them.

10. On Friday January 3, 2008 Rudy call 3 times to get the phone number from my assistant Ashley for the Dump company on Thursday I told James he could get the phone number off the dumpster themselves it is very apparent that SDI does not make any effort to help themselves or have any concept of their job or their responsibilities.

EXHIBIT

Z

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

Attachment K

Notice of Discharge, Written Notice, or Order

To: Sebastian Cohen Date: June 16, 2008

Subject: Notice of Discharge

Project Name: Realign Highway 101 and construct two bridges at Confusion Hill

Caltrans Contract Number: 01-379514

In accordance with the Caltrans NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Date: June 13, 2008
Time: Approximately 10:30 am
Location: South Fork Eel River below bridge no. 10-0299

Nature of the operation that caused the discharge

On the morning of June 13, 2008, the Contractor performed tendon grouting operations on the bridge deck of the Segmental Bridge (Southbridge). A small hole in the plastic inlet grout tube allowed a stream of grout approximately 7/16 to ¼ inch in diameter lasting approximately 10 to 15 seconds to discharge to the bar of the South Fork Eel River. Unknown damage occurred to the newly installed grout line form either a piece of equipment or other bridge building material and was not noticed prior to grouting operations began. The grouting operations were ongoing for several hours with no issue prior to the hole in the delivery line leak developed. Due to the high pressure in the grout delivery line; the small diameter and the alignment of the hole; due to the high winds and the approximate 260 ft height from the river bar to the bridge deck, a total discharge of approximately 3 to 5 gallons of grout material fell to the river bar below. Although the majority of the material fell to river bar that was immediately below the location of where the material left the bridge deck, because of high winds some of the material drifted in the wind and landed within the waters of the South Fork of the Eel River (SFER). Note that if the hole had developed on the underside of the grout line, and did not occur on the upside of the line, the leak would have been contained on the deck.

Initial assessment of any impact cause by the discharge

The grout discharge caused a large area of the river bar to be lightly covered in a spackling-like covering of grout. The area was approximately 50 ft x 75 ft with some area only being lightly covered. A small plume, approximately 1 to 5 foot wide immediately appeared along the edge of the river. The length of the plume was unrecorded, but appeared to be 100 to 200 ft in length at its maximum. The plume in the river was visually undetectable within under 25 minutes. The Contractor did not take Ph measurements, but Caltrans pH measurements concluded no detectable pH change as a result of the discharge. Pre- event / background pH measurements taken 3 days prior to the vent, as compared to immediately post event, and on one-hour intervals after the event, and as compared to readings taken several days later, all pH readings concluded in no detectable pH change. The pH range for all stated measurements was between 7.2 and 7.6 using paper pH sticks measuring devices. The Contractor immediately inspected the river bar, and within 30 minutes the grout on the rocks was dry and not capable of being washed or removed. Any mitigation regarding cleaning the grout off the river bar is pending input from appropriate resource / permitting agencies.

Existing BMP(s) in place prior to discharge event

The primary BMP employed prior to the discharge event was NS-13, "Material and Equipment Use Over Water," per the approved project SWPPP. Other primary and secondary protection measures, such as steel pump drip-pan containment; basic plastic or visquen liners; plastic bucket containment for outlet tubes venting; and placement of straw waddles and plywood barriers were also in place, but due to the high pressures of the grout tube the discharge sprayed up into the air and bypassed primary and secondary measures.

Date of deployment and type of BMPs deployed after the discharge.

Per direction from the State, the Contractor's operations were immediately halted and all BMP measures were reevaluated (BMP NS-13 plus other additional measures- per above statements). The Contractor has proposed new and additional improvements, as described in the next paragraph. These will be implemented.

The Contractor will remove gravel contaminated with grout, if and when governing agencies allow and/or require. Since grout is dry and inert, physical clean up could cause tubidity and more damage than if simply left alone.

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Several of the same BMP material items will be implemented, but in a different alignment/location/ such that in the case of line rupture, no grout will be allowed to discharge to the river below. The Contractor's measures include: visqueen under the inlet hose; fiber rolls or other obstacles along the edge of deck down gradient from grouting operations; plywood along the guardrail and over union locations where separation of the grout line could occur; lowering of grout pressure to minimize risk of line rupture; and increased replacement of plastic grout delivery line. In general, the Contractor

will be prepared for pressurized airborne grout, not only for gravity driven grout (leaks or spill from non-pressurized line).

Implementation and maintenance schedule for any affected BMPs

All BMPs will be implemented and maintained as detailed in the SWPPP. The SWPPP will be updated / amended accordingly. No grout work will occur until Caltrans approves the additional measures and allows the Contractor to implement/install the additional BMP measures and amend the SWPPP.

If further information or a modification to the above schedule is required, notify the contact person below.

Justin Porteous Name of Contact Person	Water Pollution Control Manger Title
MCM Construction, Inc. Company	(707) 599-6365 Telephone Number
Signature	6/16/00 Date

From: Kason Grady
To: Macedo, Julie
Date: 2/7/2011 1:22 PM
Subject: #2
Attachments: ConfusionHill-5.jpg; ConfusionHill-6.jpg; ConfusionHill-7.jpg; 6-13-08Grout -AttchK.tif; Picture-4.jpg; Picture-1.jpg; Picture-3.jpg

Julie,

Here is an email that I got from Sebastian re: #2 (Grout Spill)

Kason

==========

Mona & Kason- (I've sent it to both of you, as I'm unsure of Mona's e-mail)

Attached is an Attachment K for the grout spill that occurred on Friday. I was not on-site when it occurred, but the pictures definitely make it clear that the grout sprayed up in the air and fell to the bar below. Caltrans monitored the site and took pH readings at one-hour intervals. Given the pressure in the line; the small diameter of the hole in the delivery line; and the short duration before the pump was turned off, a total quantity of 3 to 5 gallons was estimated to have been discharged. The plume that developed along the bank was completely invisible within 20 to 25 minutes. The pH readings resulted in no change from pre-to during-to post event.

These pictures are from my staff. I have yet to get pictures from the Contractor.
I will have more info and pictures.

please call with any questions.....thanks

(See attached file: Picture-4.jpg)(See attached file: Picture-1.jpg)(See attached file: Picture-3.jpg)(See attached file: ConfusionHill-5.jpg)(See attached file: ConfusionHill-6.jpg)(See attached file: ConfusionHill-7.jpg)

(See attached file: 6-13-08Grout-AttchK.tif)

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
707-496-4096-cell

From: Kason Grady
To: Macedo, Julie
Date: 2/7/2011 1:17 PM
Subject: Re: Fwd:
Attachments: AttachK 001.jpg; AttachK 002.jpg; AttachK 003.jpg

Here's the Attachment K for #2. I have another email with photos from this event.

>>> Sebastian Cohen <sebastian_cohen@dot.ca.gov> 6/18/2008 7:01 PM >>>
Lets try this:

(See attached file: AttachK 001.jpg)(See attached file: AttachK 002.jpg)
(See attached file: AttachK 003.jpg)

I have yet to hear from my legal dept. Are we still on for the July 16th mtg in Santa Rosa? Last time we spoke it was either at 11:00 or 1:00?

Also- we will be starting to prepare for work within the river. We will be removing the foundations for the northbruidge falsework and the trestle. I have been working with MCM and our Bio regarding appropriate BMPs. We will be implementing much more significant (apprpriate BMPs) than what was done when the foundations went in. I have been told that I am to submit an Attachment K simply stating that since we will be starting this work, anticipated but insignificant impacts are expected (i.e, small sediment plumes from simply having bodies in the river placing the turbidity curtains and doing the work will cause impacts). i will send an attachment K tomorrow for this work. We have a bio monitor on-site for this work - as reqyuired.

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
707-496-4096-cell

"Kason Grady" <KGrady@waterboards.ca.gov>
06/18/2008 04:19 PM

To
"Sebastian Cohen" <sebastian_cohen@dot.ca.gov>

cc
"Dean Prat" <DPrat@waterboards.ca.gov>, "Mona Dougherty" <MDougherty@waterboards.ca.gov>

Subject
Re: Fwd:

I checked, and I am only able to view one page. Perhaps this is because the Attachment K was submitted in TIF format. Please resend just the second and third pages to keep the file size down.

>>> Sebastian Cohen <sebastian_cohen@dot.ca.gov> 6/18/2008 3:51 PM >>>
The BMP measures were / are simply more of the same except for implementation of a lower grouting pressure; implentaion of a stronger grout delivery line; placement of a horizontal barier that would encase any high pressure grout leaks. Better and more significant containment for any sudden grout leaks is what is being implemented, whether trhe laks be from a break in a line under pressure, or from a spill on deck. I had a mtg specifically with this sub and the prime prior to any grouting about the importance of grout control BMPs; the importance of proper maintenance and implementaion; and my staff has been on them fairly significantly. All was going well, but the freak leak is just that.

The grout that hit the rocks that can be seen in the photos is hard as a rock. Absolutely no cleanup was done. The prime wanted to go and clean-up all of the rocks that have grout on them, but we did not allow this as it was sure to cause more impact by going on the river bar and trying to clean dry, hard, inert grout. I told them that any clean-up orders would occurr after agency consultation. My staff says that the grout dried within several minutes, as the small driops on the rocks was thin. The grout is essentially concret waster with no aggregate, so once it is dried, it should be inert.

I e-mailed all three pages of the Attachment K. Please check again, and if you still only have one page let me know. I did not send in a hard copy, but I can. Let me know if that is needed. It was very slow to e-mail as it was very large and was kicked back a few times, both from you and from NMFS and CDFG.

Thanks.....

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
707-496-4096-cell

"Kason Grady"
<KGrady@waterboar
ds.ca.gov>

06/17/2008 02:50
PM

To
<sebastian_cohen@dot.ca.gov>
cc
"Dean Prat"
<DPrat@waterboards.ca.gov>, "Mona
Dougherty"
<MDougherty@waterboards.ca.gov>
Subject
Fwd:

Sebastian,

What are the revised BMP measures that the sub-contractor submitted? You should have secondary containment around all pressurized lines above the river before the contractor gets back to work. Is that what you mean by the BMPs installed for "a hole in the pressure line type leak?" Did the spill get cleaned up off of the gravel bar and river? How? The Attachment K that you sent us only contained the first page, can you send the second page too? Did you send in a hard copy?

Kason

>>> Mona Dougherty 6/17/2008 2:29 PM >>>

>>> Sebastian Cohen <sebastian_cohen@dot.ca.gov> 6/17/2008 10:35 AM >>>

Mona-

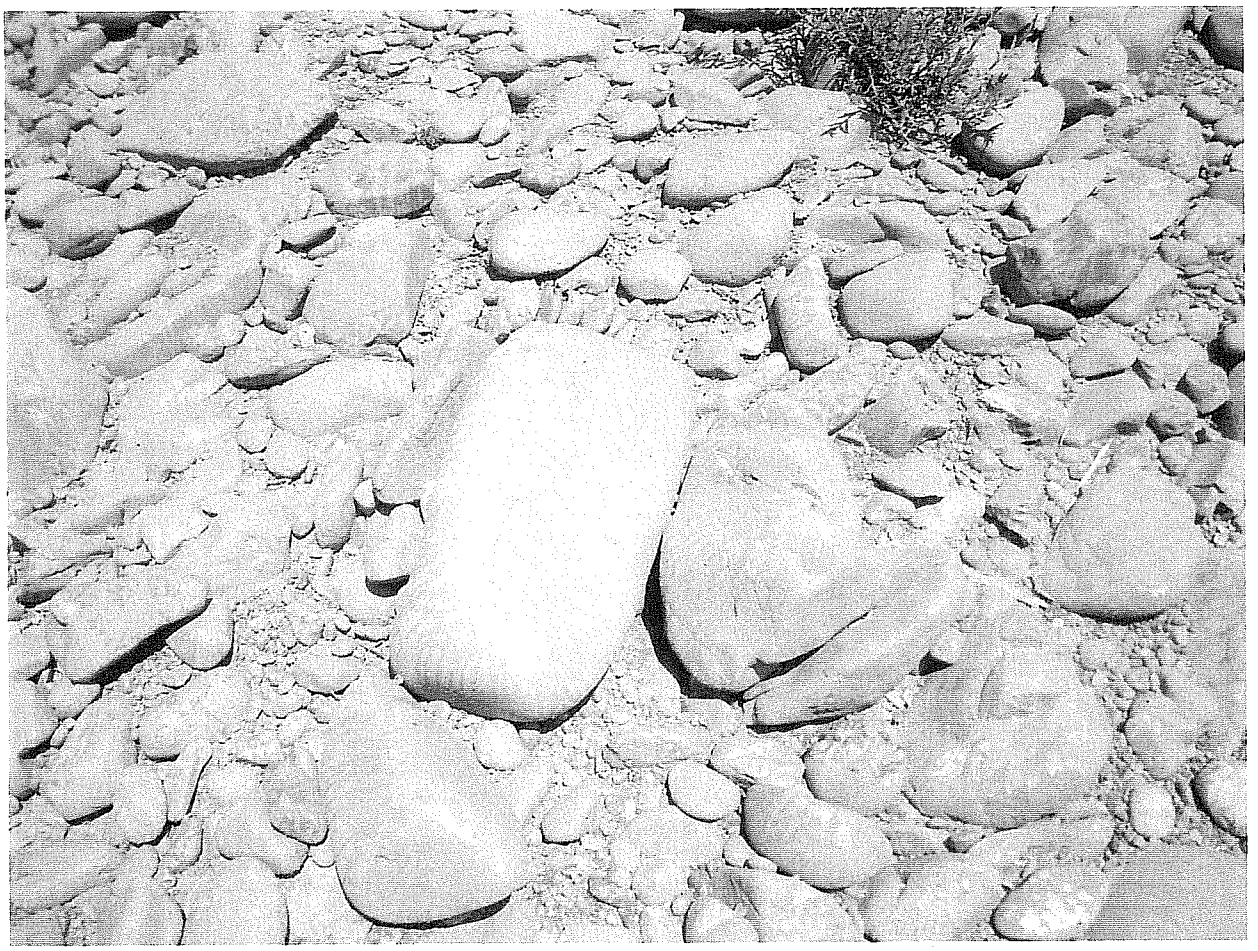
Just checking to make sure that you received the Attachment K. I am still not on-site, but I will have more pictures and info by COB today.

Also- The sub-contractor responsible for this issue has re-submitted additional BMP measures, and we will be allowing them to get back to work on the grouting tommorrow. There is only a couple days of grouting left. The grouting is for the void bewteen the 3/4" diamter steel tendon cables that post-tension the bridge and the 4" diamter CSP that is cast inside the bridge.

I will provide picture sof the grout equipment and all apparatus in action, with BMPs installed (both for a gravity leak and a hole in the pressure

line type leak).

SEBASTIAN COHEN, PE
Resident Engineer - Confusion Hill Realignment
District 1-Leggett
707-925-6217-office
707-496-4096-cell



EXHIBIT

AA

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONSTRUCTION SWPPP INSPECTION REPORT

01-397514
ER-37B3(004)E
MEN-101-159.6/162.O (KP)
REALIGN HIGHWAY WITH
TWO BRIDGES

☑ CT Construction Inspection Report

☐ Contractors Inspection Report

SWPP/WPCP Inspection Report		SWPP	Shift Hours:	R.E.	Sebastian Cohen
Report #		AML-66	07:00 to 16:30	Contractor:	MCM Construction
Day	Date	WD #	SWPP Compliance	Controlling Operation	Weather
Friday	01/09/09	960	YES	Wall 19+02	Clear

Type of Diary

☐ Prior to a Forecast Storm ☐ **CheckBox3**

☐ At 24 hour intervals during extended precipitation events

☐ CheckBox4

☐ After precipitation that can cause

☑ Routinely, at a minimum of once every week

Blank = No Inspection NC = Needs Correction, See Comments OK = Meets Standards N/A = Not Applicable

1	Sandbags, straw bales and silt fences placed and functioning properly?	OK
2	Erodible slopes protected with acceptable soil stabilization practices?	OK
3	Desilting basing functioning properly?	OK
4	Work areas, including equipment and storage areas, reasonably clean and free of leaks?	NC
5	Material stockpiles properly covered?	NC
6	Discharge points free of significant erosion, or sediment transport?	OK
7	Discharge points free of noticeable pollutants?	OK
8	BMPs installed per plan and specifications?	OK
9	Do any structural BMP's require repair or clean out to maintain adequate function?	OK
10	Construction on-site traffic routes, parking, and storage of equipment and supplies restricted to authorized areas?	NC
11	Are temporary soil stockpile(s) or construction materials in approved areas?	OK
12	Do any seeded or landscaped areas require maintenance, irrigation, fertilization, seeding or mulching?	OK
13	Is there any evidence of sediment wheel tracking on public roads at intersections w/site access roads?	OK
14	Is there any evidence of erosion in cut or fill slopes?	OK
15	Does SWPPP or WPCP require revisions?	OK
16	Illicit discharges by others reported to appropriate authorizes?	OK

Comments:
Note: Rain Gage indicates 84.16" to date (01-09-09). This week was cloudy and overcast through Thursday (01-08-09) with .59" accumulating during several light/mist rains. Friday is clear.

Route 271
Beginning north of the North Gate, Men. 271, the MCM storage areas are clean and BMP's (gravel bag check dams and rice straw covering exposed soils) are functioning. Mercer Fraser cleaned out the accumulated sediment in the ditches leading from upper Bear Pen Rd, as well as they cleaned out the settled material in the basins, ditches, and check dams. From the North Gate to the Contractors' Office Row the BMPs are functioning well and were also cleaned this week. The tannic acid coloration continues to leach out of the chips and discoloring the waters flowing to the Office Row DI. A Genset being work on by MCM mechanic is placed in a 'broken' containment vessel and needs to be corrected. The (3) Concrete Cement washout basins are 40% full of rainwater and concrete cement washout material accumulation. MCM has been removing water from the basins for disposal at Schendell. MCM has spilled some of this cementious water in the adjacent ditch and have been requested to remove the soil before the next rains and treat the soil as wash out material, i.e., dispose of at Snake Pit. The Men. 271 roadways, from the washout basins to Concrete Cement Batch Plant, is in good shape, except for the mass wasting occurring from the disposal pile immediately South of the Concrete Cement Batch Plant. However MF blew rice straw onto the exposed soils this week. The five sediment basins are controlling water/sediment that flows from the concrete cement batch plant area to Red Mountain Creek area. The two basins at the Batch Plant are 10% full of rainwater accumulation. MF pumped the basins out and hauled the cementious water to the Fortuna Plant.

Disposal Sites, Snake Pit, Bear Pen, and Schendel
Schendel Disposal area: Several rock/soil slips/mass wasting: The disposal pile is being relandscaped by LADD with a better rock buttress constructed at its base; the 'blue goo' slump along Men 101 was relandscaped by MF, seeded, and strawed. Runoff from these sites has been directed thru sediment basins and check dams.
Bear Pen Disposal Site is clean and secure.
Snake Pit Disposal Site is clean and secure, including the mass wasting on the south slope toward the Batch Plant – as already mentioned.

NORTH BRIDGE
Stockpiled material to the North has been partially uncovered by winds. LADD has been informed to reattach the tarps. The bridge deck has gravel bag check dams settling out sediment and these were cleaned out by MF during the week. The deck has been cleaned of soil and rock material and remains clean. Drainage at both ends of the north bridge is functional. The 3" minus rock wheel tracking prevention is functional.

THROUGH CUT AREA

This is 'W' line Sta 17+80 to 22+00. Temporary BMP's are in place in addition to Permanent Drainage Facilities. Slide #4 has been covered with straw and Jut Netting but has experienced movement during this week that is now rotating trees at the top and burying the straw and some of the Jute Netting. The Temporary Spoil stored in the W line

~ Sta 19+50 to 20+00 by Ladd and Associates from the excavating below Wall 19+02 is stable and non erosive at this time. The temporary fill/spoils is being stockpiled within the limits of the functional BMPs; BMP berms have been placed around the base(s) of the piles. The ongoing rock fall continues and is a safety concern at 'W' Line Sta ~18+00.

SOUTH BRIDGE

Pier #3 Side

This is the main work area with construction debris. Stored Styrofoam used in the North Bridge 10-0299 as backwall filler/expansion joints that was blown around the area has been picked up. The bridge deck is clean and secure.

Pier #2 side Br. 10-0299

Additional rice straw was blown over the entire area around Pier #2 from the bottom to the top. Blackwell Property is clean and secure. The grave creek sediment basin is functioning.

Route 101

The BMP's along the northbound shoulder near Wall 10+46,"W" Line Sta. W line Sta 10+00 to 12+00, are functional. The rock stabilization pad at W line Sta 10+00, for vehicle wheel cleaning, continues to function.

Men 101 PM 100.9 SB pullout /w K-rail encirclement, MCM Corp. Yard – has BMP's in place, yard is clean and secure. Pull out along Men. 101 NB, near PM 101.12, the additional BMP's added to established BMP's are working well, accumulating debris, sediment, and trash that comes off the well used (public and contractors) pull out.

Repeat:

The empty trash receptacles and the full trash receptacles continue to fill with rain water and attract Ravens. There is a lot of lunch/snack trash that either blows out or is picked through by the birds. The Trash Containers need to be emptied of both trash and water within (a maximum period) two weeks per WM-5, Construction wastes need to be removed from site every two weeks and shall not be located within 50' from drainage facilities, per CDFG Permit condition #18 Equipment must be moved away from the stream prior to fueling and/or service.

SEE INSPECTOR'S DIARIES FOR COMPLETE DETAILS OF CONTRACTOR'S OPERATIONS		
	Name: Jack Naylor	Title: ARE

EXHIBIT

BB

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 fi6 18. 2

Confusion Hill Project		Rainy Season Inspection Report	
CO-RTE-P.M.	MEN-101-99.2-100.7	Inspection Date	Wed, 2/25/09
Inspector	Cabe Silverhame, PG	Inspect Phone:	415.407.5744
WPC Proj. Inspector	Arvin Lal	WPC Phone:	707.496.4348
Weather Conditions	Cloudy, rain showers, cool, light wind	Last Rain Event	2/25/09

Notes : Photos from this inspection may be found on the BC file transfer site in the "CalTrans D1" folder, ftp://bc:bcftp@ftp.brwncald.com/ until 3/8/09.

SWPPP Observations and Recommendations

Abutment 1 South Bridge

[Observation] : Storm runoff from the south approach to the SB and the A...ment 1 area exhibits moderate turbidity as it leaves the drainpipe (Photo 001), but no turbidity is visible downstream at the cross-culvert invert (Photo 002, arrow shows flow direction).

South Bridge Deck

1. A significant amount of soil fines were left on the south end of the bridge deck over the weekend, resulting in some of the material being washed over the edge by heavy rainfall (Photo 003). In addition, a pile of refuse, some of which is susceptible to wind-carry, remained on the bridge near recent guardrail construction activities (Photo 004).

North End of South Bridge

2. A pile of sandblasting grit, previously noted on the 1/21/09 Inspection Report, has largely been washed off the bridge deck by precipitation (Photo 004). The remainder should be swept up and disposed of as construction debris as soon as practicable.

Peninsula Access Road

3. Several of the gravel bag check dams along the inboard flow line are damaged or filled with silt and should be restored (Photo 005, typ.)
4. Construction debris, including PVC pipe, filter fabric and a short section of drain pipe, have been abandoned near the northernmost retention basin on the Peninsula Access Road (Photo 008). This material has been at this location for several months, and should be cleaned up as soon as practicable.

[Observation] : The northernmost retention basin on the Peninsula Access Road is functioning as designed after several days of significant rainfall, with the water level well below the outlet (Photo 009, arrow shows outlet).

Pier 1 North Bridge

[Observation] : Stormwater runoff from the drainage BMPs in the Throughcut and adjacent to Pier 1 NB exhibits visible turbidity after several days of significant precipitation, but the resulting plume in the river is very localized, extending only several feet from the mouth of the drainage (Photo 010).

Snake Pit Disposal Area

5. The protective poly sheeting covering a stockpile of soil and cementitious debris near the crest of the Snake Pit Disposal Area has blown off (Photo 012) and needs to be reinstalled.

Month End Report of Unresolved SWPPP Observations

Confusion Hill Project — February 2009

✓	Item	Date	Location	Description	Age	Priority
	2	1/28	NE of Abutment 4 SB	Various items of construction waste, including Styrofoam®, poly sheeting and plastic refuse are in the natural forest area immediately northeast of Abutment 4.	31 days	Medium
	1	2/2	Highway 271 North of Bear Pen Undercrossing	A new pile of mixed construction debris and refuse has been dumped next to the former scrap lumber pile on Highway 271.	26 days	Mediu[redacted]
	2	2/2	Highway 271 at Construction Field Trailers	A spill of lubricant, fuel or hydraulic fluid is on the ground at the north end of the construction field trailers and immediately south of the roll-off dumpsters.	26 days	Medi[redacted]
	1	2/9	Highway 271, Three-bay Concrete Washout	Waste poly sheeting and waste filter fabric have been present on the north and south sides, respectively, of the three-bay concrete washout for at least several weeks.	18 days	Low
	1	2/12	Pier 2 South Bridge	Several pieces of scrap lumber are abandoned along the access road near Pier 2 SB.	16 days	Low
	2	2/12	Highway 271 North of Three-Bay Concrete Washout	A pile of mixed construction debris, including lumber, Styrofoam, fabric and plastic, has been placed on the easterly side of the roadway.	16 days	Medium
	1	2/17	Base of Abutment 1 South Bridge	Several storage boxes for concrete test cylinders have been abandoned at the base of the South Abutment of the SB between the retention basins and the access road to Pier 2 SB.	11 days	Low
	4	2/17	Schendel Disposal Area	Build-up of alluvium behind several of the straw bale check dams along the access road to the Schendel Disposal Area is diverting stormwater flow around the dams.	11 days	Medium
	2	2/25	North End of South Bridge	A pile of sandblasting grit, previously noted on the 1/21/09 Inspection Report, has largely been washed off the bridge deck by precipitation. The remainder should be swept up and disposed of as construction debris as soon as practicable.	3 days	H[redacted]
	4	2/25	Peninsula Access Road	Construction debris, including PVC pipe, filter fabric and a short section of drain pipe, have been abandoned near the northernmost retention basin on the Peninsula Access Road.	3 days	Low
	1	2/27	South Approach to South Bridge	A new stockpile of soil and rock has been placed on the easterly side of the approach road, and should be protected from stormwater impacts.	1 day	Medium

Statistics

Observations This MONTH	Corrected this Month	Percent Corrected	Carryover Items
34	25	74%	1
Observations This YEAR	**Corrected this Year**	**Percent Corrected**	**Carryover Items**
63	52	82%	1

EXHIBIT

CC

Declaration of Julie Macedo

Prosecution Team Case-in-Chief
Confusion Hill Bypass Project

285 fi6 18.2

Confusion Hill Project — Rainy Season Inspection Report

CO-RTE-P.M.	MEN-101-99.2-100.7	Inspection Date	Mon, 1/12/09
Inspector	Cabe Silverhame, PG	Inspect Phone:	415.407.5744
WPC Proj. Inspector	Arvin Lal	WPC Phone:	707.496.4348
Weather Conditions	Clear, mild, calm	Last Rain Event	1/8/09

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SWPPP Observations and Recommendations

Former Mulch Storage Area along Highway 101

1. A small log has damaged the silt fence portion of a straw bale/silt fence retention basin near the center of the former mulch storage area (Photo 003), and this water velocity and sediment control feature should be repaired.

North End of South Bridge

2. The drip containment BMP beneath a diesel-fueled generator parked on the north end of the SB is substandard and provides inadequate drip protection (Photo 004). A drip pan or a properly installed poly sheeting apron should be substituted.
3. Several small spills of what appears to be hydraulic fluid were observed on the bridge deck near the north end of the SB (Photos 005 and 006). The spills should be mitigated by application of absorbent granules, then swept up and placed in a proper disposal container.

South End of Throughcut Retaining Wall

4. A partially-filled five-gallon container of lubricant and several one-gallon containers of other hazardous substances are improperly stored with no spill protection or secondary containment at the south end of the Throughcut retaining wall (Photo 007).

Resolution of Prior SWPPP Observations

Highway 271, Mechanic's Work Area

Item 2 – 1/8/09 : Two one-gallon containers of antifreeze that were improperly stored on a plank atop two 55-gallon drums have been moved or utilized.

Schendel Disposal Area

Item 4 – 1/5/09 : The sloughed soil from several adjacent surficial cut slope failures that occurred near the entry to the Schendel Disposal Area has been removed, and the cut slope angle has been slightly reduced (Photo 001). Additional stabilization is pending.

Item 5 – 1/4/09 : Debris from the recent shallow slope failure that occurred on the westerly slope of the Schendel stockpile has been cleaned up from the roadway, and the ditch lines have been re-established (Photo 002). Additional stabilization of the scarp is pending.