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STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of: ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R1-2012-0034 (REGIONAL WATER QUALITY CONTROL BOARD, NORTH COAST REGION)	**PETITION FOR REVIEW**

I. INTRODUCTION

MCM respectfully petitions the State Water Resources Control Board to review the March 15, 2012 Administrative Civil Liability Order of the North Coast Regional Water Quality Control Board ("Regional Board"). The Order is not supported by the evidence, or by the plain terms of the Section 401 water quality certification ("Certification"), and establishes precedent that will significantly increase the costs and uncertainty of construction in this state.

The Regional Board issued the Certification to approve a major highway and bridge construction known as the Confusion Hill Bypass Project. The project involved the construction of two bridges across the South Fork Eel River to circumvent a failing section of Highway 101 in Mendocino County. The Regional Board issued the Certification after the California Department

of Transportation ("Caltrans"), the lead agency, approved the project and adopted mitigation. The Certification was brief for a project of this scope. It comprised only nine pages and contained 20, largely boilerplate, conditions.

The Certification, by its nature and its terms, allowed Caltrans and its contractors to select appropriate best management practices ("BMPs") to protect water quality, and did not specify what BMPs should be selected. Caltrans' primary contractor, MCM Construction, is an experienced bridge builder and has constructed hundreds of bridges in the state, including in the North Coast Region. Caltrans and MCM applied their combined experience and devoted a considerable effort to the BMPs for the project. MCM testified that more resources were devoted to BMPs than any other project in the company's history.

The bridges, completed in July 2009, are a major achievement. The bridges have won accolades for their design and appearance. More importantly, they allow Highway 101 – a major transportation corridor and known as the "lifeline" of the North Coast region – to remain open year-round by rerouting the highway around an unstable section that slid regularly each winter, cutting off access to the North Coast region. Most importantly, the bridges were completed after three years of successful construction that ended without any major spills, upsets or adverse impacts to the Eel River's water quality or beneficial uses.

As construction concluded, however, Regional Board staff members were already pouring over thousands of pages of Caltrans' engineering logs, biological monitoring reports, notes, memoranda, correspondence and photographs, for what only can be described as any shred of evidence that the construction process did not conform in any conceivable way with staff's expectations regarding what the Certification required.

The resulting Administrative Civil Liability Complaint ("Complaint") alleged 296 violations of the Certification and Caltrans' Storm Water Permit, for a total proposed civil liability of $1,511,000. The Complaint embraced a liberal, "anything goes" approach to identify violations, rather than judiciously parsing the facts, or alleging violations based only upon substantial and credible evidence.

MCM appreciates the efforts made by the Regional Board to address the Complaint's

overreaching. The Order eliminated many alleged violations, and reduced the civil liability to a total of 42 violations for $405,000 (to this, the Order added staff costs of $70,182). Ultimately, however, the manner in which the Order interpreted the Certification still presents an untenable precedent for California builders on future projects.

The Certification, in this regard, was a highly generalized document. It contained "boilerplate" language that could be used interchangeably with other projects, and virtually no specific guidance for how construction must proceed or what BMPs were to be used. The nature and terms of the Certification left it to Caltrans and its contractors to exercise their professional judgment. Now, after construction has ended, the Regional Board staff has interpreted the terms of the Certification in ways not supported by its plain terms, that precludes the exercise of Caltrans' professional judgment, and which could not have been reasonably foreseen by Caltrans or its contractors.

Caltrans and MCM, like others in the California construction industry, require consistency in the interpretation and application of regulatory requirements. The Order prevents consistency by allowing after-the-fact interpretations of Section 401 conditions that deviate from their terms. The wasteful effects of this process have been felt by all concerned in this case. By February 2011, months before even the initial hearing, the Prosecution Team[2] claimed in written declarations to have spent 980 hours on this proceeding. In the time since, there have been two hearings, pre-hearing meetings, evidentiary rulings, and the time devoted by the Regional Board to sort through it all. There can be no doubt that collectively among the parties, there have been thousands of man-hours and hundreds of thousands of dollars spent on this proceeding. The Petition is to ensure that this process is not repeated.

II. ACTION SUBJECT TO REVIEW

The action subject to review is Administrative Civil Liability Order No. R1-2012-0034 ("Order"). The North Coast Regional Water Quality Control Board issued the Order on March

[2] The proceeding involved the typical separation of functions within the Regional Board's staff to ensure due process. The "Prosecution Team," tasked with prosecuting the Complaint, was comprised of one set of Regional Board attorneys and staff members, while the "Advisory Team" was a different group of attorneys and staff members which evaluated the allegations and advised the Regional Board members.

15, 2012. All substantive issues and objections raised in this Petition were raised before the Regional Board.

III. MANNER IN WHICH PETITIONER IS AGGRIEVED

MCM Construction is aggrieved because it may, based on its contractual relationship with Caltrans, be required to pay some part of any civil liability imposed on Caltrans. MCM also is aggrieved because the manner in which the Certification was prepared, interpreted and enforced would, if repeated for other projects, significantly increase the cost and risk of construction in this state without any corresponding environmental benefit.

IV. BACKGROUND

Because the administrative record has not been fully compiled, citations in this Petition refer to the individual document by title.

The Confusion Hill Bypass Project was the permanent relocation of Highway 101 from the east side of the South Fork Eel River to the west side, in Mendocino County. Relocation was necessary due to an ongoing Highway 101 landslide. The former highway alignment passed through an ancient but active landslide.

Slides and debris flows frequently closed this segment of Highway 101. During the 2002-2003 winter season, for example, the highway was closed on ten occasions due to slides or safety concerns. Closure meant a 250-mile detour to connect the North Coast region with areas to the south because Highway 101 was the only major north-south corridor. The Environmental Impact Statement ("Final EIS") estimated that closure would cost millions of dollars each month in delays, vehicle costs, and economic hardship. (Final EIS, p. vi.) The bridges were therefore listed as an "emergency" project and built on an expedited schedule. (Application, p. 1.)

The project involved the construction of two large bridges spanning the South Fork Eel River canyon and a new section of highway to link the new bridges. The south bridge is a 1,355-foot long, cast-in-place, pre-stressed box girder structure spanning 225 feet over the center of the river. The north bridge is a 580-foot long, pre-cast, box girder structure, with foundations 150 feet over the river. Both bridges were designed with piers that fully spanned the 100-year floodplain to avoid permanent impacts to the South Fork Eel River.

Construction was subject to a labyrinthine and overlapping group of permitting documents. Caltrans' construction was subject to a statewide NPDES permit (Order No. 99-06 DWQ). The permit required the use of best management practices ("BMPs") meeting the "best conventional technology" standard for conventional pollutants (such as sediment) and the "best available technology" standard for toxics pollutants. (Application, p. 5.) Additionally, Caltrans was subject to an NPDES permit for "Discharges of Storm Water Associated with Construction Activities" (Order No. 99-08-DWQ). This permit required a Storm Water Pollution Prevention Plan ("SWPPP") and the use of construction BMPs to protect water quality. (Application, p. 5.) Caltrans has adopted and maintains a march 2003 Construction Site Best Management Practices Manual ("BMP Manual") that lists numerous approved BMPs to be applied under both permits. Some approved BMPs were used to support the violations here.

The Certification represented an additional layer of requirements. The Regional Board issued the Certification on February 16, 2006, based on information that Caltrans had provided to the Regional Board in a December 15, 2005 application ("Application"). The Application listed a number of specific BMPs that would be used, and stated that Caltrans also would be following its BMP Manual and the approved BMPs listed there for sediment and turbidity. (Application, p. 13.) The Certification incorporated these BMPs via Condition 17, which stated: "All activities, BMPs, and associated mitigation will be conducted as described in this Permit *and the application submitted by the applicant for this project*." (Emphasis added.)

It was no surprise that construction would occur in the river channel itself. The Application was clear that activities in the South Fork Eel River would include the installation of temporary trestles, i.e., temporary platforms designed to accommodate heavy equipment such as cranes, or support the bridge falsework. Temporary trestles in turn required numerous piles to be placed in the river channel to serve as foundations for the trestles. Constructing the foundations usually meant placing coffer dams in the active river and dewatering the coffers, as described in the Application. The Application also stated that a number of vehicle crossings over the river would occur. (See Application, pp. 5-10.)

There also was no question that increased sedimentation and turbidity would result from

construction. The Final EIS for the project stated that vehicle crossings in the river, pile driving and other work in the river would generate "temporary adverse impacts to water quality." (Final EIS, p. 68.) The Application was also straightforward that construction would cause "temporary increases in turbidity." (Application, p. 8.) The Application, accordingly, stated that BMPs to minimize temporary impacts would be used.

As mitigation for these impacts, Caltrans paid compensation by funding a habitat improvement project. The Certification described the mitigation: "To compensate for potential impacts to salmonids as a result of the Confusion Hill Bypass construction activities, the applicant will fund a project to improve fish passage through the culvert at Red Mountain Creek," which was near the construction site. (Certification, p. 4; see also Application, pp. 13-14.) The cost of the mitigation to Caltrans is estimated to be over $450,000.

Bridge construction commenced in June 2006 and continued over a three-year period to July 2009. During construction, Caltrans and MCM made certain changes to the original design that served to reduce the level of impacts below even what was contemplated in the Application. For example:

- The construction process used far fewer temporary piles than outlined in the Application, by using heavier footings for the temporary trestles. The Application described up to 50 temporary piles in the live stream, involving over 4,200 cubic yards of concrete. As built, only six piles were installed using 12 cubic yards of concrete.

- The original plans contemplated that an access road would be built down into the river channel to allow equipment to enter and exit the work area. The access would have required a 25-foot wide earthen ramp, over 1,100 cubic yards of earth, and the removal of mature trees and riparian habitat. Caltrans and MCM avoided the ramp, and the associated impacts, by instead using a crane to lower and raise equipment to the work area from the trestle deck. MCM's June 23, 2011 visual presentation (hereinafter, "Visual Presentation") illustrates this use of the trestle deck on slides 18-19.

The construction ended without major operational upsets or unexpected impacts to beneficial uses, and ultimately, the impacts were successfully limited to temporary increases in

construction-related turbidity.[3] Moreover, due to the changes made, the degree and extent of impacts was significantly less than what was envisioned when the project was approved.

In August 2009, the Regional Board presented Caltrans with the Administrative Civil Liability Complaint. The Complaint alleged 296 separate violations of the 401 Certification and the Storm Water Permit, and sought a total of $1,511,000 in civil liability. For reasons not made entirely clear by the Prosecution Team, the period of liability spans only the first building season beginning in the fall of 2006, although the Prosecution Team hinted in the June 23, 2011 hearing that a future administrative civil liability complaint could be issued for later periods of the construction.

On June 23, 2011, the RWQCB conducted a full-day evidentiary hearing, with presentations from the RWQCB Prosecution Team, Caltrans, and MCM. On February 15, 2012, the RWQCB distributed a draft Order for review. Caltrans, MCM, and the Prosecution Team each submitted written comments on February 29, 2012. After a series of revisions, the Regional Board formally adopted the Order on March 15, 2012.

V. WHY ACTION IS INAPPROPRIATE OR IMPROPER

This Petition is organized to track the categories of violations in the same general sequence as presented in the Order.

1. Construction Dewatering Violations (Category "A")

The first category of administrative civil liability, Construction Dewatering violations, asserts that Caltrans violated the Certification by using portions of the gravel bar adjacent to the Eel River for construction dewatering.

As follows, the Certification, by its terms, permitted the use of dewatering basins on the gravel bar, and Caltrans and MCM had a reasonable expectation that the activity was permissible under the Certification. The Order adopts an interpretation of the Certification that not only is

[3] The Order suggests that beneficial uses may have been impacted by the use of a sedimentation basin for construction dewatering because two yellow-legged frogs and one pikeminnow in that basin might have been lost or displaced. (Order, p. 8.) Before the June 23, 2011 hearing, however, staff testified in deposition that they knew of no impacts to wildlife. The Order also states that the frogs were lost as a result of rock debris, not from dewatering. (Order, p. 8.) In any event, it is clear that impacts to aquatic life were not a major factor in the calculus to pursue civil liability.

irreconcilable with its plain terms, but also puts certain provisions in direct conflict.

Dewatering basins were a key component of the construction process. The project allowed up to 50 excavations in the river channel to install temporary foundations to support the bridge falsework and trestles. (For foundations in the wetted river, it was necessary to pump water from the excavations before installing the foundation. Caltrans was not permitted to pump water directly into the river because the water was often turbid from disturbing the silted river bottom. Instead, water was sometimes pumped (or "dewatered") to a sedimentation basin on the gravel bar known as "Isolated Pool B." Isolated Pool B was set apart from the wetted river on a dry portion of the gravel bar where it intersected the canyon wall.

Only one condition in the Certification expressly mentions dewatering, Condition 12, although the Order found that dewatering was controlled by four different conditions, numbers 7, 9, 12 and 17. These conditions, quoted below, allow construction dewatering where appropriate BMPs are used, but do not specify where dewatering must occur other than water may not be disposed of to "surface waters":

Condition 7 provided:

> 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.

Condition 9 provided:

> 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.

Condition 12 provided:

> 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)...

Condition 17 provided

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

The Application, in contrast to the general terms of the Certification, provided exactly how construction dewatering would occur. The Application stated that construction dewatering would take place on portions of the gravel bar:

> Project specifications developed for this project will prohibit any direct discharges to the SFER and/or its tributaries for construction de-watering activities. ***It is proposed to utilize portions of the gravel bar for construction de-watering during the dry season. Temporary sedimentation basins would be located a minimum of 100 feet from the live stream channel.***

(Application, p. 9, emphasis added.)

This specification was incorporated within the Certification through Condition 17, which required compliance with all "activities" and "BMPs" in the Application. Thus, under Condition 17, this part of the Application was made a requirement of the Certification. The use of Isolated Pool B also was fully consistent with conditions 7, 9 and 12. Under Condition 9, using the gravel bar was "authorized by this permit" because it was authorized under Condition 17. Using Isolated Pool B was consistent with Condition 7 because the basin was a "BMP[] for sediment and turbidity control." Under Condition 12, dewatering to the dry gravel bar was "land disposal," not disposal to "surface waters," and therefore allowable. Thus, the use of the gravel bar for construction dewatering complied with all of the pertinent conditions.

The Order mentions a number of reasons for why dewatering on the gravel bar was not permitted, but none fit the language of the Certification.

First, the Order states, incorrectly, that Condition 12 prohibited dewatering to "waters of the state." (Order, p. 7.) The term "waters of the State" does not exist in Condition 12, however. Condition 12 prohibits only discharges to "surface waters." "Surface waters" is not defined in the Certification nor has the Regional Board provided any accepted definition for that term. Based on Webster's dictionary definition of the term "surface" ("...the exterior or upper boundary of an object or body [on the *surface* of the water]..."), the phrase "surface waters" logically and rationally means only waters which are present and have a surface, which does not include a dry gravel bar.

Second, the Order asserts that Condition 9 "prohibited any discharge of waste to waters

of the state not authorized by the permit." (Order, p. 7.) For the reasons just explained, however, dewatering to the gravel bar was authorized by Condition 17, which incorporated the terms of the Application. As between Condition 17 and other conditions, Condition 17 took precedence under the well-established legal rule that, as between general and specific requirements, specific provisions take precedence over general ones. (See *Singh v. Superior Court* (2006) 140 Cal.App.4th 387, 399.) Because Condition 17 is the most specific direction as to where dewatering would occur, it takes precedence over other conditions.

Third, the Order indicates that Condition 7 was not satisfied because it required "[a]dequate BMPs for sediment and turbidity control." This overlooks the fact that Isolated Pool B was itself a BMP that provided sediment and turbidity control. Isolated Pool B was placed 70 feet from the river in a lateral direction and 137 feet from the river measured downgradient, as shown by MCM at the June 23, 2011 hearing. (Visual Presentation, Slide 5.) MCM submitted testimony from a certified hydrogeologist that this location was sufficiently far from the river for Isolated Pool B to function as an effective BMP. (Transcript, 216:18-217:23.)

In this regard, the Order indicates that the Certification prohibited the use of Isolated Pool B because it was not a minimum of 100 feet from the active river, pursuant to the Application. Such heavy reliance on this minimum distance is unwarranted. There were no specific technical reasons supporting this minimum distance; the Application merely assumed that it was possible to put a basin on the gravel bar at least 100 feet from the river. Because the width of the canyon did not allow it, MCM testified that Isolated Pool B was placed as far from the river as possible. (Transcript, 215:17-216:11.) The Regional Board's staff also testified in deposition that the 100-foot distance was not critical and the Certification would have issued even if the Application said the basin would be a minimum of 70 feet from the river rather than 100 feet.

> Q. A few minutes ago we talked about isolated Pool B. I have a couple of questions about that. If I understood your testimony right, you said that there's nothing special about the 100-foot distance that was included in the Application here. That was what Caltrans included in the Application and the Board approved it; is that right?
>
> A. Yes.

Q. And you, also, mention that the Regional Board, in all likelihood, have approved shorter distances than 100 feet in other situations?

A. Yes.

Q. Knowing that there's nothing special about the 100 foot distance here, and also knowing that the Board has probably accepted less than 100 feet in other situations, if, back at the time of the Application, Caltrans would have said: "The furthest we could put away a basin within the gravel bar in the work area is 70 feet," would there be any reason, from your standpoint, to disapprove that request?

A. No.

(Transcript of Deposition of Dean Prat, 53:24-54:19.)

The most basic problem with the Order, however, is that if the Certification was meant to prohibit any dewatering on the gravel bar, it could have clearly stated that in the Certification. Instead, staff made no effort to expressly bar the activity, even though the Application read by staff reflected Caltrans' clear plans to use the gravel bar for dewatering.

This exemplifies the problem with the Order. The Certification appeared to allow Caltrans and its contractors to engage in activities that are typical of the construction process, and the Regional Board has interpreted the Certification in ways that improperly withdraws such authorization after the construction has been completed.

2. Leaky Equipment (Category "B")

The "Leaky Equipment" violations hold Caltrans to requirements that do not appear in the plain language of the Certification. These violations are based on the Regional Board's opinion that Caltrans did not maintain equipment in an acceptable manner to prevent fluid leaks, notwithstanding that for most of these violations no fluid discharges were proven.

The Order relied on two provisions of the Certification, Conditions 9 and 13. Beginning first with 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.

The issue before the Regional Board was whether this provision was violated despite that, for three of four of the violations in this category, fluid leaks were immediately caught or captured by BMPs before any discharge to the river or ground occurred. The three events were:

- On October 6, 2006, biological monitoring notes indicate that no discharge occurred and that BMPs (absorbent materials, plastic tarps, etc.) captured fluids.
- On October 27, 2006, biological monitoring notes contain general criticism of equipment maintenance but reveal no discharges.
- On November 3, 2006[4], Caltrans' records observed that BMPs were being used and again did not record any discharges.

MCM asserted at the hearing that where tarps, sheeting or similar BMPs prevent a fluid leak from discharging to the ground or river, no violation of Condition 9 exists. This is because fluids have not been "allowed to enter into" waters of the State, nor have they been "placed where it may be washed by rainfall" into waters of the State because tarps, etc., are routinely disposed of. It must be noted that the Regional Board staff agreed with this precise interpretation while testifying in deposition:

> Q. So if the leak is captured so to speak through the use of BMPs, is that a condition that would violate the certification?
>
> A. If it is indeed a BMP, then – you know, it's difficult to answer a hypothetical not looking at a specific situation, but in general, the purpose of BMPs is to protect the water quality objectives, and if it is functioning properly, then the water quality objectives have been protected, and it would have prevented this, a discharge.
>
> Q. So if I can correctly describe your answer, is it your testimony, then, that if equipment leaks but that leak is completely captured through BMPs, then there is no violation of the certification?
>
> A. Correct.

MCM therefore submits that it was error for the Order to conclude that Condition 9 is violated where equipment fluid leaks are immediately caught or captured by BMPs, because the

[4] The date in the Proposed Order is incorrect. The November 3 event was listed as November 6.

interpretation is not supported by the plain language of Condition 9.

Next, the Order relied on Condition 13, which provides:

> 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.

The Order assumed that Condition 13 was violated where Caltrans or its contractors poorly maintained equipment. This does not fit with the plain language of Condition 13. Poor maintenance is not synonymous with a "threatened" discharge, and nothing in Condition 13 allows a post-project critique of equipment maintenance practices where no discharge is involved. The statement in Condition 13 that prohibits equipment that "leaks any substance that may impact water quality" must also be interpreted in light of the reality that fluid leaks from heavy construction equipment are unavoidable. This was established by MCM's expert testimony. (Transcript, 235:15-236:10.) A contractor acts responsibly and reasonably by ensuring that additional BMPs are in place (such as plastic sheeting, spill kits, absorbent materials, etc.) to capture any leaks that may occur, which occurred here.

Even if the Certification could support a violation based upon poor maintenance, the evidence does not establish that there was a "chronic problem" with maintenance. (Order, p.14.) Such a finding typically requires specialized knowledge which is the realm of expert testimony. No expert testimony, declarations or reports, of any type, were offered to support these violations. Rather, this element of the Order is based on notes written by the biological monitors assigned by Caltrans to the project.

For several reasons, the biological monitors' notes do not constitute "credible" or "reasonable" evidence to support the finding that a chronic problem existed with equipment maintenance. (*Order No. WQ 85-7 (Exxon, Co., U.S.A.)* ["There must be substantial evidence to support a finding of responsibility... This means credible and reasonable evidence which indicates the named party has responsibility"].)

First, the Order gives the biological monitors' notes the force of expert opinion without

any showing that the biological monitors possessed expert qualifications. There is no basis in the record to suppose that these individuals were trained, experienced or versed in heavy equipment in any way to qualify them to offer a credible opinion on the quality of equipment maintenance. As such, it was inappropriate for the Order to afford their opinion statements such weight.

Second, such heavy reliance on the biological monitors' written notes violates due process because such individuals were not present at the hearing, there was no opportunity for cross-examination and they did not provide any statements or affidavits. The right to cross-examination is a primary tenet of due process that was not given effect here. In light of the heavy reliance on the notes to demonstrate "chronic problems" (Order, p. 14) with equipment, it was error for the Regional Board to accept these opinions statements without the biological monitors being available for cross-examination.

Third, the Regional Board improperly ignored testimony from MCM which rebutted the allegations of poor maintenance. MCM testified that in light of the sensitivity of the site, MCM took an unprecedented step of having a full-time mechanic at the site to keep equipment in good working order, and other precautions such as daily equipment checks and removing equipment from the site when appropriate:

> Q. ...There are two Caltrans Standard BMPs that apply here. One is NS13, which says basically to follow NS10, and if leak in line can't be repaired, move equipment from over water. NS10 says, essentially, to inspect vehicles each day of use, repair problems immediately or move equipment from the project site. So, Mr. Paine, what did MCM do to comply with these BMPs?
>
> A. Well, the first one was that we had a full time mechanic on this project. We do not have full time mechanics on hardly any of our projects. On this particular project we decided to have one here so that because of the high profile area, and we wanted to be able to address any sort of equipment concerns immediately. Some of the other items that we do on a daily basis is our operators and oilers, our trained operators and oilers have to fill out an equipment maintenance log before they fire up the equipment every morning. Every morning that equipment log goes to the mechanic onsite who checks it out to make sure if there is anything that needs to be done. The list also goes to our main office mechanics who review the list to make sure that there is nothing wrong.
>
> And we always have -- the maintenance area for this project was probably about a quarter mile away from the river. It was up by our fueling facility by our office is where we did most of the mechanic work. And we also had spill kits. Almost every

pick up on the job had a spill kit in it, and we also had the storage van, as you see in some of these pictures down here, the shed that's down on the river bar, it also had all kinds of spill kits in it.

And we also have a training program, and there are oilers that we have to hire through the unions, and in order to be even hired as an oiler you have to go through a training program to be -- to know how to oil and to take care of equipment.

Q. Were there any instances where you actually removed equipment from the project site?

A. Yeah. We had -- we had one backhoe that was having some problems. The mechanic went down there to fix it. He did get it fixed once. It happened again, and that piece -- that backhoe ended up being removed from the project.

(Transcript, 233:19-235:12.)

Finally, it must be recognized that the biological monitors did not create their notes expecting them to be used as evidence in a civil liability proceeding. Their observations of site conditions tended to be succinct, without the rigor or detail to provide the main support for civil liability, at least not without accompanying testimony to provide an appropriate foundation and explain the circumstances surrounding their observations.

In summary, the biological monitors' statements did not constitute reasonable or credible evidence that equipment displayed "chronic problems," and as a result the record does not support the findings.

3. Turbid Discharges to River (Category "D")

The Turbid Discharge violations hold builders to an impossible standard that does not represent a reasonable interpretation of the Certification. Condition 7 of the Certification required that Caltrans and its contractors use adequate BMPs for sediment and turbidity control:

> Condition 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.

The Order skips to the last line of Condition 7 and focuses on the phrase: "...to ensure that *no silt or sediment enters surface waters*." (Order, p. 16, italics in original.) From this, the Order appears to have adopted a zero-turbidity standard that regarded any turbidity as a violation without regard to the adequacy of the BMPs. That interpretation makes no sense in light of the

nature of the project and the information given to the Regional Board before the Certification was issued.

Turbidity from construction was plainly unavoidable in a bridge project of this magnitude. Accordingly, the Final EIS prepared by the U.S. Department of Transportation and Caltrans for the project was clear that "temporary adverse impacts to water quality" would result from "temporary water crossings, pile driving and other construction activities in the floodplain/river." (Final EIS, p. 68.) Similarly, before the Certification was issued, the Application made it clear to the Regional Board's staff that the construction process would result in temporary increases in turbidity: "Pile installation may cause temporary increases in turbidity. These increases would be minor and of short duration." (Application, p. 8.)

Thus, a Certification prohibiting all turbidity whatsoever would have made the project unbuildable. It must be assumed that the Regional Board's staff intended to approve the project, however; thus, a zero-turbidity standard is not a tenable interpretation. The Order should instead have considered the entirety of Condition 7, including the requirement for "[a]dequate BMPs for sediment and turbidity..." In its entirety, the only reasonable and tenable interpretation is that the Certification required "adequate BMPs" for turbidity and did not impose a zero-turbidity standard.

The four violations in this category, summarized below, involve exactly the types of construction-related turbidity that were expected to occur during construction. The record shows clearly that BMPs were in place for each of these events.

September 9, 2006:

This violation is based on the turbidity adjacent to a corrugated metal pipe ("CMP") foundation in the wetted river. CMPs were partially constructed of concrete, and once installed, they would be drilled to secure steel plates to attach to the trestle deck supports. The violation was based on reports from the biological monitor that debris from the drilling activity entered the river and created turbidity.[5]

[5] Notably, MCM testified that turbidity also could have been created by drill vibrations and mobilization of bottom sediments.

The record shows that MCM used BMPs to control drilling debris. The Assistant Structure Representative's Daily Report explained that MCM was using "baffles" to minimize the debris. (September 11, 2006 Assistant Structure Representative's Daily Report.) The report indicates that MCM had been using the BMPs consistently and that they were effective to control turbidity. Not incidentally, the report also reflected that care was being taken to control turbidity generally. It quoted Ron den Heyer, Caltrans' Resident Engineer, as saying: "...if we see something going into the water we need to stop in immediately..."

That some turbidity occurred even with the use of BMPs does not establish a violation. The Order issued the violation on the basis that turbidity was "apparently preventable." (Order, p. 16.) A zero-turbidity standard is not consistent, however, with the nature of the project or the fact that turbidity was expected. A zero-turbidity standard also is not consistent with the typical understanding of BMPs, which are mechanisms to *control and reduce* pollution, not just prevent it entirely. In this regard, Caltrans' BMP Manual defines a BMP as: "Any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution." (BMP Manual, Appx. A., p. 2.)

In sum, the record does not contain substantial evidence establishing that BMPs used to control drilling debris were not adequate, and the record therefore does not support the finding for this violation.

September 22, 2006:

This violation is based on turbidity that arose when construction vehicles were driven across the river. The crossing was planned and permitted. To minimize turbidity, Caltrans and MCM followed a practice of pre-cleaning equipment. The violation is based upon an assumption that this practice was not implemented for a series of crossings on September 22, 2006 that appeared to generate more turbidity than crossings on other days.

The violation was based on certain statements in the biological monitor's report that equipment may not have been cleaned before the crossing. However, the reports also suggest the biological monitor was not able to confirm whether the equipment crossed without cleaning, and that this was only a suspicion that he harbored. The report states:

> Equipment cleaning was a pro-active measure taken for the first & third crossings, but it *appeared* to have not been done for the second crossing event witnessed by B. Norman on September 22. This was apparent by the much larger amount of dirt on the equipment during the second crossing compared to the other two crossings... *Although the biological monitor was notified that the wet-channel crossing was to occur that morning, he was not given any notice immediately before the event occurred.* The vehicle did not stop at the edge of the river and continued directly into the river. The monitor attempted to hail the equipment operator but was not successful.

(URS Report, p. 6-20, italics added.)

The question of the biological monitor's personal knowledge could have been resolved had the biological monitors been present at the hearing, or offered written statements. Because they were not present, however, the extent of their personal observations could not be explored and is not in the record. Moreover, the Order itself reflects some uncertainty over exactly what the cause of turbidity was:

> It is unclear whether the failure to clean the equipment, the speed of the crossings, or some combination of these factors resulted in the discharge. None-the-less, BMPs used for this activity were not adequate to comply with Condition 7.

(Order, p. 16.)

Given the foregoing, this violation is not supported by the record. The biological monitors' reports cannot support civil liability when the same reports cast doubt on the biological monitor had actual personal knowledge that pre-cleaning did not occur, and the cause of turbidity is not clear.

September 29, 2006:

The Order contains two violations for this date. The first violation involved a leak during a concrete pour into a CMP that was being installed in the wetted portion of the river. The leak occurred at the bottom of the CMP where it was placed against the river bottom.

MCM devoted considerable time and effort at the June 23, 2011 hearing to explain the purpose and function of CMPs as part of a foundation that would handle hundreds of thousands of pounds of load. (Transcript, 222:13-223:14; 249:15-251:21.) MCM also showed the process in photographs at the June 23, 2011 hearing. (Visual Presentation, Slides 49-52.)

The leak occurred despite several measures to establish a tight seal of the CMP against the riverbed. The installation process, and measures to establish a seal and protect against leaks, were shown by MCM at the June 23, 2011 hearing. (Visual Presentation, Slides 49-52.) These included using filter fabric, sandbags and gravel to form a seal at the bottom of the CMP against the river bottom. MCM's project engineer explained that achieving a good seal against the river bottom was not an exact science and sometimes required iterative attempts. (Transcript, 248:14-249:14.) Here, the leak occurred on the third of six foundations to be placed in the wetted river. For the prior two foundations, the CMPs had been installed "beautifully" without any problems; the leak occurred on the third foundation as the water became deeper and the bedrock more irregular. (Transcript, 255:8-25; see also Visual Presentation, Slide 55.) The problem did not reoccur on the remaining three foundations in the river.

The record contains no evidence that these BMPs were not "adequate." No evidence was presented that another type of BMP should have been used or was available. These methods performed well overall, illustrated by the fact that no leaks occurred for other CMPs installations. In sum, the record does not support a violation of Condition 7.

September 29, 2006:

The second violation for September 22 also occurred during a CMP installation. Engineer's logs noted turbidity in the vicinity of a worker standing on sandbags surrounding a CMP as concrete was poured:

> During 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 of how much was algae was hard to determine.

(September 29, 2006 Assistant Resident Engineer's Daily Report.)

No evidence other than the foregoing quote supports the violation. As such, a cause of the turbidity was never established on the record. The Order itself acknowledges the uncertainty over the source of turbidity: "It is unclear whether the second plume was the result of concrete discharges or the disturbance of river bottom deposits." (Order, p. 17.) MCM also testified that workers would occasionally kick up bottom sediments while standing on sandbags (Transcript,

255:13-25), but the Order appeared to reject this explanation. Without establishing a cause of turbidity, the evidence cannot support a finding that a violation occurred.

In conclusion, the Certification did not impose a zero-turbidity standard, but rather required adequate BMPs for sediment and turbidity control. Caltrans and MCM went to considerable lengths to control turbidity, and the BMPs used were adequate and appropriate. The record does not support the findings for these four events.

4. Insufficient Turbidity Measurements (Category "E")

This category presents another example where the Regional Board's expectations were not contained in the plain terms of the Certification. This category surrounds the requirement in Condition 19 that "field turbidity measurements" be taken to monitor turbidity and demonstrate compliance with the receiving water limitations. Condition 19 provides, in full:

> 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.

The crux of the issue is that Condition 19 does not describe or define how "field turbidity measurements" may be taken. For some instances involving turbidity, Caltrans and its contractors used visual means to monitor turbidity. MCM presented expert testimony that monitoring using visual means was, particularly for minor turbidity events, a common construction practice, and that it was possible for workers to determine compliance for minor turbidity events based on visual means. (Transcript, 260:1-263:13.)

The Order takes a more stringent position, and asserts that "field turbidity measurements" required the use of instrumentation that generated a numeric result: "It is not possible to comply with a numeric standard using qualitative data such as a visual scale." (Order, p. 18.) The Order asserts that the use of monitoring equipment was an absolute requirement of the Certification.

The Regional Board's staff acknowledged, however, that Condition 19 did not specifically require the use of turbidity monitoring equipment:

> Q. Where in the Certification does it state that field turbidity measurements must be taken by an NTU meter?
>
> A. To my knowledge, there is no specific location describing that.
>
> Q. Your definition that you just provided me for field turbidity measurements, can you cite for me any recognized publication, works, regulations, or other information that have that definition of field turbidity measurements?
>
> A. No.
>
> Q. So I take it it is just your understanding that it is the practice in the industry that field turbidity measurements use NTU meters?
>
> A. Yes.

(Transcript of Deposition of Kason Grady, 202:6-20.)

Staff also acknowledged that visual monitoring had in fact allowed workers to measure the size and length of turbidity plumes:

> Q. As you previously testified, the field turbidity measurements must be measured using an NTU meter, right?
>
> A. Yes.

Q. Would you agree that in this case there also appears to have been -- there is evidence of visual measurements being taken of the turbidity created by the crossings?

A. Visual observations?

Q. Yes. And, in fact, those visual observations resulted in estimates regarding the size, length and duration of the plume; would you agree?

A. Yes.

(Transcript of Deposition of Kason Grady, 266:5-17.)

MCM submits that the Order is based on monitoring expectations that are not contained in the terms of the Certification. We cannot help but observe that the Regional Board staff could have written Condition 19 to clearly require the use of monitoring equipment and prohibit visual means as a method of determining compliance, if that was in fact intended when the Certification was issued. Instead, the Certification employed general terms that offered Caltrans and its contractors the flexibility to take field turbidity measurements using means such as a visual scale.

The fact that many of the instances of turbidity were relatively minor lends to the appropriateness of visual methods for this project. Many turbidity plumes were recorded at lengths of 20 feet or less (for example, August 29: 15 foot plume, August 30: 15 foot plume; September 1: 20 foot plume; October 16: 8 foot plume). For such minor events, visual monitoring not only met the terms of the Certification, but also represented a logical and reasonable method.

5. Cementitious Discharges (Category "F")

The September 18, 2006 violation was not supported by substantial evidence in the record. The violation was based on a single photograph showing what was asserted to be cement waste on the gravel bar, without any corroborating evidence. MCM testified at the June 23, 2011 hearing that the material in the photograph was natural sediment of the type prevalent in the Eel River. (Transcript, 267:10-268:6.) MCM showed the Regional Board examples of these sediments at the hearing. (Visual Presentation, Slide 74.) MCM explained that the photograph was not in fact cement waste, but sediments concentrated near the outflow of the dewatering pipe

to Isolated Pool B. There was no contrary evidence or testimony, but the Order nonetheless included this violation. MCM submits that the violation is not supported by substantial evidence.

6. Individual Events (Category "H")

MCM submits that two of the violations in this category are not supported by substantial evidence.

The $10,000 civil liability for November 3, 2006 was based upon a report of loose soil that traveled downslope for reasons that are not entirely clear in the record. The evidence supporting the violation was a short email description circulated by Caltrans:

> 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. The loose soil below OHW should be removed.

(November 7, 2006 email from Walt Dragaloski.)

The email does not provide evidence of the amount of soil, the reasons for the cascade, or any other circumstances that seem necessary to establish liability. The record also does not reveal how the soil cascade was not stopped by barriers (known as "super sacks") installed mid-slope to prevent rockfall into the river channel. MCM described the barriers in its June 23, 2011 testimony (Transcript, 274:1-275:1) and offered examples in photographs at the June 23, 2011 hearing. (Visual Presentation, Slide 90.) The email description above suggests the event was inadvertent. In sum, the record is not sufficiently developed to provide substantial evidence that a violation of the Certification occurred.

The record also does not support $20,000 in civil liability for two violations relating to sandblasting. These violations are based on the fact that a portion of the sand used to sandblast a bridge, as part of the finishing process, fell in the channel below. MCM performed sandblasting in accordance with Caltrans' approved BMP NS-14 in the BMP Manual, which was incorporated into the Certification. The terms of NS-14 do not require containment for blown sand, however, and MCM testified that full containment had not been required under NS-14 on prior Caltrans projects. (Transcript, 275:8-276:17.) Nonetheless, Caltrans requested a new BMP that provided

containment; MCM developed such a BMP (which used tarps to capture sand), and the resulting changes were approved by Caltrans and thereafter followed by MCM. (Id.) Thus, at no point in time did sandblasting occur without the use of approved BMPs. The fact that the BMPs were reviewed and adjusted over time shows that the parties took the BMP process seriously.

7. Storm Water Permit Violations (Category "I")

The Order contains a $30,000 penalty under Caltrans' Storm Water Permit based upon the "non-containment of the trestle deck over an extended period of time." The Order indicates that the trestle deck should have been watertight pursuant to Caltrans' BMP NS-13. Caltrans and MCM objected to these allegations because NS-13 did not, by its terms, require the trestle deck to be watertight. NS-13 stated, in relevant part:

> Provide watertight curbs or toe boards to contain spills and prevent materials, tools, and debris from leaving the barge, platform, dock, etc.

At the June 23, 2011 hearing, MCM testified that it had built hundreds of trestle decks, and never had a project required a watertight deck. (Transcript, 226:14-227:7.) MCM testified that making a trestle deck watertight presented an "engineering nightmare" based on the need to distribute the "active" load of rainwater over a 500-foot by 80-foot area. (Transcript, 227:8-20.) MCM worked to satisfy this interpretation of NS-13 by first adding caulking, and eventually by using filter fabric on the deck, without regard to the fact that BMP NS-13 did not impose these requirements. (Transcript, 230:22-231:232:8.) Further, to the extent that watertight "curbs" were required by NS-13, MCM testified that the curbs on the trestle deck met this requirement. (Transcript, 228:18-229:15.)

Further, Caltrans' expert also testified that the design of the trestle deck was above and beyond the BMP's requirements:

> Q. All right. In your opinion, was there any violation of the Caltrans Storm Water Permit in association with the trestle?
>
> A. No.
>
> Q. Okay. What's the basis of that opinion?
>
> A. The basis of that opinion is that from the record it is clear that Caltrans and the contractor made attempts to put BMPs

> on the trestle deck. They came out with the plywood patching, put it in the larger holes. They tried the expanding foam within the joints there. They eventually put up the toe boards. They installed the filter fabric. And if you read NS13, the expanding foam, filter fabric, those BMPs are not described in the construction site BMP Manual. So, when I look at that information, it appears to me that we went above and beyond what is described in NS13. And the -- you know, at the end of the day, there were no discharges from the trestle...

(Transcript, 157:7-24.)

In sum, the Order imposed requirements into the Storm Water Permit that are not supported by the plain language of BMP NS-13. Because Caltrans developed NS-13, Caltrans deserved deference from the Regional Board to interpret and apply NS-13 in the manner that Caltrans intended.

8. Application of Section 13385 Factors

Many, if not most, of the violations in the Order have been afforded the maximum penalty authorized by Water Code section 13385, subdivision (e), of $10,000 per day. Section 13385 requires, however, that prior to imposing liability in the maximum amount or in any amount, the Regional Board must apply an analysis that takes into account ten distinct factors to determine the amount of civil liability:

> In determining the amount of any liability imposed under this section, the regional board... shall take into account the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require. 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.

(Wat. Code, § 13385, subd. (e).)

The Order fails to satisfy this mandatory requirement of the Water Code. The Order is almost devoid of any discussion of these ten factors, and to the extent the factors are noted in the Order, it is in a glancing way rather than as part of a meaningful analysis.

Further, in situations where a violation was found to be intentional rather than

inadvertent, the Order suggests that the Section 13385 factors do not apply at all: "Failure to cite the duration and volume of the waste discharge does not apply in this instance as this violation does not depend upon those factors, but rather the intentional discharge of dewatering waste to waters of the state without a permit." (Order, p. 10.)

The Water Code expressly states that the Order "shall take into account" the listed factors for each and every alleged discharge. The language is mandatory and singular in every instance, and makes no reference to "general" or "categorical" application of the listed factors. (*Ibid.*) Thus, to comply with the statute, the Order should have applied the listed factors individually to each alleged violation. (*Ibid.*; see *Lazar v. Hertz Corp.* (1999) 69 Cal.App.4th 1494, 1503 [if "the words of a statute are reasonably free of ambiguity and uncertainty, we look no further than those words to determine the meaning of that language"].)

The absence of a proper Section 13385 analysis poses a substantial hardship to Caltrans and MCM. Because the factors relevant to imposing the maximum liability were not explained, Caltrans and MCM have not been provided a complete rationale for the Order as required by statute, and therefore cannot evaluate the basis for civil liability in regard to factual inquires that should have been made under Section 13385, subdivision (e), concerning the nature, extent and gravity of each alleged violation, susceptibility to cleanup or abatement and voluntary cleanup efforts undertaken, degree of culpability, and economic benefit. (Wat. Code, § 13385, subd. (e); see, e.g., *County Sanitation District No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1597.) [public agency's broad-brush assertions are insufficient where individual assessment of particular evidence or other factors is required].) For these reasons, the findings of maximum liability are not supported by the law or the record.

VI. ACTION REQUESTED OF STATE BOARD

Petitioner, MCM, requests that the State Water Board vacate and/or reverse and remand the Order as discussed herein.

VII. NOTIFICATION TO REGIONAL BOARD

A copy of this Petition has been sent to the Regional Board at the following address: California Regional Water Quality Control Board, North Coast Region, c/o Lisa Bernard, 5550

Skylane Boulevard, Suite A, Santa Rosa, CA 95403.

Respectfully Submitted:

Dated: April 16, 2012

HARRISON, TEMBLADOR, HUNGERFORD & JOHNSON LLP

By: _____
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