



Western States Petroleum Association
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February 28, 2007

Ms. Song Her
Clerk to the Board, Executive Office
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100



Re: Comment Letter – Bay-Delta Offset Mercury Policy –
CEQA Scoping Comments of Western States Petroleum Association

Dear Ms. Her:

This letter contains the comments of the Western State Petroleum Association (WSPA) regarding the scope of compliance with the California Environmental Quality Act (CEQA) for the proposed adoption by the State Water Resources Control Board (State Board) of a mercury discharge offset policy for San Francisco Bay and the Sacramento-San Joaquin River Delta (Offset Policy).

WSPA is a trade association that represents the companies and other entities that conduct most of the petroleum-related operations in the western United States. These operations include production, transportation, refining and marketing of petroleum and petroleum-based products.

We appreciate the State Board's efforts toward developing an offset program for mercury and wish to express our strong support for the concept of offsets and trading in general. Well-designed and scientifically justified offset programs are essential if dischargers are to work effectively and efficiently toward compliance with unattainably stringent water quality standards. Nevertheless, WSPA believes that the Offset Policy as proposed would have potential environmental impacts and that additional alternatives are available which may reduce such impacts. These issues are addressed in our CEQA scoping comments, below.

Our comments are based on the *Informational Document – Public Scoping Meeting for Proposed State Policy for Water Quality Control, San Francisco Bay, Sacramento-San Joaquin River Delta and Tributaries Mercury Discharge Offset Policy* dated January 2007 (referred to herein as the "Informational Document"). Many of the issues raised by the Offset Policy were also addressed in our November 28, 2006 scoping comments on the proposed Sediment

Quality Objectives (SQOs). We attach those comments as Attachment A for incorporation into the record on the Offset Policy.

Comment 1 – Policy Limitations Are Unsupported and Inconsistent with State Board Direction

At the outset, WSPA notes that the limitations on the Offset Policy, as proposed in the Informational Document, does not conform to the State Board's direction in important respects. The State Board directed staff to develop:

State policy for water quality control that establishes alternative methods to allow dischargers to meet mercury effluent limitations that are directed to preventing contributions to excursions above water quality standards. . . . The policy shall include provisions that recognize the efforts of those dischargers who are meeting or outperforming their wasteload allocations, and that recognize the expenditures made by dischargers who are employing higher treatment levels. *The policy shall not include requirements that would leverage existing point source discharges as a means of forcing dischargers to bear more than their fair share of responsibility for causing or contributing to any violation of water quality standards. In this context "fair share" shall refer to the dischargers' proportional contribution to the impairment.*

State Board Resolution No. 2005-060 (September 7, 2005) (emphasis added).

Restriction to WLAs rather than WQBELs. The Offset Policy allows offsets only as an alternative means of meeting wasteload allocations (WLAs) under a Total Maximum Daily Load (TMDL). There is no legal requirement that TMDLs be in place before offsets may be authorized and the State Board's direction to staff did not include that limitation. On the contrary, this approach is inconsistent with the State Board's direction to establish a policy to meet "mercury effluent limitations that are directed to preventing contributions to excursions above water quality standards" – that is, Water Quality-Based Effluent Limitations (WQBELs), not WLAs.

Restriction to Bay-Delta System. The Offset Policy only applies to San Francisco Bay and the Sacramento-San Joaquin River Delta. This restriction presumably reflects the fact that the State Board's Resolution specifically addressed the San Francisco Bay Mercury TMDL. However, the State Board directed staff to develop a "State policy" with no mention of limiting that policy to one region. Nothing in the proposed Offset Policy itself would limit its effectiveness or give rise to problems if applied throughout the state. It would be more administratively efficient to address this important issue on a statewide basis, rather than piecemeal.

Failure to Credit Best Performers. The Offset Policy contains no provisions that address the State Board's direction to recognize "the efforts of those dischargers who are meeting or outperforming their wasteload allocations" and "expenditures made by dischargers who are employing higher treatment levels." In the former case, dischargers who meet or exceed WLAs would not need offsets themselves. Therefore, to recognize their efforts as the State Board directed, such dischargers should be allowed to trade with other dischargers who may need offset credits. However, the Offset Policy expressly excludes pollutant credit trading. In the latter case, the best performers – i.e., those dischargers who have invested substantial expenditures to implement higher treatment levels than comparable facilities – should be recognized by allowing them a credit against the required offset ratio.

Prohibition on Increased Discharges from Existing Facilities. General Principle 4 of the Offset Policy (p. 3) provides that, except for new or expanded facilities, “even when authorizing an offset, the Regional Board may not allow the mass or concentration of mercury in an existing discharge to increase.” It appears that this statement is intended to require offsets to be accompanied by performance-based limits, capping existing discharges at current mass and concentration levels. However, there is no reasonable basis, and nothing in the State Board’s resolution, to support this restriction. If an offset project reduces mercury loading by more than the amount needed to address an existing exceedance, there is no environmental reason why the discharge should not be able to increase for reasons other than facility expansion (for example, increased throughput at existing facilities).

Leveraging Existing Discharges by Offset Ratios. Most important, the policy imposes a greater than 1:1 offset ratio, in amounts based on factors unrelated to the “fair share” of the discharger’s contribution. By definition, an offset of 1:1 means the amount of offset equals “the dischargers’ proportional contribution to the impairment” in accordance with the State Board’s resolution. Once the discharger performs an alternative project which fully offsets its contribution at a 1:1 ratio, it has *already* borne responsibility for its “fair share.” Instead, the factors included in the Offset Policy – the magnitude of the exceedance, cost savings from offset projects, and the length of time until compliance – serve no other purpose than to leverage the dischargers’ contribution. These provisions effectively impose a penalty for a greater magnitude or duration of exceedance that would occur *in the absence of the offset*, disregarding the fact that the exceedance (of whatever size and duration) must be fully offset. Worse, the policy directly seeks to leverage the discharger’s cost savings by further increasing the offset ratio. Dischargers who are able to conduct more cost-effective offset projects will merely be saddled with greater offset demands. This approach is inconsistent with both the letter and spirit of the State Board’s resolution, limiting the value of the offset program.

Prohibition on Offset Projects for which Others are Responsible. The policy allows offset projects only if the resulting mercury reduction is not already the responsibility of some other party – except if the responsible party happens to be a public agency and the project is on public land. Both the restriction and the exception have no basis in the State Board’s resolution. If these conditions are intended to ensure that offset projects are “surplus” – i.e., that mercury reductions already scheduled to be achieved are not double-counted – then the conditions are both over- and under-restrictive. On the one hand, it makes no sense to exclude projects on private land, no matter who is responsible, if the work will not be performed in a reasonable timeframe otherwise; e.g., if no solvent private party or public funds are available to finance the work. On the other hand, the Offset Policy unfairly allows public agencies with access to adequate funding to avoid fulfilling their remediation responsibilities on public land. This condition appears to leverage the burden on private dischargers to the benefit of public agencies.

Exclusion of Pollutant Credit Trading. Finally, the exclusion of credit trading between facilities will greatly reduce the potential effectiveness of the offset policy. There is no basis for this exclusion in the State Board’s resolution. Pursuant to CEQA, a trading program should be included in the alternatives considered, as it that could avoid or reduce the potential adverse environmental impacts associated with offset projects involving remediation, as discussed below. Moreover, to the extent that it may take time to address the complexities posed by such a trading program, we note that there is no urgency to adopting a mercury offset policy. Given limited agency resources and the impending deadlines resulting from EPA’s recent disapproval

of TMDL-based compliance schedules, the most pressing priority for the State Board and the regional boards should be timely completion of TMDLs, not implementation of a seriously incomplete Offset Policy. It is more important that the State Board take the time require to adopt an effective Offset Policy for mercury.

Therefore, to comply with the State Board's direction, either Offset Policy should be revised as follows, or the following should be considered as alternatives:

- Apply the Offset Policy statewide.
- Authorize offset projects as a method to allow dischargers to meet WQBELs or, if available, wasteload allocations specified in a TMDL.
- Authorize offset projects as a method to allow new or additional discharges of mercury from new facilities, expansion of additional facilities, or increased discharges from existing facilities, when consistent with the Policy.
- Authorize offset projects on public or private land, unless the work is expected to be performed in a reasonable timeframe by other public or private parties.
- Require a default offset ratio of 1:1.
- Give offset credit (i.e., require a less than 1:1 offset ratio) to "best performer" dischargers that have made substantial expenditures to employ higher treatment levels than comparable facilities.
- Incorporate credit trading between facilities into the Offset Policy.

Comment 2 – Inadequate Basis for CEQA Scoping

The January 5, 2007 *Notice of Two Public California Environmental Quality Act Scoping Meetings* solicits scoping comments on the range of actions, alternatives, mitigation measures and potential significant environmental impacts that should be evaluated. However, readers of the Informational Document would never know it was intended as a CEQA scoping document. The Informational Document does not even mention the words "environmental impact" or "CEQA." The State Board should not disregard the requirements for a scoping document which must include the "probable environmental effects of the project" and provide "sufficient information" to enable a "meaningful response." CEQA Guidelines (14 Cal. Code Regs.) § 15082(a)(1); see also § 15083(c).

We assume that the State Board will prepare a Substitute Environmental Document (SED) consistent with its past practice (although this is not stated in the notice or the Informational Document). Not all procedures for an Environmental Impact Report need apply to an SED. Still, having decided to engage in scoping for an SED that serves as the functional equivalent of an EIR, the scoping process should provide the functional equivalent of EIR scoping. The Informational Document is too brief and lacks crucial specifics, depriving commenters of the opportunity for a "meaningful response." WSPA will provide further comment when the State Board provides further information on its proposal.

Comment 3 – Adverse Environmental Side-Effects Must Be Analyzed

When an agency proposes to adopt a new pollution control program, CEQA requires an analysis of the impacts of methods of compliance, feasible mitigation measures, and alternative means of compliance which would avoid or eliminate the impacts. CEQA Guidelines § 15187. Where requirements intended for environmental protection may have adverse environmental side-effects, those effects must be evaluated. For example, in *City of Arcadia v. State Water Resources Control Board*, 135 Cal. App. 4th 1392 (2006), the court held that the Los Angeles Regional Water Quality Control Board violated CEQA in adopting a TMDL for trash in the Los Angeles River. The court found that the regional board failed to evaluate potential environmental impacts of actions by cities – in particular, installation of structural trash controls – to meet their TMDL allocations. Similarly, the State Board's SED must evaluate the potential environmental impacts of action under the Offset Policy.

Unfortunately, the brief Informational Document contains little information on proposed methods of compliance and no alternatives or mitigation measures formulated to address impacts. However, document (p. 4) does identify candidate offset projects in four general: (i) various projects to address existing mercury contamination in sources and sediments (restoration of watersheds affected by mercury; stream bed stabilization; mass removal; mine remediation; removal of contaminated sediments in impoundments; removal of legacy mercury); (ii) reduction of in-bay discharges of dredged material; (iii) reduction of local aerial deposition; and (iv) collection and disposal of mercury-containing objects from the public.

As to the first category, the Offset Policy focuses heavily on removal of mercury from sediments, including legacy mercury from mines that has washed into riverbeds and San Francisco Bay; see p. 2. However, projects to remove such sediments would also have potentially significant environmental impacts. Reasonably foreseeable impacts of offset projects to remediate contaminated sediments, as discussed in WSPA's SQO comments, would include the following (see Attachment A, pp. 4-7):

- Impacts on water quality and biological resources from turbidity and suspended contaminants
- Impacts on benthic communities due to physical disturbance
- Air emissions from project equipment operations and from barge and truck trips for transport of material for disposal
- Solid and hazardous waste impacts on disposal site capacity
- Cumulative impacts of these effects

As to the second category, reducing the amount of mercury-contaminated dredged material disposed of in San Francisco Bay would require diversion of the material to other disposal or reuse alternatives. These alternatives would result in air emissions from operation of project equipment, and transportation impacts and air emissions from barge and truck trips for transport of material to disposal or reuse locations. In addition, the disposal or reuse activities would themselves involve water quality and biological impacts from the placement of mercury-contaminated material at those locations (and reuse options would likely be limited due to the contamination). The federal and state agencies participating in the Long-Term Management Strategy to reduce in-Bay disposal of dredged material have recognized the need to consider

these impacts pursuant to CEQA. See *Long-Term Management Strategy (LTMS) For the Placement of Dredged Material in the San Francisco Bay Region, Final Policy Environmental Impact Statement/Programmatic Environmental Impact Report* (1998), sections 6.1.1.3, 6.1.2.3, 6.1.3.3, 6.1.4.3 and 6.1.5.4.

As to the third category, projects to reduce aerial deposition would require installation of new or modified pollution control equipment at sources of mercury air emissions. Reasonably foreseeable impacts would include construction impacts for new or modified control equipment, energy consumption for equipment operations, solid and hazardous waste impacts related to materials used in the control process as well as disposal of residuals, and cumulative impacts of these effects.

As to the fourth category, collection and disposal of mercury-containing objects from the public, establishing such a new program also would have reasonably foreseeable impacts on solid and hazardous waste handling and disposal capacity, impacts from construction and operation of new facilities, air emissions from transport of the materials for disposal; and associated cumulative impacts.

Comment 4 – A Wider Range of Projects Should Be Eligible as Offsets

The categories of offset projects listed on p. 4 are limited to traditional types of remediation, pollution control and minimization activities. This focus appears unduly narrow and should be broadened to include actions that achieve the desired offsets, while reducing or avoiding the adverse impacts discussed above. For example, the State Board is currently considering methylmercury objectives for protection of wildlife. Offsetting projects for those objectives, if adopted, could include projects that enhance wildlife habitat or otherwise benefit wildlife, such as predator control programs. WSPA urges the State Board to craft its Offset Policy sufficiently broadly that any offset project with the potential to produce a net environmental benefit may be considered.

Comment 5 – Determining Net Environmental Benefit

The Offset Policy, General Principle 1 (p. 3), states that offset projects must result in a “net environmental benefit” in the Bay-Delta system. However, “net environmental benefit” is undefined. We note that a recognized set of methodologies, under the general heading of “Net Environmental Benefit Analysis” (NEBA), may be useful in this context. These methodologies include Habitat Equivalency Analysis (HEA) which was developed by the National Oceanic and Atmospheric Administration to design appropriate restoration actions to fully offset natural resource damages.¹ As an alternative to determining “net environmental benefit” on a subjective and qualitative basis, WSPA suggests that the State Board consider the use of such quantitative analytical tools.

Comment 6 – “Disparate Localized Impact” Requirements Must Be Clarified

The Offset Policy, General Principle 6 (p. 3) states that dischargers should try to locate offset projects “near” the discharge but that “if demonstrated not to be practical, a project not in the vicinity of the discharge may be considered.” In addition, General Principle 7 separately prohibits “disparate localized impacts.” To implement the policy effectively and consistently, it must be revised to provide clear definitions of the crucial terms “near,” “practical” and especially

¹ See, e.g., R.A. Efrogmson, J.P. Nicolette and G.W. Suter (2004), “A framework for net environmental benefit analysis for remediation or restoration of contaminated sites,” in *Environmental Management* 34(3):315-331.

“disparate localized impacts.” Each of these terms may have a markedly different meaning depending on the characteristics of the contaminant and the affected water body. More important, it appears that Principle 7 subsumes Principle 6 and renders it unnecessary. If the goal is to improve water quality in impaired water body segments, offset projects outside the vicinity of the discharge should not be disfavored, so long as disparate localized impacts are avoided. Indeed, remediation of upstream sources is likely the best available means of addressing downstream impairment.

WSPA therefore urges the State Board to delete General Principle 6 as redundant.

Thank you for considering our scoping comments. We look forward to the opportunity to comment on the SED when it is issued and for further discussion of these issues with the State Board.

s/Kevin Buchan
(*sent via email*)

Enclosures: Attachment A: “WSPA cmts, SQO Scoping Doc, 11-28-06”



Western States Petroleum Association
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Kevin Buchan
Environmental Representative

November 28, 2006

Ms. Song Her
Clerk to the Board, Executive Office
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

**Re: Comment Letter – Sediment Quality Objectives –
CEQA Scoping Comments of Western States Petroleum Association**

Dear Ms. Her:

This letter contains the comments of the Western State Petroleum Association (“WSPA”) regarding the scope of compliance with the California Environmental Quality Act (“CEQA”) for the proposed adoption of Sediment Quality Objectives (“SQOs”) and a Sediment Quality Plan (“SQO Plan” or “Plan”) for enclosed bays and estuaries by the State Water Resources Control Board (“State Board”).

The Western States Petroleum Association is a trade association that represents the companies and other entities that conduct most of the petroleum-related operations in the western United States. These operations include production, transportation, refining and marketing of petroleum and petroleum-based products. We appreciate the opportunity to submit these CEQA scoping comments on the proposed SQO Plan.

As outlined in the *CEQA Scoping Meeting Informational Document - Development of Sediment Quality Objectives For Enclosed Bays and Estuaries* dated August 17, 2006 (hereinafter “Scoping Document”), the State Board intends to prepare a Substitute Environmental Document (“SED”) in lieu of an Environmental Impact Report (“EIR”). The Scoping Document outlines a number of alternatives to aspects of the SQO Plan, but does not identify any environmental impacts that the State Board intends to consider in its SED. WSPA is concerned that implementation of SQOs by means of the SQO Plan will have reasonably foreseeable potential environmental impacts which must be fully analyzed in the SED. Moreover, we believe that additional alternatives, not considered in the Scoping Document, are available to avoid or reduce such impacts and therefore should be included and evaluated in the SED. These issues are addressed in our CEQA scoping comments, below, and in our technical comments, attached as Attachment A.

Comment 1 – Impacts Of Compliance Methods Must Be Analyzed

The CEQA guidelines require an SED to contain an analysis of reasonably foreseeable environmental impacts of methods of compliance with new standards or requirements, feasible mitigation measures, and alternative means of compliance which would avoid or eliminate the identified impacts. CEQA Guidelines (14 Cal. Code Regs.) § 15187. It is well settled that, where there is evidence that a program or regulation intended for environmental protection may have unintended adverse environmental consequences, those consequences must be analyzed, and feasible alternatives or mitigation incorporated in accordance with CEQA, before the program or regulation may be adopted. See, e.g., *County Sanitation District v. County of Kern*, 127 Cal. App. 4th 1544 (2005). One particularly relevant recent case is *City of Arcadia v. State Water Resources Control Board*, 135 Cal. App. 4th 1392 (2006), in which the court found that the Regional Water Quality Control Board (“Regional Board”) failed to comply with CEQA in adopting a Total Maximum Daily Load (“TMDL”) for trash in the Los Angeles River watershed, when the Board failed to evaluate reasonably foreseeable environmental impacts of the means of compliance likely to be utilized by the cities subject to wasteload allocations. For these reasons, the SED must evaluate the impacts of and alternatives to anticipated means of compliance with the SQO Plan.

Comment 2 – Tiered CEQA Analysis

While the Scoping Document is not entirely clear on this point, it appears that the SED will contain a program-level or Tier 1 CEQA analysis, deferring consideration of specific implementation actions to later project-level or Tier 2 CEQA analyses. While CEQA encourages tiered environmental review and would allow a Tier 1 SED to defer consideration of information that may not be feasibly reviewed at the programmatic level, the tiering approach does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier. CEQA Guidelines § 15152(b). If a future implementation action “is reasonably foreseeable in general terms, the [tier 1 EIR or SED] must include a general discussion of the fact and its possible environmental effects, but need not include a detailed analysis of specific facts that cannot reasonably be foreseen at the time the [EIR or SED] is prepared.” *Ebbetts Pass Forest Watch v. California Dept. of Forestry and Fire Protection*, 139 Cal. App. 4th 165 (2006). Again, for these reasons, the SED must evaluate the impacts of and alternatives to anticipated means of compliance with the SQO Plan.

Comment 3 – The SQO Plan Lacks Critical Specifics On Implementation Actions

We understand that the merits of the SQOs and SQO Plan are not yet being considered at the CEQA scoping stage. Even so, we must point out that the SQO Plan as drafted is fundamentally flawed in a manner that is highly relevant to CEQA review. Even as a program document, the Plan is excessively vague and lacking in critical specifics on potential implementation actions. Analysis of the environmental impacts of, and alternatives, to the Plan will require a sufficiently specific description of the proposed action and reasonably foreseeable means of compliance.

Aside from CEQA, the current draft Plan is so lacking in specificity that it fails to contain the elements required by Water Code § 13242. That section requires such implementation programs to contain “a description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private.” The SQO Plan contains none of these things.

Moreover, when the State Board does come to consider the merits of the SQO Plan, we believe that a clearer understanding of its implementation mechanisms will be critically important, both

for the State Board's decision whether to adopt the Plan and to guide future decisions by the Regional Boards. A number of particularly important issues are addressed in WSPA's technical comments, Attachment A.

Comment 4 – Reasonable Range Of Alternatives

CEQA requires consideration of a reasonable range of alternatives to the project that could feasibly attain its basic objectives and would “substantially lessen the significant environmental effects.” CEQA (Cal. Pub. Res. Code) § 21002; CEQA Guidelines § 15126.6. While the Scoping Document outlines a number of alternatives to specific aspects of the SQO Plan, these alternatives appear to have been crafted more as available options, without any attempt to develop alternatives that could lessen impacts. It is not reasonable to consider only alternatives that will have no effect on environmental impacts in the first place, or are by definition infeasible, and to then rely on the inadequacy of those “straw man” alternatives to justify adopting the SQO Plan as currently drafted.

Comment 5 – No Alternatives To “How SQOs Could Be Applied”

Most critically, Section 2.21 of the Scoping Document – “How could SQOs be applied?” – considers no alternatives. This is not surprising, since the SQO Plan is so vague in its discussion of future management actions that it is difficult to understand its meaning, much less identify and evaluate reasonably foreseeable means of compliance and associated impacts. It is impossible for the State Board to assess the environmental impacts of SQOs as required by CEQA prior to their adoption, without any description of how the SQOs will be applied to trigger management actions or affect regulatory decisions such as listing under Clean Water Act section 303(d), TMDL development and NPDES permitting. If the section is intended to describe which actions might be triggered by application of the SQOs, they must be described with sufficient specificity – including reasonably foreseeable means of compliance – to allow proper evaluation of impacts; and the State Board must consider alternatives that would avoid or lessen those impacts.

Comment 6 – The Current Regulatory Regime Is The CEQA “Baseline”

In CEQA analysis, environmental impacts of the proposed action and alternatives (including the No-Action Alternative) are compared to the baseline of existing conditions. CEQA Guidelines §§ 15125(a), 15126.2(a). The State Board is obligated by statute to adopt SQOs, so that a No-Action Alternative of not adopting SQOs themselves would be legally infeasible. However, the same is not true of discretionary implementation actions under the SQO Plan. When considering a new regulatory program such as the SQO Plan, the lead agency must compare impacts and alternatives to the baseline of the current regulatory regime. Sediment management issues to be addressed under the SQO Plan are currently regulated under the Clean Water Action section 404/401 program, the TMDL program under Clean Water Act section 303(d), and the toxic hotspots program under Water Code section 13394. In our view, continued reliance on these existing programs to implement SQOs constitutes the environmental baseline. Any change in activities that otherwise would have occurred under existing programs – for example, changes in patterns of maintenance dredging, or remedial actions triggered solely by SQO exceedances – must be considered as consequences of adopting the SQO Plan, and must therefore be evaluated for potentially significant environmental impacts.

Comment 7 – Changes To Current Dredging Regime

One clearly foreseeable context for SQO implementation is dredging. The SQO Plan could alter the current regime of dredging activities in two ways. First, Regional Boards could rely on

SQOs exceedances to trigger remedial actions or other dredging activities that might not otherwise have been undertaken. Second, routine maintenance dredging would become more difficult for marine terminals and other industrial facilities around the state, faced with additional regulatory burdens arising from the SQO Plan. The implications of these two issues are discussed in the following comments 8 to 13.

Comment 8 – Water Quality And Biological Resources Impacts Of Increased Remedial Dredging

With regard to the first point in Comment 7, the SED must consider the potential impacts that could arise from disturbance of sediments exceeding SQOs that would not otherwise have been disturbed. Sediment removal is typically performed by dredging. Dredged material must then be relocated, in some cases to approved ocean or bay disposal sites. However, in many instances, disposal of sediments exceeding SQOs would occur on land. Dewatering is often used to reduce the volume of sediment to be disposed, and the material must then be transported to a disposal site. These activities would be associated with potentially significant environmental impacts, including the following:

- Short-term water quality impacts from suspension of contaminants buried in sediment, temporarily increasing water column concentrations, due to releases of material during dredging and dewatering discharges (Zahakos, 2005; Lee and Jones, 2000; Kennish, 1998; Quantitative Environmental Analysis et al., 2001)
- Short-term water quality impacts from exceedance of water quality objectives for turbidity and suspended solids, due to dredging and dewatering discharges (Johnston, 1981; Koebel et al., 1999; Nichols et al., 1990)
- Longer-term water quality impacts, depending upon the duration and extent of the dredging operation, if contaminant concentrations at the sediment surface are increased as successive layers of sediment are removed and/or substantial material is lost during dredging (Su et al., 2002; Goossens and Zwolsman, 1996)
- Impacts on biological resources, from exposure of water column and benthic organisms to resuspended contaminants (Zahakos, 2005; Lee and Jones, 2000; Kennish, 1998)
- Impacts on benthic communities due to physical disturbance from dredging, including impacts to biota outside the dredged area which may receive additional sedimentation as resuspended material settles (Lee and Jones, 2000; Kennish, 1998)
- Air emissions from dredging and dewatering equipment operations (Starcrest Consulting Group, 2005)
- Air emissions from barge and truck trips for transport of dredged material to disposal sites (Starcrest Consulting Group, 2005; NRDC, 2004; Ports of Los Angeles and Long Beach, 2006)
- Solid and hazardous waste impacts on disposal site capacity which is already limited (CIWMB, 1992)

Comment 9 – Impacts To Disposal Site Capacity From Increased Remedial Dredging

It is reasonable to expect that implementation of the SQOs could result in substantial areas within active harbors being deemed in exceedance. To provide the basis for adequate evaluation of impacts, the State Board should develop an analysis of the enormous magnitude of additional disposal that could result. Available sediment data for representative locations could be used to estimate the number of acres of bottom where SQOs would be exceeded. Assuming that sediment exceeding SQOs is removed to a depth of two feet, the volume of sediment that would require disposal can be estimated. The estimated volume, in turn, can be compared to the volume of available land disposal or (for sediments characterized as hazardous) hazardous waste landfill capacity. Unless it performs such an analysis of the reasonably foreseeable consequences of SQO implementation, the State Board would have no basis to conclude that the potential impacts on disposal capacity sites will be less than significant.

Comment 10 – Air Quality Impacts Of Increased Remedial Dredging

Air emissions from dredging activity and truck trips to transport large volumes of material would be likely to exceed applicable CEQA significance thresholds. For example, the South Coast Air Quality Management District (SCAQMD) has adopted CEQA significance thresholds of (i) daily emissions of 100 pounds NO_x, 75 pounds ROG, 150 pounds SO_x or PM₁₀, or 550 pounds of CO and (ii) calendar quarterly emissions of 2.5 tons of ROG or NO_x, 6.75 tons of SO_x or PM₁₀, or 24.75 tons of CO (SCAQMD 1993).

Based on the estimated volumes of dredge material (see comment 9), the amount of air emissions, should SQO exceedances be addressed by remedial action over large areas, can be estimated. The typical suite of equipment involved in dredging operations includes the dredge vessels and dredges themselves, tugs used to transport barges of dredged material to shore, off-loading equipment, and trucks to transport dredged material to disposal sites. All are sources of emissions with potentially significant effects on air quality. The emissions associated with removing and transporting the estimated volume of additional dredged material, from representative origins to likely disposal destinations, can be calculated and compared to the applicable CEQA emission thresholds.

Even without performing such a quantitative analysis, given the low thresholds set by SCAQMD and other air districts, it is foreseeable that potentially significant air quality impact would result. Unless it performs such an analysis of the reasonably foreseeable consequences of SQO implementation, the State Board would have no basis to conclude that the potential impacts on air quality will be less than significant.

Comment 11 – Cumulative Impacts Of Increased Remedial Dredging

The State Board should also consider potentially significant cumulative impacts in the vicinity of areas likely to be affected by the SQO Plan. For example, according to the *San Pedro Bay Ports Clean Air Action Plan Technical Report* (Ports of Los Angeles and Long Beach, 2006), other projects are contributing and will contribute to serious environmental concerns related to truck traffic, air pollution and noise in the areas adjacent to the Ports of Los Angeles and Long Beach.

Comment 12 – Capping Impacts

In addition to sediment removal by dredging, sediment sequestering or capping is another reasonably foreseeable activity that could result from adoption of SQOs and identification of sediments that exceed SQOs. Accordingly, the State Board's CEQA evaluation for adoption of

the SQO Plan must evaluate the reasonably foreseeable environmental impacts of capping as an implementation strategy.

Sediment sequestration or capping would entail covering contaminated bed sediments in a water body with clean fill material from another source. Capping is used to make the contaminants less biologically available by sequestering them from the human environment and from the biologically active sediment layer, which is generally the top six inches of sediment. Construction of sediment caps on contaminated sediments can result in impacts similar to those that occur for dredging, including increased ship and boat traffic (barges are generally used to transport clean sediment to the area to be capped), truck traffic (when capping material comes from land-based sources), and increased air pollution. In addition, capping requires a clean sediment source, which is generally taken from a marine borrow area or from a land-based source, and the capture and transport of the capping material can also cause environmental impacts.

- Capping areas of contaminated sediments would temporarily increase the turbidity of overlying waters, with impacts to organisms in the water column (Koebel et al., 1999)
- Similar to dredging operations, exhaust emissions from barges and sediment placement equipment would contribute to air quality impacts (EA Engineering, Science, and Technology, 2005)
- Taking capping material from marine borrow sources would disturb a area of clean sediment elsewhere, resulting in impacts to the biota in the borrow location, resuspension of sediments, and associated turbidity that would likely be similar to impacts for dredging (see dredging references cited above)
- Using capping material from land-based sources would require the transport of clean material to the capping area by truck, with resulting air emissions that would likely be similar to impacts for dredging (see dredging references cited above)

Comment 13 – Economic And Indirect Environmental Effects

As noted above in Comment 7, another foreseeable consequence of SQO implementation is that routine maintenance dredging will become more difficult for ports, marine terminals and other industrial facilities around the state. Moreover, if contaminated sediments in port areas were capped, maintenance dredging would have to avoid the sediment caps and thus would become more difficult, potentially reducing the frequency and scope of maintenance projects.

While economic effects are not environmental impacts, CEQA requires consideration of environmental impacts that may arise as a reasonably foreseeable consequence of economic effects. CEQA Guidelines §§ 15064(e), 15131(a). In this case, the increased difficulty of maintenance dredging could have indirect impacts as a consequence of the reduced availability of port facilities, leading to re-routing of goods and petroleum products to land transport with resulting increased traffic impacts and emissions of air pollutants from truck cargo trips (NRDC, 2004; Ports of Los Angeles and Long Beach, 2006).

Comment 14 – Economic Analysis Under Water Code Section 13241

We also note that, under Water Code section 13241, economic considerations must be taken into account, separately from CEQA, in evaluating the proposed SQOs. As the State Board has

itself acknowledged: “Under Water Code section 13241, the State Board is legally required to consider economics, as well as other factors, prior to adopting SQOs. The analysis of economic considerations will likely be incorporated into or appended to the [SED].” State Board, Responses to Comments on the Draft Revised Workplan (2003), p. 19; see also p. 29: “The State Board will comply with all applicable federal and state legal requirements, including Water Code section 13241, prior to adopting any SQOs.” This analysis has not yet been done. The SQO Plan and Scoping Document contain no discussion of economic considerations or indication of how the State Board intends to carry out its obligation to do so. This is an important issue on which the regulated community should have a full and fair opportunity to comment. Accordingly, the State Board should make its analysis available for review and comment no later than the public draft SED.

Comment 15 – Implementation In NPDES Permits And TMDLs

With respect to the prospect of SQO implementation in NPDES permits and/or TMDLs, the State Board should consider the following potential impacts:

- Solid and hazardous waste impacts from disposal of residuals from increased wastewater treatment (City of St. Helena, 2006)
- Construction impacts for new treatment facilities (Pierce County, 2000)¹
- Energy consumption for treatment facility operations (SBW Consulting, Inc., 2002; M/J Industrial Solutions, 2003)
- Cumulative impacts of wastewater treatment expansion and/or remedial dredging at upstream sources of contaminants (Pierce County, 2000)

Comment 16 – Remedial Action Alternatives

In Section 2.4 of the Scoping Document, the recommended Alternative 1 – “Regional Water Boards retain the discretion to apply the SQOs and the supporting tools to cleanup activities, where appropriate” – is excessively vague and would likely lead to sediment removal or remediation actions that would not have occurred otherwise. Potentially significant impacts could result, including effects on water quality, biological resources, air quality, etc. as discussed above. Each of these impacts should be evaluated in the SED for the State Board staff’s recommended alternative.

The SED should also consider other alternatives that would reduce or avoid such impacts:

Alternative 3: An SQO evaluation, by itself, would not be used to trigger or initiate a sediment cleanup action. SQOs will be implemented in sediment cleanup actions under the existing toxic hotspots and TMDL programs, not through independent sediment cleanup actions.

These existing regulatory programs constitute part of the existing conditions or “CEQA baseline,” against which the SED must evaluate impacts of adopting the new SQO Plan. By

¹ See Tables A-12 and A-13, pp. 29-32.

limiting the application of SQOs to the existing regulatory programs, adverse environmental impacts associated with SQO adoption will be reduced.

Alternative 4: Remedial actions that are already underway and those for which plans have been approved will not be affected by the SQO process or subject to SQO evaluation.

The reason for this alternative is that planned remedial measures at a site will have already been formulated to include ecological risk evaluations. SQO evaluation for these projects would duplicate prior work and likely delay remediation plans that already taken a significant amount of time and effort to formulate.

Comment 17 – Alternatives Regarding Use Of Multiple Lines Of Evidence

WSPA generally agrees with the multiple lines of evidence (MLOE) approach proposed in the SQO Plan. However, the draft Plan, Section C.2, specifies that only two lines of evidence (chemistry and toxicity) shall be used for bays and estuaries where benthic tools are unavailable. Section J provides an evaluation matrix that uses chemistry and toxicity to make a determination for a station with missing benthic data. WSPA is especially concerned with the classifications of some of the boxes within Table 3.10 on p. 50, which allow final SQO assessments to be made using only two lines of evidence. Section 2.19 of the Scoping Document (pp. 30-32) discusses the application of SQOs to estuaries and recommends adoption of Alternative 3, which would allow use of sediment toxicity and chemistry alone (i.e., only two lines of evidence) to implement the narrative objective.

WSPA strongly disagrees with the recommendation to adopt Alternative 3 and requests that the State Board carefully consider Alternative 1, requiring use of three lines of evidence in estuarine environments. The use of only two lines of evidence directly contradicts the recommendations of the Scientific Steering Committee and cannot be implemented with the tools currently specified in the draft SQO Plan. (See discussion in WSPA's technical comments, Attachment A to this letter, and the excerpts from the Scientific Steering Committee Consensus Opinion on MLOE Approach (March 2, 2005), attached to the technical comments.) Reliance on too few lines of evidence risks both under- and over-inclusive results, i.e., mistakenly failing to identify some affected sediments while mistakenly identifying others that are in fact unaffected. For example, relying on the chemistry line of evidence could lead to mis-classifying sediments which were not tested for those toxic contaminants actually causing serious impacts to benthic community organisms. Conversely, without chemistry and toxicity data, it is impossible to determine if alterations in the benthos may result from natural factors. Sediments not actually causing biological impacts could be misclassified due to the presence of toxic chemicals that are not bioavailable. Spurious results of toxicity tests could also be attributable to the presence of natural factors such as ammonia, hydrogen sulfide or physical abrasion or alternatively, the result of contaminants not tested.

An under-inclusive result could result in direct environmental consequences, by ignoring sediments that should be addressed; while an over-inclusive result could lead to inappropriate remedial actions with potentially significant adverse side-effects for water quality, air quality and disposal site capacity as discussed above. These reasonably foreseeable consequences must be considered in the SED. The SED must also consider alternatives requiring three lines of evidence for all provisions in the draft Plan that currently allow reliance on only two lines of evidence. As discussed in WSPA's technical comments, two options that should be considered when the SQO tool for benthic community evaluation is unavailable: using the best professional

judgment of a trained benthic ecologist or taxonomist; or using available indices developed outside the SQO program.

Comment 18 - Natural Attenuation/Recovery Alternative

In particular, the SED should evaluate an alternative providing that, whenever remedial action is considered based on exceedance of SQOs, management by means of natural attenuation (also referred to as natural recovery) must be evaluated. Natural attenuation is generally preferred when a remedial action (either dredging or capping) would cause more harm than leaving the sediment in place. Natural attenuation is generally appropriate in “accretional areas” where cleaner sediments are already accumulating and burying existing contamination; or for pollutants that are degrading in situ (e.g., via biodegradation).

As discussed at the outset of these comments, WSPA understands that the State Board intends the SED to serve as a programmatic CEQA document. That is, the SED will not purport to fully evaluate environmental impacts in a manner that would permit the Regional Boards to order implementing actions without any further CEQA review. Rather, the SED will constitute a “tier 1” CEQA document covering only adopting of the SQO Plan and analyzing impacts of implementation on a program level. This approach requires the Regional Boards to conduct subsequent “tier 2” CEQA analyses for the actions they ultimately select to implement SQOs. However, even under the tiered approach, as noted above, if a later implementation action “is reasonably foreseeable in general terms, the [Tier 1 CEQA document] must include a general discussion of the act and its possible environmental effects.” *Ebbetts Pass Forest Watch*.

For this reason, the SQO Plan should direct the Regional Boards that they should evaluate a natural attenuation/recovery alternative before ordering remedial actions based on exceedance of SQOs. While it not necessary to conduct a full evaluation of the impacts of future actions in the Tier 1 CEQA document, if the Tier 1 document does defer certain areas of specific analysis to Tier 2, those issues must be addressed by the Regional Boards which undertake future Tier 2 actions. In other words, the Regional Boards cannot rely on the State Board for CEQA compliance that the State Board deferred to the Regional Boards. By adopting an alternative that requires the Regional Board to consider the benefits and impacts of natural attenuation, on a case-by-case basis, the State Board can rely on the Regional Boards to perform the evaluation of impacts and alternatives, which the State Board did not perform.

Thank you for considering WSPA’s scoping comments. Please contact me at 916-498-7755 if you have any questions or wish to discuss our comments. We look forward to the opportunity to comment on the SED when it is issued and for further discussion of these issues with the State Board.

Sincerely yours,

s/Kevin Buchan
(sent via email)

Enclosure: Attachment A

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