II. RESPONSES TO COMMENTS

Pursuant to State California Environmental Quality Act (CEQA) Guidelines section 15088, the California State Lands Commission (CSLC), as CEQA Lead Agency, is required to evaluate comments on environmental issues received from persons who reviewed the Draft Environmental Impact Report (EIR) prepared for the Shell Martinez Marine Terminal (Shell Terminal) Lease Consideration Project (Project) and to prepare a written response. The Lead Agency must respond to comments received during the noticed comment period and any extensions and may respond to late comments.

The State CEQA Guidelines further require the Lead Agency to describe in its written response the disposition of significant environmental issues raised (e.g., revisions to the proposed Project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position varies from recommendations and objections raised in the comments must be addressed in detail giving reasons why any specific comments and suggestions were not accepted.

Six written comment sets were submitted on the Draft EIR. No oral comments were made at either of the two public meetings on the Draft EIR held on February 10, 2010. Each comment received is given a unique identification (ID) number (see Table II-1).

- Each commenter is given a unique comment code, an abbreviation that refers to the agency, organization, or person submitting the comment.
- Individual comments are numbered in the margins of each comment letter and/or meeting transcript; correspondingly numbered responses follow each comment.

Section II contains both the original letter and the CSLC's Responses to Comments. In addition, Section III of this Final EIR contains revisions to the text of the Draft EIR that were made in response to comments received and to include new information that has come to light since publication of the Draft EIR in January 2010.

Table II-1 Commenters on Draft EIR and Comment Identification Numbers Used in this Final EIR

Category	Comment Set	Name of Commenter	Comment ID No.
Agency	1	City of Martinez	MAR-1
	2	Contra Costa County Public Works Department	CCPW-1
	3	San Francisco Bay Conservation and Development Commission	BCDC-1
Public	4	San Francisco Baykeeper	SFB-1 to SFB-15
	5	Concerned Public (anonymous)	CP-1 to CP-18
Applicant	6	Shell Oil Products US	SHELL-1 to SHELL-14

COMMENT SET 1: CITY OF MARTINEZ

City of Martinez
525 Henrietta Street, Martinez, CA 94553-2394
(925) 372-3515
FAX (925) 372-0257

February 10, 2010

Scott McFarlin, Project Manager
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

RE: CSLC EIR #722 - Shell Marine Oil Terminal, Martinez, California

Dear Mr. McFarlin:

The City of Martinez respectfully submits the following comments on the proposed lease extension for the Shell Marine Oil Terminal (MOT) located in Martinez, CA. As your agency is aware, we have raised concerns regarding possible effects of sediment re-suspension on the Martinez Marina, located nearby to the MOT. The Draft EIR indicates that no study has been done to attempt to quantify this potential impact. Furthermore, while the City agrees that the number of vessels transitting the MOT is a relatively small percentage of the overall number of vessels moving through the Carquinez Straight, and that currents are strong and sediment baseloads do result in some shoaling at the Marina, the Draft EIR does indicate an "adverse but less than significant" impact to shoaling at our City's Marina.

MAR-1

Shoaling has a significant impact on the navigability and economic viability of our Marina. As the State and Shell are no doubt aware, dredging is expensive. Thus, the City remains concerned that vessel transit and berthing operations could increase shoaling at our Marina, beyond background levels, due to vessel operations at the MOT. We believe that the "adverse but less than significant" impact deserves further quantitative analysis than what is presented in the Draft EIR.

The City of Martinez respectfully requests the opportunity to further discuss these concerns with our neighbors at the MOT. We believe this meeting should include representatives of the pilots who operate the vessels. The City is interested in studying these issues further, as well as better understanding current vessel approach and berthing practices and considering whether operational BMPs (e.g. changes in approach, lower speeds, etc.) could reduce the potential for shoaling at our Marina.

Thank you for the consideration of these comments.

We look forward to receiving your proposal. Questions regarding the RFP may be directed to me at 925.372.3534.

Sincerely,

Terry Blount

Terry Blount, AICP
Planning Manager

RESPONSE TO COMMENT SET 1: CITY OF MARTINEZ

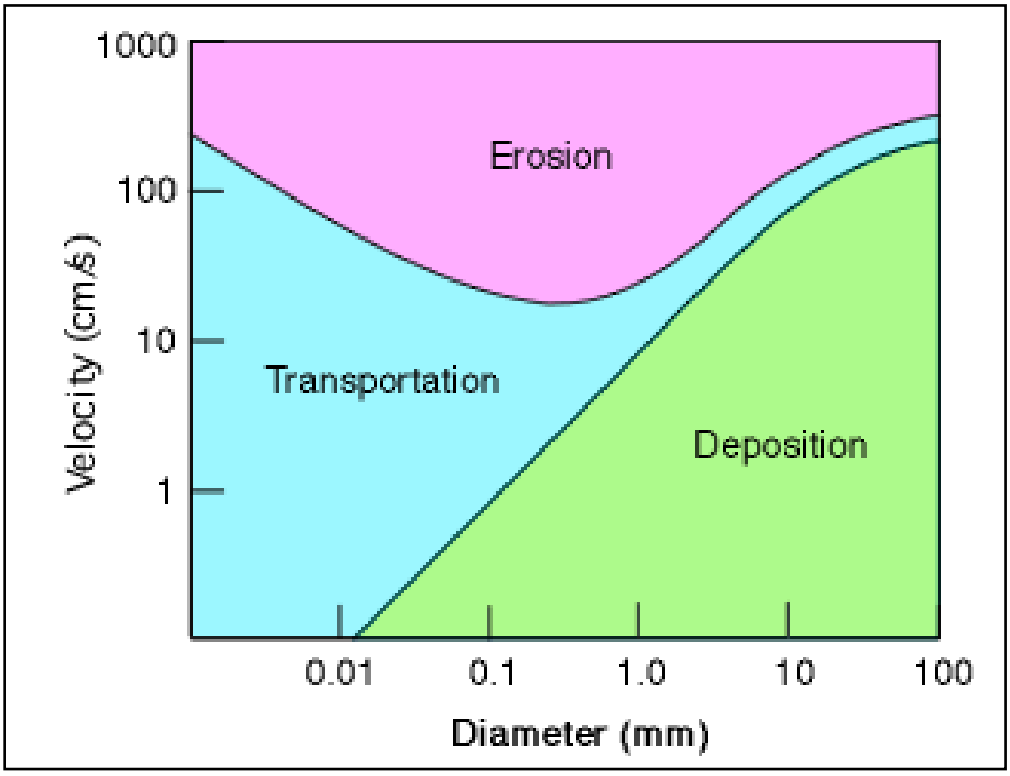
MAR-1 Any shoaling at the Shell Martinez Marine Terminal (Shell Terminal), which has been located on the Carquinez Strait upstream of the Martinez Marina since 1915, is considered within the Project baseline. The Final Environmental Impact Report (EIR) discusses turbidity related to vessel traffic at the Shell Terminal and concludes that Project-related Shell Terminal vessel traffic is not degrading beneficial uses of the Carquinez Strait or causing sedimentation at the Martinez Marina (EIR Section 4.2.4.1 [Shell Terminal Routine Operations and Potential for Accident Conditions, Impact WQ-1]).

The Carquinez Strait is a narrow, tidally influenced strait with high average current velocities throughout the year. Average current velocities measured at the Martinez Amorco Pier just upstream of the Shell Terminal in 2009 were 2.1 knots (108 centimeters per second [cm/s]) during flood tide and 2.2 knots (113 cm/s) during ebb tide (National Oceanic and Atmospheric Administration [NOAA] 2009; http://tidesandcurrents.noaa.gov/currents09/tab2pc1.html#107). The San Francisco Bay Estuary drains about 40 percent of California's water, which comes from the Sierra Nevada mountains through two major river systems, the Sacramento and San Joaquin, that converge in Suisun Bay then flow through the Carquinez Strait to San Pablo Bay and the Pacific Ocean. Carquinez Strait is turbid from high suspended sediment loads dominated by fine-grained material from historical hydraulic mining in the Sierra Nevada and runoff from Central Valley agriculture. Estimated sediment loads for waters in the Carquinez Strait range from 0.26 to 26 million metric tons per year.[1]

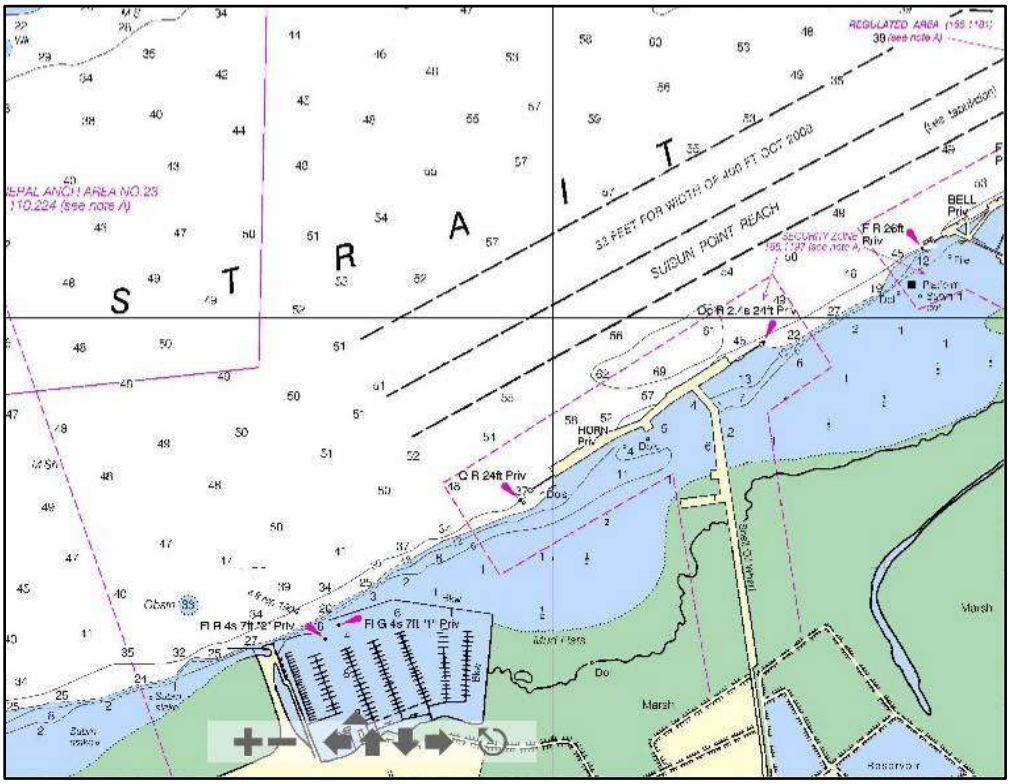
Whether sediment suspended in moving water is deposited or stays in suspension is dependent on the velocity of the current (see Hjulstrom curve below, which depicts the relationship between current velocity and sizes of particles that can be deposited). The fine-grained material (grain size less than 0.063 millimeters in diameter) dominant in the area would not be deposited in the Shell Terminal outer berth area as current velocities are too high. Smaller sediment particles typically stay in suspension longer than larger particles. Sands and gravels settle more quickly than silts and clays, regardless of the ambient water velocity. The natural siltation dynamics in the Carquinez Strait and other tidal water bodies are for sediments to deposit where water velocities fall below the critical velocity that keeps sediments in suspension. These low velocity areas are typically in shallow marshes and mud flats, such as those inshore of the Shell Terminal wharf (e.g., at inner Berths #3 and #4). Nautical charts of the Carquinez Strait (see below) indicate the presence of marshes and shallow areas along the south shore of the strait, encompassing the Martinez Marina and the south side of the Shell Terminal (Berths #3 and #4). These areas are naturally prone to sedimentation.

[1] McKee, L.J., N.K. Ganju, and D. H. Schoelhamer. 2006. *Estimates of suspended sediment entering San Francisco Bay from the Sacramento and San Joaquin Delta, San Francisco Bay, California*. Journal of Hydrology. 323.

Hjulström Diagram/Curve (source: www.columbia.edu/~vjd1/hjulstrom.gif).



Area nautical chart (Source: www.charts.noaa.gov/OnLineViewer/18657.shtml).



Many of the smaller particles in the deeper, more energetic sections of the Carquinez Strait are constantly washed out, leaving only the larger particles at the channel bottom near the Shell Terminal. The distribution of sand sediments in the main channel and fines nearer to shore can be seen in Table 4.2-13 (EIR Section 4.2.1 [Environmental Setting]), showing that sediment grain sizes at the Shell Refinery outfall ranged from 77.6 to 64.8 percent fines (silt and clay) decreasing with distance from the shore. Therefore, sediments in the deeper water at Berths #1 and #2, where vessels call, have a lower percentage of fines than Berths #3 and #4.

Shell performs annual hydrographic and side-scan sonar surveys of the seafloor surrounding the Marine Terminal, and sediments at the Shell Terminal appear to be hydrodynamically stable. Propeller wash from the volume of vessel traffic that has occurred at the berths over time has likely already scoured sediment so that the bottom contours are no longer affected by propeller wash associated with maneuvering and berthing vessels at the outer berths. The existing bottom sediments are in equilibrium with the many years of maneuvering and berthing operations and the existing currents. The current condition of the berths underscores these dynamics: U.S. Army Corps of Engineers records confirm that Berths #1 and #2 have never required dredging to maintain more than adequate draft for vessels.

COMMENT SET 2: CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENT

Contra Costa County
Public Works
Department

Julia R. Bueren, Director
Deputy Directors
R. Mitch Avalon • Brian M. Balbas
Stephen Kowalewski • Patricia McNamee

February 23, 2010

Scott McFarlin
California State Lands Commission
100 Howe Ave Suite 100 South
Sacramento, CA 95825-8202

RE: **45-Day Comments**: Shell Martinez Marine Oil Terminal – 30-Year Lease Renewal, Notice of Preparation of a Draft EIR

Dear Mr. McFarlin:

We have reviewed the Notice of Preparation of a Draft Environmental Impact report (DEIR) for the Shell Martinez Marine Oil Terminal 30-Year Lease Renewal. The notice was received on January 21, 2010.

Please coordinate with the Contra Costa County Public Works Department on future road improvements, resurfacing, and any mitigation to address impacts to the road surface due to projected increased production which may involve added trips. An encroachment permit will be required prior to the commencement of any work performed on County roads. **CCPW-1**

If you have any questions, please contact me by phone at (925) 313-2161 or by e-mail at griva@pw.cccounty.us; alternatively, you can reach Mary Halle at (925) 313-2327 or at mhall@pw.cccounty.us.

Sincerely,

Alex Rivas
Engineer
Transportation Engineering Division

AR:jcw
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Cc: Mary Halle, TE
Chris Lau, TE

"Accredited by the American Public Works Association"
255 Glacier Drive • Martinez, CA 94553-4825
TEL: (925) 313-2000 • FAX: (925) 313-2333
www.cccpublicworks.org

RESPONSE TO COMMENT SET 2: CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENT

CCPW-1 The Applicant (Shell) states that it will coordinate with the Contra Costa County Public Works Department on future road improvements, resurfacing, and mitigation necessary to address any impacts to the road surface associated with Project activities. Shell will apply for and obtain any necessary encroachment permits required by the County.