UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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September 28, 2012

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U.S. Army Corps of Engineers
Los Angeles District, Ventura Field Office
Alessandro Drive, Suite 110, Ventura
California 93001

ATTN: File Number SPL-2010-00602-JWM, 2152

Subject: Draft Environmental Impact Statement for the Eagle Rock Aggregate Terminal Project, Los Angeles County, California (CEQ # 20120253)

The U.S. Environmental Protection Agency (EPA) is providing comments on the Draft Environmental Impact Statement for the Eagle Rock Aggregate Terminal Project. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our comments are also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act. We appreciate the Corps of Engineers' willingness to extend EPA's opportunity to comment to September 28, per your September 18, 2012 communication with Tom Kelly of my staff.

The Port of Long Beach, along with the Port of Los Angeles, has made substantial progress in reducing air pollution, particularly diesel emissions, through the San Pedro Bay Clean Air Action Plan. Nevertheless, if the South Coast Air Basin is to attain the National Ambient Air Quality Standard for ozone by 2023, the Ports and many other sectors will need to accelerate deployment of existing air pollution control technologies and employ new technologies not yet commercially available. Port expansion projects, such as the Eagle Rock Aggregate Terminal, while they may offer other benefits, slow the Port of Long Beach's progress in reducing emissions. Furthermore, the project's significant emissions of nitrogen oxides and volatile organic compounds would be borne by local communities that are already burdened by poor air quality.

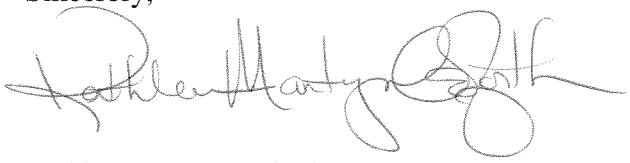
EPA acknowledges the environmental commitments that the Port of Long Beach has incorporated into the proposed project, which is located on private, rather than port-owned, land. The Clean Truck Program, for example, would minimize emissions from aggregate hauling to local ready-mix concrete plants. The primary opportunities to further reduce the significant air quality impacts of the project rest with the project proponent. We encourage Eagle Rock Aggregates to recognize the full impact of its marine terminal on the proximal populated areas, reduce emissions from its ocean going vessels serving the terminal, and demonstrate leadership by participating in early testing and adoption of zero or near-zero (tailpipe) emission drayage fleet vehicles. The Port can be of valuable assistance to Eagle Rock Aggregates in taking these steps. Additionally, the Port of Long Beach Green Ship Incentive Program provides financial

incentives for ocean going vessels that meet the International Maritime Organization Tier 2 and Tier 3 emission standards. We encourage Eagle Rock Aggregates to participate in that program. While the Army Corps of Engineers has limited control over long-term operational emissions at the terminal, we ask the Corps to ensure that the applicant has developed appropriate plans to minimize future impacts to protect water and air quality, to the extent possible.

Based on our concerns regarding air quality, as well as water resources, alternatives considered but not carried forward for analysis, lightering, and recycled aggregate, we have rated the proposed project as Environmental Concerns-Insufficient Information (EC-2) (please see the enclosed "Summary of EPA Rating Definitions"). The enclosed Detailed Comments elaborate on these concerns and our recommendations.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and one electronic copy to the address above (mail code: CED-2). If you have questions, please contact me at (415) 972-3856 or kelly.thomasp@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
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Enclosures: EPA's Detailed Comments
Summary of EPA's Rating Definitions

cc via email: Rick Cameron, Port of Long Beach
William Terry, Eagle Rock Aggregates
Susan E. Anderson Wise, Port of Long Beach Harbor Commissioners
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Alan Hicks, U.S. Department of Transportation, Maritime Administration
Caroline Denis, CSL International
David Coscia, LA County, Environmental Programs Division

EPA DETAILED COMMENTS, DRAFT ENVIRONMENTAL IMPACT STATEMENT EAGLE ROCK AGGREGATE TERMINAL PROJECT, LOS ANGELES COUNTY, CALIFORNIA (CEQ # 20120253)

Air Quality

Ocean Going Vessels

The DEIS estimates that, in the first full year of operations, ocean going vessel emissions will represent more than 70% of the project's total nitrogen oxides (NOx) emissions, more than 50% of the total Volatile Organic Compound (VOC) emissions, and more than 30% of particulate matter less than 2.5 microns (PM 2.5). While some of these emissions decline slightly in absolute terms by 2035, they do not decline as a percentage of project emissions. For example, Eagle Rock's bulk cargo vessel appears to represent more than 80% of NOx emissions in 2035[1]. The Clean Air Action Plan has specific measures that focus on vessel emissions, but these are not discussed in the DEIS. For example, one measure seeks to maximize the number of vessels meeting new International Maritime Organization Tier 2 (15% NOx reduction) and Tier 3 (80% NOx reduction) engine standards[2]. The Port of Long Beach implements this through its Green Ship Incentive Program by providing incentive funds for ocean-going vessels meeting Tier 2 or 3 standards. A second Clean Air Action Plan measure encourages voluntary deployment of cleaner engine technologies validated through the Technology Advancement Program (TAP) or by regulatory agencies[3]. The Port has identified many retrofit technologies to reduce emissions from existing ocean-going vessels, such as slide valves, direct water injection, fuel water emulsion, humid air motor, exhaust gas recirculation, selective catalytic reduction and continuous water injection.

Eagle Rock Aggregates' parent company Polaris Minerals has an ISO14001 certified Environmental Management System (EMS)[4]. Emissions from shipping, particularly in close proximity to residents and schools, are likely to be a significant aspect (environmental impact) for the company. As discussed above, opportunities to address such emissions are readily available.

> *Recommendations:*
> The FEIS should include a commitment from the project proponent to reduce air emissions from ocean going vessels. Eagle Rock Aggregates should meet with the Port of Long Beach and their contract bulk cargo shipper to evaluate the options and determine a cost-effective method to minimize such emissions. Alternatively, the FEIS should include a brief summary of financial incentives and available technologies (including approximate or standardized costs) to reduce emissions from the vessel modeled in the DEIS: the (CSL) Acadian.
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> We encourage Polaris Minerals to ensure that its EMS covers all of its operations, including product transport and terminal operations, if it has not already done so.

At-Berth Emissions

The DEIS concludes that the installation of shore power, to reduce ship at-berth (or hoteling) emissions, is not economically feasible (p. 1-24). While we appreciated the conceptual plan and cost estimate for shore power in Appendix B, two additional factors

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[1] Year 2035 emissions estimated from Annual Controlled Emissions in Appendix 2, page 65.
[2] OGV-5, Clean Air Action Plan 2010 Update, Port of Long Beach and Port of Los Angeles.
[3] OGV-6, Clean Air Action Plan 2010 Update, Port of Long Beach and Port of Los Angeles.
[4] Polaris Mineral 2011 Annual Report

should be considered in determining economic feasibility: Eagle Rock Aggregate's lease costs and the relative cost difference of transportation by barge. Neither was discussed in the DEIS, but these costs considered together could make shore power a more reasonable fraction of the total annual project cost.

We also note that the DEIS does not appear to consider all relevant elements of the Clean Air Action Plan for at-berth emissions. This plan states, "through the Technology Advancement Program, demonstration and application of alternative emissions reduction technologies will be evaluated and implemented for ships that are not good candidates for shore power[5]."

> *Recommendation:*
> The FEIS should discuss the cost of transporting aggregate by bulk cargo vessel versus barge, because it could affect the economic feasibility of shore power. If shore power remains infeasible, Eagle Rock Aggregates should commit to early testing and adoption of technologies other than shore power that are demonstrated by the Port of Long Beach Technology Advancement Program.

Baseline

The DEIS provides three NEPA alternatives. Alternative 3 is the No Federal Action Alternative because it avoids the need for approval by the Army Corps. The DEIS also considers Alternative 3 to be the NEPA baseline. A No Project Alternative (Alternative 4 and CEQA No Action) is presented in the CEQA analysis of this joint EIS/EIR, but is not part of the NEPA analysis. The No Project Alternative describes current environmental conditions at the proposed project site.

EPA is concerned that Alternative 3, which would involve off-loading barges, rather than ships, at the Eagle Rock Aggregate Terminal, may not be reasonably foreseeable and, therefore, may not appropriately represent the environmental baseline. Although the throughput of aggregate materials is the same for each action alternative (Tables 1.8-3, 5 and 7), the different means of transport could significantly alter the economic and logistical feasibility of the project. Alternative 3 operations would include articulated barges traveling from British Columbia with the assistance of two diesel powered tugboats, and returned using a single tugboat. Articulated barges are notched at the rear where the tug connects to the barge, and, as the DEIS notes on page 1-23, these barges would have a conveyor to deposit aggregate in hoppers at the shore. The DEIS does not indicate whether such barges are readily available or might need to be custom built, or describe operational limits in poor weather.

We estimate that the trip from British Columbia is more than 1,200 miles; a round trip journey would take more than a week at 15 knots[6]. To maintain maximum aggregate

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[5] See page 89 of the San Pedro Bay Ports Clean Air Action Plan 2010 Update, Port of Long Beach and Port of Los Angeles.

[6] Maximum speeds are 13 knots for articulated barges in light duty and 15 knots for articulated barges transporting containers, according to The Articulated Tug/Barge – AT/B, The History and State of the Art, by Robert P. Hill <http://www.oceantugbarge.com/PDF/history.pdf >

throughput of 2.75 million tons per year specified in the DEIS, Alternative 3 would require the full-time use of more than 10 tugboats and 5 barges. Given these logistical considerations and their unspecified costs, the likelihood that Alternative 3 would be pursued, in the event the Corps decides to take no action, appears uncertain. (Please note an additional concern about this Alternative 3 under the heading Lightering).

> *Recommendations:*
> EPA recommends that the FEIS more completely explain, in Alternative 3, the logistics (e.g., number of tugs, barges, crew, expected schedules etc.) of transporting aggregate by barge; the cost of operating, leasing or contracting for this mode of transport; and the basis for assuming that this alternative would be pursued in the event that the Corps decides to take no action. Compare these to the logistics and costs of transport via Panamax-class vessel, including their relative percentage of the delivered product cost.
>
> Because Alternative 3 may not be reasonably foreseeable, EPA recommends that pre-project conditions, as described in Alternative 4 (the CEQA No Action alternative), be considered the environmental baseline for purposes of NEPA. The presentation of impacts in the FEIS should be revised to include a comparison of those from Alternatives 1, 2 and 3 with those from Alternative 4 (as is already presented as part of the CEQA analysis), in addition to the existing comparison of Alternatives 1 and 2 with Alternative 3 (No Federal Action Alternative), to provide a more complete picture of the project's impacts in the EIS.

Drayage Fleet

EPA supports the Port of Long Beach Clean Truck Program. It ensures that the drayage fleet filling the need of the Eagle Rock Terminal -- an average of 385 round-trips per day -- would meet EPA's tier 4 on-road engine standards for heavy duty trucks. The TAP is working to include operational and durability testing of an all electric on-road drayage truck, but the DEIS does not discuss transition to a zero or near-zero (tailpipe) emission drayage fleet to serve the Eagle Rock Aggregates terminal. Because the majority of trucks from the facility will be traveling less than 20 miles (p. ES-4), the terminal may be an ideal candidate for early transition to a zero-emission fleet.

> *Recommendation:*
> We encourage Eagle Rock Aggregates to commit to early testing and adoption of zero or near zero (tailpipe) emission trucks for fleets serving the terminal.

Water Resources

Stormwater Pollution Prevention

In Section 3.3, the DEIS briefly discusses the requirement to prepare a stormwater pollution prevention plan (SWPPP) and best management practices (BMPs) for both construction and operation of the Eagle Rock facility. The DEIS states that the impacts of erosion and runoff are expected to be less than significant, and that BMPs including, but not limited to, the following may be required under the SWPPP: placement of sediment detention devices

(temporary berms, sand bags, fencing or straw bales) and temporary inlet protection devices to trap sediment, covering stockpiled material prior to rain events, and regular site sweeping and cleanup.

While temporary berms, sand bags, fencing or straw bales may be standard methods to reduce construction impacts, operational stormwater controls should be incorporated into the design of the terminal to continuously and permanently manage stormwater runoff. Regardless of whether the effects would be significant, the facility design should minimize the impacts of stormwater pollution. In discussing fugitive dust, the DEIS mentions "site watering as necessary to maintain sufficient [storage pile] soil moisture content," (p. 3.1-12) but does not discuss control of this water. While the amount of this water is likely to be small, it would be an unauthorized stormwater flow if discharged by the facility. Additionally, the project description mentions a land-based conveyance and distribution system" (p. 1-16) but does not mention whether this system is enclosed to minimize windblown losses.

Recommendations:
The FEIS should describe the permanent facilities, equipment and procedures that would be incorporated into the facility design to minimize stormwater discharges. EPA offers the following examples of such facilities, equipment, and procedures:

- a fully enclosed aggregate conveyor from the ship's boom that is easily maintained to minimize spillage, windblown losses and discharges to waters of the United States;
- a paved bulk storage area to facilitate sweeping and minimize emissions;
- a settling basin to control stormwater discharges and unauthorized non-stormwater discharges (e.g. runoff from water placed on the pile to minimize particulate emissions) within the bermed storage area;
- removal of any storm drains within the bermed area;
- maintenance areas with oils and fuels that are separated from the aggregate storage area by berms and, preferably, covered;
- storm drain inlet controls such as filter fabric, sand traps, sumps throughout the facility;
- routine facility-wide sweeping by street sweepers;
- storm water storage tanks to provide excess storm water capacity, to avoid turbid discharges, and allow the facility to reuse storm water for on-site dust suppression;
- track out controls, preferably a tire wash, at the exit of the truck loading area.

Executive Order 11988: Floodplain Management

Executive Order 11988 Floodplain Management requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains. The DEIS states that the proposed project is within the 100-year floodplain, Federal Emergency Management Agency Zone AE, corresponding to a 1-percent annual chance of flooding (p. 3.3-8). According to the Flood Insurance Rate Map,

the proposed project location has a base flood elevation of 9 feet[7]. While the DEIS discusses the impact of the project on the floodplain, it does not sufficiently discuss the risk of potential flooding (i.e. storm surge) on the proposed project, as required by Executive Order 11988.

> *Recommendations:*
> The FEIS should discuss the impacts of potential flooding on the proposed Project, and discuss mitigation to minimize these impacts, such as temporarily placing weighed tarps over the bottom 9 feet of the sand and gravel stockpiles.

Alternatives Considered But Not Carried Forward for Analysis

The DEIS considered but rejected an alternative to fully enclose the stockpile area. The stated reasons for not considering this alternative are the avoidance of construction related emissions; the low potential for fugitive dust; and the Corps' determination that the impacts associated with fugitive dust during Project operation would be less than significant (p. 1-9). According to the DEIS, the reasonably foreseeable maximum construction emissions for the proposed project, which does not include construction of a stockpile enclosure, are 42 lbs per day of PM10 and 22 lbs per day of PM 2.5 (Table 3.1-7). The DEIS estimates that the total fugitive dust emissions from aggregate handling and wind erosion, during operations, would be a maximum of 31 pounds per day for PM 10 and nearly 5 pounds per day for PM 2.5 (Table 3.1-9). These emissions could be substantially reduced by enclosing facility operations. Fully enclosing the storage pile would also offer the potential benefit of allowing the facility to submit a no exposure certification for exclusion from NPDES stormwater permitting requirements.

> *Recommendations:*
> Given the Port's history of significant impacts to minority and low income populations, including from PM 2.5 emissions, we recommend that the FEIS further analyze the relative benefits of avoiding a few months of construction emissions, compared to continuously controlling wind erosion and aggregate handling emissions during the years of facility operations by enclosing the facility's aggregate storage pile. If appropriate, the Corps should reconsider the feasibility of the latter alternative.

Lightering

For Alternative 3, the DEIS clearly explains that aggregate material will be towed by diesel tugboats on barges from British Columbia (p. 1-22 and elsewhere); yet that is not the method used for transporting aggregate to the San Francisco Bay Area. The website for Polaris Minerals, parent company to Eagle Rock Aggregates, describes a lightering procedure:

> . . . sand and gravel is loaded into customers' barges while the Panamax vessel is at anchor in San Francisco Bay. In this way, the residual cargo can be discharged

[7] See Flood Insurance Rate Map#: 06037C1964F Los Angeles Co Uninc & Inc 09/26/2008

directly into the Richmond or Redwood City terminals, where shallow water prevents access to a fully loaded Panamax vessel.

It is unclear why a similar procedure would not be employed for the proposed project. While we are not aware of other customers within San Pedro Bay, we are aware that Eagle Rock Aggregates is interested in expanding to San Diego and Port Hueneme[8]. Alternatively, Eagle Rock might off-load to its own barges.

Recommendation:
The FEIS should clarify the reason the No Federal Action Alternative would transport aggregate materials to the Long Beach terminal on barge towed by ocean-going tugboats, instead of bulk cargo vessels lightering cargo to a barge.

Recycled Aggregate

In discussing the need for the project, the DEIS referenced a 2006 map and its supporting documentation, prepared by the California Department of Conservation, Geological Survey. The map and documentation showed a 68% deficit in aggregate construction material for the San Gabriel Valley Study Area, which includes greater Los Angeles and Long Beach, over the next 50 years (p. 1-4). The DEIS summary of the need for aggregate did not discuss recycled aggregate. Waste concrete and asphalt represent 2.4%, or 977,000 tons of California's solid water stream[9]. As Cal Recycle has noted, waste concrete and asphalt can readily be recycled into aggregate. Furthermore, the Governor of California recently signed AB 341, setting a State-wide goal for waste diversion of 75% by 2020. While recycled aggregate is unlikely to be available in sufficient quantities to meet the local needs described in the DEIS, we encourage a discussion of the impact of importing aggregate on the domestic recycled aggregate market.

Recommendation:
The FEIS should discuss the effect of imported aggregate on the domestic recycled aggregate market.

Clarification

The DEIS notes that the Port of Long Beach had 4,898 vessel calls in 2010 (p. ES-9 and 1-6); however, the Port of Long Beach's 2010 Air Emissions Inventory states that it had only 2,212 vessel calls in 2010 (p. 30, Table 2.1). We ask for correction or clarification of this apparent discrepancy in the FEIS.

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[8] 2010 Annual Report for Polaris Minerals, parent company to Eagle Rock Aggregates
[9] California 2008 Statewide Waste Characterization Study, <http://www.calrecycle.ca.gov/Publications/Detail.aspx?PublicationID=1346>

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.