

CALIFORNIA COASTAL COMMISSION

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May 24, 2001

TO: Coastal Commissioners and Interested Parties

FROM: Jaime C. Kooser, Deputy Director
Alison J. Dettmer, Manager, Energy and Ocean Resources Unit

RE: **Hearing to Determine if Special Condition 7 of CDP E-94-006 Requires Chevron to Submit an Amendment Application to Remove Four Shell Mounds From the Former Sites of Platforms Hazel, Hilda, Hope and Heidi.**

Executive Summary

On April 10, 2001, the Coastal Commission passed a motion to set for hearing in June 2001 the question of whether Chevron should submit to the Coastal Commission pursuant to Special Condition 7 of coastal development permit ("CDP") E-94-006 an amendment application to remove the four shell mounds located at the former sites of Platforms Hazel, Heidi, Hilda and Hope (collectively known as the "4H platforms") so as to avoid an unreasonable risk of snagging by trawl nets.

The Commission staff is recommending that the Commission determine that Special Condition 7 of CDP E-94-006 requires Chevron to apply forthwith for an amendment to remove the four shell mounds.

Current information, namely, the conclusions of the *Shell Mounds Environmental Review – Final Technical Report*, completed by the consultant L. A. de Wit in March 2001, suggest that due to the physical characteristics and shape and slope of the shell mounds, they may be removed by either dredging or trawling using Gorilla nets (except if removal includes the Platform Hazel caissons or other cement material).

Disposition of the 4H shell mounds will require preparation by the California State Lands Commission ("SLC") of an environmental impact report ("EIR") under the provisions of the California Environmental Quality Act ("CEQA"). On May 23, 2001, Chevron submitted to the

SLC an application to amend the 4H Abandonment Plan for the purpose of addressing the SLC's requirement that the area be trawlable. That application did not propose a specific project. Instead the application proposes a range of potential modifications to the 4H Abandonment Plan, from providing mitigation to all affected fishermen to the complete removal of each of the four shell mounds. Disturbance of the shell mounds will also require National Environmental Policy Act ("NEPA") review by the U.S. Army Corps of Engineers ("ACOE"). A joint CEQA/NEPA document may be prepared.

The CEQA/NEPA process will include additional shell mound sampling and laboratory analysis to comply with the ACOE Ocean Disposal Testing Manual (*i.e.*, *Evaluation of Dredged Material Proposed for Ocean Disposal, Testing Manual*, commonly referred to as the "Green Book"), the Inland Testing Manual (*i.e.*, *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual, Inland Testing Manual*, commonly referred to as the "Gold Book"), and California Ocean Plan requirements. It will also include an in-depth evaluation of the environmental impacts of feasible alternatives including but not limited to removing and disposing of the shell mounds using the various techniques suggested by L. A. de Wit in his report. For example, the CEQA/NEPA document will assess whether the shell mound at the site of former Platform Hazel can be removed without the use of explosives (that would be necessary to remove also the four 27-foot diameter caissons abandoned in place).

When it reviews Chevron's application to amend CDP E-94-006, the Commission will consider the results of the CEQA/NEPA environmental review, and, on the basis thereof, make a final determination of (1) the feasibility of shell mound removal, and (2) whether the benefits of shell mound removal outweigh any adverse impacts of removal operations.

1.0 STAFF RECOMMENDATION

On April 10, 2001, the Coastal Commission passed a motion to set for hearing in June 2001 the question of whether Chevron should submit to the Coastal Commission pursuant to Special Condition 7 of coastal development permit ("CDP") E-94-006 an amendment application to remove the four shell mounds located at the former sites of Platforms Hazel, Heidi, Hilda and Hope.

For the reasons set forth in this staff recommendation, the Commission staff recommends that the Commission address the issue of shell mound removal by voting favorably on the following motion.

Motion:

I move that the Commission determine that Special Condition 7 of coastal development permit ("CDP") E-94-006 requires Chevron to apply forthwith for an amendment to remove the four shell mounds located at the former sites of Platforms Hazel, Heidi, Hilda and Hope.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in adoption of the following resolution. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby determines that Special Condition 7 of coastal development permit ("CDP") E-94-006 requires Chevron to apply forthwith for an amendment to remove the four shell mounds located at the former sites of Platforms Hazel, Heidi, Hilda and Hope.

2.0 FINDINGS AND DECLARATIONS

2.1 *Background on Removal of Platforms Hazel, Hilda, Hope and Heidi*

Chevron's oil and gas production platforms Hazel, Hilda, Hope and Heidi (collectively known as the "4H platforms") were located in state waters in the eastern portion of the Santa Barbara Channel offshore of Santa Barbara County. In 1995, the California State Lands Commission ("SLC") and the Coastal Commission approved the decommissioning of all four platforms. In 1996, Chevron removed most of the platform structures (except for four buried 27-foot diameter Platform Hazel caissons). With the platform structures removed, the remaining features of the former platform sites are shell mounds that consist of drilling muds and cuttings covered with a layer of mussel, clam and barnacle shells. The mounds are roughly semi-circular with diameters ranging from 55 meters to 82 meters.

The final phase of the platform abandonment project involves the removal of debris from the platform areas. Final site clearance was determined by test trawl surveys conducted with commercial bottom trawl fishing gear over the project site. Chevron submitted to the SLC and

Coastal Commission the results of the test trawl surveys in March 1997. The surveys determined that trawl gear could not cross the shell mounds without snagging. Both the SLC and Coastal Commission require that the site be "trawlable" as a condition of project completion. Special Condition 7 of coastal development permit ("CDP") E-94-6 states that "if the Executive Director determines that removal of the debris attributed to Chevron is necessary to avoid an unreasonable risk of snagging by trawl nets, this matter shall be set for public hearing before the Coastal Commission for the purpose of determining whether or not this coastal development permit shall be amended to require debris removal."

In order for the Commission to determine if Chevron should, under the requirements of Special Condition 7, submit an amendment application to remove the shell mounds so as to avoid an unreasonable risk of snagging by trawl nets, it needed additional information on the technical and environmental feasibility of shell mound removal. Prior to the release of the March 2001 shell mound technical report, Chevron believed that the mounds were a solid mass, much like concrete, and would require explosives to remove. Thus, the feasibility of removal, and its attendant environmental effects, was a serious concern. In addition, no quantitative data on the chemical and physical composition of shell mound material at these sites were known.

In 1999, Chevron agreed to fund a technical report to gather critical information about the physical and chemical composition of the mounds, the potential short-term and long-term environmental impacts of mound removal as compared to in-place abandonment, and analysis of shell mound removal feasibility and options. In November 1999, the Commission approved a Scope of Work for a technical report to address these issues. In April 2001, the SLC awarded the technical report contract to the consultant, L. A. de Wit. Although funded by Chevron, the report was carried out under the direction of the staffs of the SLC and Coastal Commission.

2.2 Results of the Shell Mound Technical Report

In March 2001 the *Shell Mounds Environmental Review – Final Technical Report* (hereinafter "technical report") was released and included the following observations and conclusions:

- The shell mounds at all four sites have similar physical characteristics comprising three distinct strata: an upper layer of shells, an intermediate layer of drill muds and cuttings, and an underlying layer of "native" seafloor sediments.
- Based on the mounds' physical characteristics, it appears feasible to remove the shell mounds using a clamshell bucket dredge or by trawling using a Gorilla-type net or dragline dredge. Clamshell dredge may result in a re-suspension of contaminated materials. Trawling could also result in re-suspension of contaminated material and would spread the shell mound material over a larger area.
- Sediment test results conclude that the Effects Range Medium ("ERM") concentrations for nickel and PCBs are exceeded at the Platform Hazel shell mound.

- The concentrations of metals and organics in the mounds at Platforms Hope, Heidi, and Hilda are not expected to be toxic to water column organisms. However, elutriate bioassay-testing results show that shell mound sediments at the Platform Hazel site are toxic enough at 48% concentration to kill 50% of the test organism, a mysid shrimp (*Mysidopsis bahia*).
- Shell mound-associated biota appears to have decreased in species richness and abundance since removal of the platforms. The shell mounds in their current form (absent the platform structures) provide limited biological habitat value. Removal of the mounds would not result in the loss of significant or unique biological resources. The macroepibota associated with the mounds is dominated by the bat star (*Asterina miniata*) while fish and the gorgonian coral *Lophogorgia chilensis* are more abundant around an exposed concrete leg at the Platform Hazel site and near an exposed pipeline at the Platform Hilda site.
- Removal of the four mounds would add 6.4 square nautical miles of halibut trawling areas, an increase of about 20% over that which is now available within Fish Block 652.
- The major water quality impact of removal would be re-suspension of contaminated material. Some petroleum could be released resulting in the potential for an oily sheen to appear on the sea surface. Of particular concern would be the removal of the mound at Platform Hazel due to the concentrations of petroleum, nickel and PCBs.
- Neither commercial nor recreational fishers are expected to benefit from the continued existence of the shell mounds.

2.3 *The Commission's Determination that a Permit Amendment is Required*

As described above, the Commission learned some key pieces of information from the technical report: (a) the mounds are not a solid mass but are instead unconsolidated materials; (b) it appears technically possible to remove the mound material (and likely without use of explosives unless the caissons at the Platform Hazel site are removed); and (c) now that the platform structures have been removed, the habitat value of the mounds is low.

Accordingly, the Commission believes based on the conclusions of the technical report that the shell mounds can be removed by either dredging or trawling using Gorilla nets (unless removal includes the Platform Hazel caissons or other cement material). The Commission has therefore determined that Special Condition 7 of CDP E-94-006 requires Chevron to apply forthwith for an amendment to remove the four shell mounds so as to avoid an unreasonable risk of snagging by trawl nets.

2.4 *Next Procedural Steps*

Disposition of the 4H shell mounds will require preparation by the SLC of an environmental impact report ("EIR") under the provisions of the California Environmental Quality Act ("CEQA"). On May 23, 2001, Chevron submitted to the SLC an application to amend the 4H

Abandonment Plan for the purpose of addressing the SLC's requirement that the area be trawlable. That application did not propose a specific project. Instead the application proposes a range of potential modifications to the 4H Abandonment Plan, from providing mitigation to all affected fishermen to the complete removal of each of the four shell mounds. Any disturbance of the shell mounds will also require National Environmental Policy Act ("NEPA") review by the U.S. Army Corps of Engineers ("ACOE"). A joint CEQA/NEPA document may be prepared.

Any project that requires disturbance of the mounds will require approval by the ACOE and either the Environmental Protection Agency ("EPA") or the Regional Water Quality Control Board ("RWQCB") depending on the disposal location. (See attached Table 1 for a list of agencies that will need to review and approve removal and disposal of shell mounds.) In a typical dredging project, the applicant itself would analyze the sediments proposed for dredging and disposal pursuant to the procedures described in the 1991 EPA/ACOE testing manual, *Evaluation of Dredged Material Proposed for Ocean Disposal - Testing Manual* (commonly referred to as the "Green Book")¹, the Inland Testing Manual (i.e., *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual, Inland Testing Manual*, commonly referred to as the "Gold Book"), and California Ocean Plan requirements. In this case, Chevron has agreed that the suite of required tests would be performed independently as part of the CEQA and NEPA processes.

The CEQA/NEPA process will include an in-depth evaluation of the environmental impacts of feasible alternatives including but not limited to removing and disposing of the shell mounds using the various techniques suggested by L. A. de Wit in his report. For example, the CEQA/NEPA document will assess whether the shell mound at the site of former Platform Hazel can be removed without also removing the four 27-foot diameter caissons (which were abandoned-in-place and would require the use of explosives to remove). In addition, the environmental document will evaluate further if dredging is a feasible option to remove shell mounds located in water depths as deep as 155 feet (the location of the Hope and Heidi shell mounds).

In reviewing any application to amend CDP E-94-006, the Commission will consider the results of the CEQA/NEPA environmental review, and, on the basis thereof, make a final determination of (1) the feasibility of shell mound removal, and (2) whether the benefits of shell mound removal outweigh any adverse impacts of removal operations.

¹ The testing procedures allow for a tiered approach to analysis of the dredged sediments. It is necessary to proceed through the tiers only until information sufficient to determine compliance with the EPA/ACOE's regulations has been obtained. The first tier requires a comprehensive analysis of all existing and readily available, assembled, and interpreted information on the dredging project. The Tier II tests consists of evaluation of marine water quality criteria compliance using a numerical mixing model of the site conditions and an evaluation of the potential benthic impact using calculations of theoretical bioaccumulation potential. Tiers III and IV use water column and bioassay and bioaccumulation tests to determine effects on representative marine organisms.

Table 1 Agency Review and Permitting

Agency	Permit/Approval	Regulated Activity	Applicable Project Components	Review Period	Authority
Federal Agencies					
US Army Corps of Engineers (ACOE), Ventura District	Section 404 permit	Dredge and discharge of dredged or fills material into waters of the U.S. during construction. Jurisdictional waters include territorial seas, tidelands, rivers, streams and wetlands.	Required for any action that would result in the modification or removal of the shell mounds.	3-6 months after certification of CEQA/NEPA document	Section 404 Clean Water Act (33 USC 1344)
US Army Corps of Engineers (ACOE), Ventura District	Section 10 permit	Structures or work in or affecting navigable waters of the U.S. Review and issuance concurrent with Section 404.	Would be required for any redistribution or redepositing of the mound materials offshore.	3-6 months after certification of CEQA/NEPA document	Section 10 of the Rivers and Harbors Act (33 USC 403)
Environmental Protection Agency (EPA)	NPDES Permit	Discharges that may affect surrounding ocean water quality.	Would regulate offshore disposal beyond the three mile limit or where dredging activities may affect adjacent OCS water quality.	3-6 months after certification of CEQA/NEPA document	Section 404 Clean Water Act (33 USC 1344)
USFWS	Endangered Species Act, Section 7 consultation	Impacts to federally listed and species proposed for listing.	Activities that may impact State Listed Species including Snowy plover and brown pelican.	3-6 months after certification of CEQA/NEPA document	16 USCA 1513 50 CFR Section 17

Table 1 Agency Review and Permitting (Continued)

Agency	Permit/Approval	Regulated Activity	Applicable Project Components	Review Period	Authority
National Marine Fisheries Service	Endangered Species Act, Section 7 consultation. Also requires review of proposed project that may affect Essential Fish Habitat (EFH)	Impacts to federally listed species and species proposed for listing. Impacts to areas classified as Essential Fish Habitat	Impacts to marine mammals associated with removal activities including potential explosives use. Santa Barbara Channel is classified as EFH	3-6 months after certification of CEQA/NEPA document	16 USCA 1513 50 CFR Section 17
US Coast Guard	Review and comment on work program. Permit for transportation and use of explosives offshore. Notice to Mariners for all anchored marine operations	Activities, which may affect marine vessel safety or pollution.	Review of vessel activities and the associated handling of explosives. Review and posting of Notice to Mariners. Any discharges of hydrocarbons that affect surrounding waters.	Unspecified	33 CFR
State of California Agencies					
State Lands Commission	Review of proposed project for consistency with lease terms including Quit Claim activities. CEQA Lead Agency.	Compliance with lease terms and site clearance. Review of environmental impacts in area of jurisdiction.	Approval of work plan and associated CEQA mitigation measures to reduce environmental impacts	6-12 months for certification of CEQA/NEPA document. Engineering approval of project related activities	California Environmental Quality Act California Public Resources Code Section 6500

Table 1-4. Agency Review and Permitting (Continued)

Agency	Permit/Approval	Regulated Activity	Applicable Project Components	Review Period	Authority
State of California Agencies (continued)					
California Coastal Commission	Amendment to Coastal Development Permit	Any development or activity within designated Coastal Zones.	Review of all activities within the Coastal Zone.	4-6 month review process, partially concurrent with CEQA/NEPA review.	California Coastal Act Coastal Zone Management Act
California Dept. of Fish and Game, Regions 3 and 4	Section 2081 Management Agreement Explosives Use Permit	Potential adverse effects to State listed species and commercial fishing activities.	Activities that may impact State listed species including Snowy plover and brown pelican. Review of explosives handling procedures and associated marine mammal mitigation measures.	1-3 month after certification of CEQA/NEPA document.	Section 2081 of the California Fish and Game Code.
Regional Water Quality Control Board	Section 401 certification NPDES Permit	Discharges that may affect surface and ground water quality. These discharges will include dredging operations offshore and associated offshore/onshore disposal options.	Excavation of contaminated materials and associated discharge of water to the marine environment. Onshore disposal of contaminated materials and associated waste water.	3-6 months after certification of CEQA/NEPA document. Concurrent with ACOE 404 Permit review	Clean Water Act. Porter-Cologne State Water Quality Act (1969).

Table 1 Agency Review and Permitting (Continued)

Agency	Permit/Approval	Regulated Activity	Applicable Project Components	Review Period	Authority
Caltrans, District 5	Transportation permits	Transportation of heavy, oversized or hazardous loads on state highways and roads.	Transportation of heavy equipment to project area including potential explosives transportation. Transportation of dredged material from project site to disposal area.	2 months after certification of CEQA/NEQA document. Day of application	21 CRR14.11.1, TO 14.11.6 Calif. Vehicle Code 35780 and Highway Code 117, 660-711
Local Agencies					
Local Department of Health Service or County Fire Department	Approval of onshore disposal operations and procedures.	Assuming contaminated materials require offsite disposal, local agency will require adequate documentation of materials and associated environmental contaminants.	Required for disposal of all contaminated materials in a State approved landfill or disposal facility.	1-3 months after certification of CEQA/NEQA document.	CIRCLA
County of Santa Barbara Air Pollution Control District	Authority to Construct Permit	Permit required for all portable equipment used during project. Best Management Practice required for projects that would exceed 25 tons of annual emissions.	Review of equipment usage and associated emissions calculations.	2 months after certification of CEQA/NEQA document.	Clean Air Act CEQA
South Coast AQMD (Assumes LA/LB Harbor Area)	Authority to Construct Permit/Authority to Operator	Permit required for upland staging and disposal sites. Best Management Practice required for stockpiles.	Emissions calculations for handling/stockpiling of dredged material.	2 months after certification of CEQA/NEQA document.	Clean Air Act CEQA

Table 1 Agency Review and Permitting (Continued)

Agency	Permit/Approval	Regulated Activity	Applicable Project Components	Review Period	Authority
Ventura County Air Pollution Control District (Assumes Port Hueneme staging area)	Authority to Construct Permit/Authority to Operator	Permit required for upland staging areas. Best Management Practice required for stockpiles.	Emissions calculations for handling/stockpiling of dredged material.	2 months after certification of CEQA/NEQA document.	Clean Air Act CEQA

