CONSISTENCY DETERMINATION for Granting a Suspension of Production for Aera Energy LLC's

PURISIMA POINT UNIT (Pacific Outer Continental Shelf Leases OCS-P 0426, 0427, 0432, and 0435)

U.S. Department of the Interior Minerals Management Service Pacific Outer Continental Shelf Region

April 6, 2005

MINERALS MANAGEMENT SERVICE PACIFIC OUTER CONTINENTAL SHELF REGION

CONSISTENCY DETERMINATION

PURISIMA POINT UNIT

SUSPENSION OF PRODUCTION

I. AUTHORITY

This consistency determination is submitted in compliance with section 307(c)(1) of the Coastal Zone Management Act [16 U.S.C. 1456(c)(1)], (CZMA) and the regulations promulgated thereunder.

II. DETERMINATION

In accordance with the Federal Coastal Zone Management Act of 1972, as amended, the Minerals Management Service (MMS) has determined that granting a suspension of production (SOP) for the Purisima Point Unit is consistent to the maximum extent practicable with the California Coastal Management Program (CCMP), pursuant to the requirements of the Coastal Zone Management Act of 1972, as amended, (CZMA) and the California Coastal Act of 1976, as amended (CCA).

III. INTRODUCTION

The proposed activity subject to this review is the granting by the Minerals Management Service of a suspension of production (SOP) request filed by the operator of the Purisima Point Unit under the provisions of the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. 1334(a)(1). The applicant requests a suspension of 34 months, within which to conduct certain in-office activities and to conduct shallow hazards and biological surveys on the Unit that will result in the submission of either, 1) a new Exploration Plan (EP) or, 2) revisions to the currently approved EP(s) for the Purisima Point Unit.

Aera intends to co-develop the Lion Rock Unit, Santa Maria Unit, Purisima Point Unit, Point Sal Unit, and Lease OCS-P 0409 in the central Santa Maria Basin. During the suspensions, no "on the water" activities are planned for the Lion Rock Unit, Santa Maria Unit, and Lease OCS-P 0409. As discussed in the Environmental Assessment for these properties, Aera proposes to conduct shallow hazards surveys and biological surveys during the suspensions on the Point Sal and Purisima Point Units. The results from these preliminary surveys are required for the preparation of new or revised Exploration Plans that Aera will submit to the MMS during the suspensions. No drilling can occur during a suspension.

Aera has also stated their intention to drill one or two delineation wells on the Point Sal and/or Purisima Point Units after the suspensions end. The results of the delineation drilling would provide valuable subsurface geologic, petrophysical, stratigraphic and reservoir data that can be applied to all of the units and Lease OCS-P 0409 and would help determine the precise development plan that would be followed with respect to all four of the central Santa Maria Basin units and Lease OCS-P 0409.

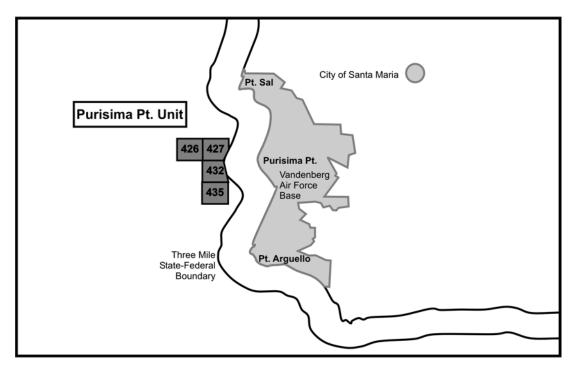


Figure 1: Location of the Purisima Pt. Unit; MMS, 2005a.

If and when a specific proposal to undertake operations on a lease is submitted under a new EP, a CZMA Section 307(c)(3) analysis and consistency certification must be made and submitted by the lessee directly to the MMS along with necessary data and information (15 CFR 930.76(c), 30 CFR 250.203(b)(18)). The MMS will then furnish the California Coastal Commission with a copy of the new EP (excluding proprietary information), necessary data and information, and the consistency certification (30 CFR 250.203(f)). If Aera chooses to revise its previously approved EP(s), then it must submit information related to the proposed revision(s) to the MMS. The MMS will determine if the proposed revision(s) could result in a significant change to the impacts previously identified and evaluated, or require additional permits. If the MMS determines that the revision(s) constitutes a significant change to the previously approved EP(s) or requires additional permits, then the revision(s) is subject to the same procedure as required for a new EP (30 CFR 250.203(n)(2).) The CZMA Section 307(c)(3) analysis will be able to focus on the site-specific information available at the time the new or revised EP(s) is submitted. The MMS may not issue permits for activities described in the EP(s) until the State has concurred that the activities are fully consistent with the enforceable policies of the CCMP, the State's concurrence is conclusively presumed (15 CFR 930.78(b) and 930.80), or, the Secretary of Commerce, on appeal, finds the activities are consistent with the State's Program or the proposed activities are in the interest of national security (15 CFR 930.120).

A suspension is a granted or directed deferral of the requirement to produce oil or gas, or to conduct leaseholding operations on the lease. A lessee is generally required to carry out such functions in order to keep the lease beyond its primary term. The approval of a suspension application is contemplated by the OCSLA to facilitate the proper development of a lease. Although the refusal to grant a suspension may cause the lease to terminate in certain circumstances, the suspension does not grant or authorize a lessee to carry out any activities. It simply provides a lessee more time to carry out functions otherwise authorized by the lease itself, or pursuant to an approved exploration or development and production plan. The granting of a suspension, therefore, does nothing more than continue the status quo, and permits the lessee to move forward toward the enjoyment of all of the rights and privileges of the lease.

Rights conveyed by a lease are limited to the exclusive right only to *pursue* exploration, development and production of the oil and gas that may be found in the lease area. These rights do not guarantee the lessee the absolute right to extract oil and gas. This right is conditioned upon the approval by the MMS of exploration or development and production plans, and upon concurrence by the State of California that the plans are consistent with the enforceable policies of the State as required by the CZMA. In this regard, the United States Supreme Court has noted that there are four distinct statutory stages to developing an offshore oil lease under OCSLA: (1) the formulation of a 5-year leasing plan by the Department of the Interior; (2) the lease sale; (3) exploration by the lessee; and (4) development and production. Likewise, the Supreme Court has recognized that, by purchasing a lease, lessees acquire no unconditional right to do anything more, but rather, their activities throughout the leasing process are subject to scrutiny under the OCSLA and the CZMA at both the exploration and development stages. *Secretary of the Interior v. California* 464 U.S. 339 (1984). Failure to receive approval of a plan, or to achieve CZMA consistency of the plan by the State, may cause the lease to expire.

At the time of the issuance of the leases in the Purisima Point Unit, a lease sale was not considered a federal agency activity that gave rise to review under section 307(c)(1) of the CZMA. *Id.* at 343. In 1990, Congress amended the statute specifically to extend CZMA consistency review to the lease sale stage as a federal agency activity under section 307(c)(1). Because these leases predated the 1990 amendments to the CZMA, the State of California never had the opportunity to review these leases for CZMA consistency at the lease sale stage.

Likewise, because granting a suspension does not authorize the lessee to conduct any activities not otherwise authorized under a permit, an approved plan, or the lease itself, the granting of suspensions was not previously considered to be an activity that was subject to 307(c)(1) review. This practice prompted the litigation and subsequent decision in *California v. Norton* 150 F.Supp.2d 1046 (N.D. Cal. 2001).

Both the district court and the Court of Appeals for the Ninth Circuit strongly stressed the lack of review at the lease sale stage as a fundamental element in their determination that the requested lease suspension in this case is subject to CZMA consistency review. In discussing the issue, the Court of Appeals for the Ninth Circuit noted:

We note that Congress specifically subjected lease sales to section (c)(1). Although a lease suspension is not identical to a lease sale, the very broad and long term effects of these suspensions more closely resemble the effects of a sale than they do the highly specific activities reviewed under section (c)(3). We also note that for some of the leases being extended new exploration plans will be issued and these plans will be subject to section (c)(3) review. For other leases, existing exploration plans will be revised, which may also trigger section (c)(3) review. This phasing of review fits closely the expressed intent of Congress in subjecting the analogously broad implications of lease sales to (c)(1) review and specific plans to (c)(3) review.

State of California v. Norton 311 F.3d 1162, 1174 (9th Cir. 2002)

It is clear, then, that the standard of review for suspensions envisioned by the Court of Appeals for the Ninth Circuit under (c)(1) is of a general nature, much like lease sales, a phased approach in contemplation that a more specific scrutiny will occur when and if the lessees submit detailed exploration or development and production plans for 307(c)(3) CZMA consistency concurrence. In order to stay

consistent with the intent of the Court, the MMS has modeled this consistency determination after a recent consistency determination developed for Alaska Lease Sale 191, in May, 2004 (Appendix B). We note in that document that the review of future impacts due to development and production activities is done in a very general way. Some impacts are addressed based upon spill plans, proposed lease stipulations and the like, that are applicable generally to every lease. In areas that are more tailored to specific impact scenarios, the MMS relies on the fact that future activities giving rise to coastal impacts are required to be described in an approved plan that must be fully consistent with the enforceable policies of the State. Therefore, they conclude that if the activity giving rise to the impacts is consistent, then the lease sale is consistent as well.

For purposes of reviewing oil and gas activities that are conducted under OCSLA, two distinct types of reviews under the CZMA come into play. Activities reviewed under section 307(c)(1) of the CZMA are activities that are conducted by federal agencies. Section 307(c)(1) of the CZMA requires that:

"each Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved state management programs."

A lease sale is an example of a federal agency activity that is subject to 307(c)(1) review. These types of reviews are usually characterized by an analysis of broad and long term effects of the proposed federal action to the extent they can be determined. In these types of reviews, it is incumbent upon the federal agency to identify the impacts that flow from its actions, and prepare a consistency determination for transmittal to the state. Although the Federal agency may not carry out the proposed activity during the period of state review, upon conclusion of state review, it is free to proceed with that activity even if the state does not agree with the agency's consistency determination.

By contrast, section 307(c)(3) of the CZMA pertains to activities proposed by private individuals or entities who are seeking a license or permit to conduct specific activities that have an impact on the coastal zone. A federal licensing agency may not grant a license or permit until the applicant has certified that the proposed activity is fully consistent with the enforceable policies of the state, and the state has concurred with that certification, is deemed to concur, or the applicant prevails in an appeal to the Secretary of Commerce. EP's and DPP's are examples of activities that require section 307(c)(3) CZMA review.

It is important to note, that the licensing agency does not play a role in the consistency determination of activities reviewed under 307(c)(3). It is the applicant who proposes the activities that are the subject of review, and the applicant that certifies consistency of those activities to the state. The state then concurs or does not concur with that certification. Any appeals are to the Secretary of Commerce.

This distinction becomes critical within the context of the CZMA review of the federal activity of granting suspensions. Granting suspensions has been determined to be a federal activity reviewed under 307(c)(1). In this case, the immediate direct impact of granting the suspension is to permit the lessee to carry out certain in-office functions and shallow hazards and biological surveys. These activities will occur during a 34-month period and will result in the submission of certain revisions to an exploration plan that has already been found consistent under 307(c)(3). Naturally, no impacts on the coastal zone will occur due to solely in-office activities, and the surveying impacts are fully addressed in the Aera EA (MMS, 2005a) and FONSI. However, we are mindful that the Court of Appeals for the Ninth Circuit envisioned the consistency process for review of the suspension in this case to be akin to a lease sale, which does entail a general review of potential impacts resulting from development and production

scenarios. Hypothetical activity scenarios have been developed in the Environmental Information Document (EID), and extensive analysis of potential impacts is discussed in that document.

Future impacts that may occur as a result of development and production activities are necessarily impacts that result from activities that are reviewable by the State under 307(c)(3). Because such activities are proposed by the lessees at a later time in the form of plan submissions, anticipating those activities is speculative at best. Further, because consistency certifications and State concurrence under 307(c)(3) are primarily transactions between the applicant and the State, it is virtually impossible for the MMS to assert consistency of any future proposed action on the part of the lessees. However, this depth of analysis is not characteristic of the more-general type of review given lease sales as contemplated by the Court of Appeals for the Ninth Circuit, and is neither possible nor necessary for purposes of determining whether suspensions are consistent with the enforceable policies of the State. The MMS realizes that any downstream impacts that occur as a result of development and production can only occur as a result of activities that are reviewed and found consistent under the CZMA 307(c)(3) review process. If the activities embodied in the EP or DPP are not found to be fully consistent with the enforceable policies of the State, then those activities cannot occur. If the activities cannot occur, then impacts on the coastal zone will not happen.

Although the MMS understands that the intent of the Court's June 2001 opinion and judgment is to grant the State consistency review akin to the type of review at the lease sale stage, we also agree with the Court of Appeals that a lease suspension is not identical to a lease sale. At the lease sale stage, there is not yet an identified lessee, a lease has not been issued, and no contractual rights and obligations exist between the United States and third parties. There have also been no exploration activities, no preliminary surveys, no exploratory drilling, and no proposals upon which to identify whether and to what extent the leases may eventually be developed. Accordingly, the level of CZMA review at the lease sale stage is very general, lacks substantive detail because specific future CZMA 307(c)(3) activities have not yet been identified and only reflects best estimates as to what may actually happen during the life of the lease. A corollary of this, however, is that the lease sale may be reviewed from the very beginning of the process because no rights have attached and no commitments made.

Unlike a lease, a suspension is for a limited purpose, and may be granted for a maximum duration of five years. Whereas the sale of a lease contemplates activities that extend through the life of the lease, a suspension is limited to a specific point in time for a limited purpose. By definition, when drilling and production activities are taking place, a suspension does not exist, because the lease is held by those activities and a suspension is not necessary. In subjecting the suspension requests to CZMA consistency, the Court of Appeals stated that:

In determining that these lease suspensions are subject to review, we note that the leases at issue have never been reviewed by California. Because these leases were issued prior to 1990, when Congress amended the statute to make clear that lease sales are subject to consistency review, California was not afforded an opportunity to review the leases.

Id, at 1173.

The leases in the Purisima Point Unit were issued in 1981 in Lease Sale 53. The potential effects that could occur from activities on leases issued in this sale were broadly evaluated in an Environmental Impact Statement (EIS) issued in 1981. The State was an active participant in the NEPA process used to prepare this EIS. The effects of the sale itself are limited to the documentation conducted by the U.S. Department of the Interior leading to the offering of specific blocks for lease, the issuance of leases by

competitive bidding, and the effects of the preliminary activities (i.e., surveys to gather scientific and engineering data necessary to develop plans) that a lease authorizes a lessee to conduct without further approvals. Included in each of the Purisima Point Unit leases are specific stipulations designed to mitigate potential environmental effects that may occur as a result of exploration and development (Text of stipulations can be found in the EID).

While we fully acknowledge that the State of California did not review the lease sale for CZMA consistency, the Purisima Point Unit has gone through significant and extensive review by the California Coastal Commission under the CZMA process as a result of the submission of exploration plans by the lessees.

The Purisima Point Unit has had 3 exploration plans (EP) approved by the California Coastal Commission for consistency under the CZMA. As shown in the table below, those approvals authorized the drilling of 21 exploratory wells, 3 of which have been drilled.

				Coastal				
Unit			MMS	Commission	Coastal		Well	
(Date			Approval	Certification	Commission	Well	Spud	Approved
fomed)	Lease	Operator	Date	Date	Case No.	No.	Date	EP's
	426	Phillips	9/22/1982	12/16/1982	23-82	1	9/6/1983	
	426	Phillips	9/22/1982	12/16/1982	23-82	2		
	426	Phillips	9/22/1982	12/16/1982	23-82	3		
	426	Phillips	9/22/1982	12/16/1982	23-82	4		
	426	Phillips	9/22/1982	12/16/1982	23-82	5		
	427	Pennzoil	11/12/1982	2/25/1983	39-82	1	6/15/1983	
	427	Pennzoil	11/12/1982	2/25/1983	39-82	2		
	427	Pennzoil	11/12/1982	2/25/1983	39-82	3		
	427	Pennzoil	11/12/1982	2/25/1983	39-82	4		
Purisima	432	Pennzoil	11/12/1982	2/25/1983	39-82	1		
Point	432	Pennzoil	11/12/1982	2/25/1983	39-82	2		3EPs
6/25/1986	432	Pennzoil	11/12/1982	2/25/1983	39-82	3		
	432	Pennzoil	11/12/1982	2/25/1983	39-82	4		
	435	Shell	9/17/1982	10/14/1982	21-82	1	11/2/1982	
	435	Shell	9/17/1982	10/14/1982	21-82	2		
	435	Shell	9/17/1982	10/14/1982	21-82	3		
	435	Shell	9/17/1982	10/14/1982	21-82	4		
	435	Shell	9/17/1982	10/14/1982	21-82	5		
	435	Shell	9/17/1982	10/14/1982	21-82	6		
	435	Shell	9/17/1982	10/14/1982	21-82	7		
	435	Shell	9/17/1982	10/14/1982	21-82	8		
					Total	21	3	

In its update for the Purisima Point Unit suspension request, the operator requested a 34 month suspension within which to submit revisions to its approved EP(s) and conduct shallow hazards and biological surveys on the Unit. Preparation of the revised EP(s) is an administrative paperwork activity that will be completed entirely in-office. The surveys conducted during the suspension have been evaluated in the Aera Environmental Assessment (EA) (MMS, 2005a).

IV. SCOPE OF ENVIRONMENTAL REVIEW

Two environmental review documents accompany this consistency determination for the proposed action of granting a 34 month suspension for the Purisima Point Unit. One is an environmental assessment (EA) accompanied by a Finding of No Significant Impact (FONSI) and the other is a supporting environmental information document.

The EA is a document that was prepared to satisfy the requirements of NEPA to take a "hard look" at the environmental consequences of the proposed action. *Metcalf v. Daley*, 214 F.3d 1135, 1141 (9th Cir. 2000). An agency must prepare NEPA documents before any irreversible commitment of resources is made. *Id.* at 1143. A federal agency may adopt a "categorical exclusion" for a "category of actions which do not individually or cumulatively have a significant effect on the human environment." 40 C.F.R. 1508.4 (2001).

The Department of the Interior adopted a categorical exclusion for the granting of suspension requests, and relied upon that categorical exclusion in granting the suspension for the Purisima Point Unit. The district court held that the United States failed to provide a reasoned explanation for its reliance on the categorical exclusion and failed to explain the inapplicability of the extraordinary circumstances exceptions to the categorical exclusion for lease suspensions. *California v. Norton*, 150 F.Supp.2d at 1057. The district court held that the United States could not rely on the categorical exclusion without providing these explanations and ordered the United States to provide both of these explanations. *Id.* Given the Ninth Circuit's stated environmental concerns, see 311 F.3d at 1165-1167, 1176-77, MMS has decided to forego reliance on the categorical exclusion for lease suspensions in this case in favor of preparing NEPA documents.

The MMS determined that NEPA required that the scope of the EA be limited to an examination of those activities that are proposed to take place during the suspension, and that NEPA did not require an examination of activities that may occur "downstream" during the development and production phase of the lease. During the suspension, the unit operator proposes to conduct shallow hazards and biological surveys on the Point Sal and Purisima Point Units, and "in office" activities that will culminate in a revision(s) to their approved EP(s). The revised EP(s) will undergo MMS examination, environmental review, and if found appropriate under 30 C.F.R. 250.203(n)(2), further CZMA consistency review by the State under 307(c)(3). At this stage, MMS is not aware of what revisions the operator may be making in their EPs. Further, based upon the results of the implementation of those plans, the lessees may or may not actually proceed to development and production. Even if they do progress to development and production, the MMS has no specific knowledge as to how the lessees would actually choose to develop Aera's four units and Lease OCS-P 0409 until the submission of Development and Production Plans (DPP's).

The Ninth Circuit recognized the unique segmented approach that OCSLA takes toward oil and gas development, and has not required the federal government to develop far-reaching NEPA and ESA analyses at early stages of the process. Indeed, in *Village of False Pass v. Clark*, 733 F.2d 605 (9th Cir. 1984) the Ninth Circuit discussed the far-reaching discretion vested in the Secretary of the Interior available throughout the leasing process. This continuing discretion in the Secretary under OCSLA is critical when a court examines whether the Department of the Interior has met the "irreversible commitment of resources" standard used to determine the timing, scope and extent of NEPA compliance. If a decision deprives an agency of further discretion over the proposed action, then full NEPA compliance should take place before the decision is made. The court further discussed how minor changes in the Secretary's discretion because of a project's momentum do not bar consideration of different environmental information in phased stages. The court stated that "[t]he discrete stages of the

OCSLA process suggest the same thing. Indeed, the purchase of a lease entails no right to proceed with full exploration, development, or production. (citation omitted)" *Id*. Therefore, we do not believe that NEPA will require the MMS to consider the consequences of hypothetical future development scenarios when considering a suspension with proposed activities that cause minimal or no disturbance at the pre-exploration stage, and will be subject to NEPA review at multiple plan approval stages.

Although we do not believe that NEPA requires a far-reaching examination of lease development under these circumstances, we do acknowledge that the State of California has raised the issue of changed circumstances in objecting to the continuation of these leases without further review. These changed circumstances have been the subject of correspondence among the lessees, the MMS and the State of California, and are primarily environmental in nature (see EID, Appendix G). It is important to note the distinction between what is required by NEPA in the evaluation of the suspension request, and what level or type of environmental review is necessary to address the impacts of the proposed activity for purposes of CZMA review.

Although we believe that NEPA only requires review of the activities that are proposed to take place under the suspensions, we acknowledge for purposes of this determination that the level of environmental review for CZMA consistency should entail a discussion of post-suspension activities, including through the development and production phase. We acknowledge this not because we believe that impacts from development are foreseeable impacts that are caused by the granting of suspensions, but rather because of the emphasis that both the district court and the Ninth Circuit Court of Appeals placed on the similarity between suspensions and lease sales. We are also mindful, however, of the distinction that the Ninth Circuit placed on the level of (c)(1) review in conjunction with lease suspensions and the adoption of a more-broad "phasing" approach, as contrasted with the much more detailed review to which plans are subject under 307(c)(3).

Assuming that the level of review for CZMA consistency should entail a discussion of post-suspension activities, it does not follow that the MMS responsibilities under NEPA change. The regulations implementing the CZMA recognize that the environmental data accompanying a CZMA consistency determination need not be a NEPA document. The regulations recognize that the NEPA process and the standards by which impacts are reviewed under the CZMA are two distinct processes. 15 C.F.R. 930.37. Therefore, in order to meet the needs of the State for purposes of reviewing the environmental impacts of not only the proposed suspension activities, but post-suspension activities as well, the MMS has prepared the EID to address those activities and impacts that may occur after the suspension has expired. Between the EA and the EID, a comprehensive environmental review of all activities ranging from the beginning of the suspension to the end of the lease have been provided (EID Table of Contents can be found in Appendix A).

It is important to recognize that although there may be references throughout the analysis to "activities" and impacts that may flow from those activities, particularly in the discussions of development and production scenarios, the only "activity" that is subject to this CZMA consistency determination is the granting of the suspension. Other "activities" that occur during the delineation and development and production phases, are described in the EP's and DPP's and reviewed as part of the more detailed subsequent review under 307(c)(3).

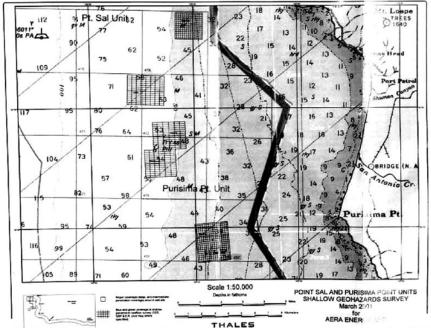
V. SUMMARY OF ACTIVITIES DURING THE SUSPENSION PHASE

During the suspension phase, Aera has proposed to conduct a shallow hazards survey using a small airgun, and a biological survey using a remotely operated vehicle (ROV) and administrative activities. MMS regulations require that these preliminary activities, as authorized by the lease, be conducted prior to the submittal of an EP. The purpose of the shallow hazards survey is to provide MMS geoscientists

with an analysis of seafloor, shallow subsurface hazards, and manmade hazards that may exist in the area where delineation drilling is proposed. The MMS may require the submittal of a shallow hazards report and the data upon which the analysis is based (30 CFR 250.203(b)(1)(ix)). The purpose of the biological survey using the ROV is to examine areas where the MMS has determined that future drilling activity may affect potential biological habitat (hardbottom features). A complete EA of the shallow hazards and biological surveys has been prepared (MMS, 2005a).

Shallow Hazards Survey

Aera plans to conduct the shallow hazards survey in the areas outlined in the figure below. For the Point Sal Unit, Aera proposes two small surveys that would be contained within portions of Leases OCS-P 0416, 0421, and 0422. During the same time period, Aera plans to collect shallow hazards survey data over portions of Leases OCS-P 0426 and 0432 in the Purisima Point Unit. Each survey would be conducted over approximately 1.5 to 2 square miles, in water depths ranging from 200 to 400 feet and 5 to 11 miles from the coast.



Shallow hazard survey grids for Aera's single air gun surveys on Point Sal and Purisima Point Units. Note that the shallow penetration seafloor surveys were completed by Aera in 2001.

Figure 2: Location of Proposed Shallow Hazards Survey; MMS, 2005a.

Aera plans to conduct the shallow hazards surveys during an 11 to 13 day period in October 2005 or October 2006, depending on the date that it receives all required permissions. The surveys would be conducted in the Fall to minimize interactions with commercial fishing seasons, marine mammal migrations, and weather. The shallow hazards survey would be conducted only during daylight hours. The survey would follow a grid pattern with survey lines on a 500- by 1200-foot spacing over six potential delineation well sites in the two units, of which only one to two wells may eventually be drilled.

Aera plans to use the following reflection seismic equipment to conduct their shallow hazards survey:

Source: A single 20-inch³ airgun Sound Pressure Level: 218 dB re 1 uPa@1m

Vessel Size (typical): 147 feet long, 33 feet wide, and a 10-foot draft

Towing Speed: 5 knotsTowing Depth: 3-10 feet Streamer Length: 820 feet behind the survey vessel

Biological Survey

Aera plans to conduct the biological survey, from a separate vessel, in two defined areas on Lease OCS-P 0421 and 0422 in the Point Sal Unit and a third defined area on Lease OCS-P 0426 in the Purisima Point Unit. The objective of the biological surveys is to characterize the community present on the identified hardbottom features. This includes identifying benthic flora and fauna, identifying and characterizing fish assemblages, estimating abundance, collecting vouchers of unidentified species, and collecting rocks for epi- and infauna analysis.

Hardbottom features are approximately 1 to 1.5 miles long and approximately 0.25 mile wide. The features are in water depths of 300 to 400 feet. A research vessel or retrofitted workboat would be employed to conduct the survey. The survey would be conducted by deploying a remotely operated vehicle (ROV) equipped with color cameras, video cameras, lights, sampling arms, and color sonar capability. The ROV is typically towed with a tether from a ship. The ROV "flies" within about 3 feet of the ocean bottom and records images of the biological habitat on the ocean bottom. Samples of individuals of species may be carefully removed for identification by the sampling arm.

Weather would dictate the operation and efficiency of the biological surveys. Given favorable weather conditions (i.e., calm seas), biological survey operations could be conducted 24 hours per day and completed in 1 day per site. If unfavorable weather conditions are encountered, biological survey operations may be curtailed or limited to daylight hours. For these reasons, the total duration of survey operations is projected to range from one to three days.

VI. SUMMARY OF HYPOTHETICAL POST-SUSPENSION PHASE ACTIVITIES

A description of hypothetical post-suspension activities associated with the Purisima Point Unit is provided in the Environmental Information Document (EID) Sections 1.4, 4.1 and 5.2. Because such activities are proposed by the lessees at a later time in the form of plan submissions, anticipating those activities is speculative at best. The actual details of these activities will not be available until the operator develops an EP and DPP. The MMS realizes that any downstream effects that occur as a result of delineation and/or development and production can only occur as a result of activities that are reviewed and found consistent under the CZMA 307(c)(3) review process. However, the long-term, cumulative effects of the hypothetical post-suspension phase activities have been assessed and are presented in EID Section 5, including an evaluation of oil spills, risk, movement, and response (EID Section 5.3). The Table of Contents for the EID can be found in Appendix A.

Aera has also stated their intention to drill one or two delineation wells on the Point Sal and/or Purisima Point Units after the suspensions end. The wells would be drilled from a Mobile Offshore Drilling Unit (MODU) (see EID Appendix K). Aera has advised that the results of the delineation drilling would provide data that can be applied to all of the units and Lease OCS-P 0409, and would help determine the precise development plan that would be followed with respect to all four of the central Santa Maria Basin units and Lease OCS-P 0409.

Hypothetical co-development of Aera's central Santa Maria Basin units and Lease OCS-P 0409 would involve the placement and operation of up to three platforms; A, B, and C. The hypothetical scenario in the EID depicts the platforms on Leases OCS-P 0409, 0422, and 0431, respectively. Extended reach drilling would allow reservoirs 4-5 miles away from the platforms to be produced. Oil and gas recovered from all of Aera's units and Lease OCS-P 0409 would be transported to a hypothetical facility located east of the community of Casmalia in northern Santa Barbara County. The Santa Barbara County "North County Siting Study" (County of Santa Barbara, 2000) identifies constraints to the siting of new oil and gas processing facilities. The Study identifies a number of potential sites and identifies two sites as a

preferred location: Casmalia East or Casmalia West. In the EID, the Casmalia East site was chosen as the location of the hypothetical onshore oil and gas processing facility. Offshore to onshore pipelines would connect Platform B and the Casmalia East facility; offshore connecting pipelines would be used between Platforms B, A and C. These hypothetical development scenario elements are summarized in the EID (pages 5.2-13 to 14).

In the hypothetical development scenario, produced oil emulsion and gas would be sent to the hypothetical Casmalia East processing facility. This facility, which would be similar to the Lompoc Oil and Gas Plant, would process the oil and gas for further distribution through local pipelines. There is also the potential for a co-located asphalt facility. All oil would be sold. Some of the gas may be used offshore as fuel on the platforms for production operations; re-injected at one or more of the platforms; used as fuel at a co-located onshore co-generation facility to generate electrical power for use by the platforms; or sold to the gas utility. A combined processing, asphalt, and co-generation facility would be roughly twice the size of the Lompoc Oil and Gas Plant. Pipelines from the hypothetical processing facility would probably tie into the All American Pipeline System at an existing pump station.

Hypothetically, the pipelines from Platform B would come onshore at a sandy beach in the vicinity of Point Sal and Lion Rock, south of an area covered by surface outcrops of the Monterey formation and north of the mouth of Shuman Creek. The pipelines would be placed in a half-mile-wide corridor from landfall to the Casmalia East site. The northern boundary of the corridor runs due east to the Casmalia site. The southern boundary of the corridor runs along Point Sal Road and maintains a separation from the town of Casmalia, hillsides prone to landslides, and Shuman Creek. The pipelines to shore would include a 12-inch water return pipeline; 10-inch gas pipeline; 24-inch oil emulsion pipeline; and an 8-inch service utility pipeline. EID Figure 5.2-1 provides a map of the hypothetical corridor for these pipelines.

Produced water would be treated at the oil and gas processing facility and then transported by the water return line to Platform B for offshore disposal or down-hole injection. There would also be a 10-inch produced water pipeline and an 8-inch service/utility pipelines between Platforms A, B and C, and from Platform B to shore, as described above. In total, four pipelines with a total length of 100 miles and a corridor measuring 25-by-0.5 miles would be needed. EID Table 5.2-6 gives the estimated amount of time needed for pipeline and cable installation and commissioning.

VII. NON-APPLICABLE POLICIES OF CHAPTER 3 OF THE CALIFORNIA COASTAL ACT

The table below lists the policies in Chapter 3 of the California Coastal Act that the MMS has determined do not apply to this consistency determination. MMS consulted with the CCC on several occasions to obtain guidance on the applicable policies (Appendix C). Reasonable filters were used in determining the non-applicable policies based on examples from previous consistency determinations for OCS proposals as well as the interaction with the CCC. A full discussion of each non-applicable policy and the reasons that MMS believes the policy does not apply to this determination can be found in Appendix D.

ARTICLE	TITLE	SECTION	POLICY
2	Public Access	30212.5	Public Facilities; distribution
4	Marine Environment	30233	Diking, filling or dredging
4	Marine Environment	30235	Revetments, breakwaters, etc
4	Marine Environment	30236	Water supply and flood control
4	Marine Environment	30237	Habitat conservation plan; Bolsa Chica

6	Development	30254.5	Sewage treatment plants and conditions
7	Industrial Development	30261	Use of tanker facilities; liquefied natural gas terminals
7	Industrial Development	30264	Thermal electric generating plants

VIII. APPLICABLE POLICIES OF CHAPTER 3 OF THE CALIFORNIA COASTAL ACT

The following is an analysis of whether granting an SOP to Aera for the Purisima Point Unit, as proposed, is consistent to the maximum extent practicable with the CCMP. The consistency language of the CZMA requires that this analysis address both direct and indirect effects of this proposal on any land or water use or natural resource of the coastal zone.

The hypothetical scenarios used in the EID to assess effects of any post-suspension activities are also used in this consistency analysis. It is impossible at this stage to anticipate and describe all future events and effects of future stages of OCS exploration, development, and production – the scenario assumptions are a reasonable hypothesis of what may happen in the future, assuming oil development and production occur. In the EID, the effects of the exploration and production are estimated assuming that all mitigation provided for by existing laws, regulations, and lease specific stipulations are in place.

The Final EA for Aera's activities that occur during the suspension was used for the purposes of this document's policy-specific comment and analysis. Resources/issues addressed in the EA include protected sea turtles and marine mammals, fish resources, commercial fishing, military operations, and environmental justice. The mitigation measures contained in the EA for activities that occur during the suspension of the Purisima Point Unit are provided in Appendix E of this consistency determination.

The following analysis is organized according to the standards of the CCMP.

Article 1: General Section 30200.

(a) Consistent with the coastal zone values cited in Section 30001 and the basic goals set forth in Section 30001.5, and except as may be otherwise specifically provided in this division, the policies of this chapter shall constitute the standards by which the adequacy of local coastal programs, as provided in Chapter 6 (commencing with Section 30500), and the permissibility of proposed developments subject to the provisions of this division are determined. All public agencies carrying out or supporting activities outside the coastal zone that could have a direct impact on resources within the coastal zone shall consider the effect of such actions on coastal zone resources in order to assure that these policies are achieved.

(b) Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

Section 30200: Comment and Analysis

The MMS has prepared this Consistency Determination to evaluate the policies specified in Chapter 3 of the California Coastal Act as they relate to proposed suspension and hypothetical post-suspension phase activities. The purpose of this evaluation is to provide the Coastal Commission and its staff with the

information needed to consider the proposed SOP for the Purisima Point Unit as it relates to the enforceable policies of the California Coastal Act.

During the suspension, Aera will conduct certain in-office activities that will result in the submission of revisions to a currently approved Exploration Plan (EP). Preliminary shallow hazards and biological surveys will also be conducted. Preliminary surveys are authorized by the lease; mitigation of environmental effects is fully addressed in the EA (MMS, 2005a).

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30200: Findings

Based upon the above, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30200 of the CCMP.

Article 2: Public Access

Section 30210.

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211.

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Sections 30210 and 30211: Comment and Analysis

A description of coastal access by the public is referenced in MMS, 2005b (California, 1997; and California Coastal Commission, 2001).

The main impact-producing agents from activities during the suspension would include sound produced by the air gun used in the shallow hazards surveys, air emissions from the survey vessels, and space-use conflicts caused by the presence of the vessels and the trailing equipment. As summarized in EA Section 3.1, activities during the suspension would not affect coastal public access, recreational opportunities, public safety, the rights of the public or private property owners, or induce the overuse of recreational uses or natural resources.

No new, long-term demand on the area's recreation facilities would result from hypothetical postsuspension activities because these activities would not substantially increase the area's population.

Hypothetical post-suspension activities would include delineation drilling from a MODU, up to three new platforms, and new pipelines. The delineation drilling, new platforms, and offshore to onshore pipelines

associated with Aera's four units and Lease OCS-P 0409 would not interfere with recreational uses of the immediate coastal area. Construction of the offshore to onshore pipelines would not interfere with onshore recreation since the pipeline landfall would occur in an area of restricted public access by Vandenberg Air Force Base (VAFB). Pipeline construction in the area of Point Sal Road could impede access to Point Sal State Park, but only temporarily.

Construction workers may affect campground availability during pipeline construction as well. These effects would contribute incrementally to cumulative effects from existing offshore oil and gas projects that have been predicted to be moderate to high, especially during construction. The cumulative effect on recreational resources from the hypothetical Casmalia East processing plant cannot be reasonably forecasted, but could be moderate to high during the construction period.

Operation and production of the new platforms would slightly increase the risk of oil spills, which could preclude ocean-dependent recreational activities in affected areas. The effects from oil spills that may occur in the area during hypothetical post-suspension activities, as discussed in EID Section 5.3, on recreational fishing and offshore access could range from low to moderate, depending on location, season, and a number of other factors.

Hypothetical platforms would degrade the visual character of the area, which in turn would degrade the quality of the coastal recreational experience.

Hypothetical post-suspension effects on recreational fishing and access to the sea, primarily as they relate to space-use and preclusion, would amount to a negligible increase over present levels. The area covered by hypothetical post-suspension activities would be small relative to the available fishing grounds and offshore access, and the periods of disturbance would be brief. Effects would be anticipated to be low.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Sections 30210 and 30211: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with sections 30210 and 30211.

Section 30212.

- (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where
- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,
- (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.
- (b) For purposes of this section, "new development" does not include:
- (1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.
- (2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former

structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.

- (3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.
- (4) The reconstruction or repair of any seawall; provided, however, that the reconstructed or repaired seawall is not seaward of the location of the former structure.
- (5) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the commission determines that the activity will have an adverse impact on lateral public access along the beach. As used in this subdivision, "bulk" means total interior cubic volume as measured from the exterior surface of the structure.
- (c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section 30212: Comment and Analysis

Activities that occur during the suspension would not involve any new development; therefore, Section 30212 is not applicable during that phase.

For the purposes of this analysis, hypothetical post-suspension phase activities are assumed to include the development and operation of those facilities summarized in Section VI. Of those facilities, construction of the offshore to onshore pipelines in the area of Point Sal Road could impede access to Point Sal State Park. However, this would be temporary and effects would be considered low. No long-term effects on existing coastal access would occur from pipeline construction.

The hypothetical Casmalia East facility is approximately six miles from the coast. Public access between the hypothetical Casmalia East facility and the coast would be restricted by the jurisdictional boundaries of VAFB (see EID Figure 4.1-2). Therefore, as provided for under Section 30212(a)(1), providing new public coastal access between this facility and the coast would be precluded for military security reasons. Additionally, the existing coastal access outside of VAFB's boundaries is considered adequate and would not be affected by the facility because its construction and operation would not substantially increase the area's population.

Operation of the MODU and production from the hypothetical Platforms A, B, and C would increase the risk of oil spills, which could preclude ocean-dependent recreational activities in affected areas. The effects from oil spills that may occur in the area during hypothetical post-suspension activities, as discussed in EID Section 5.3, on recreational fishing and offshore access could range from low to moderate, depending on location, season, and a number of other factors.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30212: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30212.

Section 30213.

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. The commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Section 30213: Comment and Analysis

As summarized in EA Section 3.1, activities conducted during the suspension would not affect coastal public access or recreational opportunities (MMS, 2005a). Therefore, the activities would not affect lower cost visitor and recreational facilities.

During the hypothetical post-suspension phase activities, placement and operation of the proposed facilities for production of Aera's four units and Lease OCS-P 0409 would not affect lower cost visitor and recreational facilities.

Section 30213: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30213.

Section 30214.

- (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.
- (b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.
- (c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Section 30214: Comment and Analysis

Activities during the suspension would occur in Federal waters offshore and would not affect public coastal access.

During the hypothetical post-suspension phase, construction of offshore to onshore pipelines outside of the boundaries of VAFB in the area of Point Sal Road could impede access to Point Sal State Park. However, due to its temporary nature, effects would be considered low. Construction of the offshore to onshore pipelines within VAFB would not interfere with public access since the pipeline landfall would be within a restricted area. Operation of the offshore to onshore pipelines would not interfere with existing public access. Construction and operation of the inland Casmalia East processing facility would not have substantial effects on existing public coastal access.

Operation of the MODU and production from the hypothetical platforms would slightly increase the risk of oil spills that could preclude coastal access in affected areas. Effects on public access from the risk of oil spills that may occur in the area during hypothetical post-suspension activities could range from low to high depending on location, season, and a number of other factors. The majority of these effects would occur during facility construction, and in the event of an oil spill of substantial volume. Some effects associated with these activities could be mitigated to an insignificant level as part of future environmental reviews and approvals for proposed EPs and DPPs.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on coastal public access that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Section 30214: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30214.

Article 3: Recreation

Section 30220.

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30220: Comment and Analysis

Activities during the suspension would occur in Federal waters offshore and would not affect coastal areas suited for water-oriented recreational activities.

Hypothetical post-suspension phase activities such as pipeline construction and oil spills may have temporary effects on coastal areas suited for water-oriented recreational activities. The water-oriented recreational activities and the potential effects of oil spills on these activities are described in the EID (MMS, 2005b).

Hypothetical offshore to onshore pipelines associated with development of Aera's four units and Lease OCS-P 0409 would not interfere with water-oriented recreational uses of the immediate coastal area, because the majority of construction associated with these pipelines would be within an area with public access restricted by VAFB. Pipeline construction in the area of Point Sal Road could impede access to Point Sal State Park temporarily. Additionally, use by construction workers may affect campground availability during pipeline construction. These effects would incrementally contribute to cumulative effects from existing offshore oil and gas projects that have been found to be moderate to high, especially during construction.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on recreation that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Section 30220: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30220.

Section 30221.

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30221: Comment and Analysis

Activities during the suspension would occur in Federal waters offshore and would not affect oceanfront land suitable for recreational use.

Oceanfront land adjacent to the central Santa Maria Basin is under the jurisdictional authority of VAFB, which restricts public coastal access and recreational uses. These restrictions would not be anticipated to change as the result of these activities, and they inherently foster both near- and long-term protection of oceanfront land in the area. Additionally, hypothetical development activities would not permanently displace existing uses of oceanfront land. Effects would be limited to restrictions on access to ocean front land during construction and while decommissioning offshore to onshore pipelines, and possibly in the event of an oil spill. Due to their temporary nature, onshore effects would be low.

Section 30221: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30221.

Section 30222.

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential,

general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30222.5.

Ocean front land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.

Sections 30222 and 30222.5: Comment and Analysis

Activities that occur during the suspension and facilities associated with hypothetical exploration and development of Aera's four units and Lease OCS-P 0409 are coastal-dependent, coastal-related, or energy facility-related in nature, and would be assumed to be designated as such by the California Coastal Commission and Santa Barbara County. Therefore, these activities would be given priority over the provisions and uses stipulated in Sections 30222 and 30222.5.

Sections 30222 and 30222.5: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30222 and 30222.5.

Section 30223.

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30223: Comment and Analysis

Activities during the suspension would be located offshore and would not affect upland coastal recreation areas or uses.

Hypothetical post-suspension activities including delineation from a MODU or development using platforms would occur offshore and would not affect upland coastal recreational uses. Construction of the offshore to onshore pipelines may affect coastal upland areas. However, these areas are located on VAFB, which restricts public coastal access and recreational uses. Additionally, construction-related effects would be temporary in nature and affected areas would be restored following construction. Therefore, there would be no permanent loss or disturbance to upland coastal areas or their recreational use.

Section 30223: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30223.

Section 30224.

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

Section 30224: Comment and Analysis

The activities related to the suspension and hypothetical post-suspension period would not entail development of boating facilities (harbors, storage areas, launch areas, etc.).

Section 30224: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30224.

Article 4. Marine Environment

A detailed description of the area's existing marine environment, including physical oceanography, water quality, biological resources, visual resources, recreation, commercial fishing and kelp harvest, and marine recreational fishing and diving is found in EID Sections 4.5, 4.6, 4.7, 4.9, 4.10, 4.13 and 4.14. Related existing resources and uses associated with the offshore environment, such as air quality, cultural resources and military operations are also detailed in EID Section 4. In addition, the EA for activities that occur during the suspension contains in-depth discussion of protected marine mammals and sea turtles, fish resources, commercial fishing and military operations.

Section 30230.

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231.

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Sections 30230 and 30231: Comment and Analysis

The comment and analysis discussion under Article 5, Section 30240, provides details regarding environmentally sensitive habitat areas, including rocky and sand beach habitats, seafloor resources, fish resources, marine and coastal birds, marine mammals, threatened and endangered species, estuarine and wetland habitats, refuges, preserves and marine sanctuaries, and onshore biological resources as related to activities that occur during the suspension and hypothetical post-suspension activities. The following discussion provides a summary of these discussions as they relate to Sections 30230 and 30231.

Activities that Occur During the Suspension

As described in EA Section 3.1, the main impact-producing agents from activities that occur during the suspension would include sound produced by the air gun used in the shallow hazards surveys, air emissions from the survey vessels, and space-use conflicts caused by the presence of the vessels and the trailing equipment. These survey activities could potentially affect marine resources such as protected

species of marine mammals and sea turtles, fish resources, managed species, and Essential Fish Habitat (EFH).

Marine mammals, sea turtles, fish, marine invertebrates, and shellfish resources could be adversely affected if they are exposed to high sound pressure levels. Sound intensity is usually expressed in decibels (dB). Since sound pressure is easier to measure than intensity, sound pressure level (SPL) is usually reported in units of decibels relative to a standard reference pressure. In this section, "dB" is used as shorthand for "dB re 1 μ Pa at 1 m [$_{rms}$]" (i.e., decibels referenced to 1 micropascal at 1 meter [$_{rms}$]).

The single airgun proposed for use by Aera in the shallow hazards surveys generates a sound pressure level of 218 dB at 3.2 feet (~1m) from the airgun. As sound pressures radiate from the airgun, their levels diminish. The rate at which they diminish is called the transmission loss. In field measurements taken during the Exxon 3D survey of 1995 of the Santa Ynez Unit in the Santa Barbara Channel, the transmission loss was approximately 25logR. In the Exxon vertical seismic profile (VSP) survey of 1998 in the same area, field tests calculated a transmission loss that was considerably higher (approximately 60logR for the down slope measurements and 48logR for the upslope leg). In 1999, the United States Geologic Survey (USGS) used a small airgun (approximately 220 dB rms) for shallow hazards surveys offshore southern California and applied a transmission loss model of 25logR that it considered conservative based upon abundant, numerical acoustic modeling and some field measurements.

In order to avoid or minimize potential effects on fish resources and marine protected species, Aera proposes to monitor marine mammals and sea turtles out to a distance of approximately one-half mile from the airgun, or to the 160 dB level. All of the mitigation measures presented in Appendix E that are proposed to minimize the exposure of marine species to adverse effects from the shallow hazards survey are discussed in Sections 4.2 through 4.4 of the EA.

There are no plans to anchor survey vessels offshore, and it is likely if rough weather interrupts the surveys that the vessels would either tie to one of the large mooring buoys found at the four platforms offshore in the Santa Maria Basin or return to port. However, the MMS would additionally require that Aera prohibit offshore anchoring (see Mitigation Measure MPS-20, Appendix E). With the no-anchoring mitigation in place, it is anticipated that there would be no effects from offshore anchoring on fish resources, managed species, or EFH.

The shallow hazards and biological surveys that occur during the suspensions have the potential for harassing or harming marine species such as fish resources, protected marine mammals, and sea turtles. Some individual animals detecting the vessel operations are anticipated to locally adjust their positions to avoid such operations (see EA Section 4.2). Localized avoidance is a negligible effect, and migration, breathing, nursing, feeding, or other typical behaviors are anticipated to continue unabated. Mitigation Measures MPS-21 and MPS-22 (Appendix E) are included in the event that animals do not avoid vessel operations; mitigation measures specific to the shallow hazards surveys make effects on marine protected species unlikely and negligible. Collisions, strikes, and entanglements with protected species are avoidable and mitigated to unlikely; only negligible effects are anticipated (see EA Section 4.2). The mitigation measures, individually and collectively applied to the proposed surveys, greatly limit the potential for adversely affecting marine protected species. The MMS concludes that marine mammals and sea turtles are unlikely to be adversely affected by the shallow hazards and biological surveys associated with the suspension. The surveys would also have no detectable effect on fish resources, managed species, and EFH. With the mitigation, potential effects on marine species would be negligible and non-

No. CD-32-99.

LePage, K., Malme, C., Mlawski, R. and Krumhansl, P. (1995). <u>Exxon SYU Sound Propagation Study</u>. Report by Bolt Beranek and Newman, Cambridge, MA, Exxon Exploration Company, BBN Report No. 8120.

Greeneridge Sciences, Inc. (1998). Sound Levels of an Airgun Array Operating at Platform Harmony on 17 March 1998. Report by MEC Analytical Systems, Inc. for the U.S. Minerals Management Service, Contract no. 14-35-0001-30809. California Coastal Commission (1999). Staff Recommendation on Consistency Determination. Consistency Determination

adverse. Consultations with NOAA Fisheries and the U.S. Fish and Wildlife Service support MMS's conclusions (see EA Appendices 4 & 5). Therefore, effects of the surveys on the biological productivity of marine organisms are anticipated to be undetectable to negligible.

Hypothetical Post-Suspension Activities – Delineation Drilling from a MODU

Hypothetical post-suspension activities would involve the use of a MODU to drill one to two delineation wells in the Point Sal and/or Purisima Point Units. Major impact agents anticipated from delineation drilling includes anchoring, noise and disturbance, vessel traffic, and drilling discharges (see EID Section 5.2.1). The activities are anticipated to result in temporary, localized disturbances to marine resources, including fish resources, marine mammals, and marine and coastal birds (see EID Section 5.7). These activities are anticipated to result in negligible to low effects on sea turtles, marine mammals and threatened and endangered species (see EID Section 5.7). MMS requires operators to submit an anchoring plan that shows avoidance of hardbottom features, potential cultural features, and seafloor anomalies. Delineation drilling activities would not involve the construction or operation of any new onshore facilities, and therefore would not affect intertidal biological resources.

Discharges from the MODU during delineation drilling would be discharged under the new Pacific OCS National Pollutant Discharge Elimination System (NPDES) permit and would be required to meet NPDES water quality criteria (see EID Section 5.7.7). No measurable effects on threatened and endangered marine mammals or sea turtles would be anticipated.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Hypothetical Post-Suspension Activities – Development and Production

Hypothetical post-suspension activities would involve the placement and operation of up to three platforms within Aera's four units and Lease OCS-P 0409. Major impact agents that would result from development include construction (platform and pipeline), anchoring, noise and disturbance, vessel traffic, drilling discharges, and potential oil spills (see EID Table 5.2-1 and Section 5.2.3.2).

The routine activities (i.e., drilling, production, and vessel and helicopter support traffic) associated with the hypothetical development of Aera's four units and Lease OCS-P 0409 are anticipated to result in temporary, localized disturbances to marine resources, including fish resources, marine mammals, and marine and coastal birds throughout the period 2006 to 2030 (see EID Section 5.7). These activities are anticipated to result in negligible to low effects on sea turtles, birds, fish, marine mammals, and threatened and endangered species (see EID Section 5.7). Once production begins, support traffic is anticipated to remain at levels typical for ongoing offshore oil and gas activities in the Santa Maria Basin.

Laying pipelines from the proposed platforms to the shore would require anchoring vessels in a manner that may affect the seafloor. As discussed in EID Section 5.7.2, MMS requires operators to submit an anchoring plan that shows avoidance of hard bottom features, potential cultural features, and seafloor anomalies. If pipeline routes were near hard bottom features, effects could be moderate from anchoring activities given the sheer number of events that could occur on one feature. The anchoring plan mitigation should reduce impacts to hard bottom features to low (see EID Section 5.7.2).

Platform effluents discharged in the course of developing the leases would be regulated under the new Pacific OCS National Pollutant Discharge Elimination System (NPDES) permit and would be required to meet NPDES water quality criteria (see EID Section 5.7.7). Water quality impacts would be low (see EID Section 5.6). No measurable discharge effects on threatened and endangered marine mammals or sea turtles in the area would be anticipated.

Potential oil spill risk is discussed in Section 5.3 of the EID. The potential for an oil spill occurring from hypothetical development of Aera's four units and Lease OCS-P 0409 represents a measurable incremental increase to the cumulative oil spill risk for threatened and endangered species. Oil spills would be anticipated to result in low to moderate effects on sea otter; fish resources; and marine, coastal, and threatened and endangered birds during the period 2006 to 2030. Effects on the sea turtle are assumed to be negligible.

Each operator is required to have an oil spill response plan with trained personnel and clean-up equipment and supplies at each site to meet Federal regulations (see EID Section 5.3.1.3). Federal regulations governing operations related to offshore oil and gas activities are found at 30 CFR 250.300 and 30 CFR 254. These regulations address the prevention and control of oil and gas spills and releases. Regulations at 40 CFR 100, 112, and 300 address responses to spills or release of oil and gas. Spill response requirements will be thoroughly addressed when a plan is submitted.

Hypothetical Post-Suspension Activities – Decommissioning

Decommissioning of the platforms could also cause moderate effects, both from anchoring effects and to the loss of habitat. Effects from anchoring on soft bottom habitat would cause localized turbidity that would disperse rapidly in the currents and have no effects on benthic organisms (URS, 1986, as cited in MMS, 2005b).

Decommissioning and removal of the platform structures and pipelines proposed for the platform(s) within Aera's four units and Lease OCS-P 0409 would be anticipated to result in noise and disturbance to threatened and endangered marine mammals. The principal potential effects would be similar to those anticipated from construction activities, i.e., short-term avoidance reactions at distances of one nautical mile or less from the operations. Implementation of a wildlife mitigation plan, in addition to mitigation similar to that employed for platform and/or pipeline removal in the Pacific and Gulf of Mexico Regions, would make it unlikely that any injury or mortality to any threatened or endangered species of marine mammal or sea turtle would occur as a result of the limited use of explosives in decommissioning operations. In order to reduce the area in which birds could be killed or injured, explosive charges would be set off 15 feet below the sea floor, which would dampen the effect of the blast. It is highly unlikely that marine and coastal birds would be at risk of injury or death from this process.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on the marine environment that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Sections 30230 and 30231: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with sections 30230 and 30231.

Section 30232.

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30232: Comment and Analysis

Activities that Occur During the Suspension

Section 3.1 of the EA describes the activities that would occur during the suspension, which are limited to a shallow hazards and biological survey and in-office, administrative activities relating to the revision(s) of an EP. The shallow hazards and biological surveys are not anticipated to create any effects resulting from the spillage of crude oil, gas, petroleum products, or hazardous substances.

Hypothetical Post-Suspension Activities - Delineation and Development Drilling and Production

A discussion of potential oil spills that could come from delineation and development drilling and production activities is presented in Section 5.3.1 of the EID.

Each operator is required to have an oil spill response plan with trained personnel and clean-up equipment and supplies at each site to meet Federal regulations (see EID Section 5.3.1.3). Federal regulations governing operations related to offshore oil and gas activities are found at 30 CFR 250.300 and 30 CFR 254. These regulations address the prevention and control of oil and gas spills and releases. Regulations at 40 CFR 100, 112, and 300 address responses to spills or release of oil and gas. Spill response requirements will be thoroughly addressed when a plan is brought forward.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without state concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on coastal public access that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Section 30232: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30232.

Section 30234.

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor

space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30234.5.

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Sections 30234 and 30234.5: Comment and Analysis

Activities that Occur During the Suspension

Section 3.1 of the EA describes the activities that would occur during the suspension, which are limited to a shallow hazards and biological survey and in-office, administrative activities relating to the revision(s) of an EP. Effects from the sound produced by the air gun and space-use conflicts caused by the presence of the vessels and the trailing equipment may affect commercial and recreational fishing.

The surveys would result in an 11-13 day preclusion of fishing operations in the survey area and an estimated potential 3-day decrease in catchability of target species following the shallow hazards surveys. These temporary impacts would be mitigated (see Appendix E), therefore any adverse impacts would be avoided or minimized (see EID Section 4.4).

No adverse impacts to commercial fishing and recreational boating harbors are anticipated.

Hypothetical Post-Suspension Activities – Delineation Drilling from a MODU

As described in EID Section 5.13.2, during the hypothetical post-suspension phase, Aera proposes drilling one to two delineation wells from a MODU into the Point Sal and/or Purisima Point Units. Several actions associated with these activities have the potential to affect commercial and recreational fishing. These activities include towing the MODU between well sites, anchoring activities, support vessel traffic, and barging activities. As crew boats and supply boats would travel to and from the drill site on a regular basis, conflicts with commercial fishing could result in preclusion from the area, lost fishing time, and damage to equipment. Any traps or gillnets in the traffic corridor of the drilling areas could become entangled and damaged or lost when the MODU and support vessels pass through the area. Trawlers, purse seiners, trollers, and hook and line fishers could be forced to move from the area or change course, resulting in lost fishing time. However, the temporary nature of these activities and incorporation of mitigation measures would result in low effects from the delineation drilling activities on commercial and recreational fishing operations (see EID Sections 5.13.2 and 5.14.2).

A discussion of the risk of potential oil spills that could come from delineation drilling activities is presented in Section 5.3.1 of the EID.

Each operator is required to have an oil spill response plan with trained personnel and clean-up equipment and supplies at each site to meet Federal regulations (see EID Section 5.3.1.3). Federal regulations governing operations related to offshore oil and gas activities are found at 30 CFR 250.300 and 30 CFR 254. These regulations address the prevention and control of oil and gas spills and releases. Regulations at 40 CFR 100, 112, and 300 address responses to spills or release of oil and gas. Spill response requirements will be thoroughly addressed when a plan is brought forward.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate

under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Hypothetical Post-Suspension Activities – Development and Production

Constructing the platforms and associated pipelines and power cables within Aera's four units and Lease OCS-P 0409 would have similar, but longer-term effects on commercial and recreational fishing as the delineation drilling. In addition, nearshore fisheries, including crab traps and set netting operations could be affected during pipelaying operations between hypothetical Platform B and the shoreline. Due to the relatively short period of time and narrow corridor within which those pipelines would be laid, those effects are anticipated to be low. Low to moderate effects on trawl, set net, and deeper water traps fisheries due to preclusion of the seafloor and water areas around the platform construction sites are anticipated. Assuming construction vessels utilize the pre-established vessel traffic corridors, the increase in vessel traffic associated with that construction is anticipated to result in low effects on commercial fishing activities. Once in-place, the platforms would permanently reduce available trawling grounds within the assumed 0.25 mile-radius "berth" area centered on the platform, a low-level effect. The pipelines and power cables are not anticipated to affect trawling or set nets within the area, nor should nearshore set gear fisheries be affected. Offshore construction activities are anticipated to cause low effects on recreational fishing (see EID Section 5.14.2).

A discussion of the risk of potential oil spills that could come from development drilling and production activities is presented in Section 5.3.1 of the EID.

Each operator is required to have an oil spill response plan with trained personnel and clean-up equipment and supplies at each site to meet Federal regulations (see EID Section 5.3.1.3). Federal regulations governing operations related to offshore oil and gas activities are found at 30 CFR 250.300 and 30 CFR 254. These regulations address the prevention and control of oil and gas spills and releases. Regulations at 40 CFR 100, 112, and 300 address responses to spills or release of oil and gas. Spill response requirements will be thoroughly addressed when a plan is brought forward.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Hypothetical Post-Suspension Activities – Decommissioning

Decommissioning impacts are anticipated to be similar to the impacts during the construction phase of the platforms and pipelines. Low to moderate, short duration impacts on commercial fisheries due to preclusion of the seafloor and water areas around the decommissioning sites are anticipated.

Sections 30234 and 30234.5: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with sections 30234 and 30234.5.

Article 5: Land Resources

Section 30240.

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30240: Comment and Analysis

During the suspension Aera will conduct shallow hazards and biological surveys within the Point Sal and Purisima Point Units. No effects to land resources are anticipated as a result of these surveys.

During the post-suspension period, Aera will use a MODU to drill 1-2 delineation wells in the Point Sal and/or Purisima Point Units. If Aera decides to proceed to development and production, they have indicated that they will place up to three platforms within their four units and Lease OCS-P 0409. Additionally, pipelines connecting the platforms, and pipelines from hypothetical Platform B to shore would need to be constructed.

The pipelines from hypothetical Platform B to shore and thereafter to the onshore processing facility at Casmalia East would likely be sited to avoid the constrained lands within the area. Areas that would likely be avoided include the Guadalupe Dunes, Point Sal/Mussel Rock/Lion's Head area, urban areas, cultivated agricultural areas, and wetlands.

Pipelines are required by the State Lands Commission to be buried through the surf zone. Depending on the rocky or sandy resources at the landfall, pipelines would be trenched and buried, laid on the surface, or drilled through the surf zone at depth. The Coastal Commission required Chevron to construct the Point Arguello pipelines using a "drilled" crossing. This approach minimized effects on sandy beach resources since no trenching was required, but caused erosion effects elsewhere on the route (MMS, 2005b). The Las Flores Canyon processing facility pipelines were trenched through sandy onshore beaches. It is assumed that the new pipelines proposed for connecting the hypothetical platforms within Aera's four units and Lease OCS-P 0409 to the hypothetical onshore facilities at Casmalia East would utilize a pipeline corridor in the vicinity of Point Sal. Therefore, it is unlikely that rocky beach resources would be affected through pipelaying activities.

Effects on living resources, such as crabs, clams and other burrowing animals, from construction of the onshore pipelines within the sandy beach area could occur through the physical displacement of the animal by trench digging, or crushing and injuring it through the use of heavy equipment. Disturbance from heavy equipment is localized and expected over a maximum 100-foot-wide corridor, a low effect. Animals such as sand crabs would be temporarily displaced, with repopulation of the area occurring within a few weeks to a few months, a low effect. Longer lived animals such as Pismo clams, if they were present and were injured or displaced through trenching, could be expected to require a few years to recover, particularly to the age class prior to the disturbance. However, the effect on Pismo clams is expected to be low given that the number of Pismo clams that could be affected would be small and would not be expected to cause a measurable change in species abundance or composition. Plant resource effects would be felt if the pipeline construction occurred in a dune habitat. These would be localized but could be substantial if the habitat is altered, a moderate effect. Previous pipeline construction projects have mitigated effects on fragile dune habitat through several measures including narrowing the construction corridor to less than 50 feet in these areas (MMS, 2005b). Mitigation to reroute pipelaying to avoid dune habitat could reduce the effect to low.

Estuaries and wetlands are described and analyzed in Section 4.7 and 5.7 of the EID, respectively. Mitigation measures required during the placement of the Santa Ynez Unit pipelines included measures to reduce sedimentation of local streambeds. One of these measures dealt with removal of trees along the route, others restricted placement of equipment and pipe during construction to minimize disturbance (Santa Barbara County, 1987, as cited in MMS, 2005b). These measures were largely successful in reducing effects on wetland resources; the replanting of trees, however, was not successful in several areas due to drought conditions following pipelaying. Once a specific proposal is made, construction of the new pipelines would include similar measures to reduce the potential effect on wetland and streambed areas. Additional environmental analysis would be done to evaluate specific effects of that future project. Given the general location of proposed activities, however, effects on wetlands would be expected to be low from construction and decommissioning/removal activities. Mitigation proposed to address sedimentation and other disturbances, such as construction and decommissioning-related noise, would further reduce identified effects.

Mitigation measures required during the placement of the Santa Ynez Unit pipelines included measures to reduce sedimentation of local streambeds. One of these measures dealt with removal of trees along the route, others restricted placement of equipment and pipe during construction to minimize disturbance (Santa Barbara County, 1987, as cited in MMS, 2005b). These measures were largely successful in reducing effects on wetland resources; the replanting of trees, however, was not successful in several areas due to drought conditions following pipelaying. It is assumed that if the Aera offshore to onshore pipelines are constructed, similar measures would be taken to reduce the potential effect on wetland and streambed areas, along with additional measures as needed. Once a specific proposal is made, additional environmental analysis would be done to evaluate specific effects of that future project. Given the general location of proposed activities, however, effects on wetlands would be anticipated to be avoided by construction and decommissioning/removal activities.

Onshore biological resources are described in detail in the EID Section 4.7. Potential effects to those resources are described in the EID Section 5.7. Factors that could affect onshore biological resources are noise generated from helicopter trips to the MODU and Aera's platforms, and an oil spill.

A discussion of the risk of potential oil spills that could come from delineation drilling activities is presented in Section 5.3.1 of the EID.

Helicopter trips in support of delineation and development activities are anticipated to average one trip per day. Helicopters would be anticipated to operate out of the Santa Maria Airport for the Purisima Point Unit. The level of helicopter traffic associated with delineation and development activities is anticipated to result in temporary (less than one-hour), localized disturbances to some marine mammals and coastal birds. Effects on marine mammals should be reduced by implementation of the marine mammal avoidance guidelines specified in the operators' MWCPs. Helicopter flights are not anticipated to have a substantial effect on marine and coastal birds in the area.

Based upon the "Oil Spills, Risk, Movement and Response" analysis found in EID Section 5.3, the most probable spill size is about 200 bbl and the maximum reasonably foreseeable oil spill volume for the Purisima Point Unit is 2,000 bbl. Assuming that the spill occurs from the pipeline, it is anticipated that the shoreline adjacent to the spill origin would be moderately or heavily oiled and that other rocky and sandy beaches would be lightly oiled, either with a patchily light sheen or with tarballs. Effects from a 200 bbl spill would be anticipated to be low, except if abalone habitat were heavily oiled, which would cause moderate effects. Effects from a 2,000 bbl spill would be anticipated to moderately or heavily oil several rocky and sandy beaches, causing moderate effects. Oil from a 2,000 bbl spill could contact enough black abalone habitat to affect the population, a high effect. A summary of effects on threatened and endangered species is presented in the table below. The oil spill response plan would include particular reference to these habitats and species to help prevent spill impacts (see EID Section 5.3).

Summary of Hypothetical Post-Suspension Effects on Threatened and Endangered Species by Exploration/Development Phase

Threatened and Endangered Species by Exploration/Development I hase				
Resource	Effect			
Fish and Marine Invertebrates	None			
Marine Mammals	Low (noise)			
	Moderate (oil spill)			
Birds	Low (noise)			
	Low to moderate (oil spill)			
Plant Species	Moderate to High - oil spill			
Amphibians	Low - oil spill			

Source: MMS, 2005b.

Oil spill effects on wetland and estuarine resources would be anticipated to range from low to high, depending on the volume of the oil spilled and its geographic range of dispersion.

The table below summarizes effects from the hypothetical development of Aera's four units and Lease OCS-P 0409 and other undeveloped leases to the Biological Resources of Channel Islands and Monterey Bay National Marine Sanctuaries and Channel Islands National Park.

· -	Marine Sanctuaries and Channel Islands National Park.			
Resource	Effects			
Rocky and sandy	Because delineation drilling, platform, pipeline and power cable construction, operation and decommissioning would occur outside of the sanctuary and park boundaries, no			
beach	effects are anticipated to occur to these resources. Effects on these resources due to an oil			
habitats	spill would range between no impact to moderate effects, depending upon the size and geographic breadth of the spill.			
Seafloor	Delineation drilling, and the construction, operation and decommissioning of new			
resources	platforms and pipelines would not occur within the boundaries of a sanctuary or park and			
	no effects would be anticipated to occur. The level of effect due to an oil spill would be			
	variable, depending upon the size and dispersion of the spill, but would likely result in no			
	effects to moderate effects.			
Kelp beds	Because no construction, operational, or decommissioning activities would occur within sanctuary and park boundaries, no to low effects are anticipated to these resources.			
Fish	Although activities associated with hypothetical post-suspension activities would not			
resources	occur within sanctuary or park boundaries, fish can be highly mobile and may move in and			
	out of these areas. Effects on fish resources from hypothetical post-suspension activities			
	are anticipated to range from low to moderate.			
Marine and	During hypothetical post-suspension phase activities, no direct effects on these resources			
coastal	within sanctuary, preserve, or park boundaries would occur because no activities within			
birds	these areas are proposed. Effects from hypothetical post-suspension activities range from			
	negligible (due to the use of exploratory drilling and decommissioning explosives and			
	other construction and decommissioning activities) to low/moderate due to an oil spill,			
	depending on its magnitude.			
Marine	Although hypothetical post-suspension activities would not occur within sanctuary or park			
mammals	boundaries, marine mammals are highly mobile and may move in and out of these areas.			
	Effects on marine mammals during hypothetical post-suspension activities are anticipated			
	to range from negligible to low.			
Threatened	Although hypothetical post-suspension activities would not occur within sanctuary or park			
and	boundaries, some of these species are highly mobile and may move in and out of these			
endangered	areas. Effects on threatened and endangered species during hypothetical post-suspension			
species	activities range from none to moderate.			
Estuaries	No hypothetical post-suspension activities would directly affect these resources within			
and	refuge, sanctuary or park boundaries; therefore, no direct effects would occur. No effects			

Resource	Effects
wetlands	on these resources would be anticipated to occur as the result of delineation drilling. Effects associated with construction, operation, decommissioning, and oil spills would be considered low to moderate.
Onshore biological resources	No hypothetical post-suspension activities would occur within designated boundaries of the area's onshore refuges, sanctuaries or parks; therefore no direct hypothetical post-suspension phase effects on onshore biological resources in these areas would occur. Effects on onshore biological resources due to construction, operation and decommissioning of the onshore pipelines and Casmalia East processing facility, including oil spills, would be low to moderate.

Source: MMS, 2005b

Effects on onshore biological resources from an onshore oil spill (due to a pipeline rupture or break) would range between low to moderate, depending on the location of the spill and the volume of oil spilled. However, use of known and effective oil spill clean-up and restoration techniques in the area would result in low long-term effects due to an oil spill.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on coastal public access that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Section 30240: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30240.

Section 30241.

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.
- (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.
- (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.
- (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

- (e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.
- (f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of prime agricultural lands.

Section 30241.5.

- (a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation containing at least both of the following elements:
- (1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.
- (2) An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.

For purposes of this subdivision, "area" means a geographic area of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for those lands included in the local coastal program or in the proposed amendment to a certified local coastal program.

(b) The economic feasibility evaluation required by subdivision (a) shall be submitted to the commission, by the local government, as part of its submittal of a local coastal program or an amendment to any local coastal program. If the local government determines that it does not have the staff with the necessary expertise to conduct the economic feasibility evaluation, the evaluation may be conducted under agreement with the local government by a consultant selected jointly by local government and the executive director of the commission.

Section 30242.

All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

Sections 30241, 30241.5 and 30242: Comment and Analysis

Santa Barbara County maintains a significant percentage of land devoted to agriculture. Over the past three decades, development pressures have created increased demand for conversion of agricultural lands to other uses. The table below shows aspects of agricultural land uses within Santa Barbara County as identified in the EID.

According to the Santa Barbara County "North County Siting Study," there are no areas of Prime Farmland, Farmlands of Statewide Importance, or Unique Farmlands in, or adjacent to, the hypothetical onshore pipeline corridor or Casmalia East site; areas designated as Farmlands of Local Importance are found in the area of the community of Casmalia (County of Santa Barbara, 2000). Designated County agricultural preserves constitute the majority of lands surrounding the northern half of VAFB, including areas immediately surrounding the community of Casmalia (County of Santa Barbara County, 2000).

Attribute	Santa Barbara	California

	County	
Number of farms	1,451	74,126
Irrigated	1,062	55,920
Non-irrigated	389	18,206
Total farm land in acres	817,068	27,698,779
Average farm size in acres	563	374
Farm land as percent of	46.62%	27.75%
total land		

Source: Based upon MMS, 2005b

Activities that occur during the SOP would occur offshore and therefore would not directly or indirectly affect agricultural land uses. No effects would occur.

During hypothetical post-suspension phase activities, impact-producing agents associated with agricultural land uses, including those associated with prime agricultural lands, would be temporary disturbances due to construction and decommissioning of pipelines and construction and operation of the hypothetical Casmalia East facility. Temporary disruptions of agricultural land uses due to construction and decommissioning of the onshore pipelines would be anticipated to be similar to those associated with the Point Pedernales Project and would be considered low. It is likely that the new Casmalia East processing facility would require some agricultural lands to be converted to an industrial use, resulting in a moderate to high effect, depending on the acreage affected and the exact nature of those uses.

Sections 30241, 30241.5 and 30242: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with sections 30241, 30241.5, and 30242.

Section 30243.

The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.

Section 30243: Comment and Analysis

A description of the regional geology of the area is presented in Sections 5.2 and 5.3 of the County of Santa Barbara's "North County Siting Study" (County of Santa Barbara, 2000). Within this area, non-residential/urban land uses are primarily agricultural, including irrigated and non-irrigated crops and livestock (County of Santa Barbara, 2000). Lands associated with Los Padres National Forest, which may have site-specific timberland uses, lie significantly inland.

All activities that occur during the suspension would occur offshore and would not affect, directly or indirectly, the long-term productivity of soil and timberlands. Based upon review of the "North County Siting Study," no known commercial timberlands land uses are located within the immediate area (County of Santa Barbara, 2000).

There are no onshore activities that occur during the suspension phase that would affect commercial timberlands or the long-term productivity of soils.

During hypothetical post-suspension phase activities, the primary impact-producing agents affecting the long-term productivity of soils would be limited to the construction and operation of the hypothetical Casmalia East facility and conversion of some agricultural lands into development use. Such conversions

could result in moderate to high effects, depending on the total acreage affected and the exact nature of the area's soils.

Section 30243: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30243.

Section 30244.

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Section 30244: Comment and Analysis

A description of cultural resources, including a regulatory overview, is presented in Section 4.8 of the EID. Onshore archaeological sites near Shuman Canyon, the area of the pipeline's onshore corridor and sensitive lands for offshore resources are presented in EID Tables 4.8-3, 4.8-4 and Figures 4.8-1 and 4.8-2. Additional information regarding these resources is found in Section 5.6 of the County of Santa Barbara's "North County Siting Study" (County of Santa Barbara, 2000). Also, all islands within the Channel Islands National Park and Channel Islands National Marine Sanctuary are either listed or eligible for listing as Archaeological Districts on the National Register of Historic Places

Activities during the suspension would include shallow hazards and biological surveys within the Point Sal and Purisima Point Units. The primary impact-producing factor that could affect archaeological and paleontological resources is anchoring. There are no plans to anchor survey vessels offshore, and it is likely that if rough weather interrupts the surveys that the vessels would either tie to one of the large mooring buoys found at the four platforms offshore in the Santa Maria Basin or return to port. However, MMS would additionally require that Aera prohibit offshore anchoring (MMS, 2005a). With the no-anchoring mitigation in place, it is anticipated that there would be no effects from the surveys on cultural resources.

According to data furnished by Aera, rig anchors would be deployed between 1,100 to 1,900 feet around the MODU. Delineation drilling operations described above would take place on the Unit at a single location. A prior remote sensing survey and report for Lease OCS-P 0432 revealed indication of potential archaeological resource sites. Additional data analysis and survey have been ordered for the area of operations to identify any sites that would need to be avoided. No vessels have been reported as lost within the Unit.

Hypothetical offshore development in the central Santa Maria Basin would, at most, result in negligible effects on offshore and onshore archaeological resources. Based on past experience, these effects would most likely result from encountering previously undetected sites. Pre-construction analysis should identify any seafloor anomalies that may be potential archaeological resources and allow planned avoidance of those sites.

Sensitive submerged landforms are present in the offshore area. The landform area located on Lease OCS-P 0409, the hypothetical location of Platform A, is associated with the 18,000 year-old shoreline. The area on Lease OCS-P 0431, the hypothetical location of Platform C, is seaward of the 16,500 year-old shoreline. Both date to the period well before the time of known human occupation of the area and are not likely to contain prehistoric archaeological resource sites. There are no relict landforms identified on Lease OCS-P 0422, the area associated with the hypothetical location of Platform B. The hypothetical

platform-to-shore pipeline intersects areas containing submerged landforms considered highly sensitive for prehistoric sites. However, since the pipeline would not be buried in this area, no effect is anticipated.

Although no vessels have been listed or reported lost within the Purisima Point Unit, several vessels have been lost along the coast from the Santa Maria River to Purisima Point. Stranding, where the ship runs aground on the coastline or shallow offshore rocks and reefs, is the primary cause of vessel loss. In addition, the area immediately adjacent to the coastline is considered a sensitive area for locating wrecked vessels. The hypothetical platform-to-shore pipeline traverses this area and has the potential to affect shipwreck sites immediately offshore and associated debris onshore if sites are not detected and avoided.

The archaeological site data summarized in EID Table 4.8-4 reveal that the potential corridor of the pipeline landfall to the hypothetical Casmalia East processing plant contains several prehistoric and historic sites. In the past, the stringent archaeological resources monitoring and mitigation requirements of Santa Barbara County and VAFB reduced the likelihood of substantial direct and indirect effects on onshore archaeological resources, even when the sites were previously undetected.

Native Americans expressed a number of concerns regarding the direct and indirect effects from construction of the pipeline and facilities in Shuman Canyon. The traditional use of resources in Shuman Canyon by Native Americans has not been evaluated. However, the effects could be moderate to high if the resources are present and become locally unavailable for a period of time.

The extent of damage to cultural resources from an oil spill would depend on the area oiled by a spill, the presence of sites in the area, and the nature of cleanup operations. Effects on offshore archaeological resources would not be anticipated. Resources located in the intertidal zone, such as portions of wreck sites around the Channel Islands, could be affected.

Onshore archaeological sites could be affected by oil spills and associated containment and cleanup activities. Along the coastline, known archaeological sites tend to be concentrated around watersheds in less-developed areas. Oil spill—related effects, should they occur, could be moderate to high depending on the characteristics of the sites affected and the ability to mitigate those effects. In 1997, Federal departments and agencies entered into a programmatic agreement to ensure that historic properties (that is, cultural resources) are taken into account in planning emergency response under the National Oil and Hazardous Substances Pollution Contingency Plan (ACHP, 1997, as cited in MMS, 2005b).

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on coastal public access that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Section 30244: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30244.

Article 6: Development

Section 30250.

- (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.
- (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.
- (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

Section 30250: Comment and Analysis

Activities during the suspension would consist of a shallow hazards and biological survey, requiring the use of a small air gun and a ROV, respectively. None of these activities would involve new residential, commercial, or industrial development.

In the central Santa Maria Basin, the new platforms would represent an extension of development in an area that does not currently have such structures. The adjacent onshore area from the coastline to the Casmalia Hills is an area that supports space launch operations at VAFB and onshore production from the Casmalia oil field. The hypothetical processing site is proximate to a closed hazardous waste disposal facility. The remoteness of the area, placement of the facility inland, and compatibility of the potential development with land use in the area minimizes effects (see EID Section 5.11.2). Development should not interfere with the plans to develop the area as a commercial spaceport nor interfere with ongoing military operations at VAFB and its role as a social, cultural, and economic influence on surrounding communities.

The facilities associated with the development of Aera's four units and Lease OCS-P 0409, including a new processing facility near Casmalia and new pipeline and power cable landfalls and rights-of-way, would potentially affect non-residential land uses along the coast. It is likely that the new Casmalia East processing facility would require some lands to be converted to an industrial use, resulting in a moderate to high effect (see EID Section 5.12.5).

Effects on the coastal communities in the area would be low during delineation drilling activities, and moderate during development and production activities. Effects on non-residential land uses during exploration and drilling would be low to moderate, and moderate to high during development and production.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30250: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30250.

Section 30251.

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30251: Comment and Analysis

Activities that occur during the suspension would consist of a shallow hazards and biological survey. The main impact-producing agents from these surveys include the sound produced by the air gun, air emissions from the survey vessels, and space-use conflicts caused by the presence of the vessels and the trailing equipment. None of these activities would alter the natural land forms or degrade the scenic and visual qualities of the coastal area.

The primary hypothetical post-suspension activity that would create physical effects is the temporary presence of the MODU, and installation of new platforms, as well as the increased vessel traffic from crew and supply boats and helicopters. During delineation and development, key visual effects would be related to the vessels required for surveys, MODU presence, and platform construction. Although temporary, some of these effects would be considered high due to their location.

The development of Aera's four units and Lease OCS-P 0409 would result in the introduction of new offshore structures and activities. Up to three new platforms would be visible from the northern portion of VAFB and the surrounding area. These platforms would be north of the existing Platform Irene. While most of the area with sight lines to these platforms would be within the confines of VAFB, which is a restricted-access facility, some, if not all of the new platforms would be visible from Guadalupe Dunes State Park, north of the base (see EID Section 5.9.2). The new platforms would result in a high-level, unmitigated, cumulative effect because of the incremental increase of industrial structures offshore and the inability to reduce the physical intrusions into high quality coastal vistas (see EID Section 5.9.2).

The following is a summary of the visual effects that would occur during the hypothetical post-suspension phase, which are discussed in Section 5.9.3 of the EID:

- 1. The only source of cumulative visual effects for the seascape originates from additional platforms for new offshore development, since no other activity results in above-water structures.
- 2. New platforms expand the area of visual effects.
- 3. Pipeline construction and operation is not anticipated to significantly increase cumulative effects.

Section 5.11.2 of the EID describes the visual effects on coastal communities as a result of the new platforms, new pipelines, greater likelihood of oil spills, and an additional onshore processing facility. Visual effects on coastal communities would result in a moderate incremental effect. In general, hypothetical post-suspension activities would result in moderate to high visual effects during delineation drilling, due to the anticipated vessel and crew traffic, and would result in high visual effects during development and production.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30251: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30251.

Section 30252.

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

Section 30252: Comment and Analysis

Activities that occur during the suspension would consist of shallow hazards and biological surveys that are not anticipated to affect coastal public access.

Hypothetical post-suspension activities include temporary MODU operations, new pipelines and up to three new platforms. The temporary MODU operations, new platforms and new offshore to onshore pipelines associated with the central Santa Maria Basin do not appear to interfere with recreational uses of the immediate coastal area. Construction of the offshore to onshore pipelines would not interfere with onshore recreation, since the pipeline landfall would be within an area of restricted public access by VAFB. Pipeline construction in the area of Point Sal Road could temporarily impede access to Point Sal State Park. Use by construction workers may affect campground availability during pipeline construction as well. These effects would incrementally contribute to cumulative effects from existing offshore oil and gas projects that have been found to be moderate to high, especially during construction.

No substantial new demand on the area's recreation facilities (e.g., coastal access facilities) would result from hypothetical post-suspension activities. As noted in EID Section 5.12, no effects on population or housing are anticipated because hypothetical post-suspension activities would not substantially increase area population. As such, hypothetical post-suspension activities would not increase demand for coastal access, recreation or associated facilities.

Operation and production of the new platforms would slightly increase the risk of oil spills, which could preclude public coastal access in affected areas. The effects from oil spills that may occur in the area during hypothetical post-suspension activities, as discussed in EID Section 5.3, could range from low to

moderate, depending on location, season, and a number of other factors, such as the volume of oil spilled and its geographic dispersion.

Effects on coastal access would be low during delineation drilling activities. During development and production, effects would be moderate to high relative to campground availability during construction and in the event of an oil spill, once production begins.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided. Residual and/or remaining effects on coastal public access that cannot be mitigated to a level of insignificant could still be approved by the MMS and Coastal Commission pursuant to NEPA and its implementing regulations, and California Coastal Act Section 30260, respectively.

Section 30252: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30252.

Section 30253.

New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.
 - (4) Minimize energy consumption and vehicle miles traveled.
- (5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30253: Comment and Analysis

The survey activities that would occur during the suspension phase are the shallow hazards and biological surveys. These surveys are not anticipated to affect life and property in areas of high geologic, flood, and fire hazard, nor would they contribute to erosion, affect structural integrity, or alter natural landforms along bluffs and cliffs. No effects on visitor destination points, energy consumption, and vehicle miles traveled would be anticipated during the suspension.

In order to determine their effects on air quality, the shallow hazards surveys combined with the simultaneous scout boat emissions were estimated to have the highest peak hour potential for activities that occur during the suspension. Section 4.1 of the EA describes the modeling analysis used to estimate emissions. The modeled concentrations were found to be well within the maximum NO₂, SO₂ and PM₁₀ allowable limits for a Class II area, as established by Federal and State of California standards and the Santa Barbara County Air Pollution Control District (SBCAPCD). Therefore, it is anticipated that

increases in the onshore average concentrations of NO₂, SO₂ and PM₁₀ are estimated to be well below the maximum increases allowed under Federal, State and SBCAPCD ambient standards (see EA Section 4.1).

Onshore incremental concentrations from the surveys are compared to Prevention of Significant Deterioration (PSD) allowable increments (40 CFR §51.166[c]) to determine the potential for significant effects. In addition, the incremental concentrations are added to existing background pollutant levels and then compared to applicable Federal and State ambient air quality standards to determine potential for violations. As discussed in Section 4.1 of the EA, the OCD-adjusted model results of the maximum predicted onshore pollutant concentrations were found to be within Santa Barbara APCD allowable limits for a Class II area reflected in SBCAPCD Rule 803. Concentrations of SO₂ and PM10 were additionally well below the allowable increases for those pollutants. Based on the modeled emission estimates, the onshore effects on air quality from the surveys were estimated to be well below federally allowable increases in NO₂, SO₂, and PM₁₀ emissions as regulated by 40 CFR §51.166(c). Thus, peak hour emission potentials for the surveys demonstrate that NOx, SO₂, and PM₁₀ emissions from the activities during the suspension are anticipated to be well below the allowable increases for those pollutants.

In order to minimize effects on air quality during the proposed surveys, MMS will require Aera to implement Mitigation Measures AQ-1 through AQ-3 (see Appendix E), which are discussed in Section 4.1 of the EA. With implementation of the mitigation measures, the potential effects on air quality from the emissions of survey vessels and equipment are considered to be low. The potential for violations of the ambient air quality standards are considered negligible due to the short duration and localized nature of the surveys and the implementation of MMS required mitigation measures to further minimize air quality effects.

Considering the short duration and localized nature of the surveys, the projected levels of equipment and activity, and mitigation measures that require Aera to avoid or minimize air quality effects, no exceedances of ambient air quality standards are anticipated from the use of survey equipment and vessels during the suspension phase, and the effects on air quality are considered to be low.

During the hypothetical post-suspension MODU operations would affect air quality (see EID Section 5.4). Activities associated with the hypothetical MODU operations are anticipated to result in low effects to regional air quality. For the drilling of the delineation well, effects are considered low. Based on modeling results, the drilling is not anticipated to result in any violations of Federal and State ambient air standards. The drilling activities would be below drilling equipment permit exemption emission levels (25 tons/year) as determined by Santa Barbara APCD rules and regulations. NSR thresholds would be exceeded by the drilling activity and would require BACT and emission offsets. Thus, the activity would be subject to Santa Barbara APCD permit requirements and NSR requirements that emissions be fully offset to ensure a net air quality benefit.

Activities that would occur during the hypothetical post-suspension phase may affect air quality, vehicle miles traveled, and popular visitor destination points for recreational uses. The following is a discussion of potential effects arising from hypothetical post-suspension operations.

Table 5.4-7 of the EID lists the highest predicted concentrations to onshore pollutant concentrations for both the site preparation and drilling phases for each of the Point Sal and/or Purisima Point delineation drilling locations and compares them with the maximum allowable increases over the baseline concentration established by SBCAPCD. The concentrations demonstrate that the emission impacts, are well within the maximum NO_x , SO_x , and PM10 allowable limits for a Class II area. Concentrations of SO_2 and PM10 are additionally well below the allowable increases for those pollutants.

The EID table further demonstrates that based on the modeled emission estimates, the onshore impacts on air quality from drilling activities are estimated to be well below federally allowable increases in NO₂, SO₂, and PM10 emissions as regulated by 40 CFR 51.166(c) and further reflected in SBCAPCD Rule

803. Any activity eventually determined to be subject to SBCAPCD permit requirements would be subject to BACT and be fully offset at a greater than a 1:1 ratio to result in a net air quality benefit to Santa Barbara County in accordance with SBCAPCD Rules and Regulations.

Section 5.4.2 of the EID also discusses the predicted onshore pollutant concentrations for both the site preparation and development drilling activities of the hypothetical post-suspension phase. The concentrations demonstrate that the emission effects are well within the maximum NOx, SOx, and PM₁₀ allowable limits for a Class II area, as established by SBCAPCD. According to SBCAPCD regulations, Aera may consume the full increment range since the regulations provide for an alternative fee-based mitigation payable to the SBCAPCD. Concentrations of SO₂ and PM₁₀ are additionally well below the allowable increases for those pollutants (see EID Section 5.4.2).

The largest contributor to short-term air quality effects would come from platform and pipeline installation during years 2012 through 2013. The worst-case scenario emissions, which are predicted during the near-shore pipeline installation, are anticipated to be limited in duration. Development of Aera's four units and Lease OCS-P 0409 is anticipated to exceed New Source Review (NSR) threshold emission levels, and would be required to comply with best available control technology (BACT) requirements, emission offsets and air quality impact analyses under SBCAPCD Rules and Regulations. Any emission sources eventually determined to be subject to SBCAPCD permit requirements would be subject to BACT and would likely be required to fully offset emissions at a greater than a 1:1 ratio, resulting in a net air quality benefit to Santa Barbara County in accordance with SBCAPCD Rules and Regulations. However, future year emission offsets may be problematic because of the limited present day availability of offsets and the requirement that all new or modified projects have an air quality benefit per NSR requirements.

Ambient air concentrations resulting from oil spills are anticipated to result in low to moderate short-term effects on regional air quality, depending upon the location and duration of the spill, and meteorological conditions exhibited at the time affecting the evaporation rate of the spilled hydrocarbons.

Given the current trends in air quality, Santa Barbara County may be designated to be in attainment for the State ozone ambient air quality standard by the time development of Aera's four units and Lease OCS-P 0409 is anticipated to commence, and may also reach attainment with the State PM₁₀ standard at some prior to 2030. The activity would then be considered in relation to the regulations enforced at the time; thus, future permitting and compliance may be subject to PSD or similar standards, and emission threshold requirements designed to ensure the continued protection of air attainment areas.

In summary, the cumulative effects are determined to be moderate, exceeding threshold emission levels (BACT, emission offsets, and air quality impact analysis [AQIA] emission levels) and threshold impact levels (allowable SBCAPCD Class II impact thresholds). However, the emissions would be mitigated through the use of BACT, and emission offsets, and the modeled effects, although determined to be greater than Class II impact thresholds, are determined not to cause any exceedances of Federal standards or cause any substantial contributions to existing exceedances of State ambient air quality standards.

In addition to air quality effects, development of Aera's four units and Lease OCS-P 0409 would be anticipated to increase crew and supply vessel traffic and the onshore support traffic by less than three percent. This scenario would likely result in a short-term increase in truck traffic at the ports associated with the development of new wells and the abandonment of currently existing wells. Short-term increases in truck traffic would result from transport of drill stem test fluids to testing facilities. It is likely that the fluids would be transported to a test facility in 140 bbl tanker trucks. The exact number of trucks required by the Unit and the increase in truck traffic at ports and marinas in southern and central California are not known at this time. However, in comparison to existing traffic levels, Section 5.12.3 of the EID concludes that effects on the transportation infrastructure would be short-term and low.

Depending on the quality of the crude produced in the central Santa Maria Basin, trucks could be required to ship product, most likely in the form of asphalt. Depending on the location of a new northern Santa Barbara County onshore facility, roads, highways and rail lines could be affected. There are 41 weekly truck trips related to offshore oil and gas activities in northern Santa Barbara County. In addition to offshore oil and gas related traffic, there are approximately 442 additional weekly truck trips at the junction of Highway 1 and Casmalia Road. This junction would be affected if the new processing facility is located at the preferred Casmalia East site identified in the County's Final North County Siting Study. If truck transport of asphalt is required from the construction of a northern Santa Barbara County facility, there could be an increase in truck trips related to offshore oil and gas development of more than 1,500 trips, or almost a four-fold increase. The effects from this change would be high.

Operational effects associated with development of these leases would slightly increase the number of weekly and monthly trucks needed to accommodate additional product (such LNGs and LPGs); however, this incremental increase would be considered small, and would also be subject to existing Santa Barbara County conditions of approval for traffic and transportation for these onshore facilities. Effects would thus be anticipated to be low.

Hypothetical post-suspension phase activities may also affect visitor destination points. As discussed under Article 6, Section 30251, coastal communities would have to adjust somewhat to account for disruptions due to visual, recreational, and other effects as a result of the new platforms, new pipelines, greater likelihood of oil spills, and an additional onshore processing facility. Effects of the proposed activities on community characteristics and tourism would be moderate (see EID Section 5.11.2). While the activities would cause the communities within the area to adjust to disruptions, these disruptions, and their related effects, would cease to exist with cessation of activity and proper removal and remediation efforts. These effects would be anticipated to occur regardless of whether they are associated with prolonged operation of existing facilities or derived from the construction and operation of new facilities.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30253: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30253.

Section 30254.

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or

nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

Section 30254: Comment and Analysis

Activities during the suspension would consist of shallow hazards and biological surveys. None of these activities would involve new or expanded public works facilities.

As discussed below under Article 6, Section 30255, an "energy facility" is defined as "any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy" (Chapter 2, Section 30107, California Coastal Act). The energy facility that would service Aera's four units and Lease OCS-P 0409 would be the Casmalia East processing facility. While this facility would likely be designated petroleum resource industry, it would serve offshore and onshore oil and gas production that would be characterized as "coastal-dependent development" (see Article 6, Section 30255, below). Under Section 30255, the proposed Casmalia East processing facility would be deemed a "coastal-related development" that provides services to a "coastal-dependent" land use; as such, construction of the new facility would not conflict with Section 30254.

Section 30254: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30254.

Section 30255.

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

Section 30255: Comment and Analysis

Activities that occur during the suspension would occur offshore and would not affect designated wetland areas directly, indirectly, or cumulatively.

Chapter 2, Section 30101 of the California Coastal Act defines "coastal dependent development or use" as "any development or use which requires a site on, or adjacent to, the sea to be able to function at all." Section 30101.3 defines "coastal-related development" as "any use that is dependent on a coastal-dependent development or use." In addition, Chapter 2, Section 30107 of the California Coastal Act defines an "energy facility" as "any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy."

Santa Barbara County has prepared and adopted land use planning documents and ordinances, including a Local Coastal Plan (LCP), within which facilities associated with offshore oil and gas development facilities are designated and zoned as either "coastal-dependent" or "coastal-related" (Dames & Moore, 1999, as cited in MMS, 2005b). The Lompoc Oil and Gas Plant is located outside of the Coastal Zone and is designated a petroleum resource industry. However, this facility serves offshore and onshore oil and gas production, and is considered a "coastal-related development." Additionally, the County of Santa Barbara has required that this facility be operated as a consolidated industrial site for oil and gas production as a condition of the discretionary land use permit issued for the Point Pedernales Unit project (County of Santa Barbara, 2000). Similar to the Lompoc Oil and Gas Plant, the proposed Casmalia East facility is located outside of the coastal zone and would serve offshore and onshore oil and gas

production. It is anticipated that the proposed facility would be designated a petroleum resource industry, but would be considered a "coastal-related development."

Section 30255: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30255.

Article 7: Industrial Development

Section 30260.

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Section 30260: Comment and Analysis

The hypothetical development scenario for Aera's four units and Lease OCS-P 0409 is provided in EID Section 5.2. Under this scenario, a new oil and gas processing facility would be constructed at the Casmalia East site. The County of Santa Barbara has adopted polices for the consolidation of onshore oil and gas processing facilities serving offshore oil and gas development, including the expansion of existing facilities to support additional (new) production (County of Santa Barbara, 2000). However, in the recommendations presented in the "North County Siting Study," the County concludes that the Lompoc Oil and Gas Plant should not be considered as a processing location for the central Santa Maria Basin undeveloped leases, including Aera's four units and Lease OCS-P 0409. This is primarily due to the thick, viscous nature of the oil associated with these leases, which would trigger the need for substantial physical expansion of the Lompoc Oil and Gas Plant (County of Santa Barbara, 2000). The "Santa Barbara North County Study" concludes in its recommendations that the Casmalia East or West sites are the strongly preferred alternatives for onshore oil and gas processing of the central Santa Maria Basin undeveloped leases in terms of environmental constraints (County of Santa Barbara, 2000). A fundamental premise of this conclusion is the use of either of these two sites as a collocated (consolidated) facility.

During the suspension activities, no permanent offshore or onshore facilities would be required. Additionally, the EA for proposed suspension activities does not identify any adverse effects that cannot be mitigated (MMS, 2005a).

The EID prepared for hypothetical post-suspension activities of the Federal offshore undeveloped leases, including Aera's four units and Lease OCS-P 0409, identifies potential environmental effects that range from no effects to high effects (MMS, 2005b). These effects are addressed in the discussions and analyses provided above under Articles 1 through 6.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the

enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30260: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30260.

Section 30262.

- (a) Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:
- (1) The development is performed safely and consistent with the geologic conditions of the well site.
- (2) New or expanded facilities related to that development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.
- (3) Environmentally safe and feasible subsea completions are used if drilling platforms or islands would substantially degrade coastal visual qualities, unless the use of those structures will result in substantially less environmental risks.
- (4) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, as determined in consultation with the United States Coast Guard and the Army Corps of Engineers.
- (5) The development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from that subsidence.
- (6) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil, Gas, and Geothermal Resources of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.
- (7)(A) All oil produced offshore California shall be transported onshore by pipeline only. The pipelines used to transport this oil shall utilize the best achievable technology to ensure maximum protection of public health and safety and of the integrity and productivity of terrestrial and marine ecosystems.
- (B) Once oil produced offshore California is onshore, it shall be transported to processing and refining facilities by pipeline.
 - (C) The following guidelines shall be used when applying subparagraphs (A) and (B):
- (i) "Best achievable technology," means the technology that provides the greatest degree of protection taking into consideration both of the following:
- (I) Processes that are being developed, or could feasibly be developed, anywhere in the world, given overall reasonable expenditures on research and development.
- (II) Processes that are currently in use anywhere in the world. This clause is not intended to create any conflicting or duplicative regulation of pipelines, including those governing the transportation of oil produced from onshore reserves.
- (ii) "Oil" refers to crude oil before it is refined into products, including gasoline, bunker fuel, lubricants, and asphalt. Crude oil that is upgraded in quality through residue reduction or other means shall be transported as provided in subparagraphs (A) and (B).

- (iii) Subparagraphs (A) and (B) shall apply only to new or expanded oil extraction operations. "New extraction operations" means production of offshore oil from leases that did not exist or had never produced oil, as of January 1, 2003, or from platforms, drilling island, subsea completions, or onshore drilling sites, that did not exist as of January 1, 2003. "Expanded oil extraction" means an increase in the geographic extent of existing leases or units, including lease boundary adjustments, or an increase in the number of well heads, on or after January 1, 2003.
- (iv) For new or expanded oil extraction operations subject to clause (iii), if the crude oil is so highly viscous that pipelining is determined to be an infeasible mode of transportation, or where there is no feasible access to a pipeline, shipment of crude oil may be permitted over land by other modes of transportation, including trains or trucks, which meet all applicable rules and regulations, excluding any waterborne mode of transport.
- (8) If a state of emergency is declared by the Governor for an emergency that disrupts the transportation of oil by pipeline, oil may be transported by a waterborne vessel, if authorized by permit, in the same manner as required by emergency permits that are issued pursuant to Section 30624.
- (9) In addition to all other measures that will maximize the protection of marine habitat and environmental quality, when an offshore well is abandoned, the best achievable technology shall be used.
- (b) Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators. (c) Nothing in this section shall affect the activities of any state agency that is responsible for regulating the extraction, production, or transport of oil and gas.

Section 30262: Comment and Analysis

Activities conducted during the suspension would not involve the actual development and production of oil and gas resources and, therefore, Section 30262 is not applicable. It is noted, however, that all activities that occur during the suspension have been mitigated, as warranted, to the maximum feasible and no substantial effects would occur. Activities that occur during the suspension would adhere to all prescribed MMS standards and regulations for shallow hazards and biological surveys.

Hypothetical post-suspension phase activities of Aera's four units and Lease OCS-P 0409 would be required to fully comply with all Federal, State and local laws, ordinances and regulations for exploration, development and production, and decommissioning. These actions would be subject to review and approval by the MMS, including the completion all necessary environmental reviews, prior to implementation. Compliance with applicable Federal, State and local standards, as well as additional mitigation measures stipulated through the environmental review process, would minimize potential environmental effects and safety hazards to the maximum extent feasible. These measures would include, as appropriate, monitoring programs as stipulated by Section 30262, subparagraph (b).

As noted in Section 30260, offshore and onshore facilities associated with Aera's four units and Lease OCS-P 0409 would maximize consolidation practices and all produced oil and gas would be transported via pipeline or possibly by truck (as needed for the transport of asphalt and oil and gas by-products and allowable under subparagraph [7] [B] [iv] of Section 30262). All appropriate mitigation and Best Achievable Technology measures for the safe transport of oil and gas via pipeline and truck would be applied as part of future regulatory reviews and approvals, including transportation of all oil by pipeline, per the stipulations of subparagraphs (7)(A) and (7) (B) of Section 30262.

Section 30262: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30262.

Section 30263.

- (a) New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if (1) alternative locations are not feasible or are more environmentally damaging; (2) adverse environmental effects are mitigated to the maximum extent feasible; (3) it is found that not permitting such development would adversely affect the public welfare; (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands, or within or contiguous to environmentally sensitive areas; and (5) the facility is sited so as to provide a sufficient buffer area to minimize adverse impacts on surrounding property.
- (b) New or expanded refineries or petrochemical facilities shall minimize the need for once-through cooling by using air cooling to the maximum extent feasible and by using treated waste waters from inplant processes where feasible.

Section 30263: Comment and Analysis

Activities during the suspension and post-suspension phases would not involve the construction or expansion of refineries or petrochemical facilities in the coastal zone. Effects related to these facilities would not occur during this phase.

Section 30263: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with Section 30263.

Section 30265.

The Legislature finds and declares all of the following:

- (a) Offshore oil production will increase dramatically in the next 10 years from the current 80,000 barrels per day to over 400,000 barrels per day.
- (b) Transportation studies have concluded that pipeline transport of oil is generally both economically feasible and environmentally preferable to other forms of crude oil transport.
- (c) Oil companies have proposed to build a pipeline to transport offshore crude oil from central California to southern California refineries, and to transport offshore oil to out-of-state refiners.
- (d) California refineries would need to be retrofitted if California offshore crude oil were to be used directly as a major feedstock. Refinery modifications may delay achievement of air quality goals in the southern California air basin and other regions of the state.
- (e) The County of Santa Barbara has issued an Oil Transportation Plan which assesses the environmental and economic differences among various methods for transporting crude oil from offshore California to refineries.
- (f) The Governor should help coordinate decisions concerning the transport and refining of offshore oil in a manner which considers state and local studies undertaken to date, which fully addresses the concerns of all affected regions, and which promotes the greatest benefits to the people of the state.

Section 30265: Comment and Analysis

Activities during the suspension would consist of shallow hazards and biological surveys. None of these activities would involve transportation of oil.

During hypothetical post-suspension activities, production from Platforms A and C would come by pipelines to Platform B, and would then be sent to shore via pipelines. For the purposes of the hypothetical development scenario discussed in Section 5.2.3 of the EID, the oil emulsion and gas would go to shore in separate pipelines for processing, which would be mainly accomplished at the onshore facility. Because of the nature of the crude oil and its high viscosity, pipeline transport of the oil emulsion is predicated on having water content of at least 50 percent in the pipeline (known as "wet-flow" transport). It is estimated that a 24-inch oil emulsion and a 10-inch gas pipeline to the onshore processing facility will be adequate for this purpose.

Under the hypothetical development scenarios, the oil emulsion and gas would be sent to the Casmalia East site, a processing facility similar to the Lompoc Oil and Gas Plant. At the Casmalia East site oil and gas would be processed for further distribution through local pipelines. There is also the potential for a co-located asphalt facility. Pipelines from the hypothetical processing facility would probably tie into the All American Pipeline system at an existing pump station. At this time, it cannot be definitively said which transportation method(s), such as pipelines, rail, truck, or a combination of all three, would be used to move the crude from the processing facility (see EID Section 5.2.3). As stated in the "California Offshore Oil and Gas Energy Resources Study" (COOGER Study), rail and truck transportation may be required due to viscosity and delivery limitations of pipelines (Dames & Moore, 2000, as cited in MMS, 2005b). Additional analysis would be conducted under a separate environmental review to assess the consistency of the proposed transport with the County of Santa Barbara Oil Transportation Plan (subparagraph [e]).

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30265: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30265.

Section 30265.5

- (a) The Governor, or the Governor's designee, shall coordinate activities concerning the transport and refining of offshore oil. Coordination efforts shall consider public health risks, the ability to achieve short- and long-term air emission reduction goals, the potential for reducing California's vulnerability and dependence on oil imports, economic development and jobs, and other factors deemed important by the Governor, or the Governor's designee.
- (b) The Governor, or the Governor's designee, shall work with state and local agencies, and the public, to facilitate the transport and refining of offshore oil in a manner which will promote the greatest public health and environmental and economic benefits to the people of the state.
- (c) The Governor, or the Governor's designee, shall consult with any individual or organization having knowledge in this area, including, but not limited to, representatives from the following:
 - (1) State Energy Resources Conservation and Development Commission.

- (2) State Air Resources Board.
- (3) California Coastal Commission.
- (4) Department of Fish and Game.
- (5) State Lands Commission.
- (6) Public Utilities Commission.
- (7) Santa Barbara County.
- (8) Santa Barbara County Air Pollution Control District.
- (9) Southern California Association of Governments.
- (10) South Coast Air Quality Management District.
- (11) Oil industry.
- (12) Public interest groups.
- (13) United States Department of the Interior.
- (14) United States Department of Energy.
- (15) United States Environmental Protection Agency.
- (16) National Oceanic and Atmospheric Administration.
- (17) United States Coast Guard.
- (d) This act is not intended, and shall not be construed, to decrease, duplicate, or supersede the jurisdiction, authority, or responsibilities of any local government, or any state agency or commission, to discharge its responsibilities concerning the transportation and refining of oil.

Section 30265.5: Comment and Analysis

Activities during the suspension would consist of shallow hazards and biological surveys. None of these activities would involve transportation of oil.

Operators must submit plans for exploration or development and production for approval to the MMS and must certify that activities described in their plan are consistent with the enforceable policies of the California Coastal Management Program (CCMP) under section 307(c)(3) of the CZMA. If appropriate under Federal regulations, the State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without State concurrence or a decision by the Secretary of Commerce to override the State's objections. Therefore, no foreseeable impacts can occur as a result of the proposed action except for those caused by activities that are fully consistent with the enforceable policies of the CCMP. However, given the scenarios and attendant activities hypothesized in the EID, it is anticipated that any conflicts with the enforceable policies can be avoided.

Section 30265.5: Findings

Based on the above analysis, granting an SOP to Aera for the Purisima Point Unit will be consistent to the maximum extent practicable with section 30265.5.

Based on the preceding analysis, MMS has concluded that granting a suspension of production for the Purisima Point Unit is consistent to the maximum extent practicable with the policies of the California Coastal Management Program.

Approved:

Ellen Avrnm Regional Manager Pacific OCS Region

Minerals Management Service

April 6, 2005 Date

IX. REFERENCES

- California Coastal Commission. 1999. Staff Recommendation on Consistency Determination. Consistency Determination No. CD-32-99.
- County of Santa Barbara. 2000. Final North County Siting Study. October.
- Dames & Moore. 1999. California Offshore Oil and Gas Energy Resources: Existing Conditions & Future Development Scenarios. Prepared under the direction of the Minerals Management Service. January 30, 1999.
- Minerals Management Service (MMS). 2005a. Final Environmental Assessment. Minerals Management Service to Grant Suspensions of Production for Aera Energy LLC's Lease OCS-P 0409, Lion Rock Unit Leases OCS-P 0396, 0397, 0402, 0403, 0408, 0414, Purisima Point Unit Leases OCS-P 0426, 0427, 0432, 0435, Point Sal Unit Leases OCS-P 0415, 0416, 0421, 0422, Santa Maria Unit Leases OCS-P 0425, 0430, 0431, 0433, 0434. January 2005.
- ______. 2005b. Environmental Information Document for Post-Suspension Activities on the Nine Federal Undeveloped Units and Lease OCS-P 0409 Offshore Santa Barbara, Ventura and San Luis Obispo Counties. Report prepared by Aspen Environmental Group for MMS. January 2005.

APPENDIX A. TABLE OF CONTENTS FROM THE ENVIRONMENTAL INFORMATION DOCUMENT

	1.	Introduction	1-1
	1.1	General Overview	
	1.2	Reader's Guide to the EID	1-3
	1.3	Related Environmental Review Documents	
	1.4	Summary of Operator Activities	1-7
2.	Rack	ground and Purpose	2-1
	2.1	Introduction	
	2.2	Overview of Pacific OCS Region Offshore Santa Barbara, Ventura, and	2 1
	2.2	San Luis Obispo Counties	2-1
	2.3	Background	2-3
3.	Regu	latory and Administrative Framework	3-1
4.	Affec	eted Environment	
	4.1	Introduction	4.1-1
		4.1.1 Past and Present Offshore Oil and Gas Activities	
	4.2	Geology	
		4.2.1 Geology and Petroleum Potential	
		4.2.2 Geologic Hazards	
	4.3	Climate and Meteorological Conditions	
		4.3.1 General Description	
		4.3.2 Wind Speed and Direction	
		4.3.3 Stability and Mixing Height	4.3-4
		4.3.4 Temperature	4.3-4
		4.3.5 Precipitation	4.3-5
		4.3.6 Severe Weather	4.3-6
	4.4	Air Quality	4.4-1
		4.4.1 Existing Air Quality	
		4.4.2 Air Pollutants	
		4.4.3 Regulatory Setting	
		4.4.4 Effects of Past Offshore Oil and Gas Activities	
	4.5	Physical Oceanography	
		4.5.1 Introduction	
		4.5.2 Southern California Bight Morphology	
		4.5.3 Oceanic Circulation in the Southern California Bight	
		4.5.4 Santa Barbara Channel–Santa Maria Basin Surface Circulation	
		4.5.5 Wave Climate of the Southern California Bight	
	4.6	Water Quality	
		4.6.1 Regulatory Setting	
		4.6.2 Regional Setting	
	4.7	Biological Resources	
		4.7.1 Rocky and Sandy Beach Habitats	
		4.7.2 Seafloor Resources	
		4.7.3 Kelp Beds.	
		4.7.4 Fish Resources	
		4.7.5 Marine and Coastal Birds	
		4.7.6 Marine Mammals	
		4.7.7 Threatened and Endangered Species.	
		4.7.8 Estuarine and Wetland Habitats4.7.9 Refuges, Preserves and Marine Sanctuaries	
		4.7.9 Refuges, Preserves and Marine Sanctuaries	
		4.7.10 OHSHOLE DIOLOGICAL NESOUICES	

4.8	Cultural Resources	
	4.8.1 Regulatory Overview	
	4.8.2 Studies in the Area	4.8-2
	4.8.3 Regional Setting	4.8-2
	4.8.4 Description of the Study Area for Cultural Resources	4.8-4
	4.8.5 Effects of Past Offshore Oil and Gas Activities on Cultural Resources	4.8-11
	4.8.6 Native American Concerns	4.8-12
4.9	Visual Resources	4.9-1
	4.9.1 Regulatory Setting	4.9-1
	4.9.2 Visual Resources Studies in the Area	
	4.9.3 Regional Setting	
	4.9.4 Effects of Past Offshore Oil and Gas Activities.	
4.10	Recreation	
	4.10.1 Regulatory Setting	
	4.10.2 Studies in the Area	
	4.10.3 Regional Setting.	
	4.10.4 Effects of Past Offshore Oil and Gas Activities.	
4 11	Community Characteristics and Tourism Resources	
7.11	4.11.1 Studies in the Area	
	4.11.2 Regional Setting	
	4.11.3 Effects of Past Offshore Oil and Gas Activities.	
4.12	Social and Economic Environment	
4.12		
	1 5 1	
	\mathcal{E}	
	4.12.3 Infrastructure	
	4.12.4 Public Finance and Services	
4.12	4.12.5 Non-Residential Land Use	
4.13	Commercial Fishing and Kelp Harvest	
	4.13.1 Regional Setting	
	4.13.2 Fishing Methods	
	4.13.3 Commercial Fisheries in the Areas of Post-Suspension Activities	
	4.13.4 Impacts of Past and Present OCS Activities on Commercial Fishing	
	4.13.5 Mariculture and Kelp Harvest	
4.14	Marine Recreational Fishing and Diving	
	4.14.1 Regional Setting	
4.15	Military Operations	
	4.15.1 Description of Military Operations	
	4.15.2 Department of the Navy	4.15-1
	4.15.3 Department of the Air Force	4.15-4
	4.15.4 Impacts of Past and Present OCS Activities	4.15-6
	Suspension Phase Environmental Consequences	
5.1	Introduction	
5.2	Potentially Foreseeable Activities	
	5.2.1 Impact Producing Factors of the Post-Suspension Phase	
	5.2.2 Anticipated Future Activities on Existing Leases	
	5.2.3 Post-Suspension Activities on the Undeveloped Leases	
5.3	Oil Spills, Risk, Movement and Response	
	5.3.1 Oil Sources, Behavior, and Spill Response	
	5.3.2 OCS Historical Spill Data	
	5.3.3 Estimated Spill Risk of Delineation Drilling	
	5.3.4 Estimated Spill Risk from Reasonably Foreseeable Actions	5.3-13

5.

	5.3.5	Conditional Oil Spill Risk Analysis	5.3-16
	5.3.6	Summary Discussion	5.3-18
5.4	Air Qu	nality	
	5.4.1	Significance Criteria	
	5.4.2	Impacts of Post-Suspension Activities	
	5.4.3	Summary and Conclusion	
5.5		al Oceanography	
5.6		Quality	
5.0	5.6.1	Significance Criteria	
	5.6.2	Impacts of Post-Suspension Activities	
	5.6.3	Summary and Conclusion	
5.7			
3.7	_	Resources	
	5.7.1	Rocky and Sandy Beach Habitats	
	5.7.2	Seafloor Resources	
	5.7.3	Kelp Beds	
	5.7.4	Fish Resources	
	5.7.5	Marine and Coastal Birds	
	5.7.6	Marine Mammals	
	5.7.7	Threatened and Endangered Species	
	5.7.8	Estuarine and Wetland Habitats	
	5.7.9	Refuges, Preserves and Marine Sanctuaries	5.7-99
	5.7.10	Onshore Biological Resources	5.7-100
5.8	Cultur	al Resources	5.8-1
	5.8.1	Significance Criteria for Cultural Resources	5.8-1
	5.8.2	Impacts of the Post-Suspension Activities on Cultural Resources	5.8-2
	5.8.3	Summary and Conclusion for Cultural Resources	
5.9	Visual	Resources	
	5.9.1	Significance Criteria	
	5.9.2	Impacts of the Post-Suspension Activities	
	5.9.3	Summary and Conclusion	
5.10		ition	
5.10	5.10.1	Significance Criteria	
	5.10.2	Impacts of the Post-Suspension Activities	
	5.10.2	Summary and Conclusion	
5.11		unity Characteristics and Tourism Resources	
3.11			
	5.11.1	Significance Criteria	
	5.11.2		
5 10		Summary and Conclusions	
5.12		and Economic Environment	
	5.12.1	Employment and Population	
	5.12.2	3	
		Infrastructure	
		Public Finance and Services	
	5.12.5		
5.13	Comm	ercial Fishing and Kelp Harvest	5.13-1
	5.13.1		
	5.13.2	Impacts of Post-Suspension Activities	5.13-2
	5.13.3		
5.14	Marine	e Recreational Fishing	
	5.14.1	•	
	5.14.2		
	5.14.3		
5.15		ry Operations	
		→ •	

Appendix A. Table of Contents from the Environmental Information Document

7.	Refer	ences	7_1
6.	Docur	ment Contributors and Reviewers	6-1
	5.16	High Case Scenario	5.16-1
		5.15.3 Summary and Conclusion	5.15-5
		5.15.2 Impacts of Post-Suspension Activities	5.15-1
		5.15.1 Significance Criteria	5.15-1

TECHNICAL APPENDICES

- A. Glossary of Terms and Acronyms
- B. Air Quality Emission Factors
- C. Title 15 Code of Federal Regulations Part 930.39: Content of Consistency Determination
- D. Title 16 U.S. Code Chapter 33, Section 1456: Coordination and Cooperation
- E. California Public Resources Code Division 20, California Coastal Act, Chapter 3
- F. California Combined Coastal Management Program/Final Environmental Impact Statement, Chapter 11, Sections (a) and (b)
- G. Information Addressing Issues Raised by the California Coastal Commission in a Letter to MMS dated August 5, 1999
- H. Regulatory Framework, Lease Stipulations, and Unit History
- I. Summary of Potentially Foreseeable Activities and Hypothetical Development Scenario
- J. Figures for Oil Spill Risk
- K. Description of Delineation Drilling Using a Mobile Offshore Drilling Unit (MODU)

LIST OF TABLES

1-1	Summary of Suspensions	
2.2-1	Summary of the Undeveloped Pacific OCS Oil and Gas Leases	2-1
2.2-2	Summary of the Developed Pacific OCS Oil and Gas Leases	2-2
2.2-3	Summary of Existing Platforms Offshore Santa Barbara and Ventura Counties	2-2
2.2-4	Offshore Oil and Gas Production Rates for 1998 through 2002	
4.1-1	Number of Permits Issued for Geological and Geophysical Exploration in the	
	Pacific OCS Region	4.1-6
4.1-2	Santa Barbara Channel and Santa Maria Basin Geological and Geophysical Permits	
	for the Pacific OCS	4 1-6
4.1-3	Offshore Pacific OCS Region 2 D and 3 D Surveys by Decade	
4.1-4	Pacific OCS Region Exploration Wells form USDOI, MMS, Pacific Region, 1992	
4.1-5	Existing Surface Structures, Pipelines, and Production in Federal Waters	
4.1-6	Existing Surface Structures Offshore Southern California, Construction Timing,	
0	Production Support Activities, and Decommissioning Timing.	4 1-13
4.1-7	Estimates of Vessel and Helicopter Traffic During Construction	
4.1-8	Produced water discharged by platform and by year in millions of gallons	
4.1-9	Marine Tankering of Oil Offshore California	
4.3-1	Temperature and Precipitation Data for Selected Santa Barbara Locations	
4.3-2	El Niño 1997–1998 Precipitation Data for Santa Barbara County	
4.4-1	Ambient Air Standards	
4.4-2	Attainment Status in the South Central Coast Air Basin	
4.4-3	Summary of Representative Ozone Monitoring Sites in SCCAB.	
4.4-4	Santa Barbara County APCD BACT, AQIA, and Emission Offset Requirements	
4.4-4	Santa Barbara County AFCD BAC1, AQIA, and Emission Offset Requirements	
4.4-3	Relation Between the Current Patterns and the Forcing Terms	
4.6-1	Relevant Studies Examining Water Quality in the Study Area	
4.6-2	Key Water Quality Parameters, Typical Units of Measure and Characteristics	
4.6-2		
4.6-3 4.6-4	Dischargers in San Luis Obispo County, the Level of Treatment and Flow	
	Selected Trace Metals Found in Sediments in the Southern California Bight	
4.6-5	Publicly Owned Treatment Works that Discharge into the Southern California Bight	
4.7-1	Table of Studies Relevant to Sandy and Rocky Habitat	
4.7-2	Characteristics of Hard Bottom Feature in Lease P-0421	
4.7-3	List of Hard Bottom Features within the Santa Maria Unit	
4.7-4	Table of Studies Relevant to Seafloor Resources	
4.7-5	Depth Distribution of Demersal Fish Common to Central California	4.7-15
4.7-6	Species Managed by the PFMC	
4.7-7	Breeding Seabirds of Central and Southern California, 1989–1999	
4.7-8	Seasonal Abundance of Common Marine Mammals in the Project Area	
4.7-9	Western Snowy Plover Critical Habitat in the Project Area	
4.7-10	Pertinent References for Wetland and Estuarine Habitats	
4.7-11	State and Federal Areas of Defined Biological Significance in the Project Area	
4.8-1	Archaeology Studies in the Area	
4.8-2	Sea Level Fluctuation from Present to 14,500 Years Before Present (B.P.)	
4.8-3	Onshore Archaeological Sites in the Area of Shuman Canyon, Santa Barbara County	
4.8-4	Vessels Lost between Point Sal and Point Arguello, California	
4.8-5	Summary of Archaeology Information by Unit	
4.9-1	Visual Resource Studies	
4.10-1	California Coastal Act Recreation Policies	
4.10-2	Recreation Studies	
4.10-3	Public Coastal Recreation Facilities.	
4.10-4	Beach Closings and Advisories	4.10-4

LIST OF TABLES (CONTINUED)

4.10-5	Water-Oriented Recreation Activity in the Channel Islands National Marine Sanctuary	4.10-6
4.10-6	Day Use Visitors and Overnight Campers to Channel Islands National Park,	
	January to December 2000	4.10-7
4.11-1	Tourism Studies	4.11-1
4.11-2	Selected Indicators of Santa Barbara Tourism (1999)	4.11-3
4.11-3	Selected Indicators of San Luis Obispo Tourism (1999)	4.11-4
4.12-1	Average Wages for Selected Industries in the Study Area	
4.12-2	Social and Economic Studies in the Project Area	
4.12-3	2000 Employment by Sector	
4.12-4	Population	
4.12-5	Housing Stock and Vacancy Rates.	
4.12-6	Median Housing Price	
4.12-7	Study Region Oil and Gas Processing Facilities	
	Highways Supporting Offshore Activities	
	Roads and Streets Supporting Offshore Activities	
	Annual Average Traffic Summary for Regional Highways	
	Existing California Crude Pipelines	
	Top Property Tax Payers, 1995-1996.	
	Agricultural Land Use	
	Poundage and Value of Landings, Santa Barbara Reporting Area, 1988–2003	
	Number of Marine Recreational Fishing Trips in Southern California, 1993–1998	
	Private and Rental Boat Trips	
4.15-1	Baseline Military Plus Proposed Sea Range Activities (annual)	
5.2-1	Summary of Activities Projected for Existing and Future Pacific OCS and State Leases	
5 A A	(2006 through 2030)	5.2-1
5.2-2	Federal Offshore Oil and Gas Wells Expected to be Drilled from Existing Platforms	
	into Currently Producing Fields	
5.2-3	Platform Decommissioning Scenarios	5.2-4
5.2-4	Surface Structures, Pipelines and Power Cables, and Production Offshore	
	Southern California, Development Scenarios for the Undeveloped Leases	5.2-10
5.2-5	Surface Structures Offshore Southern California, Construction Timing,	
	Production Support Activities, and Decommissioning Timing,	
	Development Scenarios for the Undeveloped Leases	5.2-12
5.2-6	Estimates of the Number of Days Required for the Phases of Construction,	
	Development Scenarios for the Undeveloped Leases	5.2-13
5.3-1	Crude, Diesel, or Other Hydrocarbon Spills Recorded in the Pacific OCS Region,	
	for OCS Oil and Gas Activities, 1969–2003 (volumes in barrels)	
5.3-2	Spill Risks, 50–99 Barrels	
5.3-3	Spill Risks, Greater than 1,000 Barrels	5.3-14
5.3-4	The Probability of an Oil Spill Contacting the Coastline for Various Spill Sizes	
	and Length of Coastline Contacted	5.3-15
5.3-5	Comparison of Seasonal Months with the Frequency and Relative Dominance of the	
	Three Characteristic Flow Regimes per Calendar Month	5.3-18
5.4-1	Santa Barbara County APCD BACT, AQIA, and Emission Offset Requirements	
5.4-2	Santa Barbara County 2000 Pacific OCS and Non-Pacific OCS Emissions Estimate	
5.4-3	Santa Barbara Channel Pacific OCS Shipping Emissions Estimate 2000-2020	
5.4-4	Santa Barbara County 2005 OCS Ozone Precursor Emission Inventory vs.	
•	Survey Emissions - Tons/day(tons/yr)	5.4-5
5.4-5	Total Drilling Emissions	
5.4-6	Delineation Drilling Peak Hour Emissions Estimates	
5.4-7	Delineation Drilling Modeling Results Summary	
	<i>G G y y</i>	

LIST OF TABLES (CONTINUED)

5.4-8	Total Cumulative Development Emissions 2005-2030	
5.4-9	Peak Year Cumulative Emissions	
5.4-10	Maximum Predicted Cumulative Onshore Pollutant Concentrations	5.4-9
5.6-1	Possible Effluents, the Type of Facility (Platform/MODU), Distance of Influence on	
	Water Quality, and Limitations from the New General NPDES Permit	5.6-2
5.6-2	Platforms That Have Discharged Produced Water, the Number of Years Discharging,	
	and the NPDES Permit Limit for Oil and Grease	5 6-10
5.6-3	Potential Impacting Agents and the Associated Specific Pollutants,	
0.00	Potential Water Quality Parameters Affected, and the Estimated Distance from the Point	
	of Discharge the Parameter Could be Affected	5 6-17
5.6-4	Key Information Necessary for the Qualitative Cumulative Analysis Including the	5.0-17
3.0-4	Undeveloped Leases (Most Likely Development Scenario)	5 6 10
5.6-5	Summary of Water Quality Impacts by Unit/Lease	
		3.0-21
5.7-1	Comparison of Impacts to Rocky and Sandy Beaches by Undeveloped Unit/Lease	570
<i> </i>	and Development Phase	5./-8
5.7-2	Comparison of Impacts to Seafloor by Undeveloped Unit/Lease and	5 7 10
	Development Phase	5.7-13
5.7-3	Comparison of Impacts to Kelp Beds by Undeveloped Unit/Lease	
	and Development Phase	5.7-17
5.7-4	Comparison of Impacts to Fish Resources by Undeveloped Unit/Lease and	
	Development Phase	5.7-31
5.7-5	Comparison Impacts to Marine and Coastal Birds by Undeveloped Unit/Lease	
	and Development Phase	5.7-38
5.7-6	Comparison of Impacts to Marine Mammals by Undeveloped Unit/Lease	
	and Development Phase	5.7-57
5.7-7	Comparison of Impacts to Threatened and Endangered Fish and Marine Invertebrates by	
	Undeveloped Unit/Lease and Development Phase	5.7-63
5.7-8	Comparison of Impacts to Threatened and Endangered Marine Mammals by	
	Undeveloped Unit/Lease and Development Phase	5 7-75
5.7-9	Comparison of Impacts to Threatened and Endangered Birds by Undeveloped Unit/	
5.1)		5.7-81
5.7-10	Comparison of Impacts to Threatened and Endangered Sea Turtles by Undeveloped Unit/	5.7-01
3.7-10	Lease and Development Phase	5786
5711	Comparison of Impacts to Threatened and Endangered Plant Species by Undeveloped Unit/	3.7-80
5.7-11		5.7-90
<i>5</i>		3.7-90
5.7-12	Comparison of Impacts to Threatened and Endangered Amphibian Species by Undeveloped	5 7 02
<i>5 7</i> 12	Unit/Lease and Development Phase	5./-93
5./-13	Comparison of Impacts to Estuarine and Wetland Habitats by Undeveloped Unit/	
	Lease and Development Phase	5.7-98
5.7-14	Summary of Cumulative Impacts from the Development of Undeveloped Leases to the	
	Biological Resources of Channel Islands and Monterey Bay National Marine Sanctuaries	
	and Channel Islands National Park	5.7-100
5.7-15	Comparison of Impacts to Onshore Biological by Undeveloped Unit/Lease and	
	Development Phase	
5.8-1	Summary of Impacts on Cultural Resources by Unit/Lease	5.8-7
5.9-1	Summary of Impacts on Visual Resources by Unit/Lease	5.9-3
5.10-1	Oil Spills for Cumulative Impact Analysis	
5.10-2	Summary of Impacts on Recreation by Unit/Lease	5.10-5
5.11-1	Summary of Impacts on Community Characteristics and Tourism by Unit/Lease	5.11-3
5.12-1	Short-Term Change in Population, Employment, and Housing	
J.12 1	From Development of the Undeveloped Leases	5 12-2
	110m 2010pment of the Charteloped Leades	5.14-4

LIST OF TABLES (CONTINUED)

5.12-2	Long-Term Change in Population, Employment, and Housing2	
	From Development of the Undeveloped Leases	5.12-2
5.12-3	Summary of Impacts on Employment and Population by Unit/Lease	5.12-3
5.12-4	Summary of Impacts on Housing by Unit/Lease	5.12-4
5.12-5	Trucks for a Northern Santa Barbara County Facility with and without Rail Transport	5.12-6
5.12-6	Summary of Impacts on Infrastructure by Unit/Lease	5.12-7
5.12-7	Summary of Impacts on Public Services and Finance by Unit/Lease	5.12-8
5.12-8	Summary of Impacts on Non-Residential Land Use by Unit/Lease	5.12-9
5.13-1	Comparison of Impacts to Commercial Fishing and Kelp Harvesting by Undeveloped Unit/	
	Lease and Development Phase	5.13-12
5.14-1	Comparison of Impacts to Commercial Fishing and Kelp Harvesting by Undeveloped Unit/	
	Lease and Development Phase	5.14-9
5.15-1	Summary of Impacts on Military Operations by Unit/Lease and Development Phase	5.15-5
5.16-1	Comparison of Base Case and High Case Hypothetical Scenario for the Undeveloped Leases.	5.16-1

LIST OF FIGURES

1-1	The Undeveloped Federal OCS Oil and Gas Leases Offshore Southern California	1-2
4.1-1	The Study Area Boundary for the Cumulative Effects Analysis	4.1-2
4.1-2	The Study Area for the Hypothetical Pipeline Landfall, Pipeline Route	
	and Onshore Processing Facility	4.1-3
4.1-3	State and Federal Oil Production Offshore Southern California	
4.2-1	Late Quaternary Fault Map of Western Traverse Ranges Region 5	4.2-5
4.2-2	Seismicity Map of Western Traverse Ranges Region, 1932-1982	4.2-6
4.3-1	Typical Prevailing Afternoon Summer Wind Flows	4.3-3
4.4-1	Reactive Hydrocarbon Inventory by Category	4.4-3
4.4-2	NOx Emission Inventory by Major Category	4.4-3
4.5-1	Southern California Bight Bathymetry	4.5-2
4.5-2	Characteristic Oceanic Circulation in, and Sources of Water of, the Southern California Bight.	4.5-4
4.5-3	Santa Barbara Channel-Santa Maria Basin Circulation Study Moored and	
	Meteorological Instrument Locations	4.5-7
4.5-4	Synoptic Views of the Circulation in the Santa Barbara Channel	4.5-12
4.7-1	Location of Refuge, Preserves, and Marine Sanctuaries in the Study Area	4.7-59
4.7-2	Map of Channel Islands Marine Protected Areas	4.7-63
4.8-1	Sensitive Lands for Submerged Prehistoric Sites	4.8-8
4.8-2	Shipwreck Sensitivity Zones	4.8-9
4.13-1	Southern California Commercial Fishing Blocks	4.13-2
4.15-1	Point Mugu Sea Range	4.15-2
5.2-1	Potential Platform, Pipeline, and Power Cable Locations, Northern Santa Maria Basin Units	5.2-8
5.2-2	Potential Platform, Pipeline, and Power Cable Locations, Gato Canyon Unit	5.2-9
5.6-1	Idealized View of Drilling Mud Discharge	5.6-6

CONSISTENCY DETERMINATION For OUTER CONTINENTAL SHELF COOK INLET SALE 191

(May 2004)

TABLE OF CONTENTS

I.	Introduction	1
II.	The Lease Sale Process	1
	A. Sale Assumptions and Scenarios	2
	1. Preparations for Sale 191	
	2. Resource Estimates	
	3. Exploration and Development Scenarios Used in the EIS	3
	4. Oil Spill Information	3
	B. Mitigation of Potential Adverse Effects	
	1. Protection of Fisheries	4
	2. Protection of Biological Resources	4
	3. Orientation Program	4
	4. Transportation of Hydrocarbons	5
	C. Compensation and Mitigation Funds Available to Alaska	5
	1. OCS Lands Act Section 8(g) Monies	5
	2. Land and Water Conservation Fund	5
	3. Historic Preservation Fund	6
	4. Tribal Preservation Program	6
	5. Coastal Impact Assistance Program	6
	6. Federal Oil Spill Liability Trust Fund	7
	7. Fisherman's Contingency Fund	7
III.	Analysis of Alaska Coastal Management Program Standards and District Enforce Policies Relevant to Sale 191	7 9
IV.	Analysis of Specific Alaska Coastal Management Program Standards and Coastal District Relevant to Sale 191 A. Coastal Development (6AAC 80.040) B. Geophysical Hazard Areas (6AAC 80.050) C. Recreation (6AAC 80.060 D. Energy Facilities (6 AAC 80.070) E. Transportation and Utilities (6 AAC 80.080) F. Fish and Seafood Processing (6AAC 80.090 G. Timber Harvest and Processing (6AAC 80.100) H. Mining and Mineral Processing (6 AAC 80.110) I. Subsistence (6AAC 80.120) J. Habitats (6 AAC 80.130)	9 10 12 13 15 17 18 19
	K. Air, Land, and Water Quality (6 AAC 80.140) L. Historic, Prehistoric, and Archaeological Resources (6 AAC 80.150)	
V.	Consistency Determination	24

Appendix A	Stipulations and Information to Lessees – Cook Inlet OCS Oil and Gas Lease
	Sale 191
Appendix B	Impact Summary
Appendix C	Alaska Coastal Management Program Standards
Appendix D	Kenai Peninsula Borough Coastal Management Program Enforceable Policies
Appendix E	Kodiak Island Borough Coastal Management Program Enforceable Policies

Due to bulk the Appendices are kept in the Leasing Division. For a copy, please call 703/787-1215.

I. Introduction

This document was prepared by the Minerals Management Service to determine whether proposed Cook Inlet Lease Sale 191 is consistent to the maximum extent practicable with the statewide standards of the Alaska Coastal Management Program, and the enforceable policies of the Coastal Management Programs of the Kenai Peninsula Borough and the Kodiak Island Borough.

Section 307(c)(1) of the Coastal Zone Management Act, as amended, requires that:

"each Federal agency activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs."

The Secretary is proposing a sale that combines deferral Alternatives III and IV in the final environmental impact statement for the Cook Inlet Planning Area, Oil and Gas Lease Sales 191 and 199. The sale area is comprised of approximately 447 whole and partial blocks covering approximately 2 million acres in the Cook Inlet Planning Area. Figure 1 depicts the sale area included in the proposed Notice of Sale. The proposed Notice of Sale includes 4 stipulations as lease-specific mitigating measures and 9 Information to Lessee clauses (see Appendix A for a list and the wording of stipulations and ITL clauses).

Sale 191 will be the 4th Outer Continental Shelf oil and gas lease sale in the Cook Inlet Planning Area. The three previous oil and gas lease sales, with the first held in 1977, resulted in issuing a total of 102 leases. All leases with the exception of two issued in the last sale (Sale 149, June 1997) have expired or been relinquished. Thirteen exploratory wells have been drilled in the federal area of Cook Inlet, none are economically producible under current economic and market conditions.

The following sections include a description of the activities associated with the lease sale process and the hypothesized scenarios developed for use in the Cook Inlet Planning Area EIS analyses. This consistency determination is based on the ACMP analyses in the EIS, and the lease sale stipulations and ITL clauses contained in Appendix A. While this document reviews and makes determinations on the policies which the State of Alaska has identified in its coastal management program as being enforceable, the Department of the Interior is neither making a judgment nor implying that such policies are enforceable under the laws of the state.

II. The Lease Sale Process

The lease sale process is a paper transaction, limited to:

- determining the area and terms and conditions of the sale,
- offering the area for lease,
- submission of bids for public opening and reading,
- evaluation of bids for adequacy, and
- award of leases.

Rights conveyed by a lease are exclusive rights only to <u>pursue</u> exploration, development, and production of the oil and gas that may be contained in the lease area. This right is conditioned upon the approval of exploration or development and production plans by MMS and upon concurrence by the State of Alaska that the plans are consistent with the ACMP.

Following the award of a lease, the only activities that may be conducted without a permit are preliminary activities, such as initial seismic and geotechnical surveys, to gather scientific and engineering data necessary to develop an exploration or development and production plan. Further activities conducted on a lease must be detailed in an approved exploration or development and production plan which is subject to federal review under multiple laws and regulations, including the OCS Lands Act and the National Environmental Policy Act, and to a review for consistency with the ACMP per section 307(c)(3)(B) of the CZMA and its implementing regulations (Title 15 CFR Part 930).

The effects of the sale itself are limited to the documentation conducted by the Department of the Interior leading to the offering of specific blocks for lease, the issuance of leases by competitive bidding, and the effects of the preliminary activities that a lease authorizes a lessee to conduct without further approvals. These paper transactions by themselves (publication of the Federal Register notices, writing planning documents, writing EISs, holding public meetings or hearings, etc.) have no measurable effect on the land and water uses and natural resources of the coastal zone. However, the area selected and the terms and conditions developed for the proposed sale reflect MMS' consideration of the standards and enforceable policies of the ACMP applicable to events that may occur later if leases are issued. The following consistency analysis is based on the hypothesized scenarios used in the final EIS. A summary of the EIS analysis and potential effects on biological, sociocultural, and other resources is provided in Appendix B, Impact Summary.

The following analysis includes consideration of the mitigative effects of the various terms and conditions developed for the sale.

A. Sale Assumptions and Scenarios

1. Preparations for Sale 191. At several points during preparations for the sale MMS provided opportunities for the State of Alaska, local governments, and other constituencies to express their views and concerns with the sale proposal, including concerns related to consistency. Preparations for Sale 191 originally began in December 2001 with the Federal Register publication of a *Call for Information and Nominations and Notice of Intent to Prepare an EIS for Cook Inlet Sales 191 and 199*. All responses to the Call and the NOI were considered in the identification of the area to be analyzed in the EIS and in development of the issues, alternatives, and mitigating measures addressed in the analysis.

A Notice announcing the availability of a draft EIS was published in the <u>Federal Register</u> in December 2002. Public hearings on the draft EIS were held in Anchorage and the communities of Homer, Kenai, and Seldovia in January 2003. The state submitted comments on the draft EIS in February 2003.

The MMS EIS analyses of the potential environmental impacts of a lease sale are based on estimates of the amount of oil and gas resources expected to be leased, developed, and produced, and on hypothetical exploration and development scenarios based on these estimates. Additional information on the scenarios can be found in Section II.B. and Appendix B of the EIS.

- **2. Resource Estimates:** The level of activities associated with petroleum exploration and development is dependent on the economic resource potential and industry effort. Given the wide range of estimates tied to both price and probability, a reasonable production volume was needed for environmental impact analysis. The EIS scenarios are based on an estimated development of 140 million barrels of oil and 190 billion cubic feet of gas and that all production would be used in the Cook Inlet area.
- **3.** Exploration and Development Scenarios Used in the EIS: The scenarios used are forecasts based on the amount of resources estimated for the sale area and the estimated portion of the resources assumed to be discovered and ultimately produced. These assumptions may well be overstated because MMS has held three sales on the Cook Inlet OCS and to date there have been no economically producible discoveries.

Scenarios are conceptual views of the future. The EIS offers scenarios regarding the timing and extent of possible future petroleum activities in the Federal OCS waters of the lower Cook Inlet. The EIS scenarios are based on economic factors, industry trends, and professional judgment. Future activities are based on assumptions regarding resource potential and anticipated production. It is reasonable to assume that industry will only pursue development projects that are profitable; estimates of activities for the EIS were based on this assumption. It is also reasonable to assume that all of the economic resources will not be discovered and developed as a result of limited leasing and exploration. Future oil and gas production will depend on many factors, including access to promising areas, regulatory restrictions, industry funding, and commodity prices.

Exploration activities associated with Sale 191 are estimated to begin in 2006 and continue until 2010, with up to two exploration wells drilled through 2010. No more than one drilling rig is estimated to operate at any time. If a commercial discovery is made it is estimated that a single development platform and a 25-mile platform-to-shore oil pipeline will be installed in 2010 to 2011. Production of oil could start in 2011. Also under the hypothetical scenario, a 25-mile gas pipeline could be constructed in 2022, and natural gas sent to shore starting in 2023. It is estimated that production will cease in 2033 after production of 140 million barrels of oil and 190 billion cubic feet of natural gas. Oil and gas sent to shore by the pipeline will be sent to existing onshore processing facilities on the Kenai Peninsula and the oil and gas produced will be consumed in Cook Inlet communities.

4. Oil Spill Information: The EIS contains detailed information on oil spills and spill containment and clean up methods. An oil spill risk analysis is included in the EIS as Appendix A. The computer-generated risk analysis is based on the best available data from MMS-funded studies, the National Weather Service, and other sources concerning wind and current conditions in the proposed sale area. The EIS oil spill analysis considers three spill size categories:

Small spills - average crude oil spills of 3 barrels (State of Alaska, Department of Environmental Conservation) - though accidental, generally are expected. The MMS estimates small spills are likely to occur. Small spills generally occur into containment devices and do not reach the environment.

A **large spill** (equal to or greater than 1,000 barrels) is unlikely to occur. However, the EIS includes a "what if" analysis of such spills and whether such a spill could cause serious environmental impacts. The MMS considers the chance of a large spill occurring over the life of the field and entering offshore waters to be low – 19 percent. The MMS uses the term "low" to characterize the relative chance of a large spill occurring based on our familiarity with oil spill rates and sizes.

A **very large spill** (equal to or greater than 120,000 barrels) has a very low probability of occurrence. Although such an event is unlikely, the EIS includes an analysis of effects if such an event were to occur.

B. Mitigation of Potential Adverse Effects

The EIS analyses of effects assumes that all mitigation provided for by the four stipulations, existing laws, regulations, and requirements addressed in the information to lessees clauses (ITL's) is in place. The lease stipulations proposed for this sale are summarized below. The complete text of the proposed stipulations and the ITL's are included in Appendix A. Following is an overview of the stipulations.

- 1. Protection of Fisheries: This stipulation requires operations to be conducted in a manner that avoids unreasonable conflicts with the fishing community and their gear. It requires the oil and gas industry to review planned activities with directly affected fishing organizations, subsistence communities, and port authorities. Those conducting exploration and development activities must publicize their planned activities to avoid possible conflicts. If MMS determines that the stipulations and any additional measures proposed by the lessee will not prevent unreasonable conflicts, lease-related use can be restricted.
- 2. Protection of Biological Resources: Important biological populations and habitats may exist in the proposed sale area which may require specific protections. If such biological resources are identified, MMS may require the lessee to conduct biological surveys to determine the extent and composition of such biological populations or habitats. The MMS may require the lessee to modify operations to ensure that significant biological populations or habitats deserving protection are not adversely affected. Such modifications could include shifts in operational sites, modification in drilling procedures, and increased consideration of the areas during oil-spill-contingency planning. This stipulation provides a formal mechanism for identifying important or unique biological populations or habitats that require specific protection because of their sensitivity and/or vulnerability.
- **3. Orientation Program:** The purpose of this stipulation is to provide increased protection to the environment by developing an awareness of the environmental values of the

region. The orientation program will promote an understanding of, and appreciation for, local community values, customs, and lifestyles of Alaskans. It will also provide necessary information to industry personnel about the biological resources and habitats used for subsistence activities, about archaeological resources of the area and appropriate ways to protect them from adverse effects, and about the concerns for reducing industrial noise and disturbance effects on marine mammals and marine and coastal birds. It provides positive mitigating effects, because it will make all personnel involved in petroleum-industry activities aware of the unique environmental, social, and cultural values of local residents and their environment. This stipulation will also help minimize conflicts between subsistence activities and activities of the oil and gas industry.

4. Transportation of Hydrocarbons: This stipulation states that use of pipelines as a means of transporting hydrocarbons will be required under most conditions. It also informs the lessee that MMS reserves the right to require the placement of pipelines in certain designated areas, and notifies lessees about requirements on the design and construction of pipelines.

C. Compensation and Mitigation Funds Available to Alaska

There are several funds from which the State of Alaska receives money as a result of OCS oil and gas leasing. For some of the funds, the money is given to the state for in-state disbursement for various state-legislated purposes; others are paid to the state for use in grant programs for parks and recreation areas and historic preservation. In addition, Native Americans may participate in a grant program to assist them in preservation of cultural traditions. This program is administered by the National Park Service. Other funds have been established to address oil spill removal costs and compensation to domestic fishermen for any damage or loss of fishing gear due to obstructions related to oil and gas activities. These funds are described in more detail below.

- 1. OCS Lands Act Section 8(g) Monies: Section 8(g) of the OCS Lands Act, as amended, requires a "fair and equitable" distribution of revenues between the Federal Government and a coastal state for federal lease blocks that lie within 3 miles of the seaward boundary of the state. In 1986, Congress determined that coastal states would receive 27 percent of all federal income derived from federal mineral leasing in this "8(g) zone." The funds provide affected coastal states and localities with money for the mitigation of adverse economic and environmental effects related to the development of such resources. From 1986 through 2002 the State of Alaska has received over \$520 million from federal mineral leasing revenues generated from this zone. The state will continue to receive 27 percent of all revenues (bonuses, rentals, and royalties) collected for areas leased in the 8(g) zone. As mandated by the state legislature, 50 percent of these funds are transferred to the Alaska Permanent Fund account.
- **2. Land and Water Conservation Fund:** This fund provides for a system of funding for federal, state, and local parks and conservation areas. It gives states and local governments incentives to plan and invest in their own park and recreational use systems. This fund is administered by the National Park Service. If authorized by Congress, the fund receives up to \$900 million each year. Since 1971, federal offshore leasing has provided about 90 percent of this money. The state has received more than \$30 million from this fund.

3. Historic Preservation Fund: This fund is also used to make grants to local communities. Revenues from federal offshore mineral leases sustain this fund at \$150 million, if authorized by Congress. Since 1968 over \$1 billon in grant funds have been awarded to states, territories, Tribal organizations, and the National Trust for Historic Preservation. The State of Alaska has received more than \$10 million from this fund.

4. Tribal Preservation Program: This program assists Native Americans in preserving their historic properties and cultural traditions and is administered by the National Park Service. The program is dedicated to working with tribes, Alaska native groups, Native Hawaiians, and national organizations to preserve and protect resources and traditions that are of importance to Native Americans.

As part of this program, in fiscal year 2003, Leisnoi Village (Woody Island Tribal Council) received a \$50,000 grant to inventory and map historic sites on Woody Island in order to begin collecting archaeological data regarding historic-era Alutiiq life on the island and to nominate qualifying sites to the National Register of Historic Places.

In fiscal year 2002, the Cook Inlet Tribal Council received a \$50,000 grant for a project to preserve and share traditional healing and health methods of Alaska's native tribes by documenting oral histories of healers, healing dances and ceremonies, healing implements, traditional storytellers sharing pre-contact healing knowledge and changes after contact with western influences. Information will be made available through training and rehabilitation programs, the broadcast media, and a web based education curriculum.

Also in fiscal year 2002, the Pedro Bay Village Council received a \$48,821 grant to complete a comprehensive field investigation of the Pedro Bay Site, a multi-component archeological site with artifacts up to 4,500 years old, which is key to interpreting movement of prehistoric people between Bristol Bay and Cook Inlet regions. The review will result in tribal involvement and future management of the site and its collections.

In fiscal year 2001 several grants were awarded to Alaska native groups. They included the following:

- The Native Village of Afognak was awarded \$49,897 for a project titled *Afognak Oral History Documentation and Archives*
- Chickaloon Village was awarded a similar amount for a project titled *Ya Ne Dah Ah Stories: the Life and Time of Katherine Wade, an Athabascan Elder*
- **5.** Coastal Impact Assistance Program: This program provided funds to the state from federal offshore mineral leasing revenues. In 1999, Congress authorized a one-time appropriation of \$150 million for this program to be divided among the seven states with offshore oil activities. The State of Alaska was included. Alaska received \$12,208,723. The law set a formula for distribution of funds to coastal communities. Funds distributed to Cook Inlet communities included the following.
 - \$100,000 to Cook Inlet Keeper to establish a community-based water quality laboratory

- \$47,700 to the Kenai Watershed Forum for culvert replacement on Silver Salmon Creek
- \$100,000 to the Lake and Peninsula Borough for community profile mapping
- \$28,000 to the Kenai Peninsula Borough for Caribou Hills stream bank protection
- \$40,000 to Cook Inlet RCAC for shore zone inventory of Cook Inlet and Outer Kenai Peninsula Coastal
- \$100,000 to Aleutians East Borough for the Nelson Lagoon coastal protection project
- \$75,000 to the City of Kodiak for Potato Patch Lake habitat restoration and education
- \$75,000 to the City of Homer for Homer Beach protection policy implementation
- \$14,251 to Kodiak High School for Monashka Creek human impact monitoring
- \$13,770 to Soldotna Community Schools for outdoor education camp, and
- \$100,000 to Wasilla Soil and Water Conservation District for coastal watershed education and restoration.

6. Federal Oil Spill Liability Trust Fund: The Oil Pollution Act of 1990 set up the Oil Spill Liability Trust Fund to take care of spill removal costs consistent with the National Oil and Hazardous Substances Pollution Contingency Plan, costs incurred by natural resources trustees in carrying out their functions, claims for uncompensated removal costs or uncompensated damages, and administrative, operational, and personnel costs and expenses. In addition to this Fund, the OPA mandates that accountable parties maintain proof of financial responsibility for removal costs and compensation for damages. Loss of subsistence use of natural resources may be compensated for through the responsible party and its insurer or from the Fund.

7. Fisherman's Contingency Fund: Title IV of the OCS Lands Act Amendments of September 18, 1978, (P.L. 95-372, Section 402) as amended, established the Fisherman's Contingency Fund. This Fund provides compensation to domestic fishermen for the damage or loss of fishing gear, and resulting economic loss due to obstructions related to oil and gas exploration, development, or production in areas of the OCS.

The Fund is supported by assessments on holders of leases, easements, and rights of way in areas of the OCS.

III. Analysis of Alaska Coastal Management Program Standards and District Enforceable Policies Relevant to Sale 191

Alaska has a federally approved Coastal Management Program and may review Federal activities for consistency. Federal consistency is the Coastal Zone Management Act requirement that Federal actions that are reasonably likely to affect any land or water use or natural resource of the coastal zone be consistent with the enforceable policies of a state's Coastal Management Program. Section 307 of the CZMA contains the Federal consistency provisions that impose certain requirements on Federal agencies to comply with enforceable policies detailed in the federally-approved Coastal Management Programs.

• Section 307(c)(1) requires Federal Agencies conducting or supporting activities affecting any land or water use or natural resources of the coastal zone be consistent to the maximum extent practicable with the enforceable policies of a state's coastal program.

• Section 307(c)(3)(A) prohibits Federal agencies from issuing a license or permit for any activity that affects any land use or water use or natural resource of the state's coastal zone until a state, with a federally-approved Coastal Management Program, has concurred with, presumed to concur with the applicant's consistency certification that the activity subject to the license or permit is consistent with its enforceable policies, or until the Secretary of Commerce has overridden the state's objections to the activity.

• Section 307(c)(3)(B) requires that no Federal license or permit for an activity described in detail in an OCS exploration or development and production plan affecting any land or water use or natural resource of the coastal zone may be approved until a state with a federally-approved Coastal Management Program, has concurred with, is presumed to concur with the applicant's consistency certification, or until the Secretary of Commerce has overridden the state's consistency objections.

The following analysis focuses on the lease sale. The analysis is based on hypothetical direct and indirect effects of post lease actions for the preferred alternative as identified in the final EIS. Activities and effects may or may not actually occur, and at best, can only be estimated in general and hypothetical terms. If and when a specific proposal to undertake operations on a lease is submitted either under an exploration plan or a development and production plan, a section 307(c)(3) analysis and consistency certification must be made and submitted by the lessee directly to the state. That analysis will be able to focus on the site-specific information available at the time the plan is submitted. The MMS may not issue permits for activities described in these plans until the state has concurred that the activities are consistent, the state has been conclusively presumed to concur with (15 CFR 930.78(b) and 930.80), or the Secretary of Commerce, on appeal finds the activities are consistent with the state's Program or the proposed activities are in the interest of national security (15 CFR 930.120).

When a section 307(c)(1) analysis is prepared for a lease sale, the Department does not know which, if any, specific block or blocks will be bid upon, leased, or explored; nor the site of any exploration, discovery, or production. In fact, there is only a small likelihood that a particular block offered at a lease sale will eventually be leased, explored, and developed, much less result in any measurable adverse impacts to a state's coastal zone. Only a small fraction of blocks offered are leased and only a small fraction of those leases are explored, fewer still ever have "shows" of hydrocarbons, and an even smaller fraction ever have a discovery sufficient to justify a platform installation. An economically recoverable discovery has not been found in the Cook Inlet Planning Area. The specific scope and location of future activities resulting from a lease sale and the effects on the land use, water use, or natural resources of the coastal zone of any such activities cannot be predicted with any degree of accuracy.

The analysis in this document describes the activities associated with the lease sale process and the exploration and development scenarios analyzed in the EIS. The MMS reviewed the ACMP for policies which may pertain to Sale 191 and the land and water uses and natural resources of the coastal zone. This section is an analysis of statewide standards and district enforceable policies relevant to the proposed action. This section also contains a discussion (under each statewide standard) of related information from the EIS, methods for mitigation of environmental effects, and analysis of the activities' consistency with the state's standards and the applicable

district policies. The consistency determination statement is presented in section IV of this document.

A. State Coastal Management Program

The ACMP was approved by the Federal Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration and includes guidelines and standards developed by the Alaska Coastal Policy Council (CPC) and an atlas depicting the boundaries of the state's coastal zone and those of the coastal districts.

Title 6 of the Alaska Administrative Code, Chapter 80 contains the statewide standards of the ACMP. The standards are listed under two sections in these state regulations: Uses and Activities and Resources and Habitats.

B. Kenai Peninsula Borough Coastal Management Program

The Kenai Peninsula Borough Coastal Management Program was fully incorporated into the ACMP in 1990. Borough-wide policies are general and not intended to create a substantial change from the existing statewide standards. More detailed planning is anticipated to occur through the use of special plans for "Areas that Merit Special Attention." The first of the AMSA plans, The Port Graham/Nanwalek AMSA, was approved by the CPC in October 1991 and incorporated into the ACMP in 1992.

C. Kodiak Island Borough Coastal Management Program

Kodiak Island Borough's CMP was fully incorporated into the ACMP in 1984. Activities that could affect fish and fishing resources and activities are carefully regulated through the Borough's CMP policies. In addition, the CMP contains policies that specifically address activities associated with oil and gas exploration and development. The portion of the Bristol Bay Coastal Resource Service Area (CRSA) that abuts Shelikof Strait has been incorporated into the Kodiak Island Borough. Until the Kodiak Island Borough amends its CMP to include the western Shelikof area incorporated by the Kodiak Island Borough, the enforceable policies of the Bristol Bay CRSA CMP are the enforceable policies for that portion of the Shelikof coast. The Bristol Bay CRSA CMP policies emphasize the protection of fish resources and the fishing industry. They also augment the 16 statewide standards for siting energy-facilities that are related directly to oil and gas development. The Kodiak Island Borough is revising its CMP to update its policies and to include the newly incorporated area.

IV. Analysis of Specific Alaska Coastal Management Program Standards and Coastal District Relevant to Sale 191

The following is an analysis of whether Sale 191, as proposed, is consistent to the maximum extent practicable with the ACMP. The ACMP incorporates district programs as part of the overall state coastal management program; therefore, this analysis includes the district coastal management programs of the Kenai Peninsula Borough and the Kodiak Island Borough. The

consistency language of the CZMA requires that this analysis address both direct and indirect effects of this proposal on any land or water use or natural resource of the coastal zone.

The hypothetical scenarios used in the Cook Inlet Planning Area, Oil and Gas Lease Sale 191 and 199 EIS to assess effects of any post lease activities are also used in this consistency analysis. It is impossible at the lease sale stage to anticipate and describe all future events and effects of future stages of OCS exploration, development, and production—the scenario assumptions are a reasonable hypothesis of what may happen as a result of the lease sale, assuming oil is discovered and produced. In the EIS analysis, the effects of the sale are estimated assuming that all mitigation provided for by existing laws, regulations, and lease specific stipulations are in place.

The following analysis is organized according to the standards of the ACMP. Applicable policies of the Kenai Peninsula Borough and Kodiak Island Borough Coastal Management Programs are assessed in conjunction with the most closely associated statewide standard.

A. Coastal Development (6 AAC 80.040):

This standard gives priority to uses and activities in coastal areas that are water-dependent. The intent of this policy is to ensure that onshore development and activities that can be placed inland do not displace activities dependent upon shoreline locations, including marine, lake, and river waterfronts. Activities and uses that are neither water dependent or water related will be given priority if there is no feasible or prudent alternative to meet the public need.

State standards also require that the placement of structures and discharge of dredged material into coastal waters complies with the regulations of the U.S. Army Corps of Engineers (6 AAC 80.040(b)). Much of the development hypothesized in the scenario would be subject to U.S. Army Corps of Engineers regulations. None of the scenario projects is necessarily allowed or disallowed under the provisions of the U.S. Army Corps of Engineers regulations. Site-specific environmental changes pursuant to development would be assessed and permitted, depending on the attendant effects.

In addition, the Kenai Peninsula Borough has four policies addressing coastal development that may be applicable (Policies 2.4 through 2.7). These policies require that projects involving dredging or filling in streams, rivers, lakes, wetlands, or saltwater areas including tidal flats be located, designed, constructed, and maintained in a manner so as to:

- avoid significant impacts to important fish and wildlife habitat;
- avoid significant interference with fish migration, spawning, and rearing as well as other important life-history phases of wildlife;
- limit areas of direct disturbance to as small an area as possible;
- minimize the amount of waterborne sediment traveling away from the dredge or fill site; and
- maintain circulation and drainage patterns in the area of the fill.

The Kodiak Island Borough Coastal Management Program addresses coastal development in its General Policies (Policy 5.3.1 – Land and Water Activities). The policy states that activities that

are water-dependant and water-related will receive priority for waterfront areas. Uses that are neither of these will be considered in shoreline areas only when no feasible or prudent inland sites are available. The Kodiak Island Borough policy also requires that waterfront facilities be used cooperatively to achieve maximum use of the facilities. In addition, activities on coastal lands must be compatible with adjacent land use to the greatest extent feasible.

The only OCS development or activity hypothesized in the EIS scenarios that would require a shoreline location is a landfall site for a pipeline. The statewide standard on coastal development and the related district policies do not automatically preclude pipeline landfalls.

It is anticipated that such development could occur within the applicable parameters of the statewide standard and related district enforceable policies. Any future specific proposals for exploration or development and production must include a consistency certification stating that the proposed activities meet consistency requirements. This certification must include an identification of all activities described in detail in the plan which require a federal license or permit and which will have reasonably foreseeable coastal effects. The state will coordinate a review of these plans with the applicable districts. If the state objects to a consistency certification, permits or licenses cannot be issued unless the Secretary of Commerce, on appeal, finds that the activity is consistent with the objectives or purposes of the CZMA, or is necessary in the interest of national security.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to coastal development.

B. Geophysical Hazard Areas (6 AAC 80.050)

Geophysical hazard areas are defined in the standards as areas which present a threat to life or property from geophysical or geological conditions, including flooding, tsunamis, storm surges, landslide, snow slides, faults, ice hazards, and littoral beach processes.

This statewide standard requires coastal districts and state agencies to identify areas in which geophysical hazards are know and in which there is a substantial probability that geophysical hazards may occur. Development in these areas is prohibited until siting, design, and construction measures for minimizing property damage and protecting against the loss of life have been provided.

The Kenai Peninsula Borough Coastal Management Program contains five policies that address geophysical hazards. They cover major considerations such as erosion; floodway and floodplain development; landslides, mass wasting (such as slumping or creeping), and avalanches. Figure E of their program illustrates the location of volcanoes, faults, and scarp in the Lower Cook Inlet. It also illustrates the location of these hazards on the adjacent onshore areas.

The Kodiak Island Borough Coastal Management Program includes policies that emphasize coordination among government agencies regarding siting, design, and construction measures relative to geophysical hazards such as seismic, coastal, and seiche (prolonged oscillating wave in a lake, bay, or gulf caused by changes in atmospheric pressure or seismic disturbances such as

earthquakes) flooding; landslides and mass wasting hazards; and avalanche and riverine flooding. "The utilization of potentially hazardous lands shall be safe and sensible. Development shall be sited to minimize the risk of life and property to the extent feasible." Proposals for large-scale development within known and potential seismic areas must include a geotechnical investigation to determine the area's physical capabilities and address siting, design, and construction measures to minimize the hazard.

Geophysical hazards are described in section III.A.1 of the EIS. Although earthquakes, shallow faults, volcanoes, tsunamis, seiches, sediment or seafloor instability, gas-charged sediments, and large bedforms are evident in the sale area, the description of the hazards provided in section III.A.1 indicates that none seems to pose a high degree of risk to any development operation.

The MMS regulations, including the platform verification program, regulate lessees to ensure that geophysical hazards, such as those identified, are accommodated in the exploration and development and production plans that must be approved before lessees may commence activities. Requirements found in Title 30 of the Code of Federal Regulations Part 250 (30 CFR 250) require that plans submitted to MMS for approval must include an analysis of seafloor and subsurface geologic and manmade hazards. Structures must be designed, fabricated, installed, used and maintained to assure their structural integrity for safe operations considering the specific environmental conditions at the location, including earthquakes, tsunami, and other appropriate phenomena.

The approval process for exploration and development and production plans will ensure siting, design, and construction measures are taken to minimize property damage and protect against loss of life for all areas, including areas in which geophysical hazards are known or where there is a substantial probability that they might occur. It is anticipated that activities related to specific proposals will occur consistent with the statewide standard and with the Kenai Peninsula Borough and Kodiak Island Borough policies related to geophysical hazards.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to geophysical hazards.

C. Recreation (6 AAC 80.060)

Under this statewide standard, districts are to designate areas for recreational use and give high priority to maintaining and, where appropriate, increasing public access to coastal water. The Kenai Peninsula Borough Coastal Management Program contains four policies guiding the location and use of public recreation (Policy 4.1 through 4.4). In addition, the Kenai Peninsula Borough's program (Policy 2.2.1) states that approval for floating facilities will address their potential for conflicts with recreation sites. The Kodiak Island Borough Coastal Management Program (Policy 5.3.2 – Specific Use Policies) contains five policies related to recreational development under the heading, "Recreation, Tourism, and Natural Setting." These policies generally guide the development of recreational sites within the boroughs.

Effects on recreation are identified in Section IV.B.1.n of the EIS. The effects of routine exploration and development activities on private and commercial recreation may arise from

space-use conflicts. When activities coincide, the duration normally will be very short. Only one of the policies, Kenai Peninsula Borough Coastal Management Program Policy 3.4(d)2, deals directly with conflict between other activities and recreational use of designated recreation areas. This policy directs other activities to be conducted to minimize conflicts.

Applicants submitting plans for exploration or development and production for approval by the MMS must certify that activities described in their plan are consistent with the ACMP. The state will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without state concurrence or a decision by the Secretary of Commerce to override the state's objections. However, given the scenarios and attendant activities hypothesized in the EIS, it is anticipated that conflicts with the statewide standard and the district-enforceable policies can be avoided.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to recreation.

D. Energy Facilities (6 AAC 80.070)

The first part of this standard requires identification of suitable sites for development of major energy facilities. Part (b) requires siting of energy facilities according to 16 criteria to the extent feasible and prudent. "Feasible and prudent" is defined in 6 AAC 80.900(2) to mean "consistent with sound engineering practice and not causing environmental, social, or economic problems that outweigh the public benefit" The last part of this standard requires that districts recognize that oil and gas development are uses of state concern.

The statewide standard requires that decisions on the siting and approval of energy-related facilities be based, to the extent feasible and prudent, on 16 standards. The following discussion addresses only those that are applicable to the scenarios presented in the EIS. These include pipelines and rights-of-way; drilling rigs and platforms; petroleum separation, treatment, or storage facilities; and oil terminals and other port development for the transfer of energy products (6 AAC 80.900(22)). Moreover, "uses authorized by the issuance of state or federal leases for mineral and petroleum resource extraction are uses of state concern" (6 AAC 80.070 (c)). A district may restrict a use of state concern only if the decision is reasonable and the district has consulted with and considered the views of appropriate agencies, identified reasonable alternative sites, and based its restrictions on analyses that show the proposed use is incompatible with the proposed site (AS 46.40.070 (c)).

The Kodiak Island Borough Coastal Management Program (Policy 5.3.2 – Energy Facilities) includes 13 policies related to energy facilities. They address compatibility with nearby land and water uses, suitable space for expansion, use of existing facilities, and consideration of commercial-fishing activities. The Kenai Peninsula Borough Coastal Management Program (Policy 5.0) incorporates 11 policies related to energy facilities. Also, the Kenai program expands all but three of the statewide standards to encompass "related activities" in addition to "facilities" (Policy 5.1). The statewide standards require that facilities be sited to:

• minimize adverse environmental and social effects while satisfying industrial requirements, and

• be compatible with existing and subsequent uses (6 AAC 80.070(1) and (2)).

Expanding on these points, the statewide standards further specify that facilities be sited in areas of least biological productivity, diversity, and vulnerability and that areas of particular scenic, recreational, environmental, and subsistence and/or cultural values be protected (6 AAC 80.070 (b)(13), and (12)).

Another statewide standard requires that facilities be consolidated (6 AAC 80.070(b)(3)). The Kenai Peninsula Borough Coastal Management Program augments this and requires that "existing industrial facilities or areas and pipeline routes shall be used to meet new requirements for exploration and production support bases, transmission/shipment (including pipelines and transportation systems), and distribution of energy resources" (Policy 5.3). The Kodiak Island Borough Program's Facility Consolidation policy encourages multiple uses for energy facilities.

Pipelines are emphasized in this statewide standard and the Kenai Peninsula Borough Coastal Management Program. First, the statewide standard requires that facilities be designed to permit free passage and movement of fish and wildlife with due consideration for historic migratory patterns (6 AAC 80.070 (12)). In addition, the Kenai Peninsula Borough Coastal Management Program requires that offshore pipelines and other underwater structures be located, designed, or protected to allow fishing gear to pass over without snagging or otherwise damaging the structure or gear (Policy 5.5). Moreover, they shall "be sited designed, constructed, and maintained to avoid important fishing grounds and to minimize risk to fish and wildlife habitats from a spill, pipeline break, or other construction activities. Pipeline crossings of fish-bearing waters and wetlands important to waterfowl and shorebirds shall incorporate mitigative measures, to the extent feasible and prudent, to minimize the amount of oil which may enter such waters as a result of a pipeline rupture or leak" (Policy 5.6). No barriers to migrating fish and wildlife were identified in the resource analyses as a result of development hypothesized in this EIS. As stated in the Kenai Peninsula Borough Coastal Management Program policy, some mitigation measures will be required to minimize damage; however, nothing in the scenario is inherently in conflict with these policies.

Other siting criteria include (6 AAC 80.070(b)(11)(13)(14)(8)(6)(7), respectively):

- Water discharges and oil spills must be able to be contained and damage to the
 environment (including fishing grounds, spawning grounds, and other biologically
 productive or vulnerable habitats such as marine mammal rookeries and hauling out
 grounds and waterfowl nesting areas) be minimized.
- Winds and air currents must be able to disperse the emissions so Federal and state airquality regulations are not violated.
- Navigational hazards must be avoided.
- Space must be available for reasonable expansion.
- Sites must either have existing infrastructure or be appropriate for an enclave development.

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In addition to oil spills, the Kenai Peninsula Borough Coastal Management Program (Policy 5.2.a) includes drilling wastes and other toxic or hazardous materials as substances that commercial/industrial operations must prevent from contaminating surface and groundwater. The Kenai Peninsula Borough's Policy 5.9 provides strict guidance for how and when geophysical surveys may occur and be consistent with the plan. "Seasonal restrictions, restrictions on the use of explosives, or restrictions relating to the type of transportation used in such operations will be included as necessary to mitigate potential adverse impacts" (Policy 5.9(a)). In addition, "(v)essels engaged in offshore geophysical exploration will conduct their operations to avoid significant interference with commercial fishing activities" (Policy 5.9 (c)).

Section IV.B.1.k of the EIS notes that seismic surveys might exert temporary disturbance/dispersal to fish and thus reduce a harvest. However, this would be limited to the time of the survey, probably no more than 1 hour following passage of the airgun array (several airguns simultaneously releasing differing amounts of compressed air). Seismic surveys that are planned and coordinated with the commercial fishing industry are expected to make conflicts rare to nonexistent.

Construction associated with energy-related facilities also must comply with siting policies that apply to all types of development. These more general policies are discussed under Habitats and Air, Land, and Water Quality.

Stipulation No. 1 - *Protection of Fisheries* requires that lessees review planned exploration and development activities with directly affected fishing organizations, subsistence communities, and port authorities to avoid unreasonable fishing gear conflicts. This stipulation also requires the lessees to include in their plans a summary of fishing activities in the area of the proposed operation, an assessment of effects, and measures taken by the lessee to prevent unreasonable conflicts.

In addition, in response to concerns expressed by driftnet fishing interests, MMS has embarked on a new study for this fiscal year title *Mitigation of Oil Industry Operations on Driftnet Fishing in Cook Inlet*. The study will work with driftnet fishing interests to document and mitigate potential conflicts prior to development.

Local communities, including fishing interests will have the opportunity to review and comment on proposed plans as part of the MMS regulatory review process. At the time specific proposals are submitted for review and approval, these requirements will be addressed. No conflicts with the statewide standards or with the Kenai Peninsula Borough and Kodiak Island Borough Coastal Management Programs' related policies on the siting and approval of energy facilities and related activities are anticipated.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to energy facilities.

E. Transportation and Utilities (6 AAC 80.080)

This statewide standard requires that transportation and utility routes and facilities in the coastal zone are sited, designed, and constructed to be compatible with district programs. It includes a

requirement that routes for transportation and utilities be sited inland from shorelines and beaches unless the route or facility is water-dependent or no feasible and prudent inland alternative exists. An offshore pipeline transporting production to shore is considered a water-dependent facility. Assuming that after an offshore pipeline crossed the beach it would continue inland of the beach, conformance with this statewide standard is possible.

In addition, the statewide standard and related district policies identify constraints for the siting, design, construction, and maintenance of transportation and utility facilities. The Kenai Peninsula Borough Coastal Management Program requires that road, pipeline, and utility crossings of anadromous fish streams be minimized and consolidated at single locations (Policy 6.2.a). Underwater pipelines must be buried or otherwise "allow for the passage of fishing gear, or the pipeline route shall be selected to avoid important fishing areas, and anadromous fish migration and feeding areas" (Policy 6.4.c). In addition, upland "pipelines and utilities shall be installed underground in areas of high recreational or scenic value or intensive public use" (Policy 6.4.b).

The Kodiak Island Borough Coastal Management Program Policy 5.3.2 - Transportation and Utility Routes, has a similar requirement under its Underground Utilities section - requiring, to the extent feasible, that utilities be installed underground in areas of high recreation or scenic value or intensive public use.

Other policies for transportation and utilities are comparable to the statewide standard and district policies discussed for facility siting, for example, bridges and culverts must allow for free passage and existing corridors must be used to the extent feasible and prudent (Kenai Peninsula Borough Coastal Management Policies 6.2.b and 6.4.a and Kodiak Island Borough Policy 5.3.2 - Transportation and Utility Routes, paragraph 4 - Stream Crossings).

Only the location of a landfall is subject to a siting decision; an offshore platform site is determined by the location of the resources and the facilities in Nikiski to which the oil would be piped already exist. Therefore, transportation issues related to the scenarios in the EIS are linked to the siting of energy-related facilities that was discussed in conjunction with the previous policy on Energy-Facility Siting.

The ACMP statewide standards and district policies related to energy facilities and transportation and utilities will be helpful in guiding decisions on where to locate a landfall. These decisions will be made at the time plans are submitted for review. The Alaska Supreme Court, in its decision in Trustees for Alaska v. State, No. 3945, noted that "until exploration is proposed and, in all likelihood, until and unless a commercially exploitable discovery is made, there will be no occasion for siting, designing or constructing transportation and utility routes." None of the transportation and utility scenarios developed for this EIS are inherently in conflict with the statewide standard and the associated district policies on Transportation and Utilities.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to transportation and utilities.

F. Fish and Seafood Processing (6 AAC 80.090)

This statewide standard requires districts to identify areas of the coast suitable for the location or development of facilities related to commercial fishing and seafood processing and allows the district to designate such areas. Although this standard relates only to the siting of facilities related to fishing and seafood processing, the district policies related to fisheries are discussed under the this statewide standard.

The Kodiak Island Borough Coastal Management Policy 5.3.2 - Fisheries and Seafood Processing, gives priority to maintenance and enhancement of fisheries when considering shoreline use proposals that might adversely affect fish habitat, migratory routes, and the commercial harvest of fish. Under this policy, the Kodiak Island Borough also requires that development of energy-related facilities include programs to replace fish stock affected by water supply or other aspects of construction and operations.

The Kenai Peninsula Borough Policy 2.3 on Commercial Fishing is addressed as part of the Borough's coastal development policy. This policy requires that, to the extent feasible and prudent, all temporary and permanent developments, structures, and facilities in marine and estuarine waters be sited, constructed, and operated in a manner that does not create a hazard or obstruction to commercial fishing. It also requires that within the marine and estuarine waters of the coastal area, operators of activities relating to oil, gas, and mining exploration and production provide timely written notification to a list of fishing organizations maintained by the Borough to apprise commercial fishing interests of the schedule and location of development activities prior to initiation of the project. The policy requires specific information be included in the notice. The last part of this policy requires that offshore resource exploration and development activities avoid interference with commercial fishing and subsistence activities.

Kenai Peninsula Borough Policy 5.5 addresses Navigation and Commercial Fishing and requires that activities associated with oil and gas resource exploration, industrial development, or production minimize navigational interference and be located or timed to avoid potential damage to fishing gear. Offshore pipelines and other underwater structures must be located, designed or protected so as to allow fishing gear to pass without snagging or otherwise damaging the structure or gear. Kenai Peninsula Borough Policy 7.3 - Maintenance and Enhancement of Fisheries gives priority to fisheries when reviewing proposed projects that might adversely affect important fisheries habitat, migratory routes, and harvest. These policies are further reinforced by the Kenai Peninsula Borough Policy 12.21 on Priority Use of Fish and Wildlife Habitat, Kenai Peninsula Borough Policy 12.3 - Fish Passage, and Policies 12.5 on Water Intake Structures and 12.6 on Use of Explosives.

Activities related to exploration and development and production will be planned and conducted in consultation with the state and the Kenai and Kodiak Boroughs. Stipulation No. 1 – *Protection of Fisheries* requires that lessees review planned exploration and development activities with directly affected fishing organizations, subsistence communities, and port authorities to avoid unreasonable fishing gear conflicts. This stipulation also requires the lessees to include in their plans a summary of fishing activities in the area of the proposed operation, an assessment of effects, and measures taken by the lessee to prevent unreasonable conflicts. Local communities,

including fishing interests will have the opportunity to review and comment on proposed plans as part of the MMS regulatory review process.

Applicants submitting plans for exploration or development and production for approval by the MMS must certify that activities described in their plan are consistent with the ACMP. The state will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without state concurrence or a decision by the Secretary of Commerce to override the state's objections. However, given the scenarios and attendant activities hypothesized in the EIS, it is anticipated that conflicts with the statewide standard and the district-enforceable policies can be avoided.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to fish and seafood processing.

G. Timber Harvest and Processing (6 AAC 80.100)

This statewide standard and the district enforceable policies address forest resources and practices and is not relevant to this analysis.

H. Mining and Mineral Processing (6 AAC 80.110)

This statewide standard requires that mining and mineral processing in the coastal area be compatible with the other standards, adjacent uses and activities, state and national needs, and district programs. When there is no feasible or prudent alternative that will meet the public need, sand and gravel may be extracted.

The Kodiak Island Borough Policy 5.3.2 – Specific Uses, Mineral and Mineral Processing allows access to gravel and other material sources when the impacts to fish and other wildlife can be minimized.

The Kenai Peninsula Borough Policy 10.1 provides for a descending order of priority for sources of sand and gravel. Existing upland sand and gravel pits tops the list, followed by reuse from abandoned areas; new upland pits; rivers, streams and lakes that don't support fish; marine shoreline and offshore sources, and lastly – river and floodplain sources in fish-bearing streams. Additionally, extraction from rivers and streams is addressed in Policy 10.2. Policy 10.3 addresses Offshore Mining, mining for locatable minerals is to be conducted to avoid interfering with commercial fishing activities, navigation and adverse impacts to fish and wildlife. Tidelands activities must not conflict with access to adjacent upland areas. Extraction of sand and gravel from the sea bottom must avoid significant adverse impacts to important and essential habitats, commercial and sport fishing activities, subsistence harvest activities, natural coastal erosion and deposition, and navigation. Dredge spoils and processed materials must be discharged on the sea bottom in the area in which they were extracted, unless discharge elsewhere at an approved site would cause less impact to the environment and other coastal activities. This Policy also prohibits resuspension of naturally-occurring toxic substances in amounts that would contribute to increased bioaccumulation in marine organisms and fish or endanger human health.

The Kenai Peninsula Borough's program also includes policies related to overburden disposal and reclamation and restoration. Their last policy in this category addresses access. Access across public lands for mineral exploration and development activities will be allowed to the extent it conforms with the Kenai Peninsula Boroughs' policies. On public lands identified as having high potential for minerals or sand and gravel, surface uses will be managed to maintain opportunities for future mining activities where feasible and prudent.

All proposals to conduct mining or mineral processing within the boundaries of the coastal zone will require approval from the appropriate permitting state and/or federal agency. Through this approval process, it will be assured that these activities are conducted in accordance with these standards.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to mining and mineral processing.

I. Subsistence (6 AAC 80.120)

Statewide standards guarantee opportunities for subsistence use of coastal areas and resources. Potentially conflicting uses or activities occurring within this designated area may be permitted only after

- a study is conducted to determine possible adverse effects and
- safeguards are implemented to ensure continued subsistence use.

Both coastal districts have policies that supplement the statewide standard on subsistence. The Kenai Peninsula Borough Coastal Management Program contains four policies that address subsistence. These policies ensure that projects and uses in areas traditionally used for subsistence accommodate the use of subsistence resources from planning to operation, minimize adverse effects to subsistence resources and activities, and maintain access to subsistence-use areas (Policies 11.1 through 11.4).

The Kodiak Island Borough Coastal Management Program also contains several policies related to subsistence. They include policies on

- Resource Protection which states that energy facilities will be sited so that areas having subsistence values will be protected,
- Primary Use which recognizes subsistence as a primary use to be protected when coastal development occurs,
- Habitat Management which ensures that the subsistence use of resources is a primary use to be managed in accordance with state and Federal laws.

Section IV.B.1.1 of the EIS, Effects of Sale 191 on Subsistence-Harvest Patterns, concludes that short-term, local disturbance from routine activities associated with exploration, development, and production could periodically affect subsistence resources and subsistence-harvest patterns, but no resource or harvest area would become unavailable, no resource would experience an overall decrease in population, and no harvest would be curtailed for the harvest season. As discussed under routine effects in Section IV.B.1.i - Terrestrial Mammals, construction disturbance and noise could briefly disturb subsistence species that include beluga whales, seals,

sea lions, fish, birds, moose, bears, and Sitka black-tailed deer, and only a few actual animals would be temporarily displaced.

Section IV.B.1.p of the EIS addresses the requirements of Executive Order 12898 which requires Federal agencies to evaluate whether a proposed project would have "disproportionately high adverse human health and environmental effects . . .on minority populations and low income populations." Potential effects focus on the Native minority populations residing in the subsistence-based communities of the Sale area. This section concludes that there would be no adverse impacts related to Environmental Justice from routine activities.

It is anticipated that exploration and development and production activities that may occur will proceed within the parameters of the appropriate consistency requirements and will not conflict with the statewide standard on Subsistence or with the related district policies.

Applicants submitting plans for exploration or development and production for approval by the MMS must certify that activities described in their plan are consistent with the ACMP. The state will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without state concurrence or a decision by the Secretary of Commerce to override the state's objections. However, given the scenarios and attendant activities hypothesized in the EIS, it is anticipated that conflicts with the statewide standard and the district-enforceable policies can be avoided.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to subsistence.

J. Habitats (6 AAC 80.130)

The statewide standard for habitats contains an overall standard plus policies specific to eight habitats –

- offshore areas:
- estuaries;
- wetlands and tidal flats:
- rocky islands and sea cliffs;
- barrier islands and lagoons;
- exposed high-energy coasts;
- rivers, streams, and lakes; and
- important upland habitat.

Activities and uses that do not conform to the standards may be permitted if there is a significant public need and no feasible prudent alternatives to meet that need, and all feasible and prudent measures are incorporated to maximize conformance (6AAC 80.030 d).

The ACMP statewide standard for all habitats in the coastal zone requires that habitats "be managed so as to maintain or enhance the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources" (6 AAC 80.130 (b)). The offshore habitat is designated a fisheries conservation zone (6 AAC 80.130.(c)(1)). The

Appendix B

Kenai Peninsula Borough Coastal Management Program contains a policy that gives the highest priority to the maintenance and enhancement of fisheries when the districts evaluate projects that may affect fish spawning, migration, rearing, and over-wintering areas (Policy 12.1). Although it is unlikely that an oil spill will affect areas within the Port Graham/English Bay Area Meriting Special Attention (AMSA), the AMSA Plan identifies seven sites that are considered a priority to protect from an oil spill (Port Graham/English Bay AMSA Plan 13.1).

The Kodiak Island Borough Coastal Management Program Policy 5.3.2 - Resource Enhancement and Protection, paragraph 2, echoes the statewide standard and states that Federal and state regulations shall guide development in anadromous fish streams, near bald eagle nests, and other coastal habitat areas. Under the same policy, paragraph 4 - Natural Processes, the Kodiak Island Borough Program states that estuaries, tidal flats, wetlands, and lagoons will be managed to assure water flow, natural circulation patterns, and adequate nutrient and oxygen levels. Dredging and filling will not be permitted in these areas unless approved by the Community Development Department, U.S. Army Corps of Engineers, and other appropriate state and Federal agencies. Upland habitats will be managed to retain drainage patterns, prevent excessive runoff and erosion, surface water quality, and natural ground-water recharge areas. The Kodiak Island Borough Coastal Management Program Fisheries and Seafood Processing Policy, paragraph 3, requires that maintenance and enhancement of fisheries be given priority consideration over shoreline use proposals that might adversely affect fish habitat, migratory routes, and the commercial harvest of fish. Paragraph 4 of the same policy requires development of industrial and energy-related facilities to include programs to replace fish stock affected by water supply or other aspects of construction operations.

Analyses in section IV.B of the EIS indicate that neither habitat alteration and reduction nor noise and disturbance as a result of routine operations are expected to have long-term effects on lower trophic-level organisms, fishes, birds, marine mammals, endangered and threatened species, or terrestrial mammals. It is anticipated that activities described in the EIS scenarios could proceed consistent with the Kenai Peninsula Borough Coastal Management Program policies that address seabird colonies, marine mammal haul outs, bald eagles, and their nest sites (Policies 12.7 and 12.9).

Drilling discharges associated with the hypothesized activities are not expected to affect fisheries due to the limited area affected near the platform-discharge point. Small amounts of oil may enter the water during routine operations but are not expected to have a measurable effect on the fisheries. Offshore construction, platforms, and pipelines are expected to result in some spaceuse conflicts; however, these are expected to be few in number and minor in scope. Seismic surveys, planned and coordinated with the commercial- fishing industry, are expected to have a minimal effect.

No spills are expected to occur during exploration. Small spills may occur during development and production, however; these spills are not expected to have a measurable effect on fisheries or habitats. It is unlikely that a large spill (greater than or equal to 1,000 barrels) will occur and no such spill is assumed.

Applicants submitting plans for exploration or development and production for approval by the MMS must certify that activities described in their plan are consistent with the ACMP. The State will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without state concurrence or a decision by the Secretary of Commerce to override the state's objections. Given the scenarios and attendant activities hypothesized in the EIS, it is anticipated that conflicts with the statewide standard and the district-enforceable policies can be avoided.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to habitats.

K. Air, Land, and Water Quality (6 AAC 80.140)

The Air-, Land-, and Water-Quality standard of the ACMP incorporates by reference all the statutes pertaining to, and regulations and procedures of, the Alaska Department of Environmental Conservation. The Environmental Protection Agency has jurisdiction for air quality over the Cook Inlet program area. Lease operators must comply with that agency's requirements for OCS sources, including the provisions of Title 1, Part C, of the Clean Air Act (Prevention of Significant Deterioration of Air Quality). Section 328 states that for a source located within 25 miles of the seaward boundary of a state (such as the entire Cook Inlet sale area), requirements would be the same as those that would apply if the source were located in the corresponding onshore area. Both the Kenai Peninsula Borough and the Kodiak Island Borough Coastal Management Programs have policies addressing air and water quality.

The Kenai Peninsula Borough Policy 13.1 prohibits disposal in the Borough of hazardous materials, petroleum, or petroleum products unless done at a facility designed and approved for that purpose. The Kodiak Island Borough policy on State-of-the-Art Technology requires use of the most effective technology currently feasible for limiting emissions and effluents, and for handling, cleanup, and disposal of oil and hazardous materials. The Kodiak Island Borough policy on Wastewater Discharge requires discharges to be limited to areas with adequate flushing action. Discharges must not be in amounts to render water unsuitable for fish survival, industrial cooling, and industrial watering supply purposes. In addition, the Kodiak Island Borough policy on Dredge and Fill requires that coastal development activities minimize adverse impacts on water quality.

Emissions into the air as a result of any exploration and development are expected to be only a very small percent of the maximum allowable concentrations. Compliance with existing federal and state laws will assure that activities associated with the proposal are consistent with the policies related to air quality.

Discharges of drilling muds and cuttings and other discharges associated with exploration drilling are not expected to have any effect on the overall quality of the Cook Inlet water. It is anticipated that the EPA will require that muds and cuttings from production drilling be reinjected or barged ashore for disposal. Even if discharged, produced waters would not be expected to degrade the quality of Cook Inlet water.

Only small, accidental oil spills are assumed to occur as a result of development and production. By definition small spills could be almost 1,000 barrels in size, however; the average small spill is a tenth of a barrel. Based on the oil spill scenario in Section IV.A.4 of the EIS, a number of small spills are assumed to occur. Small spills are not expected to have any degradational effect on the overall water quality of Cook Inlet.

The most likely number of large spills (greater than 1,000 barrels) is "0." Based on statistical analyses, the MMS estimates the mean number of large spills that may occur over the life of the hypothetical development and production (approximately 30 years) to be 0.02 platform spills and 0.19 pipeline spills for a total of 0.21 spills. (EIS, Appendix A-1, Oil Spill Information, Models, and Assumptions). A large spill would be accidental in nature and is not considered reasonably foreseeable in the context of the analysis of potential conflicts with ACMP standards.

Each permittee operating offshore in the Cook Inlet is required to have an oil-spill response plan with trained personnel and cleanup equipment and supplies at each activity site to meet Federal and state regulations. Federal regulations governing MMS operations related to offshore oil and gas activities are found at 30 CFR 250.300 and 30 CFR 254. These regulations address the prevention and control of oil and gas spills and releases. Regulations at 40 CFR 110, 112, and 300 address responses to spills or release of oil and gas. Spill response requirements will be thoroughly addressed when and if proposals are brought forward. In addition, certain state regulations may apply to oil spill response plans, as listed in Title 18 of the Alaska Administrative Code, Chapter 75. These regulations are administered by the state, Department of Environmental Conservation.

The analysis in the EIS indicates that activities included in the analyzed scenarios can and will be conducted consistent with the statewide standards and district policies. When proposals are submitted for review and approval, the state and the coastal districts will have the opportunity to review and comment on the proposal, including the consistency certification, for that specific activity.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to air, land, and water quality.

L. Statewide Historic, Prehistoric, and Archaeological Resources (6 AAC 80.150)

The ACMP statewide standard requires that coastal districts and appropriate state agencies identify areas of the coast that are important to the study, understanding, or illustration of National, state, or local history or prehistory. Although no disturbance of known sites is likely, previously undiscovered sites and artifacts may be encountered.

The Kenai Peninsula Borough Coastal Management Program requires that the site be protected from further disturbance and the State Historical Protection Office be notified immediately to evaluate the site or artifacts (Policy 14.2). The Kodiak Island Borough policy on Resource Identification requires that sites not already protected be identified and preserved to the extent feasible and prudent.

Section IV.B.1.l and Appendix F of the EIS provide the documentation that is required by the Alaska Supreme Court before the state can proceed with a lease sale (Trustees for Alaska v. State, No. 3945, April 23, 1993). In Appendix F, 149 blocks have been identified as having a high probability for containing prehistoric resources (Appendix F, Figure F-1 of the EIS).

The rules in the Code of Federal Regulations that pertain to OCS oil and gas activities include specific requirements of lessees who are planning operations in areas where an archaeological resource may exist. They also have specific requirements if a lessee should discover any archaeological resource while conducting operations. Compliance with these regulations and the state and district review of plans when they are submitted will assure consistency with this state standard and the related district policies.

Applicants submitting plans for exploration or development and production for approval by the MMS must certify that activities described in their plan are consistent with the ACMP. The state will review the plan and the consistency certification and either concur or object. No activities will be permitted by MMS without state concurrence or a decision by the Secretary of Commerce to override the state's objections. Given the scenarios and attendant activities hypothesized in the EIS, it is anticipated that conflicts with the statewide standard and the district-enforceable policies can and will be avoided.

Based on the above analysis, Sale 191 will be consistent to the maximum extent practicable with the statewide standards and district policies related to statewide historic, prehistoric, and archaeological resources.

Summary

Many of the statewide standards and district policies could apply to the hypothetical developments associated with the scenarios in the EIS. However, the EIS analyses indicate that activities described in the scenarios can be and will be consistent with the statewide standards of the ACMP or the enforceable policies of the district programs. The MMS operating regulations and procedures, and the mitigating measures significantly minimize the potential for conflict between oil and gas industry activities and the statewide standards of the ACMP and the enforceable policies of the Kenai Peninsula Borough and Kodiak Island Borough Coastal Management Programs. The CZMA, its implementing regulations, and the State of Alaska Statutes and regulations require that all activities described in detail in an OCS exploration and development and production plan be consistent with the ACMP, including the district enforceable policies. Conflicts that may arise as specific plans for exploration and development and production are submitted for MMS approval and state consistency certification will be addressed through that process.

V. Consistency Determination

The previous section analyzed whether the proposed sale is consistent to the maximum extent practicable with the standards and policies of the ACMP identified as enforceable by the state. It evaluated the consistency of the lease sale with the ACMP and possible effects of the sale,

including possible future consistency aspects of facilities and activities which may occur on leases. The evaluation is based on exploration and development hypothesized in the EIS.

Leasing of the OCS does not convey rights to a lessee regarding the location of facilities or authorize any specific exploration, development, or production activities. These will be subject to later federal regulatory and state consistency certification reviews, at which time the cumulative effects of previous federal actions can be reviewed as well.

Nothing in the conduct of the sale, the terms and conditions, the location, nor the configuration of the proposed sale precludes or prevents exploration, development, and production activities from being conducted in a manner consistent with the ACMP.

The proposed Notice of Sale includes stipulations on:

- Protection of Fisheries
- Protection of Biological Resources
- Orientation Program
- Transportation of Hydrocarbons

The proposal also includes ITL clauses for:

- Bird and Marine Mammal Protection
- Endangered and Threatened Species
- Sensitive Areas to be Considered in Oil-Spill-Response Plans
- Oil-Spill-Response Preparedness
- Drilling Fluids and Cuttings Discharge During Lease Activities
- Air-Quality Regulations and Standards
- · Coastal Zone Management
- Navigation Safety
- Offshore Pipelines

Approved:

The complete description of stipulations and ITL clauses are included as Appendix A to this document.

Based on the preceding analysis, MMS has concluded that Sale 191, as presented in the proposed Notice of Sale, is consistent to the maximum extent practicable with the policies of the ACMP.

John Bruth Roy 12 2003

Director, Minerals Management Service

Date

Consultation with the California Coastal Commission on Applicable Policies

STATE OF CALIFORNIA— THE RESOURCES AGENCY

CALIFORNIA COASTAL COMMISSION

'S FREMONT, SUITE 2000 N PRANCISCO, CA 94105-2219 DICE AND TOD (415) 904-5200 FAX (415) 904-5400



July 19, 2001

Dr. J. Lisle Reed Pacific Regional Director Minerals Management Service 770 Paseo Camarillo Camarillo, California 93010

RE: Submittal of Consistency Determinations for Suspensions of 36 OCS Leases

Dear Dr. Rock

In our telephone conversation on July 5, 2001 regarding the district court's recent decision in *California v. Norson*, you informed me that, in compliance with the court order, the Minerals Management Service ("MMS") is in the process of preparing consistency determinations ("CDs") to be submitted to the Coastal Commission for the suspensions requested for the 36 outer continental shelf ("OCS") leases. Suspending a lease effectively extends the lease by suspending the running of the term of the lease. It is my understanding that the MMS will submit a total of 10 CDs for the 36 OCS leases (one for each of the nine units, and one for lease 409).

The district court ruled that the MMS must submit CDs to the Coastal Commission pursuant to section 307(c)(1) of the Coastal Zone Management Act ("CZMA") (16 U.S.C. § 1456(c)(1)) and to its implementing regulations (15 CFR Part 930, Subpart C). Section 930.34(d) of the regulations encourages the MMS to engage in early consultations with the Commission to obtain the views and assistance of the Commission "regarding the means for determining that the proposed activity will be conducted in a manner consistent to the maximum extent practicable with the enforceable policies of the State's coastal management program." I write this letter in fulfillment of the role that section 930.34(d) assigns to the Commission.

Under applicable statutory and regulatory standards, the CDs must indicate that the lease suspensions will "be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of [the California Coastal Management Program ("CCMP")]." CZMA § 307(c)(1); 15 C.F.R. § 930.36(a). In making its CDs, MMS must find not only the lease suspensions themselves, but also the effects of the lease suspensions and of any associated facilities (e.g., onshore processing or other support facilities) "on any coastal use or resource," to be consistent to the maximum extent practicable with the enforceable policies of the CCMP. 15 C.F.R. § 930.39(b).

In support of the CDs, MMS must describe the effects of the lease suspensions and associated facilities on coastal resources and provide comprehensive data and information that is sufficient to support those determinations. 15 C.F.R. § 930.39(a). When evaluating effects on coastal uses

Letter to Dr. J Lisle Reed July 19, 2001 Page 2

or resources, MMS must consider "any reasonably foreseeable effect on any coastal use or resource" resulting from the lease suspensions. 15 C.F.R. § 930.11(g). Reasonably foreseeable effects include both direct and indirect effects. Id, "Direct effects" are those that result from the activity and occur at the same time and place as the activity. "Direct effects" includes those activities that will be conducted during the lease suspension or extension period. "Indirect effects" include both secondary and cumulative effects. Secondary effects are "effects which result from the activity and are later in time or farther removed in distance, but are still reasonably foreseeable." Id. Cumulative effects "are effects resulting from the incremental impact of the federal action when added to other past, present, and reasonably foreseeable actions, whether taken by MMS or other public or private parties." Id. In this context, reasonably foreseeable indirect effects include the effects of any oil and gas exploration and/or development activities that a particular lessee plans to conduct on OCS lands subject to the lease. In this connection, each lessee prepared for MMS a schedule of activities for each unit or lease, including future exploration and development activities for the 36 OCS leases. Accordingly, the analysis submitted by MMS as part of each CD must include a comprehensive analysis of the effects to both offshore and onshore coastal resources that are likely to occur due to exploration and development activities planned for each unit or lease that will occur as a result of a decision by the MMS to grant the lease suspensions.

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The range of issues to be addressed include, but are not limited to, potential impacts to:

- Marine resources (e.g., hard and soft bottom communities, marine mammals, endangered and threatened species) and, environmentally sensitive habitat areas (including designated sanctuary and monument areas),
- > Water quality,
- > Oil spill prevention and response,
- > Commercial and recreational fisheries,
- Navigational safety,
- Scenic resources,
- > Air quality, and
- > Public access and recreational use of ocean waters and beaches.

For those leases that would be explored and developed using existing infrastructure (i.e., platforms and pipelines) the Commission is concerned about the age of those facilities. Therefore, each CD should also address the stability and structural integrity of existing infrastructure.

We look forward to working with you on these matters. Please feel free to call me to discuss any questions or concerns you may have.

Executive Director



United States Department of the Interior

MINERALS MANAGEMENT SERVICE Pacific OCS Region 770 Paseo Camarillo Camarillo, California 93010-6064

December 17, 2004

Ms. Alison Dettmer California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219

Dear Ms. Dettmer:

Thank you for meeting with MMS staff on December 2 at your offices in San Francisco. Drew, John, and Maurice told me that it was a productive meeting for them, though they acknowledged that there were disagreements over the content of the consistency determinations. I would like to clarify that it is our intention to comply fully with the District Court order and that the consistency determinations we provide the Commission will examine the activities during the suspension period as well as after the suspension period ends, in the same manner as an OCS lease sale.

Although Executive Director Douglas, in his July 19, 2001, letter to the Regional Director of the Pacific OCS Region, listed the range of issues that the Commission would like addressed, he did not specify the enforceable policies that the issues fall under. So that we consider all of the enforceable policies that the California Coastal Commission deems relevant, in the spirit of 15 CFR 930.34(d), we request that the Commission provide us with all of the specific enforceable policies that we should address in our determinations.

We look forward to your response, and should you have any questions, please contact me at (805) 389-7707, or Drew Mayerson at (805) 389-7750.

Sincerely,

Joan Barminski

Chief, Office of Reservoir Evaluation and Production

Pacific OCS Region



CALIFORNIA COASTAL COMMISSION

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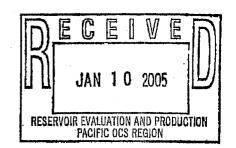


January 6, 2005

Ms. Joan Barminski
Chief, Office of Reservoir Evaluation and Production
Minerals Management Service
Pacific OCS Region
770 Paseo Camarillo
Camarillo, California 93010-6064

RE: OCS Lease Suspensions

Dear Ms. Barminski:



In a letter dated December 17, 2004, you requested that Coastal Commission staff provide the Minerals Management Service ("MMS"), in the spirit of 15 CFR 930.34(d), a list of the specific enforceable policies of California's Coastal Management Program ("CCMP") that apply to the OCS lessees' request for lease suspensions. The MMS is currently preparing 10 consistency determinations that are to be submitted to the Commission in April 2005; the consistency determinations are to be accompanied by an analysis of the proposed activities conformity with the policies of the CCMP. We understand that the consistency determinations will include an analysis of the environmental effects of the activities to be undertaken during an approved suspension period (e.g., shallow hazard surveys) and the effects of future development activities (e.g., exploration and development) if a lease suspension is granted.

As we discussed by phone on January 4, 2005, the specific enforceable policies are found in Chapter 3 of the California Coastal Act. See Cal Pub Res Code §§ 30200-30265.5. We recommend that you focus particular attention on the marine environment, public access, recreation, and industrial development policies of Chapter 3. This is not necessarily an exhaustive list, however. We can't determine with certainty the applicable Chapter 3 policies without having information about each lease's future potential exploration and development scenarios. Since we don't know at this time if approval of a specific lease suspension might lead to a new platform, pipelines, and/or onshore infrastructure, we can't advise at this time, for example, if the land-based policies of the Coastal Act governing beach access, wetlands, and environmentally sensitive habitat areas are applicable.

As you are developing the consistency determinations and accompanying environmental analysis, please don't hesitate to call me as questions arise. Yesterday, by e-mail, I provided Drew Mayerson with a copy of a recent Coastal Commission staff report that is an example of how the Coastal Commission applies the Chapter 3 policies of the Coastal Act to another

January 6, 2005, Letter to Joan Barminski Page 2 of 2

offshore development project. I have also included with this letter a copy of the Coastal Commission's 1983 staff report on MMS's consistency determination for Lease Sale 73. Although this report is over 20 years old, it might offer you some guidance on how the Commission evaluated a similar situation, a lease sale, for conformity with the Coastal Act's Chapter 3 policies.

Sincerely,

ALISON J. DETTMER

Manager

Energy and Ocean Resources Unit

Non-Applicable Policies of the California Coastal Act for Suspension Actions for Nine Federal Units and Lease OCS-P 0409

Section No.	Policy Text	Reason(s) For Non-Applicability
30212.5	Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.	Suspension and hypothetical post-suspension phase activities would not involve the construction and operation of public facilities, or affect existing public facilities. Therefore, Section 31212.5 is not applicable.
	(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following: (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities. (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps. (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities shall not exceed 25 percent of the degraded wetland. (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities. (5) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas. (7) Restoration purposes. (8) Nature study, aquaculture, or similar resource-dependent activities. (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine a	be administrative in nature and would not result in any direct, indirect, or cumulative environmental effects. Suspension and hypothetical post-suspension phase activities would not involve diking, filling, or dredging operations. Therefore, Section 30233 is not applicable.

Non-Applicable Policies of the California Coastal Act for Suspension Actions for Nine Federal Units and Lease OCS-P 0409

Section No.	Policy Text	Reason(s) For Non-Applicability
	For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where such improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities. (d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.	
30235	that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.	would alter the natural shoreline processes or introduce substantial alterations of rivers and streams. Therefore, Sections 30235 and 30236 are not applicable.
30236		
30237	(1) To provide for the conservation of the habitat of fish and wildlife resources. (2) To anticipate and resolve potential conflicts between the conservation of fish and wildlife resources or their	to the Bolsa Chica wetlands in the County of Orange, which are located over 100 miles away. Activities that occur during the suspension and hypothetical post-suspension phase activities would not occur within the vicinity of the Bolsa Chica wetlands or a portion thereof in the County of Orange. Therefore, Section 30237 is not applicable.

Non-Applicable Policies of the California Coastal Act for Suspension Actions for Nine Federal Units and Lease OCS-P 0409

Section No.	Policy Text	Reason(s) For Non-Applicability
	it to the commission for approval. The commission shall approve the plan if it finds it raises no substantial issue as to conformity with the planning and management policies of this chapter. If the plan is approved by the commission, it may be incorporated into the county's local coastal program. (c) All costs of preparation of the habitat conservation plan, including, but not limited to, additional necessary personnel temporarily appointed by the Department of Fish and Game and the State Coastal Conservancy, shall be paid by the petitioner or petitioners. If additional personnel are necessary, the Department of Finance shall review the requests to ensure that the personnel required will be utilized to carry out only the purposes of this section. If the Department of Finance finds the additional personnel required will be utilized only to carry out the purposes of this section, the temporary appointment requests shall be processed and approved by the Department of Finance in an expedited fashion, in no event longer than 10 working days after the requests are made. Furthermore, these requests for temporary appointments shall be exempt from all state personnel hiring requirements and procedures, except for affirmative action requirements, for the review provided in this subdivision by the Department of Finance, and from any personnel hiring limitations during the time period set forth in this section for the preparation of the habitat conservation plan.	
30254.5	development of any sewage treatment plant which is applicable to any future development that the commission finds can be accommodated by that plant consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.	Activities that occur during the suspension and hypothetical post-suspension phase activities would not involve the development of any sewage treatment plant. Therefore, Section 30254.5 is not applicable.
30261	legally permissible, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area. New tanker terminals outside of existing terminal areas shall be situated as to avoid risk to environmentally sensitive areas and shall use a monobuoy system, unless an alternative type of system can be shown to be environmentally preferable for a	No tankering of produced oil is proposed as part of activities that occur during the suspension or hypothetical post-suspension phase activities. All post-suspension phase transport of produced oil would be done via pipeline. Therefore, Section 30261 is not applicable.
30264	expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related	No activities that occur during the suspension or hypothetical post-suspension activities would involve the development or expansion of thermal electric generating plants. Therefore, Section 30264 is not applicable.

APPENDIX E. MITIGATION MEASURES IDENTIFIED

MITIGATION MEASURES IDENTIFIED IN THE FINAL ENVIRONMENTAL ASSESSMENT FOR THE MINERALS MANAGEMENT SERVICE TO GRANT SUSPENSIONS OF PRODUCTION FOR AERA ENERGY LLC'S PURISIMA POINT UNIT – LEASES OCS-P 0426, 0427, 0432, 0435

AIR QUALITY

Mitigation Measures Required by the MMS: To minimize potential adverse impacts to air quality from the shallow hazards surveys, MMS will require that Aera implement the following mitigation measures:

- **AQ-1**. Aera shall prepare and submit to the MMS, an Emissions Reporting Plan 60 days prior to commencement of the surveys. This plan shall provide detailed information regarding the actual vessels to be employed, internal combustion engines used, the duration of their use, the fuel consumed, and the calculated emissions.
- **AQ-2**. Aera shall determine, on a daily basis, fuel use and emissions from both the Shallow Hazards and Biological Surveys. At the conclusion of the surveys, Aera will prepare and submit a summary of the daily and total fuel use and emissions associated with the project to verify compliance with project specific conditions.
- **AQ-3**. Aera shall require the survey vessels and other associated internal combustion engines to use fuel with less than 0.2% sulfur by weight when operating within waters adjacent to Santa Barbara County.

MARINE MAMALS AND TURTLES

Mitigation Measures Proposed by Aera: To minimize potential adverse impacts to marine protected species (i.e., marine mammals and sea turtles) from the shallow hazards and biological surveys, Aera plans to implement the following mitigation measures:

- **MPS-1:** Aera shall ensure that the single 20 in 3 air gun will be operated only in daylight hours to allow observation of nearby marine protected species (and sport or commercial diving operations) by experienced observers. The air gun will be turned off during the period in which the vessel makes its turn to move from one line to the next
- **MPS-2:** Aera shall ensure that a 160 dB impact zone (estimated at 795 m [0.50 mi] radius) around the air gun is established, and the air gun is shut down if marine protected species enter the zone.
- MPS-3: Aera shall use two NOAA Fisheries approved observers on the shallow hazards survey vessel to ensure continuous observation during air gun operations. Monitoring will begin at least 30 minutes before the air gun is turned on. Preferred methods include use of 7 X 50 reticulated binoculars and from a vantage point on the vessel with the best view of the 160 dB impact zone (ideally an unobstructed 360° view)
- MPS-4: Aera shall require that the air gun will be ramped up to allow marine protected species that may have been missed by the observers to move away as the intensity of the SPL gradually increases over several minutes.
- **MPS-5**: Aera shall ensure that if the 160 dB impact zone or survey area cannot be adequately monitored due to weather conditions (e.g., fog) or sea state (greater than Beaufort 4), all operations will be delayed until conditions improve.
- MPS-6: Aera shall require the survey vessel to observe all additional procedures outlined in the MWCP.
- MPS-7: Aera shall ensure that all protective measures established apply for marine mammals and sea turtles.

C-1 April 2005

Mitigation Measures Required by the MMS: Many of the mitigations recommended by the High Energy Seismic Survey (HESS) Team have been incorporated into the proposed action or required by MMS. These measures will minimize potential adverse impacts on marine mammals or federally listed endangered and threatened species from the shallow hazards and biological surveys that would take place during the suspension period. All mitigation measures are obligatory. The MMS will require that Aera shall do the following:

MPS-8: Aera shall submit for MMS and NOAA Fisheries approval at least 90 days prior to the commencement of survey operations a current and final MWCP by which Aera will avoid adversely impacting marine mammals and endangered and threatened species. Aera shall provide the California Coastal Commission a copy of the approved final MWCP before the survey vessel departs for the survey.

MPS-9: Aera shall ensure that vessel operators and personnel aboard the survey vessels are educated of the potential occurrence of marine protected species in the region, and of the importance to avoid "taking" a marine protected species (e.g., loss of valued wildlife; criminal and/or civil penalties). Aera shall require all vessel operators and personnel (survey vessels and scout boats) to be alert for marine protected species.

MPS-10: Aera shall require that any personnel observing a marine protected species during vessel operations (e.g., transiting to or from the survey areas, during survey operations) to immediately report the sighting to the vessel operator and/or watchstanding observer (during shallow hazards survey operations). Communications between vessel operators and observers can be accomplished by hand-held radios. Subcontracted personnel, such as technical personnel tending ROV lines, are also required to comply with these requirements.

MPS-11: Aera shall ensure that all vessel operators (survey vessels and scout vessels) shall, in general, when transiting to and from survey sites, remain at least 300 m (approximately 1,000 ft) from marine protected species to minimize the chance of collision or disturbance. Vessel operators should adhere to the following guidelines: DO NOT: (1) move into the path of a whale; (2) move faster than a whale; (3) make rapid speed or erratic directional changes, unless to avoid collision with a whale or another vessel; (4) get between two whales; or (5) chase whales. All vessel operators shall follow the appropriate procedures established in the approved MWCP.

MPS-12: Aera shall ensure that all vessel operators shall operate their vessels at speeds not to exceed 12 knots to minimize risking collision with whales. In the unlikely even of a watercraft collision with a marine mammal, Aera must immediately contact the NOAA Fisheries Stranding Coordinator, at (562) 980-4017 and the MMS POCS Region Office.

MPS-13: Aera shall consult with the Office of Protected Resources, NOAA Fisheries to determine if a small take authorization or incidental harassment authorization is warranted for the shallow hazards survey. Aera shall obtain the appropriate authorization per NOAA Fisheries advice. NOAA Fisheries advised the MMS that an applicant to the permitting process for harassment authorization should apply at least eight months prior to the intended start date; delays can occur because of other regulatory requirements associated with the ESA and NEPA.) Aera shall conduct the shallow hazards surveys during the mid-October and mid-December window, unless NOAA Fisheries determines via the permitting process that another period is more suitable to avoid impacts to marine mammals. Aera shall provide the MMS with an updated Execution Plan 60 days prior to survey start-up. The updated Execution Plan shall include documentation regarding the outcome of the consultation with NOAA Fisheries concerning incidental harassment authorization and any additional mitigation measures required or recommended by NOAA Fisheries. Aera shall also provide a copy of the updated Execution Plan to the California Coastal Commission.

MPS-14: Aera shall not operate the air gun in federal waters beyond the boundaries of the area for which the survey is permitted. An exception would exist wherein Aera may ramp-up the single air gun in a

C-2 April 2005

buffer area approximately 1 km preceding the immediate trackline to be surveyed inside the permitted area. Aera shall not operate the air gun in state waters without the appropriate approvals from the California State Lands Commission. Observers will document the time and exact location (i.e., latitude and longitude) that the survey vessel passes into or out of federal waters, as well as to whether the air gun is shutdown or activated at the time. Observers shall document any air gun firings occurring within state waters.

MPS-15: Aera shall ramp-up the air gun to operating levels at a rate not to exceed 6 dB per minute to operating level at the start of operations or testing, when beginning a new trackline, or any time after the air gun is powered down below 160 dB.

MPS-16: Aera shall empower observers with the authority to delay ramp-up or require shut down of the air gun whenever marine mammals or endangered or threatened species are observed within or appear likely to enter the 160 dB impact zone.

MPS-17: Aera shall require that if marine mammals or endangered or threatened species are observed within the 160 dB impact zone or proximate area prior to ramp-up, observers shall delay powering up the air gun for 30 minutes and until protected species are believed beyond the impact zone and unlikely to reenter.

MPS-18: Aera shall ensure that observers do not stand watches lasting longer than 4 hours. Two to three hour watches are recommended.

MPS-19: Aera shall empower observers with the authority to shutdown, resume, or continue airgun operations under reduced visibility conditions, based on periodic reevaluation that takes into account the densities of observed marine protected species and variations in visibility allowing for intermittent monitoring of the 160 dB impact zone. When operating under conditions of reduced visibility due to adverse weather conditions, operations may continue unless, in the judgment of the shipboard observers, the 160 dB impact zone cannot be adequately monitored and observed marine protected species densities have been high enough to warrant concern that an animal may enter the impact zone undetected.

MPS-20: Aera shall not allow offshore anchoring of vessels associated with the surveys, unless human harm is likely without anchoring.

MPS-21: Aera shall log all sightings of marine mammals and/or endangered or threatened species. Data to be recorded includes the species, numbers, and behavior of marine mammals and/or endangered or threatened species observed from the vessel or aircraft (if used), as well as those occurring in the 160 dB impact zone, the estimated number of animals that may have entered the 160 dB impact zone, any air gun shutdowns due to marine protected species mitigations, and any behavioral responses to vessel or survey activities. Watchstanding observers are best suited for logging data, however, in the case that observers are not available (e.g., during biological surveys), vessel operators will be responsible for ensuring the data is logged. The task may be delegated to a competent note-taker. Aera shall notify the MMS Pacific OCS Region on a daily basis of any sightings data made for that day and the steps Aera has taken/is taking to avoid adversely impacting protected species.

MPS-22: Aera shall submit to MMS and NOAA Fisheries, no later than 60 days after completion of survey operations, a report of all sightings and data collected as specified in MPS-14 and MPS-21. A summary of the sightings data and effectiveness of mitigation measures shall be included as part of the report. The report may also include recommendations for improving the mitigation measures required to protect marine protected species. Aera shall provide the California Coastal Commission with a copy of the report within two weeks following its delivery to the MMS and NOAA Fisheries.

C-3 April 2005

FISH RESOURCES, MANAGED SPECIES, and ESSENTIAL FISH HABITAT

Mitigation Measures Required by the MMS: To minimize potential adverse impacts to fish resources, managed species, and essential fish habitat from the shallow hazards surveys, MMS will require that Aera implement the following mitigation measures:

MPS-15: Aera shall ramp-up the air gun to operating levels at a rate not to exceed 6 dB per minute to operating level at the start of operations or testing, when beginning a new trackline, or any time after the air gun is powered down below 160 dB.

MPS-20: Aera shall not allow offshore anchoring of vessels associated with the surveys, unless human harm is likely without anchoring.

COMMERCIAL FISHING

Mitigation Measures Required by the MMS: To minimize potential adverse impacts to commercial fishing from the shallow hazards surveys, Aera plans to implement the following mitigation measures:

- **CF-1.** Aera shall require that the vessels comply with the traffic corridors established by the Joint Oil/Fisheries Committee when going to and from the project area. Nautical charts showing the traffic corridors will be distributed to the vessel captains at pre-survey meetings.
- **CF-2.** Aera shall require that contractors keep logs documenting equipment lost overboard and shall notify MMS of all lost items.
- **CF-3.** Aera shall avoid or minimize conflicts and discord with commercial fishermen during and after the shallow hazards and biological surveys. Included in this mitigation is a series of steps below.
- **CF-3a.** Aera shall consult with the Joint Oil/Fisheries Liaison Officer to identify commercial fishing fleets that could be in conflict with the shallow hazards and biological surveys operations and utilize the Joint Oil/Fisheries Committee guidelines for avoiding and reducing conflict between fishing operations and shallow hazards surveys.
- **CF-3b.** Aera shall identify a means to meet and develop the appropriate measures to reduce or avoid impacts on commercial fishing.
- **CF-3c.** Aera shall meet with representatives of the potentially affected fishing fleets to provide information describing the location of the proposed surveys, the area to be traversed, and planned dates of initiation and completion of the surveys to all potentially affected fishermen and to obtain feedback from them on fishing concerns.
- **CF-4.** Aera shall implement a Fisheries Plan including a Joint Use Strategy and Survey Vessel Strategies for avoiding commercial fishing operations.
- **CF-5.** Aera shall time the surveys to avoid major conflict with commercial fishing activities. Included in this mitigation is a series of steps below.
- **CF-5a.** Aera shall contact JOFLO prior to vessel arrival in the survey area to confirm that the salmon fishing fleet is not present or expected to be present in the area.
- **CF-5b.** Aera shall scout the survey area prior to the shallow hazards surveys to ensure salmon fishing is not being conducted.
- **CF-5c.** If JOFLO or scouting reports that the salmon fishing fleet is in the area or expected on scene during the probable duration of the shallow hazards surveys, Aera shall reschedule the shallow hazards survey for a later date. Alternately the survey operators will work with JOFLO to determine if the surveys can be conducted with minimal impact to commercial fishing efforts.

C-4 April 2005

- **CF-5d.** If the shallow hazards surveys are on-going and salmon fishers unexpectedly arrive during the surveys, Aera shall contact JOFLO immediately to determine if the surveys can continue with minimal impact to the fishing effort. If JOFLO cannot be reached, or if JOFLO so advises, the shallow hazards survey effort may be suspended until such time as the salmon fishing effort is over or JOFLO suggests that it can be continued with minimal impact to the commercial fishing effort.
- **CF-6.** Aera shall: 1) notify fishermen in writing 30 days prior and verbally three days prior to the commencement of shallow hazards operations; 2) notify the U.S. Coast Guard, Santa Barbara County Resource Management Department, Joint Oil/Fisheries Liaison Office, California State Lands Commission and the Marine Advisory Newsletter in Goleta; 3) distribute and post notices at area fuel docks, ice supply houses, wholesale fish buyers, and in the Harbor Master's offices of Santa Barbara, Ventura, Oxnard, and Port Hueneme harbors.
- **CF-7.** Aera shall hold pre-survey coordination meetings with MMS and other interested agencies to review environmental and safety issues, including commercial fishing operations in the project area.
- **CF-8.** Aera shall notify Craig Fusaro at the Joint Oil/Fisheries Committee office immediately following completion of survey operations.

Mitigation Measures Required by the MMS: To minimize potential adverse impacts to commercial fishing from the shallow hazards surveys, MMS will require that Aera implement the following mitigation measures:

- MPS-20. Aera shall not allow offshore anchoring of vessels associated with the surveys, unless human harm is likely without anchoring. This mitigation applies to Marine Protected Species and shall apply here.
- **CF-9.** Aera shall, to the extent reasonable and feasible, require contractors to recover all items lost overboard during activities associated with the surveys.
- **CF-10.** Aera shall file an advisory with U.S. Coast Guard for publication in Local Notice to Mariners at least 14 days prior to commencement of survey operations.
- **CF-11.** Aera shall notify MMS on a daily basis of any conflict or contact with commercial fishermen (who, what, where, when) and the steps Aera has taken/is taking to resolve the conflicts during and/or after the surveys.
- **CF-12.** Aera shall require that contractors use a scout boat captained by a local, knowledgeable fisherman for the shallow hazards surveys, to avoid conflicts with commercial fishermen including fixed gear (trap) fishing as well as with other users of the OCS.
- **CF-13.** Aera shall educate all key vessel personnel regarding commercial fishing activities, conflict avoidance, and record keeping procedures and shall ensure that all offshore personnel involved in shallow hazards and biological surveys attend the Western States Petroleum Association's Fisheries Training Program.
- **C-14.** Aera shall submit for MMS approval at least 90 days prior to the commencement of shallow hazards surveys operations a Final Fisheries Contingency Plan by which Aera will avoid or minimize conflicts with commercial fishing. Include details of coordination with JOFLO and fishermen.
- **CF-15.** Aera shall submit to MMS no later than 60 days after completion of shallow hazards survey operations a report of Aera compliance with its Final Fisheries Contingency Plan and the success or failure of its plan to avoid or minimize conflicts with commercial fishing. Include supporting information and details of coordination with JOFLO and fishermen.

C-5 April 2005