

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

Summary

It is not known whether the undeveloped leases addressed by this study will actually be developed. The federal government could terminate the undeveloped leases offshore of northern and western Santa Barbara County, either through a lease buyback program or through lease expiration. In either of these cases, no additional offshore oil and gas development would occur, and the question of where associated onshore facilities could best be sited would become moot.

This study analyzes several onshore processing options for the potential development of the leases which exist offshore of northern Santa Barbara County. The properties of the crude oil from the southern leases would allow production from those leases to be processed at Las Flores Canyon, an existing well-sited facility. However, a risk analysis comparing the use of Las Flores Canyon (using the Point Arguello Pipelines and new pipelines from the Gaviota site to Las Flores Canyon) with the use of the Lompoc Oil and Gas Plant is necessary to determine which processing option poses the least risk. This analysis requires specific project descriptions and could not be accomplished with the limited information available at this time.

The heavier crude from the northern leases would require processing locations that have good access to rail and truck transportation options. Given the site characteristics of the existing facilities, a new facility in a better location would be preferable for processing the crude from the northern leases.

Processing Locations and Technical Considerations

Southern Leases: Oil and gas produced from the undeveloped OCS leases in the southern Santa Maria Basin (Bonito, Sword, and Rocky Point) could be processed on the South Coast at either the Gaviota or Las Flores Canyon site, or could be processed at the Lompoc Oil and Gas Plant. There is also the possibility of some combination whereby production from the Rocky Point and Sword Units would be processed on the South Coast, and Bonito production would be processed in Lompoc. The environmentally preferred processing alternative appears to include maximizing the use of the existing facilities and potential capacity at the consolidation site within Las Flores Canyon to process production from the southern undeveloped leases.

Northern Leases: Assuming full development of the undeveloped leases, a new facility would likely be required to process the heavy oil from the Lion Rock field and subsequent development from the northern Santa Maria Basin. Such a new facility could either be co-located at an existing facility, or constructed at one of the sites identified in this report. It is possible that the existing consolidated oil and gas processing facility at the Lompoc Oil and Gas Facility could be expanded to process the heavier oil. However, technical considerations may limit any expansion at that site. A majority of the end product after processing the heavier oil from the northern leases may be asphalt, requiring additional processing at an asphalt refinery with the need for multiple transportation options (pipeline, truck, and rail). This transportation requirement will limit the siting options for any new facility constructed for the purposes of serving the northern Santa Maria Basin development. Much of the product from this area is not

expected to be able to be transported by pipeline and therefore must be transported by truck or rail. Therefore, to maintain multiple options, any new facility would require access to the Union Pacific Railroad. This requirement eliminates consideration of much of the eastern portion of the Study Area.

Future Land Use Compatibility

The earliest that new production would commence from the northern undeveloped leases, if approved, would be sometime after 2008. Production from some units (Pt. Sal, Santa Maria, and Purisima Point), if approved, would not be likely to begin until after 2015. Production from these leases would then continue for another 25-30 years. It is difficult to predict technical and economic details for such a long-term project. Therefore, the analysis of what may occur from 2010-2045 involves some uncertainty. However, it is clear that if a new facility were constructed to serve the heavy crude of the northern Santa Maria Basin, such a facility could have a very long lifespan. This is an important aspect when considering the siting of a new facility or the refurbishing of an existing facility with undesirable siting aspects. Urban expansion into the rural areas over the next 30 years could further exacerbate land use conflicts between hazardous facilities and residents. Such conflicts are evident in the Vandenberg Village and Mission Hills areas where residents live close to the Point Pedernales pipelines, the Lompoc Oil Field, and the Lompoc Oil and Gas Plant. This is also evident in Ellwood, on the south coast, west of Goleta, where there are compatibility conflicts between an historic oil and gas processing site and increased residential, visitor-related, and recreational growth. Any future siting of facilities should take into consideration the potential for population expansion and encroachment into areas surrounding a facility and its pipeline routes.

Physical and Environmental Considerations

The most important siting consideration for new oil and gas development is public safety and potential exposure to hazardous materials. For this reason, all urban areas, population centers, and public lands were eliminated from consideration for oil and gas facility siting. Other safety factors including limiting long expanses of sour gas pipelines which would strongly discourage siting a facility east of the major transportation corridors or near the urban areas of Guadalupe, Santa Maria, Orcutt, Los Alamos, and Lompoc. Other considerations such as potential visual impacts, noise and odor impacts, and general land use compatibility encourage eliminating these areas. The Study Area contains enough rural, unpopulated land in the North County to be able to disregard any urban land from consideration.

The rural areas of the siting study contain areas of high agricultural, scenic and biological value. The policy of Santa Barbara County is to discourage the conversion of any productive agricultural operation, and therefore all lands meeting the definition of Prime, Statewide Importance, Unique, and Local Importance were eliminated from consideration. For the purposes of siting a new facility, areas that have already been disturbed would have a lower scenic and biological value. Areas that are the least visible from public areas provide the best possible sites for facility location. Similarly, the most biologically degraded or disturbed provide the best possible sites for consideration.

7.2 RECOMMENDATIONS

These final recommendations incorporate input from the final analysis, and reflect input from the public and the Planning Commission.

1. If additional production from the Southern Santa Maria Basin (Rocky Point, Bonito, and Sword Units) is approved, production from these units should be transported to Las Flores Canyon for processing.¹ The use of existing facilities and potential additional capacity should be maximized at this well-sited consolidated facility. The Gaviota facility on the South Coast could be used for processing if the conclusions of the Gaviota R-1 analysis indicate that extended use of the facility should be allowed. However, the Las Flores Canyon is considered a preferred processing location given the siting characteristics of the two facilities.
2. Significant modification or physical expansion of the Santa Maria Asphalt Refinery to accommodate new offshore production should be discouraged due to the significant constraints and land use conflicts associated with the site. The site is constrained by its location overlying the Santa Maria groundwater basin and upwind of the City of Santa Maria. The Asphalt Refinery is also very visible and expansion may involve the removal of productive agricultural land or wetlands.
3. The Lompoc Oil and Gas Plant should not be considered as a processing location for the heavy crude from the northern leases. Accommodating this additional production would require significant physical expansion and extension of the life of the facility. The fate of the Lompoc facility for processing oil and gas from other new sources of production will be investigated in detail as part of the Environmental Impact Report for the proposed Tranquillon Ridge Project. That project would require both facility modification and extension of the life of the Lompoc facility for a period potentially exceeding 20 years.
4. All new processing facilities associated with the northern undeveloped offshore leases (Lion Rock Unit, Santa Maria Unit, Purisima Point Unit, Pt. Sal Unit, and OCS Lease #0409), including asphalt refining functions, if necessary, should be collocated at one site². Estimated production profiles from the Lion Rock Unit suggest that there may be need for an asphalt refinery due to the heavy (high viscosity) nature of the crude oil from that area. This analysis identifies several environmental constraints associated with the Santa Maria Asphalt Refinery and does not support expansion of that facility to accommodate offshore production.
5. The Casmalia East and Casmalia West sites are strongly preferred for any future onshore facilities needed to process new offshore production from the northern leases. If an operator applies to develop a new oil and gas processing facility or asphalt refinery at another site within the Study Area, the required environmental document should fully evaluate the Casmalia West or Casmalia East sites as potential alternative sites. Development of new oil and gas facilities at Cat Canyon and Miguelito Canyon are less preferred due to the constraints associated with transportation products into and out of those sites.

¹ A comparative risk analysis needs to be completed comparing specific project descriptions and pipeline routes. However, the Las Flores Canyon site is considered to be the best processing site in terms of location.

² This recommendation pertains to refining that occurs within the Study Area.

6. Onshore facilities supporting new offshore oil and gas development, including pipelines to potential onshore processing sites, should be required to avoid the most constrained lands within the Study Area. Areas in which oil and gas development should be precluded include the Guadalupe Dunes, Pt. Sal / Mussel Rock / Lion's Head Area, all urban areas, all cultivated agricultural areas, and wetlands.

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