

5.0 ENVIRONMENTAL CONSTRAINTS

The following constraints for oil and gas facilities were analyzed: public safety and hazardous materials, geology and hydrology, agricultural resources, biological resources, visual resources, cultural resources, land use, public services, noise, circulation, and air quality. Each issue was analyzed with respect to the Study Area and impacts commonly caused by oil and gas facilities. Each section also contains a list of relevant policies related to development.

The public safety section focuses on potential public and environmental safety hazards associated with oil and gas processing and storage. This section also addresses the ability to minimize the risk to public safety by mitigation of these hazards through siting a processing facility and methods of hydrocarbon storage and transportation.

The section on geology and hydrology provides information pertaining to geologic hazards and constraints that might affect decisions regarding the location of future processing facilities and appurtenances that may be proposed by applicants within the petroleum industry. The information presented in this section is intended to enable preliminary analysis of geologic considerations for proposed new facilities, or possible expansion of existing facilities such as the Pt. Arguello Project Gaviota Processing Plant, the Lompoc Oil and Gas Plant, or the Santa Maria Asphalt Plant.

The section on agriculture identifies significant agricultural resources in the Study Area. This section also describes the agricultural history and trends of the Study Area. The agriculture section discusses the County's policies regarding the preservation of agricultural lands.

The biological resources section provides an overview of biological resource sensitivities and constraints for the onshore portion of the Study Area. Its purpose is to identify locations that should be avoided in siting future onshore oil and gas facilities, or those that may pose significant permitting and mitigation challenges should such development be pursued.

The visual resources section includes a description of the regions in the Study Area and the important viewsheds in those regions, as well as a list of scenic corridors. The section includes photographs of each existing facility as well as a description of the visual impacts of each. The section also contains a discussion of environmentally preferred locations to site oil and gas facilities.

The section on cultural resources describes the types of cultural resources that are known to be present in the Study Area. In general, preferable sites for future development would include those where cultural resources are absent. Secondly, sites that have been previously disturbed or have already been studied and determined to be culturally insignificant could be considered for development. The section explains typical ways cultural resources are mitigated when development occurs on a site with cultural resources.

The land use section includes the major land uses within the regions of the Study Area. Land uses that are compatible with oil and gas facilities are described. Areas which, based on their land uses, should be excluded from oil and gas facility siting are identified in this section.

Public services include police, fire protection, solid waste, health care facilities, and utilities. Fire protection and police are the most important of these facilities with regard to oil and gas facilities. This section analyzes the public services currently available in the Study Area and the potential need for increased services if an oil and gas facility is sited in the area.

The noise section includes the list of noise sensitive receptors identified in the Santa Barbara County Comprehensive Plan. The section also explains common producers of noise from oil and gas facilities. It describes ways to mitigate noise and to site facilities to avoid causing noise impacts.

The circulation section addresses the potential constraints to roadways and surface transportation that are affected by oil and gas processing facilities. The most significant circulation issue raised by oil and gas development is the need for safe transportation of natural gas liquids. The siting of a facility would not necessarily affect how many trips are necessary in and out of a facility, either during construction, abandonment or normal operation. However, the siting of a facility should consider the potential transportation impacts to the local roadways.

The air quality section explains the factors that determine the effects that oil and gas development has upon air quality. Meteorology, regulatory requirements, and mitigation for pollutant emissions play significant roles in how a project may affect local and regional air quality. Information presented in this section outlines the prevailing meteorological conditions in Santa Barbara County, the current regulatory environment, and regional air quality trends.

North County Siting Study

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