CALIFORNIA
ENERGY
COMMISSION

2008 BEST PERMITTING PRACTICES GUIDELINES FOR LIQUID TRANSPORTATION FUELS INFRASTRUCTURE

STAFF REPORT

May 2008

CEC-700-2008-002SF

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Acknowledgments

The *2008 Best Permitting Practices Guidelines for Liquid Transportation Fuels Infrastructure* was prepared with the support and assistance of the following individuals in the Energy Facilities Siting Division.

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ABSTRACT

The *2008 Best Permitting Practices Guidelines for Liquid Transportation Fuel Infrastructure* provides recommendations to local, state, and federal agencies, as well project proponents, on approaches and tools to streamline and coordinate the permitting process for petroleum and other liquid transportation fuel infrastructure projects, with no reduction in environmental protection. The guidelines do not recommend changes to laws, regulations, or agency jurisdictions or responsibilities. The guidelines were developed in response to recommendations in the *2005 Integrated Energy Policy Report*. They are based on transportation fuel forecasts developed for the *2007 Integrated Energy Policy Report*, a review of the existing regulatory framework for development projects in California, and advice and information provided by more than 300 stakeholders and agency representatives.

Keywords: petroleum, transportation fuels, petroleum infrastructure, permits, permitting practices, regulatory framework, permitting processes, refineries, marine terminals, fuel storage facilities, environmental impact report, environmental impact statement, California.

Executive Summary

The California Energy Commission (Energy Commission) is responsible for proposing policies to ensure affordable, reliable and environmentally sound supplies of petroleum, other fuels, and electricity. The *2005 Integrated Energy Policy Report* (*IEPR*) calls for improving and expanding petroleum infrastructure to meet California's needs in the next 20 years. The *2005 IEPR* found, based on public hearings in 2004 and 2005 (Order Instituting Investigation, Docket # 04-SIT-1), that regulatory and permitting coordination among a potpourri of local, state, and federal agencies presented a barrier to infrastructure expansion. To address this problem, the Energy Commission recommended initiating an effort to identify and develop permitting guidelines for petroleum infrastructure projects, with no reduction in environmental standards.

In 2006 Energy Commission staff embarked on developing best permitting practices guidelines for petroleum and other liquid transportation fuel infrastructure, including refineries, storage facilities, onshore pipelines, and marine terminals. Guidelines development considered the number and location of existing facilities, transportation fuel and infrastructure forecasts, the existing regulatory framework, comments and information from staff outreach efforts to more than 300 agency, local government, industry and community stakeholders, and recommendations that could be implemented within the existing regulatory framework and processes.

There are 22 refineries and about 52 related storage/onshore distribution facilities operating in California. Most of the facilities are located in the Los Angeles Basin, San Francisco Bay Area, and in the San Joaquin Valley. The nearly 5,560 miles of onshore petroleum product pipelines in California cross 228 cities and 31 counties. Most of California's 51 marine terminals that handle petroleum and clean fuels are located in Southern California and the San Francisco Bay Area.

Forecasts of needed infrastructure additions are based on petroleum and other transportation fuel forecasts presented in the Energy Commission final staff report *Transportation Energy Forecasts for the Integrated Energy Policy Report (CEC-600-2007-009SF).* Staff is projecting that overall demand for transportation fuels will continue to increase at rates marginally greater than indicated in the *2005 IEPR*. This increase in demand leads staff to conclude that specific kinds of infrastructure capacity expansions must occur to prevent substantial economic losses to state consumers.

Many energy-related projects require local, state, and federal authorizations. In all, and depending on the type of project, a new or expanded facility may require from 15 to 50 regulatory agency permits and other authorizations. A typical permitting process for these types of facilities ranges from nearly six months (for a non-emergency project exempt from California Environmental Quality Act [CEQA] requirements) to more than two years for a project that must comply with CEQA and the National Environmental Policy Act (NEPA). In addition, many projects demand an involved pre-application phase that can take from 3.5 months to a year or more, depending on a project's status and changes made as a result of consultations between agencies and project proponents.

Conclusions from the *2005 and 2007 IEPR* processes and recent discussions with agencies and stakeholders regarding petroleum and other transportation fuel infrastructure are as follows:

- California will need new/improved transportation fuels infrastructure over the next 10 to 25 years.
- There are regulatory challenges at the state, regional, and local levels of government that delay permitting of transportation fuel facilities.
- Most problems are with the permitting processes, rather than the laws that guide those processes.
- Most of the problems can be addressed by 1) clearly and accurately defining the issues and 2) balancing competing interests when designing/maintaining environmentally and technologically robust and safe infrastructure.
- There is industry and agency acknowledgement that better coordination and information transfer will facilitate permitting.
- Some agencies/local governments have best permitting practices that may serve as models for others.

Regulatory and permitting issues raised in 2004 and 2005 and by the more than 300 contacts in 2006 and 2007 can be summarized as follows:

- Incomplete applications.
- Disagreement or confusion on applicability of laws.
- Lack of coordination among agencies.
- Inexperienced staff.
- Agency consultation/approval delays.
- Inconsistent agency decisions.
- Balancing community and environmental impacts and the state's need for continuing supplies of transportation fuels.
- Community and environmental concerns draw out CEQA project review process.
- Lack of information on statewide importance of projects.

The following recommended best permitting practices guidelines for petroleum and other liquid transportation fuels infrastructure are: 1) offered to agencies, project proponents, and stakeholders; 2) focus on anticipating and acting on issues early in regulatory processes and improving coordination and cooperation; and 3) do not suggest changes to laws, regulations, or agency jurisdictions or responsibilities. Energy Commission staff found through its investigations that many permitting issues are raised on an individual project or permit basis

and that the identified problems and challenges can be addressed by 1) proactive planning by project proponents, and 2) modifying individual agency processes.

Recommendations

Background for each recommendation is provided in Chapter 4: Issues and Recommended Guidelines.

Make use of pre-application meetings. Energy Commission staff recommend applicants request and agencies offer and pursue at least one pre-application meeting before submitting of a permit application for a project. Staff suggests that project applicants consider scheduling these meetings a minimum of one year and three months before the start of anticipated construction. Depending on the project's complexity and expected level of public controversy, project proponents have initiated such meetings as much as two to three years before the start of environmental review processes to allow for changes in project design. Meetings are most productive if the scope of the project is clearly defined by the applicant.

Identify the key responsible, trustee, and cooperating agencies. It is critical to identify the responsible, trustee, and cooperating agencies that will likely review and issue authorizations for a project. The identification can be done through pre-application meetings and using staff and consultant knowledge/experience early in the project design process.

Provide timely CEQA/NEPA document consultations and comments. Timely and complete environmental document consultations and comments by trustee, responsible, and coordinating agencies 1) will facilitate lead agency decision-making on the documents, 2) notify project proponents of issues that will likely be raised by fish and wildlife and coastal management agencies during their permitting processes, and 3) may expedite issuance of permits.

Agency partnering. Consider partnering between the lead and a responsible agency during preparation of environmental documents and the project permitting process, especially when one or more critical issues focus on a single environmental topic, such as air quality. Partnering agreements or memorandums of understanding (MOUs) are used to formalize the relationship. These documents specify the purpose of the agreements, legal and regulatory roles of the partnering agencies, coordination of project review schedules, and other arrangements.

Coordinate agency reviews. Staff recommends lead, responsible, trustee, cooperating, and interested agencies coordinate their review of projects and/or environmental documents to avoid duplication of effort and expedite decisions on the documents and related permits.

Establish joint-agency working groups. Establishing an interagency working group can effectively educate agency staff on statewide policy issues surrounding proposed major and complex petroleum or transportation fuel projects that involve multiple regulatory jurisdictions. Staff recommends the main purpose of such a group be to inform agency staff on the policy implications of particular transportation fuel projects or activities. Successful groups have been facilitated by an agency or entity that does not have direct regulatory authority over the projects. The group could 1) facilitate communication among the regulatory staffs, 2) serve as an information transfer forum to discuss the technology and major statewide environmental and

energy policy issues raised by a project, and 3) prepare agency staff for public discourse on projects.

Establish, coordinate, and adhere to project timelines/milestones. Develop a master schedule for a project that addresses the environmental analysis and permitting phases and include dates for major milestones. Through coordinated scheduling, regulatory agencies involved in authorizing a particular project can identify the sequencing of permits, better assure adherence to State Permit Streamlining Act (PSA) time limits, and provide advice to applicants on scheduling submittal of land and water resource surveys and permit applications to project applicants.

Consider expedited agency reviews. Agencies should consider offering expedited reviews of permit applications to project proponents, when appropriate and feasible. Factors to consider may be the potential impacts on the state's supply of transportation fuels, as well as the scope and complexity of issues raised by a project.

Establish or maintain buffers around facilities. It may be prudent in some communities for local governments to consider limiting expansion of residential or other incompatible uses around existing, functioning, and planned facilities. Limiting such expansions may require strategic assessment of land use patterns and the need to balance approvals for transportation fuel facilities and residential, open space, recreational, and commercial development.

Facility master planning. Regulators and project proponents should consider approval and use of a master plan for a number of facility improvements rather than seeking permits for each improvement.

Ensure adequately trained staff.

- Regulatory agencies and project proponents should consider training staff if knowledge and experience levels warrant the additional education and information exchange.
- Energy Commission staff should consider facilitating workshops and training forums for agency and stakeholder participants, as appropriate.

Seek staff with energy facility siting experience during hiring processes. Consider requiring energy facility siting expertise as part of the job descriptions for certain positions within an organization.

Clearly identify "chain of command."

- Identify responsible staff representatives, project managers and primary points of contact within agencies and project applicant teams before or at pre-application meetings, or as soon thereafter as possible to facilitate timely information exchange.
- Identify roles/responsibilities of staff and consultants and keep them up-to-date. Specify decision-making authorities of primary points of contact and know who else to consult when issues or questions arise that identified individuals cannot address. Provide responses/information in a prudent, accurate, and timely manner.

Create and use clear criteria for regulatory decisions. Consider adopting criteria to guide decision-making on projects throughout an agency, address agency mandates and policies, and ensure consistent treatment of project proposals.

Publish model agency decisions or guidance documents. Agencies should consider posting on the Internet or otherwise distribute decisions to known interested parties (including agency staff) that would serve as models for future actions on similar projects.

Implement governmental relations and public outreach efforts. Regulatory agencies and project proponents have found that robust governmental relations and public outreach programs for an organization, as a whole, and/or designed for a particular project help to identify and address community, environmental, and agency concerns.

Continue and expand the Energy Commission's participation in project regulatory processes. Consider expansion of the Energy Commission's efforts to inform regulatory agencies of transportation fuel demand, supply and infrastructure forecasts, and related statewide energy policies including sound environmental and security measures that meet regulatory agency mandates. Consider having Energy Commission staff available to work with ports, other local governments, local permit appeal entities, and state and federal regulators to address the identified challenges and issues in a balanced manner.

Proposed next steps for the Energy Commission being an active participant in petroleum and other transportation fuel infrastructure regulatory processes are summarized below:

- Establish an Energy Commission-led interagency working group for addressing major statewide petroleum and other transportation fuel infrastructure issues.
- Assess the Energy Commission's resources for an expanded and continuous informational transfer role in petroleum and other transportation fuel project environmental and regulatory processes.
- Consider local agency requests for financial assistance or training to enhance their regulatory staff capabilities. Local governments suggested use of grants or Energy Commission staff to assist their regulatory efforts.
- Assess the Energy Commission's role in promoting land use policies that address balancing approvals for transportation fuel facilities and potentially incompatible development and land uses.

Chapter 1: Introduction

Purpose

The California Energy Commission (Energy Commission) is responsible for proposing policies to ensure affordable, reliable, and environmentally sound supplies of petroleum, alternative fuels, and electricity to meet California's growing energy needs. The *2005 Integrated Energy Policy Report (IEPR)* calls for improving and expanding petroleum infrastructure to meet California's transportation fuel needs in the next 20 years. The Commission recognized these improvements would be needed despite working toward reducing the state's long-term dependence on petroleum fuels through successful energy efficiency programs, continued technological advances, and development of new energy supplies. To promote development of the forecasted infrastructure improvements and expansions, the Commission found that developing best permitting practices guidelines for petroleum infrastructure facilities would address a potential barrier to meeting the state's rising demand for petroleum fuels. The *2007 IEPR* transportation fuel forecasts predict that expansion of infrastructure will continue to be needed to meet expected demand for petroleum and other transportation fuels. As a result of the forecasts, the *2007 IEPR* and the *State Alternatives Fuels Plan (CEC-600-2007-011-CMF)* support expansion of necessary and environmentally sound infrastructure for petroleum and alternative transportation fuels. This report will recommend to state and federal agencies, local governments, project proponents, and other stakeholders best permitting practices guidelines for petroleum and other liquid transportation fuel infrastructure.

Organization of this Report

Development of guidelines requires some understanding of transportation fuel forecasts, the regulatory structure in California for permitting industrial energy facilities, and concerns about construction and operation of petroleum infrastructure facilities. Chapter 2 provides an overview of the existing transportation fuel infrastructure network. The chapter summarizes Energy Commission transportation fuel forecasts and related forecasts for the facilities needed to receive, refine, store, and transport the fuels. The chapter also summarizes concerns regarding the future of the transportation fuel infrastructure. Chapter 3 focuses on the industrial energy facility permitting structure and process in California. Chapter 4 describes the permitting and regulatory issues raised by the Energy Commission and more than 300 agency, local government and stakeholder representatives in 2006 and 2007. Most importantly, the chapter offers recommended guidelines and tools for addressing the issues. Chapter 5 concludes with suggested next steps.

Chapter 2: Liquid Transportation Fuels Infrastructure, Forecasts, and Concerns

California Transportation Fuels Infrastructure

Refineries and storage facilities, onshore pipelines,[1] and marine terminals make up the majority of California's liquid transportation fuel infrastructure used for importing, storing, refining, and distributing unrefined and refined fuel products to consumers. Descriptions of the facilities and the Energy Commission 2007 transportation fuels forecasts are provided below.

Refineries and Storage Facilities

Most of California's refineries, tank storage facilities, and related onshore terminals that handle transportation-related petroleum, alternative and clean fuels are located in Southern California, the San Joaquin Valley, and the San Francisco Bay Area. At the present time, 22 refineries and about 52 onshore storage and distribution facilities operate in California.

Certain refineries in California have filed permit applications to expand their facilities. For example, planned expansions at the ConocoPhilips refinery in Rodeo and the Chevron refinery in Richmond call for new facilities for producing relatively clean-burning gasoline and ultra-low-sulfur diesel fuels that meet requirements established by the California Air Resources Board (ARB). Other refineries may file similar expansion plans in the future.

Refineries in California produce many different commodities from crude oil, including transportation fuels. The six groups of refined product include:

- Liquefied petroleum gases, such as butane and propane
- Gasoline
- Jet fuel
- Distillates, including diesel and high-sulfur distillate fuel oil
- Residual fuel oil, used to power ships and generators
- Miscellaneous products

To process the products, various process units in a refinery perform one or more of four fundamental functions:

- Separation of feedstock, that is, crude oil, into distinct streams of lighter and heavier hydrocarbons (equipment/facilities: distillation column, fractionators, splitter)

[1] Subsea pipelines are generally used to transport crude oil and gas from production platforms or islands to shoreside processing facilities, marine terminals and onshore pipeline networks. The oil and gas production infrastructure is not a subject of this report.

- Conversion of petroleum molecules by cracking and reforming (equipment/facilities: catalytic cracking, hydrocracking and coking units)
- Purification of products (equipment/facilities: hydrotreaters, sulfur recovery plant)
- Blending (mixing) of hydrocarbon streams into finished products (equipment/facilities: storage tanks, process vessels)

Refineries require support processes that provide utilities such as cooling water, electricity, steam, and hydrogen. These processes generally require cogeneration facilities, boilers, and furnaces for continuous electricity and steam. Refineries also manage wastes in wastewater treatment systems or collect solid wastes for offsite disposal. Part of the waste management process includes recovery and recycling of hydrocarbons. These hydrocarbons are "fed" back into the processing units.

Refinery facilities include storage tanks used for several purposes: 1) storing crude oil before processing, 2) storing intermediate petroleum compounds from a process unit, 3) storing blending components used for creating finished products, and 4) holding finished products before distribution. The tanks store crude oil, clean fuels, finished gasoline, diesel fuel, and blend stocks. These tanks range in size from 30,000 barrels to 80,000 barrels. The tank facilities are connected or adjacent to onshore and marine terminals. Product in the tanks is generally transported via pipelines to/from the refineries or distribution facilities. The product is stored for transport and distributed throughout the state by pipeline, rail, or truck. Some of the produced product leaves the state from marine terminals in the Bay Area or Los Angeles Basin or by pipeline to Arizona and Nevada. The marine facilities also handle imported product transported to California by marine tankers.

Figure 1 depicts a refinery and storage facility in California. Figure 2 (page 12) shows the general locations of refineries in California.

Figure 1: Refinery/Storage Facility

Source: Google Image 2007

Onshore Pipelines

There are nearly 5,560 miles of onshore petroleum product pipelines in California. Pipelines range in size from 2 inches to 42 inches in diameter. They carry crude oil (generally larger diameter pipelines linking oil fields in the southern San Joaquin Valley and terminals in the Los Angeles and San Francisco Bay areas) and refined products (including gasoline, jet fuel, clean fuels, and other products). The size of refined products pipelines depend on type of product, length and overall capacity of the pipeline. Figure 2 shows the major pipeline and petroleum refinery network in California.

Figure 2: California Pipeline and Refinery Network

Source: California Energy Commission 2007

Onshore petroleum products pipelines are sited either on the ground, above on trestles or other elevated structures, or buried. Streams and other water body crossings are generally trenched

through or drilled beneath the channels. The latter option is generally preferred to avoid contact with the water body during construction.

Marine Terminals

Most of California's 51 marine terminals that handle petroleum and clean fuels are located in Southern California and the San Francisco Bay Area. Several are located in Humboldt County (north of San Francisco - four terminals) and along the central and south central coasts (nine).

Stationary marine terminals include piers or offshore moorings for tanker/barge loading/unloading. Pipelines (whether above ground or subsea) connect to an upland storage, transportation or refinery facility. The on-property onshore distribution network is usually composed of pipelines and/or rail or truck terminals. According to *An Assessment of California's Petroleum Infrastructure Needs in Support of the 2005 Integrated Energy Policy Report (CEC-600-2005-009)*, an average-size facility in California handles about 5 million barrels annual throughput for clean fuels and 20 million barrels annual throughput for crude oil. Very large facilities can handle up to 50 million barrels annual throughput. Figure 3 is an example of a marine terminal with an offshore pier and trestle. Pipelines linking the vessel dock to shore are located on the trestle.

Figure 3: Marine Terminal Facility

Source: Google Image 2007

Energy Commission Forecasts

Transportation Energy Forecasts for the 2007 Integrated Energy Policy Report (CEC-600-2007-009SF) provides transportation fuel import forecasts that will be used as a basis for the infrastructure needs forecasts. Energy Commission staff found the following:

"The outlook for the adequacy of California's transportation fuel import infrastructure has worsened slightly since publication of the *2005 IEPR*. Staff projections indicate that overall demand for transportation fuels will continue to increase at rates marginally greater than indicated in that document. Staff expects that this growing demand will exceed likely infrastructure capacity expansions currently under construction or to which the industry is committed. Numerous uncertainties can affect these estimates of future import infrastructure needs, including fuel prices; rates of adoption of new technologies and alternative fuels; demand for fuels in California and neighboring states; decline rates of California oil production; refinery and other infrastructure capacity expansions; and greenhouse gas (GHG) reduction rules and standards. However, this potential shortfall in the ability to provide transportation fuels leads staff to conclude that certain specific kinds of infrastructure capacity expansions must occur to prevent substantial economic losses to state consumers."

In *CEC-600-2007-009SF* staff further found the following regarding fuel demand, imports, and refinery and storage tank capacity forecasts.

"--Staff estimates that total **gasoline, diesel, and jet fuel demand** will grow to between 26.3 billion and 33.1 billion gallons (627 to 789 million barrels) per year by 2030, an increase of 13.5 to 42.5 percent, from levels of 23.2 billion gallons per year in 2005.

--**Imports of crude oil** into California are expected to rise 19.9 to 33.8 percent (81 million to 138 million barrels per year) from 2005 levels by 2015 and 37 to 65.2 percent (151 million and 266 million barrels per year) by 2025.

--Staff expects combined **imports of gasoline, diesel, and jet fuel** to increase by 18.9 million barrels per year by 2015 and 11 million barrels per year by 2025 in the low fuel demand case compared to 2005 levels. Combined fuel imports are estimated to increase by 115.5 million barrels per year by 2015 and 199.7 million barrels per year by 2025 in the high fuel demand case.

--To meet **neighboring state demand** for transportation fuels, pipeline exports to Nevada will grow by 28.7 to 36.3 million barrels per year by 2025, an increase of 50.4 to 63.7 percent. Exports to Arizona are expected to increase by 29 million barrels per year (59 percent).

--Staff expects California **refinery capacity growth** ("refinery creep") to produce between 20 million and 48 million barrels per year of additional transportation fuels by 2015 compared to 2006 levels (an increase of 3.3 to 8.1 percent). By 2025, the increased output of transportation fuels is forecast to increase by 43 million to 107 million barrels per year compared to 2006 (an increase of 7.2 to 17.9 percent).

--Staff estimates that the number of **additional product tanker arrivals** in California per year by 2025 could range from as few as 37 to as many as 1,331 depending on assumptions about product demand and size of tanker loads. Estimates of the number of additional crude oil tanker arrivals in the state range from 76 to 380 per year depending on assumptions about vessel loads, state oil production, and refinery capacity additions.

--Staff estimates additional **storage tank capacity** needed to meet California product storage requirements by 2025 to be between 0.9 million and 16.8 million barrels depending primarily on

assumptions about demand. Estimates of additional state crude oil storage capacity needed by 2025 range from 6.6 million to 22.2 million barrels.

--Assuming planned capacity additions are built, **crude oil import capacity** in the Los Angeles Basin will be sufficient through 2015, but in the higher imports case, more capacity would be required by 2025.

--Incremental **imports of ethanol** could grow by 2025 to as much as 661 million gallons (15.9 million barrels) per year more than 2006 import levels of 906 million gallons, with high gasoline demand and limited in-state growth of ethanol production (an increase of 73 percent). Conversely, assuming lower gasoline demand and higher state ethanol production, ethanol imports could actually decrease by 174 million gallons (4.1 million barrels) by 2025 (a decrease of 19.2 percent compared to 2006)." (emphasis added)

The Energy Commission staff forecast for expanded transportation fuel storage requirements assumes that projects already in the permit approval process or those that are in the midst of construction actually would begin operations within the forecasting period. The forecasts do not project a need for new refineries but estimate that refineries in California will expand production of petroleum fuels at an average rate of 0.7 percent per year due to refinery creep (gradual increase in distillation capacity, occasionally conducted during periodic facility maintenance consistent with environmental requirements).

Energy Commission staff forecasts that expansion of the pipeline network will occur through 2025. For example, Kinder Morgan Pipeline announced recently that it has expansion plans for its pipeline between Colton, California, and Las Vegas, Nevada. The federal government is in the process of proposing designation of energy transmission corridors (which could include pipelines) generally along: the California/Mexico border; north and south of the Los Angeles area in an eastward direction; along the Interstate 80 corridor east of Sacramento; in parts of extreme Northern California; and in eastern California, roughly paralleling Highway 395. In addition, existing pipelines undergo maintenance, and, in some cases, replacement of aging lines is needed to ensure safe operation of the network. There will be a continuing need for permits for pipeline maintenance, repair, replacement, and or expansions.

Energy Commission 2007 transportation fuel demand forecasts state that the expected increase of transportation fuel imports into California will require expansion of marine terminals. Energy Commission staff is currently assessing the magnitude of the expected increase and existing spare capacity of the system. Results are expected in 2008, and the assessment will result in Energy Commission staff-projected timeframes for this projected expansion. The projections are dependent on several factors: increased use of alternative fuels, effects of refinery expansions in and outside California, effects of laws that require reduction of GHG emissions, and the size of the tankers that would be bringing product into the state, among other factors. Nevertheless, Energy Commission staff projects that total imports of all transportation fuel will continue to increase between now and 2025. In addition, marine terminal upgrades and improvement may require regulatory review.

If most of the increased supply arrives in very large crude carriers the need for new marine terminals may be limited to one new marine terminal in Southern California with the capability of handling such carriers. If increased supply arrives in smaller tankers or via barge, then more marine terminals in Southern California and the San Francisco Bay Area may be required.

Currently, the very large carriers cannot enter San Francisco Bay due to the bay's shallow water depths. The Bay's shipping channels for most refinery marine terminals are limited to handling vessels with a maximum draft (depth that a vessel sits in the water) of 40 feet. The very large carriers require a water depth of 60 feet or more. To handle the carriers, substantial dredging of existing shipping channels would be required and is unlikely due to environmental concerns and costs.

Concerns

The Energy Commission, other agencies and stakeholders (oil/gas industry, local communities, non-governmental interests) expressed the same concerns in 2006 and 2007 that they expressed in 2004 and 2005:

- Important segments of the state's existing fuels infrastructure are already being used at or near capacity.
- Current capacity of existing marine infrastructure, particularly in the Los Angeles Basin, could decline as a result of community or economic pressure to remove petroleum facilities due to local resident concerns, stakeholder interests and new laws and regulations. Such laws and regulations include AB 32 – Núñez, Chapter 488, Statutes of 2006 to reduce GHG emissions and the California State Lands Commission (CSLC) Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) to upgrade facilities to meet seismic safety standards. Although implementing these laws and regulations would result in important and necessary improvements to the infrastructure, some companies may decide the cost of upgrading facilities may not make economic sense given the current regulatory environment, land lease terms, and other circumstances.
- Petroleum marine terminal capacity, marine storage, and gathering pipelines that connect marine terminals with refineries must expand to meet expected demand for fuels. Most of this expansion would likely occur in the Los Angeles Basin.
- Expansion of transportation fuels marine infrastructure will become more difficult in the Los Angeles Basin as available land becomes increasingly scarce and subject to competing uses.
- Local community members, elected officials, and port representatives have objected to existing and proposals for modified, expanded, or new infrastructure facilities. Their concerns include increased air pollution, increased truck traffic, aesthetic impacts of storage tanks, safety threat (perceived or real) to nearby communities, and competition for diminishing spare land.

Conclusions

Conclusions from the *IEPR* process and recent discussions with agencies and stakeholders regarding petroleum infrastructure are as follows:

- California will need new/improved transportation fuels infrastructure over the next 10 to 25 years.
- There are regulatory challenges at the state, regional, and local levels of government that delay permitting of transportation fuel facilities.
- Most problems are with the permitting processes, rather than the laws that guide those processes.
- Most of the problems must be addressed by 1) clearly and accurately defining the issues and 2) balancing competing interests when designing/maintaining environmentally and technologically robust and safe infrastructure.
- There is industry and agency acknowledgement that better coordination and information sharing will facilitate permitting.
- Some agencies/local governments have best permitting practices that may serve as models for others.

Chapter 3: Regulatory Framework

Facilities and Permitting

To expand, adapt, and in some cases maintain petroleum infrastructure, project proponents must comply with a complex regulatory structure in California. The structure is complex by design to ensure numerous agency checks and balances throughout the permitting process.

Refineries and Storage Facilities Permitting

Most refineries and storage facilities require around 15 to 20 local and state permits (depending on location), in addition to certifications and decisions on state environmental documents, as required by the California Environmental Quality Act (CEQA) and related CEQA guidelines. Depending on the location of the proposed facilities and potential environmental impacts, federal permits may be required.

Each city, county, air quality management district, regional water quality control board, and special district has a different set of rules, regulations, and permitting processes. There is no standard procedure for determining which permit to apply for first. However, storage facilities and refineries require CEQA review, which must be completed before permitting agencies issue their authorizations.

Pipeline Permitting

The nearly 5,560 miles of onshore petroleum product pipelines in California cross 228 cities and 31 counties. It is not possible to state with certainty all of the permits required for new or replacement pipelines, as any pipeline could cross any number of the state's 58 counties, 478 cities, or approximately 2,300 special district boundaries. In addition, there are 107 Native American sovereign nations in California; permits and consistency determinations would be required from tribes if pipelines were to cross their nation lands.

Most pipeline permits and approvals are governed by federal and state laws and regulations. These laws and regulations may require from 30 to 50 state and federal permits (depending on location), in addition to certifications and decisions on state and federal environmental documents, as required by the National Environmental Policy Act (NEPA) and CEQA. In addition, each local government requires one or more permits and/or approvals.

Marine Terminal Permitting

Most marine terminal permits are governed by federal and state laws and regulations. These laws and regulations require as many as 20 state and federal permits (depending on location), in addition to certifications and decisions on state and federal environmental documents, as required by NEPA and CEQA.

Offshore most areas of California, no local permits are required for portions of marine oil terminal facilities that are sited on tide or submerged lands (beaches, wetlands, and the ocean out to three miles offshore of the coast), as these areas are governed by state agencies (such as California State Lands Commission [CSLC], Coastal Commission [CCC], and San Francisco Bay

Conservation and Development Commission [BCDC]). The CSLC issues a land use lease, and the CCC and BCDC issue coastal development permits.

In Southern California certain local governments, such as the cities of Los Angeles and Long Beach, were granted trusteeship of tide and submerged lands offshore of their coasts by the state. In these cases, the local governments issue the land use lease.

For onshore portions of projects, local agency permits are required. In the portion of the California Coastal Zone (Coastal Zone) administered by the CCC, local decisions are appealable to the CCC. This area is generally along the 1,100 miles of coast, excluding San Francisco Bay. Refer to www.coastal.ca.gov for a detailed definition of the Coastal Zone within the CCC's jurisdiction. For terminals in the San Francisco Bay Area, BCDC issues permits for portions of marine terminals located offshore of the mean high tide line and areas within 100 feet inland from the line. Refer to www.bcdc.ca.gov for a description of the Coastal Zone in San Francisco Bay.

Regulatory Structure and Process

Permitting Framework

Permission to build a new or expand an existing petroleum infrastructure facility would likely require between 15 to 50 non-emergency agency and local government authorizations, including permits, consultations, approvals, agreements, leases, and/or certifications. The number and type of authorizations depend on the type of facility and its location.

Generally, the regulatory framework includes the state and federal agencies and local and tribal governments shown in Figure 4.

Figure 4: General Regulatory Framework for Transportation Fuel Facilities

Source: California Energy Commission 2007, Google Earth 2007

Table 1 below summarizes the federal and state/regional agencies and types of local governments most involved in permitting these types of facilities, the authorizations required by the jurisdictions, and their respective authorities. Each type of facility will require a different combination of authorizations, depending on the complexity of the project and its location relative to the jurisdictional boundaries of the regulatory agencies and local and tribal governments.

Table 1: Liquid Transportation Fuels Facility Authorizations – Summarized

Permits		
Federal/Native American Nations	**State/Regional**	**Local**
U. S. Army Corps of Engineers -Section 10 (Rivers & Harbors Act) -Section 404 (Clean Water Act) -Nationwide (Clean Water Act) **Bureau of Land Management** -Right-of-Way (Mineral Leasing Act, Section 28) **National Park Service** -Right-of-Way (The Organic Act) **U.S. Fish & Wildlife Service** -Use permits in National Wildlife Refuges (Fish & Wildlife Coordination Act) **Federal Aviation Administration** -Proposed Construction or Alteration of Objects That May Affect Navigable Airspace **Native American Tribal Governments** -Permits analogous too many Federal environmental permits (Tribal Treaties)	**Caltrans** -Encroachment (Streets and Highway Code) **Regional Water Quality Control Boards (9)** -National Pollution Discharge Elimination System Permits (Clean Water Act; CA Porter Cologne Water Quality Control Act; CA Water Code Section 13000 et seq.) **Coastal Commission** -Coastal Development (CA Coastal Act) **Bay Conservation & Development Commission** -Coastal Development (CA McAteer Petris Act and Suisun Marsh Preservation Act) **Air Quality Management Districts (35)** -New Source Review -Prevention of Significant Deterioration (Clean Air Act; CA Health and Safety Code, Division 26; CA Public Resource Code, Division 13, Local Agencies) **Occupational Safety & Health Administration [Cal OSHA]** -Construction related (29 CFR 1910.95) **Department of Toxic Substance Control** -On-site Hazardous Waste Generation (Resource Conservation & Recovery Act; Hazardous Waste Control Law) **Department of Fish & Game** -Incidental Take Permits (CA Endangered Species Act; CA Fish & Game Code 2080.1, 2081(b); CA Code of Regulations 873.0 et seq.)	**Cities/Counties** (CA Government Code) -Encroachment -Land Use -Safety -Grading -Plumbing -Electrical -Public Works -Noise -Environmental Health -Building -Coastal Development (CA Coastal Act) **Bureaus of Sanitation** -Industrial Wastewater Discharge **Fire Departments** -Hazmat permit (CA Constitution, Article XI, Section 7) -Above Ground Storage of Hazardous/Flammable Materials **Ports/Airports** -Encroachment (CA Public Resources Code, Division 9) -See Cities/Counties, above -Land Use (CA Coastal Act) **Special Districts – Examples: Water, Flood Control, Reclamation Districts** -Encroachment (esp. for water crossings) (CA Public Resources Code, Division 9)

Table 1: Liquid Transportation Fuels Facility Authorizations – Summarized (Continued)

Consultations		
Federal/Native American Nations	**State/Regional**	**Local**
NOAA Fisheries -Essential Fish Habitat, Threatened and Endangered Species (Magnuson-Stevens Fisheries Conservation Act; Fish & Wildlife Coordination Act; Endangered Species Act) **Advisory Council on Historic Preservation** Impacts on Listed, Historic Structures (National Historic Preservation Act) **Native American Tribal Monitors** -Consistency with National Historic Preservation Act **U.S. Fish & Wildlife Service** -Threatened and Endangered Species, Migratory Birds Inter-jurisdictional Fishes Water Resources and Quality (Endangered Species Act; Migratory Bird Treaty Act; Fish & Wildlife Coordination Act) **Bureau of Indian Affairs** -Government-to-Government Consultations with Indian Tribes (Tribal Treaties) **U.S. Coast Guard** -Operations, Transportation, Safety (Oil Pollution Act; Federal Water Pollution Control Act; Clean Water Act; Water Quality Act; Resource Conservation & Recovery Act; Hazardous & Solid Waste Act; Refuse Act; CFR Titles 33 & 46)	**State Historic Preservation Officer** -Section 106 (National Historic Preservation Act) **Air Resources Board** -Statewide Portable Equipment Registrations Program (Clean Air Act; CA Health & Safety Code) **Department of Fish & Game** -Threatened and Endangered Species (CA Endangered Species Act; CA Public Resources Code 21000 et seq.; CA Code of Regulations 15000 et seq) **State Lands Commission** -Shipwrecks (CA Public Resources Code, Division 6)	**Resource Conservation Districts** -Assistance for controlling soil, erosion/runoff, stabilizing soils & improving water quality (CA Public Resources Code)

Table 1: Liquid Transportation Fuels Facility Authorizations – Summarized (Continued)

Leases/Agreements/Approvals		
Federal/Native American Nations	**State/Regional**	**Local**
Bureau of Indian Affairs -Right-of-Way approvals on lands held in trust for an Indian or Indian Tribe (Tribal Treaties) **U.S. Forest Service** -Special Use Authorizations (Mineral Leasing Act, Section 28)	**Department of Fish & Game** -Lake and Streambed Alteration Agreement (CA Fish & Game Code 1600 et seq) -Risk & Hazard Analyses; Certificates of Financial Responsibility (CA Oil Spill Prevention & Response Act) **State Fire Marshal, Office of Pipeline Safety** (U.S. Department of Transportation Agent) -Design of leak protection system -Cathodic protection -Pipeline Wellhead Protection Plan (49 CFR 190; 49 CFR 195; 40 CFR; Oil Pollution Act; Public Law 101-380; CA Government Code 51010-51019.1) **Public Utilities Commission** -Tariffs & terms of service (CA Public Utilities Code) **State Lands Commission** -Land Lease (CA Public Resources Code, Division 6) -Marine Oil Terminal Engineering & Maintenance Standards audit results & rehabilitation plans, Operations Manuals, Training & Certification Programs for personnel, Facility Security Plan (CA Oil Spill Prevention & Response Act)	**Cities/Counties** -Oil Spill Response Plans (40 CFR 300) -Land Use (CA Public Resources Code, Division 6) **Fire Departments** -Hazardous Materials Business Plan **Notification Centers** -Contract two days prior to excavation (Article 2, CA Code 4216-4216.9) **Ports** -Land Use (CA Public Resources Code, Division 6)

Table 1: Liquid Transportation Fuels Facility Authorizations – Summarized (Continued)

Certifications		
Federal/Native American Nations	**State/Regional**	**Local**
Lead Agency -Record of Decision (National Environmental Policy Act)	**Lead Agency** -Certification (CA Environmental Quality Act) **Coastal Commission** -Coastal Consistency Determination and Certification (Coastal Zone Management Act) **Bay Conservation & Development Commission** -Coastal Consistency Determination and Certification (Coastal Zone Management Act) **Regional Water Quality Control Boards (9)** -401 Certification (Clean Water Act) **State Lands Commission** -Pipeline tests (CA Oil Spill Prevention & Response Act)	**Lead Agency** -Certification (CA Environmental Quality Act)

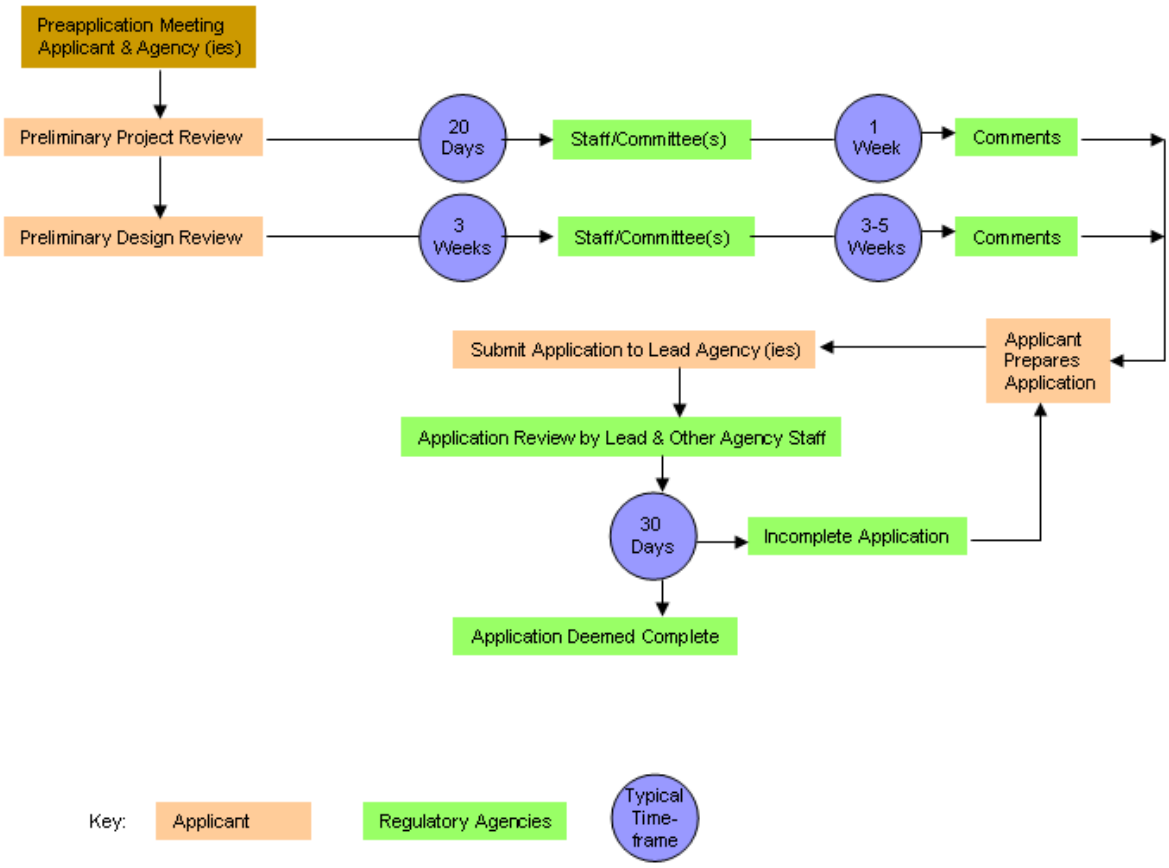
Source: California Energy Commission 2007

Typical Permitting Process

The permitting process for a project that would require some level of review consistent with CEQA would range from nearly six months (for a non-emergency project exempt from CEQA requirements) to 1.5 or more years (for a project requiring an Environmental Impact Report [EIR]). In both cases it is assumed project applicants engage in pre-permit application meetings/discussions with regulators. However, time taken for pre-application meetings is not included in the range described above.

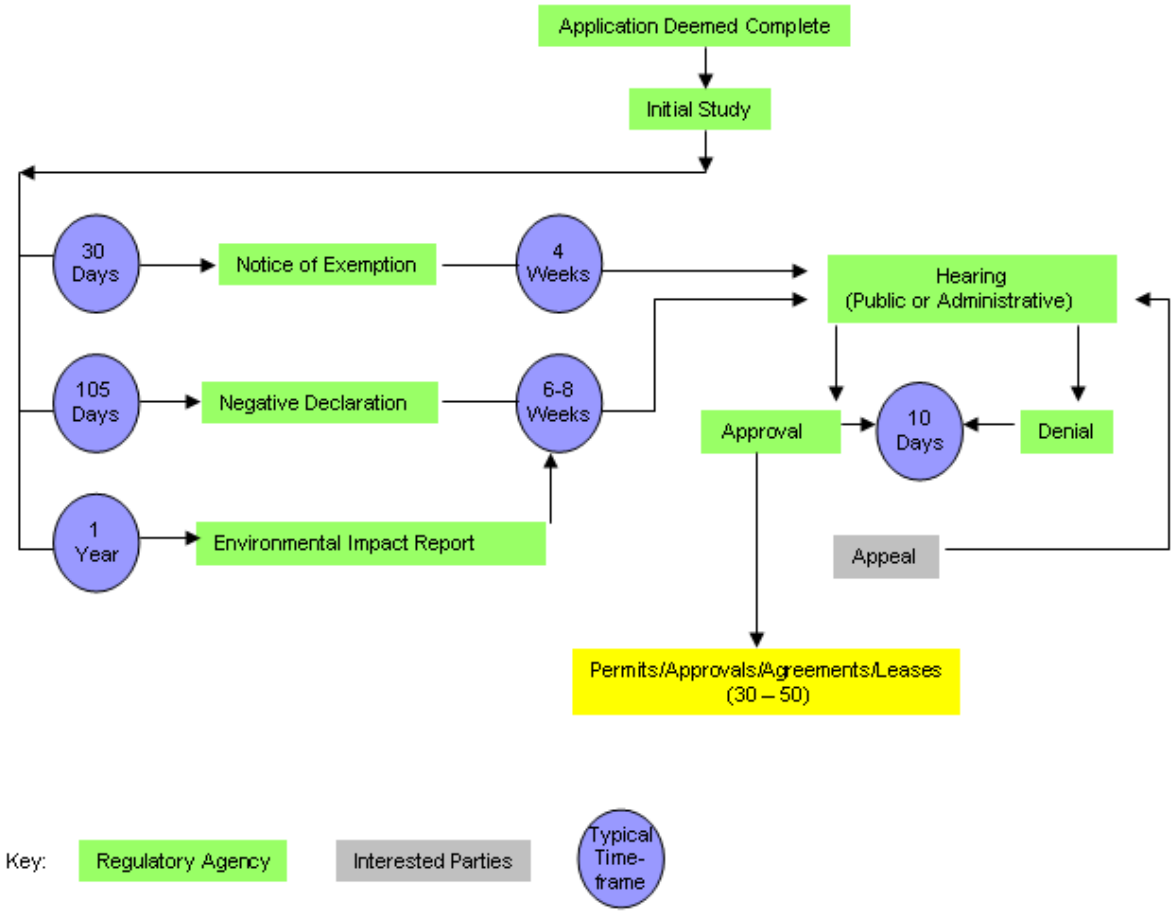
Figures 5 and 6 below depict typical permitting processes and timeframes for major industrial energy projects in California. Figure 5 depicts the steps for completing an application, including the pre-application meeting(s). The pre-application phase can take from 3.5 months to a year or more, depending on the project status and changes made as a result of the consultations between the regulatory agencies and project proponent.

Figure 5: Typical Permitting Process (Completing an Application)



Source: California Energy Commission 2007

Figure 6: Typical Permitting Process (Environmental Review)



Source: California Energy Commission 2007

The timeline for environmental review (Figure 6) is based on schedules required under state law, mainly the CEQA guidelines and the Permit Streamlining Act (PSA). The guidelines are regulations adopted by the California Resources Agency that provide detailed procedures that agencies follow to implement CEQA. The PSA requires government agencies to complete EIR preparation within one year of accepting a complete project application and to render their decisions on the permit application within 180 days of certification of the EIR. A lead agency, according to CEQA, is responsible for preparing the EIR.

Note that issuance of permits, approvals, and other regulatory authorizations occur after certification of the EIR. The schedules and timeframes for obtaining these permits are not depicted on Figure 6 but can take longer than 180 days under certain circumstances. Usually the

lead agencies will approve their permits before responsible or trustee agencies approve or issue their authorizations.

Under CEQA, a responsible agency has legal responsibility for carrying out or approving a project and a trustee agency has jurisdiction over certain resources held in trust for the people of California. There are four trustee agencies in California: California Department of Fish and Game (CDFG), CSLC, California Department of Parks and Recreation (CDPR) and the University of California. Although CEQA encourages coordination among the lead, responsible and trustee agencies, proactive participation in the preparation and review of EIRs by responsible and trustee agencies is not required. These agencies generally serve in a passive, commenting role.

Many energy-related projects require federal permits or are sponsored, in whole or in part, by federal agencies. These projects are governed by NEPA and many require preparation of an environmental impact statement (EIS). Obtaining authorizations for projects requiring EIRs and EISs may take two or more years. Joint EIR/EIS documents and reviews are encouraged by the CEQA Guidelines.

Federal lead agencies have primary responsibility for preparing EISs and issue the records of decisions on the documents. The decisions are analogous to the findings and statements of overriding consideration that accompany EIR certifications. Federal lead agencies often rely on cooperating agencies that are federal agencies with legal jurisdiction over the project, or that have special expertise on potential impacts of the project. Their NEPA role is proactive in that they are expected to participate in preparation of an EIS.

Conclusion

To ensure adequate transportation fuel supply to maintain California's growing demand, upgraded and new infrastructure will be needed over the next 25 years. The aging infrastructure will require ongoing maintenance, repairs, and replacements to insure safe operations. Future expansions or new facilities are likely due to increased imports of fuels and conversion to newer, cleaner fuels. These anticipated improvements demonstrate a continuing need for petroleum and other transportation fuel facility permits.

Designing a project to meet California's regulatory requirements, conducting environmental review, and obtaining the necessary authorizations:

- Require in-depth knowledge of the regulatory process.
- Entail a major commitment of resources and financial support.
- Necessitate careful planning.
- Require appropriate coordination between project proponents and agencies.
- Involve extensive outreach to the public and community groups.
- Can be time consuming.

As Chapter 4 explains, the permitting process can be made more efficient, while ensuring agencies retain their regulatory authority and the projects are environmentally sound and technologically robust.

Chapter 4: Issues and Recommended Guidelines

As mentioned in Chapter 1, Energy Commission staff heard from hundreds of agency, local government, and stakeholder representatives in 2006 and 2007 regarding regulatory process issues and best permitting practices for improving the efficiency of the permitting process for petroleum and other liquid transportation fuel infrastructure facilities in California. Comments from these individuals added detail to, generally supported, and updated information provided to the Commission in 2004 and 2005.

Background

In 2004 and 2005 the Energy Commission conducted public hearings on Petroleum Infrastructure Development Constraints (Order Instituting Investigation, Docket # 04-SIT-1). Results of the hearings were summarized in the *2005 IEPR*. Generally, the hearings confirmed that most regulatory challenges in California are with permitting processes, rather than with the laws that guide those processes. In addition, better coordination/information transfer and following or adapting best permitting practices used by particular entities would make the processes more efficient.

Between September 2006 and July 2007 Energy Commission staff met with state and federal agency, local government, industry, and local community representatives in the San Francisco Bay Area, Los Angeles Basin, Bakersfield, and Sacramento. These meetings were either with large groups of representatives in workshop or public meeting settings, training sessions, or during "one-on-one" or small group interviews. The purpose of the meetings was to identify:

- Specific problems or challenges with the various regulatory processes.
- The need to improve permitting processes.
- Examples of agencies or processes that have or are good permitting practices.
- How the Commission could help improve the overall process or assist organizations.

In addition to the meetings, during spring and summer of 2007 the Energy Commission and Governor's Office of Planning and Research conducted a survey of selected cities and counties in California to better understand 1) how local governments approach planning and permitting for energy infrastructure facilities (including petroleum, electrical transmission, and large-scale renewable energy facilities) and 2) how those processes might be better coordinated with State energy policy initiatives. Surveys were distributed to 24 counties and 73 cities. Six counties and 22 cities (29 percent of the total distribution) representing urban and rural local governments located throughout California responded.

In total, the Energy Commission staff outreach in 2006 and 2007 extended to more than 300 representatives. The following list of issues summarizes their comments. Following this list are recommended best permitting practices guidelines for addressing the issues. The recommendations focus on working within the existing regulatory framework and do not suggest changes to agency jurisdictions or responsibilities.

Issues/Challenges

Incomplete Applications

State agency and local government officials complained about the relatively high number of incomplete applications received from project proponents. One agency, the South Coast Air Quality Management District (SCAQMD), certifies professionals for its permitting program and a high percentage of the certified individuals continue to submit incomplete applications. Petroleum industry representatives mentioned that from their perspective incomplete applications are troublesome, as they delay the permitting process. They also stated that at least one reason for filing of incomplete applications is lack of clarity from regulators on permit application information requirements.

Another agency, the Bay Area Air Quality Management District (BAAQMD), does not discourage early, incomplete applications. They will keep such applications and work with the applicants to complete design of a project with the intent of ensuring that the facility will have the necessary equipment and processes to meet the district's air quality requirements. In these cases, an application may remain incomplete for up to a year.

Disagreement or Confusion on Applicability of Laws

Recently, the most prominent example of disagreement or confusion on applicability of laws is differences in local governments' and the State Attorney General's interpretation of the applicability of CEQA and AB 32 with respect to identifying, assessing, and mitigating impacts from GHG emissions in EIRs for local plans and projects. At this time, the Attorney General's office and local governments are settling and trying to avoid lawsuits on this issue. A settlement agreement was reached in September 2007 on the ConocoPhillips EIR for expansion of the refinery at Rodeo. The city of Los Angeles and the Attorney General signed a settlement agreement in December 2007 for certain proposed projects in the Port of Los Angeles, including the Plains All American Pipeline, L.P., Pier 400 Marine Terminal project.

Another example is applicability of CDFG lake and streambed alteration agreements to horizontal directional drilling or boring of pipelines under waterways and related riparian areas. Some project proponents argue that because a waterway environment would not be affected by routine drilling/boring (with adequate setbacks), there would be no impact, and, therefore, an agreement would not be needed. Some CDFG officials reason that drilling and boring, while not intrusive to the waterway environment, may result in fracturing of the substrate and possible leaks or spills of drilling fluids into the waterway from below the lake or streambed. According to CDFG officials, an agreement, if properly crafted, would address the possibility of spills and leaks into a waterway by including a prevention and emergency response plan, and possibly other mitigation to minimize and offset potential harm to the environment. Inclusion of such mitigation would ensure compliance with laws and regulations if a spill or leak were to occur. Currently, CDFG treats the issue on a case-by-case basis.

Lack of Coordination Among Agencies

Project proponents informed Energy Commission staff that redundant, multiple information requests from agencies leads them to think that agencies working on the same project are either not coordinating or the coordination is so minimal that information is not being shared. Conversely, agency staff points out that often there are project details important to some agencies and less important to others due to their different mandates. At times, a request that seems redundant to a permit applicant is actually asking for project details that are not available from an earlier response to another agency's request.

Lack of coordination can cause unnecessary delays in the permitting process, especially if the applicant and/or the agencies are unaware of the differing information requirements, permitting timelines and schedules. This can be a major source of delay, especially if an agency's permit is dependent on another agency issuing their permit or approval. Some projects have been delayed a year or more when agencies request environmental information, such as biological surveys, that can be obtained only during certain times of the year.

To ensure a project located in the Coastal Zone or within federal jurisdiction adjacent to the Coastal Zone (such as offshore the 3 nautical mile Coastal Zone boundary) proceeds through the permitting process promptly, regulatory agency and project proponent knowledge of the differences and similarities between the CEQA/NEPA and California Coastal Act (Coastal Act) processes is critical. The CCC will often rely on an EIR or EIS to provide a general overview of the project, environmental impacts, and mitigation measures, as there are major differences between how impacts are assessed for projects located in the Coastal Zone.

Under CEQA, impacts are defined as being significant or less than significant. Section 15358 of the CEQA Guidelines generally defines a significant effect on the environment as a substantial or potentially substantial adverse change in the physical environment. The enforceable policies of the Coastal Act, while not inconsistent with this definition, often add complexity. For example, Section 30230 of the Coastal Act (found at www.coastal.ca.gov/coastact.pdf) states, in part, " 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."

If lead agencies and project proponents are unaware of the coastal issues while developing the project description or assessing impacts, CCC staff comments on an EIR or their letters in response to an application may come as a surprise, as some Coastal Act issues will likely not be addressed in the draft CEQA/NEPA documents. Also, all Coastal Act issues may not be addressed in the CCC comments for CEQA/NEPA documents, as Commission staff may not have the time to thoroughly review an environmental document or will often comment before a coastal development permit application is received. As a result, expensive changes to a project and delays in the permitting process may be especially troublesome to a company and lead agencies, since often the CCC and the other coastal management agency in California, BCDC, insist on conducting their permitting processes after the other agencies have rendered their decisions.

Inexperienced Staff

Preparing and reviewing permit applications, related environmental reports, and project details requires unique and specialized expertise and knowledge by engineers, scientists, land use planners, environmental, maritime affairs and public policy specialists, and air and water quality professionals. Often smaller companies, local governments, and many agencies do not employ all of the types of professionals needed to plan a project or conduct an appropriate review of the application materials.

Some agency staffs will not act on an application because they are so unfamiliar with a proposed project's technology that they do not know how to address the issues presented by the project, according stakeholders and agency representatives. A few local governments have asked the Energy Commission for financial assistance to hire the appropriate staff or for technical staff or assistance to enable them to review projects in a knowledgeable manner.

In other cases, permit applicants initiate project planning or permitting processes without the appropriate staff or consultants. Poorly designed projects, incomplete applications (as explained above), missed regulatory deadlines, and even adverse agency decisions can be the end result.

Agency Consultation/Approval Delays

While untrained/inexperienced staff may be one reason for regulatory delays, Energy Commission staff heard there are other reasons, such as lack of staff. There have been cases where a lead CEQA or NEPA agency has almost begged for an endangered species consultation from the respective fish and wildlife agency to fully address biological resource issues. Sometimes the consultation is provided; other times, it is not.

The consequences of approving an EIR, for example, without the consultation can later lead to protracted negotiations between the permit applicant and CDFG on lake and streambed alteration agreements and incidental take permits. There have been situations where CDFG staff has not conducted the consultation called for by CEQA, lacked the administrative record, leverage, or credibility to require environmentally protective measures in the agreements or permits, and, as a consequence, environmental advocates have sued or otherwise blocked projects after the permits have been issued.

Local governments have stated that permits, such as air quality permits or Caltrans encroachment permits, are crucial for issuance of building or other local permits. Project proponents and port and county officials have commented that permits have been slow in coming or the requirements are unclear because communication with agencies is limited to non-decision makers or those who do not articulate the issues critical to the agency.

For example, one company stated that it waited seven months for what agency staff described as a routine permit. They were told by the staff that all of the forms, fees, and mitigation commitments were in order and that there was no explanation why a manager would not sign the permit. The company representative made routine contacts while waiting for the permit and was reassured there was not a problem with the application. The permit was finally issued with no extraordinary conditions and no explanation for the delay.

The Energy Commission, other agencies, and stakeholders have noted what seems to be an extraordinary amount of time taken by the Port of Los Angeles to prepare an EIR for the Plains All American Pipeline, L.P., Pier 400 Marine Terminal project. The port received the initial application in 2003, and public scoping meetings for the EIR began in 2004. The EIR has yet to be issued, but port officials informed Energy Commission staff that the draft EIR is expected in February 2008. The reasons for the delay in preparing the EIR (according to port officials) include issues surrounding air emissions and changing requirements internal to the port. For example, in November 2006 the Ports of Los Angeles and Long Beach approved the San Pedro Bay Ports Clean Air Action Plan (CAAP) that integrates common goals for air quality in the South Coast Air Basin. The plan describes measures that the ports will take toward reducing air emissions related to port operations. Energy Commission staff understands the current Pier 400 project, as proposed, incorporates measures to comply with the CAAP.

Inconsistent Agency Decisions

Local governments and project proponents have received different and occasionally conflicting decisions or guidance from the same agency. In some cases it is difficult to identify the "chain of command" in an agency and, therefore, the people responsible for explaining and addressing confusing or conflicting guidance or draft decisions. In other cases, especially if an agency has regional offices that process the permits, one region's decision on an agreement or permit may be different than another region's decision for a similar type project.

Balancing Community/Environmental Impacts and the State's Continuing Need for Appropriate Supplies of Transportation Fuels

Local communities bear the brunt of impacts from petroleum-related facilities. Community representatives raise concerns with aesthetics (such as noise, lighting, odors) of projects such as refineries and storage facilities. Additional concerns include air quality, safety, security, truck traffic, among others. With pipelines, street closures, trenching, and local traffic disruption are mentioned as impacts on local neighborhoods and communities.

These issues are especially acute where there is a concentration of petroleum refineries/storage facilities in urban areas without adequate buffers or land space to separate the industrial facilities from residential neighborhoods. In many locations facilities were originally constructed far from neighborhoods. In communities such as Wilmington, Richmond, El Segundo, and other locations, housing developments were subsequently built to accommodate the population growth that occurred. In some locations, such as Richmond, residential encroachment may continue to occur.

In addition to the aforementioned impacts, environmental groups often question the efficacy of allowing or supporting expansions of such facilities. They raise these questions in light of alternatives to petroleum-based fuels, GHG emission impacts, state energy policy that encourages development and use of renewable and alternative fuels, and other statewide policy and political issues.

Acknowledging the need to balance local and statewide interests the Energy Commission's *2007 IEPR* concludes the following regarding transportation fuel supplies:

> "Over the next several decades California must pursue multiple complementary strategies that increase fuel efficiency, expand non-traditional fuel use, and ultimately realign consumer preferences to reduce demand for all transportation fuels. In the near term, California must expand its marine terminal capacity, marine storage and the pipelines connecting these facilities with the refineries and other distribution pipelines."

It is in the best interests of California for agencies and local governments to be proactive in identifying and considering state and local concerns when assessing a project's impacts and rendering decisions.

Community and Environmental Concerns Draw Out CEQA Project Review Process

The CEQA-required environmental review process:

- Disclose significant environmental impacts of proposed activities.
- Identifies ways to avoid or reduce environmental damage.
- Prevents environmental damage by requiring implementation of feasible alternatives or mitigation measures.
- Discloses reasons for agency approval of projects with significant environmental effects.
- Fosters interagency coordination in review of projects.
- Enhances public participation in the planning process.

In doing so, CEQA requires agencies responsible for certifying the documents to host public hearings and address comments on the EIRs from the public and agencies. After the document is certified, it is up to agencies to decide if the project will be constructed and operated consistent with their mandates and should or should not be approved. The EIR and permitting processes can be extraordinarily long, especially if community and environmental issues are not addressed early in the project design or review stages.

Some agencies and project proponents stated that certain EIRs are less of a decision-making document and used more as a tool by interest groups to leverage certain economic concessions. Some permit applicants have been told by local government leaders to "cut a deal" with said interest group or groups to facilitate completion of the CEQA process. When that occurs, objections to certain unrelated environmental issues are reversed, opposition disappears, and the governmental entity makes its decision on a project without threat of lawsuits or other legal actions by private groups.

Lack of Information on Statewide Importance of Projects

Several agencies and local governments told Energy Commission staff they would like information on how particular projects help to address expected transportation fuel shortages, meet state mandates, and address or support overall state energy policy. They would like this information to become better informed on statewide energy policies and issues, how those policies/issues could affect their communities and decision-making on local matters, and to balance community opposition to a project that appears to be well-designed and mitigated.

Energy Commission staff has begun responding to these requests. Comment letters on EIRs for refinery expansions, attendance at related public meetings, participation in training sessions for agency staff, and assistance with information transfer from one agency to another are continuing. Staff acknowledges that more can be done to assist cities, counties, state agencies, and others who want the help.

Recommended Best Permitting Practices Guidelines for Liquid Transportation Fuels

Energy Commission staff found through its investigations that many issues are raised on a project or permit specific basis. The identified problems and challenges can be addressed through proactive planning by project proponents and modifying or improving coordination of individual agency processes. Energy Commission staff has found that appropriate levels of information transfer and coordination between all the parties will likely make a regulatory process more efficient. Much of that efficiency would be a result of anticipating issues early in a regulatory process and addressing the issues at appropriate times. Staff continues to find that the guidance in the *2005 EIPR* is appropriate: To focus on developing permitting guidelines to streamline and coordinate petroleum infrastructure permitting processes, with no reduction in environmental standards.

The following recommended best permitting practices guidelines are offered to agencies, project proponents and stakeholders. These guidelines are recommended in the spirit of informing agencies and stakeholders of the lessons Energy Commission staff has learned over the past several years and suggesting tools that may make better use of resources, staff, and consultants. The recommendations do not suggest changes to laws, regulations, or agency jurisdictions or responsibilities.

Make Use of Pre-application Meetings

Recommendation to Regulators and Applicants

Energy Commission staff recommend applicants request and agencies offer and pursue at least one pre-application meeting before submitting a permit application for a project. Staff suggests that project applicants consider scheduling these meetings a minimum of one year and three months before the start of anticipated construction. Depending on the project's complexity and expected level of public controversy, project proponents have initiated such meetings as much as two to three years before the start of environmental review processes to allow for changes in

project design. Meetings are most productive if the scope of the project is clearly defined by the applicant.

Background

The project applicant initiates the pre-application meetings. Under the PSA an applicant can request such a meeting and, if requested, the meeting must be granted by the lead agency. Although the meetings are scheduled with the lead agency (ies) it may be important to include or schedule separate meetings with key trustee, responsible, cooperating, and other interested agencies.

When scheduling a meeting, it is good to know whom best to approach in the agency, so that the most appropriate people (representing the project proponent and the agency) attend. For the applicant, these people can include the project manager, key environmental, engineering, legal, government relations, and public affairs and/or government personnel or consultants. For agencies, the representatives can include regulatory division managers, the likely lead analyst or team who will coordinate the agency's review and prepare the decision-making documents, and key scientists and engineers. If an agency has regional offices, the agency and the applicant should clearly understand the respective roles of headquarters and the regional office during the application review and decision-making process.

About 70 percent of the local governments surveyed stated they incorporate pre-application meetings into their regulatory processes. These meetings (most often between project proponents and agency staff), if well-planned and attended by the right people, will minimize the occurrence of incomplete applications (or at least shorten the length of time an application remains incomplete) and surprises later in the regulatory process. The meetings are most productive if sufficient project detail is provided by applicants so that agencies can provide meaningful responses and guidance. The usefulness of a pre-application meeting is directly dependent on how well the project scope is defined by the project applicant. The meetings can also address questions about applicability of a law or regulations, the decision-making "history" of similar projects or important precedents, and the types of issues likely to be raised by agencies, ports, local/tribal governments, and often potentially interested stakeholders. Project proponents and agencies can also discuss the appropriate sequencing of permit applications and decision-making processes. Depending on the complexity of a project, more than one meeting may be prudent with one or more agencies.

With meetings scheduled early in project design processes, discussions can lead to project changes before expensive design investments are made, according to several representatives. Some changes have included moving project locations or have helped in identifying preferred locations of projects when several options appear to be feasible.

If a project is located in the coastal zone, meeting with either CCC or BCDC staff will likely identify issues that will not be raised by a local government or another state agency for the reasons stated earlier in this chapter (page 27).

Identify the Key Responsible, Trustee, and Cooperating Agencies

Recommendation to Regulators and Applicants

It is critical to identify the responsible, trustee, and cooperating agencies that will likely review and issue authorizations for a project. The identification can be done through pre-application meetings and using staff and consultant knowledge/experience early in the project design process.

Background

Knowing whether a project has the potential to cross a port's, tribe's, CSLC's, CDPR's, CDFG's, the University of California and/or a federal agency's jurisdiction is important. Many of these jurisdictions require land use leases, encroachment permits, agreements, consultations, and other authorizations. In addition, a project's EIR and/or EIS may not address critical issues without the review and/or comments by these entities.

In some cases, it would be prudent for a project proponent to be proactive in contacting the appropriate agencies. As discussed earlier, due to lack of staff and resources, some entities do not actively participate in the EIR review or lead agency process and instead wait to raise their issues when their authorization is needed to place a facility or conduct an activity on their land or within their jurisdiction. If an agency is unresponsive to a request, some applicants have asked other regulatory representatives to contact the agency. Sometimes, inviting an unresponsive agency to a project team meeting is the appropriate approach for getting necessary participation by the regulator.

Provide Timely CEQA/NEPA Document Consultations and Comments

Recommendation to Trustee, Responsible and Coordinating Agencies

Timely and complete environmental document consultations and comments 1) will facilitate lead agency decision-making on the documents, 2) notify project proponents of issues that will likely be raised by fish and wildlife and coastal management agencies during their permitting processes, and 3) may expedite issuance of permits.

Background

Early and consistent trustee, responsible, and coordinating agency involvement in the environmental review and permitting process is critical for informing lead agencies, project proponents, and the public on the issues (including mitigation) important to the commenting agencies. Lead agencies are required to notify trustee agencies of the availability of CEQA documents for projects or activities within the trustee agency jurisdictions.

In the case of CDFG, providing comments or an endangered species consultation allows staff biologists to review the adequacy of the environmental document's analysis of all potentially significant impacts to fish and wildlife resources and recommend necessary and appropriate mitigation measures. Providing the consultation or comments 1) gets CDFG's issues and concerns on the record, 2) provides opportunities for suggesting project modifications and informing others on potential permitting requirements, 3) increases CDFG's leverage and/or credibility if streambed alteration agreements or California Endangered Species Act (CESA)

incidental take permits (ITPs) are required later, and 4) affords a broader scope or context than the narrower regulatory role for addressing impacts on fish and wildlife, in general. Streambed agreements are limited to potential impacts on surface water bodies, and ITPs are limited to state listed threatened and endangered species.

Comments from the BCDC and CCC notify lead agencies and project proponents of coastal management issues that may not be fully addressed in the environmental documents but will likely be dealt with during the coastal permitting processes. Comments during the public scoping period prior to environmental document preparation and on the draft documents 1) give permitees a "heads up" on issues unique to the coastal management agencies, 2) allow time for gathering the extra information, and 3) better ensure complete coastal development permit applications and more timely consideration of the proposed projects.

Agency Partnering

Recommendation to Regulators

Consider partnering between the lead and a responsible agency during preparation of environmental documents and the project permitting process, especially when one or more critical issues focus on a single environmental topic, such as air quality. Partnering agreements or memorandums of understanding (MOUs) are used to formalize the relationship. These documents specify the purpose of the agreements, legal and regulatory roles of the partnering agencies, coordination of project review schedules, and other arrangements.

Background

Contra Costa County regularly partners with the BAAQMD for environmental review and decision-making on refinery and storage projects. Often the county is the lead agency and BAAQMD is one of several responsible agencies. The county and BAAQMD have found that partnering on preparation of the EIR identifies the issues and information requirements early in the environmental review process. Later in the process, they work in concert to propose mitigation or project design changes to address the issues. The partnering keeps the two regulators on the same schedule and on track as they proceed through development of the EIR and their respective regulatory processes. Comments from county and BAAQMD staff indicate that they both benefit from partnering and use of the tool generally moves the EIR preparation and review process to a speedier conclusion.

Coordinate Agency Reviews

Recommendation to Regulators

Staff recommends lead, responsible, trustee, cooperating, and interested agencies coordinate their review of projects and/or environmental documents to avoid duplication of effort and expedite decisions on the documents and related permits.

Background

The city of Benicia and others have identified this tool as particularly effective. City staff and consultants led coordination of several local lead agencies and the ARB to identify and to address common issues and solutions with The Clean Fuels Project for several San Francisco

Bay Area refineries. The coordination involved regular meetings of the ad hoc group with the purpose of establishing and maintaining a project schedule and jointly conducting the necessary environmental analysis for the project EIRs.

Coordinated agency reviews are encouraged by the CEQA guidelines. They have the added advantage of identifying and addressing agency stakeholder concerns in the draft document, rather than waiting for those stakeholders to raise the issues through the public hearing process and then addressing the issues, later, in the final document.

An example of a more formalized and long-term agency coordination program is the San Francisco Bay Long Term Management Strategy for Dredging (LTMS). The LTMS is a cooperative effort of the U. S. Environmental Protection Agency (USEPA), U.S. Army Corps of Engineers (USACOE), San Francisco Regional Water Quality Control Board, BCDC and stakeholders. The LTMS agencies completed a Final Policy EIS/Programmatic EIR and developed a management plan. The agencies also established a Dredged Material Management Office, which serves as a "one-stop shop" for Bay Area dredging permit applications and has received national recognition for streamlining the permitting process for dredging projects. More information on the LTMS can be found at www.epa.gov/region09/water/dredging.

Another form of coordination includes use of the Internet. The federal Department of Transportation Pipeline and Hazardous Materials Safety Administration (Office of Pipeline Safety) is testing use of a newly created Web-based pipeline repair streamlining process that allows, at the discretion of an applicant, agencies to coordinate their reviews and decision-making. The Pipeline Repair Environmental Guidance (PREG) System is designed to support and integrate efforts of agencies and pipeline operators to promote communication, consultation, and cooperation when approvals for non-emergency pipeline repairs are needed. Agencies post best management practices to address specific environmental circumstances and inform project operators of their requirements. The website supports a discussion board and an activity management system. The management system allows the applicant and agencies to coordinate and share information as a project proposal proceeds through the regulatory process. The PREG supplements and is used in conjunction with existing permitting processes.

Using an Internet accessible system to share information between project proponents and agencies can serve the purpose of an electronic clearinghouse and supplement or, in some cases, replace face-to-face pre-application or coordination meetings.

In some cases where coordination has been attempted, lack of staff resources and other pressing priorities prevent an agency from participating. Based on review of examples of coordinated efforts, Energy Commission staff has found that successful efforts have the following attributes in common:

- Goals are clearly articulated and achievable and address the mutual concerns of the agencies and stakeholders involved.
- The efforts are collaborative and have respected and trusted facilitators or leaders that guide the participants through agendas and the process.

- The coordinated process has a definite beginning and end and is subject to realistic schedules and deadlines.
- The decision-making process for the effort is identified and followed throughout the schedule.
- The agencies and stakeholders are specifically identified and have a clear stake or role in the process.
- The agencies and stakeholders have the financial and policy support of their respective constituents, parent agencies, and/or decision-making bodies.
- The results of the effort will serve the interests of the agencies and stakeholders. For example, permitting will be easier and more streamlined and save or make more efficient use of resources.

If it is determined that key agencies can and will participate at the appropriate levels of effort, the time and resources involved in establishing and maintaining the coordination may be worth the effort. Depending on the agencies' abilities to fully participate in a coordinated process, work well together, and keep to agreed-upon schedules, environmental review and permitting processes can be expedited and streamlined.

Establish Joint-Agency Working Groups

Recommendation to Regulators

Establishing an interagency working group can effectively educate agency staff on statewide policy issues surrounding proposed major and complex petroleum or transportation fuel projects that involve multiple regulatory jurisdictions. Staff recommends the main purpose of such a group be to inform agency staff on the policy implications of particular transportation fuel projects or activities. Successful groups have been facilitated by an agency or entity that does not have direct regulatory authority over the projects. The group could 1) facilitate communication among the regulatory staffs, 2) serve as an information transfer forum to discuss the technology and major statewide environmental and energy policy issues raised by a project, and 3) prepare agency staff for public discourse on projects.

Background

Joint-agency working groups differ from coordinated agency review forums in that often the groups are set up when a project could potentially affect or inform statewide policy making. Information developed for or outcomes of discussion can help state officials determine the efficacy of policies or actions that would allow expansions and other long-term improvements to petroleum and other transportation fuel facilities.

Although not focused on petroleum infrastructure, the LNG (liquefied natural gas) Interagency working group facilitated by Energy Commission staff is an example of such a group. The Working Group was formed in response to federal legislation that gives the Governor of California the opportunity to recommend approval or denial of LNG projects proposed offshore California in federal waters. The group is composed of the various federal, state, and local

agencies that have regulatory jurisdiction over such projects. According to group members, the meetings provide useful information to regulatory agency staff for its review and assessment of project proposals.

Establish, Coordinate and Adhere to Project Timelines/Milestones

Recommendation to Regulators and Applicants

Develop a master schedule for a project that addresses the environmental analysis and permitting phases and include dates for major milestones. Through this coordinated scheduling, regulatory agencies involved in authorizing a particular project can identify the sequencing of permits, better assure adherence to PSA time limits, and provide advice to applicants on scheduling submittal of land and water resource surveys and permit applications.

Background

Coordinated scheduling of regulatory processes can lead to consolidation of the environmental review (CEQA and/or NEPA) and permitting processes of lead and responsible agencies. Of the local governments surveyed, 75 percent said they followed this practice. CSLC, a trustee and often a lead agency, has combined its hearings to consider certifying an EIR and approving a related land lease on the same day. This practice can shorten a regulatory process by 30 to 90 days, depending on the frequency of regularly scheduled agency meetings.

Close coordination by agencies and cooperation with project applicants, if done early and promptly, can lead to scheduling different agency decisions in quick succession, saving additional time.

Also, if an agency will issue several decisions on the same project, careful and coordinated planning by the applicant and the agency staff can result in one public hearing for two or more actions. For example, the CCC may be responsible for issuing a coastal development permit, making a decision on an appeal of a city, county, or port permit action, and certifying or determining whether a project is consistent with the federally approved coastal management program. It is not uncommon for the applicant to coordinate with the local government to schedule submittal of its application and certification/determination to the CCC so that the entire package is heard by the coastal management agency at one time. Otherwise, CCC approvals can stretch over a course of months. This type of planning requires strategic decision-making on the part of the project applicant and the agencies. However, if done correctly, it can end up saving agency staff resources and time and shorten the permitting process.

Consider Expedited Agency Reviews

Recommendation to Regulators

Agencies should consider offering expedited reviews of permit applications to project proponents, when appropriate and feasible. Factors to consider may be the potential impacts on the state's supply of transportation fuels, as well as the scope and complexity of issues raised by a project.

Background

Agencies such as CDFG and SCAQMD offer or have offered this option to applicants. At SCAQMD, permit applicants pay an additional fee (currently 50 percent of the base permit processing fee) to have a staff person or consultant conduct the agency-required review during overtime hours. Alternatively, some agencies have hired temporary staff or a consultant (at the applicant's expense) to manage the permitting process and minimize delays due to competing priorities of regular agency staff.

Energy Commission staff found from project proponents that results of use of this type of tool are mixed. Expedited processing by individual agency Web-based permit tracking systems for use by applicants and internally by agency staff can occur if the systems are maintained and the system is used to move the permit through an agency's process expeditiously. Commitment to timely action on each of the steps is needed to ensure an efficient and speedier process.

Establish or Maintain Buffers Around Facilities

Recommendation to Local Governments

It may be prudent in some communities for local governments to consider limiting expansion of residential or other incompatible uses around existing, functioning, and planned facilities. Limiting such expansions may require strategic assessment of land use patterns and the need to balance approvals for transportation fuel facilities and residential, open space, recreational, and commercial development.

Background

Use of buffers reduces the likelihood that facility operations will have adverse effects on neighboring communities. The Shell Martinez refinery complex and Valero refinery across the Carquinez Strait in Benicia benefit from 1) earlier establishment of the buffers when the facilities were first built and 2) maintenance of buffers in later years. In the case of the Valero refinery, the company owns acres of surrounding open space lands.

The communities of Richmond, Wilmington, San Pedro, and Carson and the nearby transportation fuel facility operators are not as fortunate since the facilities were built closer to urban areas and those areas grew around the facilities in later years. In Southern California the Port of Los Angeles is in the process of "developing" open space buffers by not renewing expiring leases for several transportation fuel facilities along the waterfront to shield the community more from port industrial facilities and activities. Some facilities may relocate to other portions of the port, and others will cease operating. These changes, to lessen land use conflicts, may reduce the overall capacity of California's transportation fuels infrastructure.

Many factors contribute to a company's decision to relocate or cease operations in a certain area, such as the Ports of Los Angeles or Long Beach. One factor will be the costs of building and operating a new facility. An up-to-date facility would incorporate modern features and standards to increase safety, reduce environmental impacts, and possibly address land use conflicts. Those costs will be compared to the expected income and length of the lease offered by the port. If the lease terms allow adequate time for making the improvements cost-effective,

the investment may be worth the cost. If the term of the lease is too short, a company may seek an alternative location.

Facility Master Planning

Recommendation to Regulators and Applicants

Regulators and project proponents should consider approval and use of a master plan for a number of facility improvements rather than seeking permits for each improvement.

Background

Use of this tool can avoid a "piecemealing" approach to projects if a series or group of related facility improvements is anticipated over a period. The master planning process must provide tangible benefits to the applicant, such as avoiding repetitive permit processes and providing some certainty over allowable development at their facilities over time, to justify the expenditure of the required time and resources. The city of Benicia used a 13-month master plan approval process in 1999-2000 and issued a single use permit for anticipated facility improvements at the Valero Refinery. Valero has applied to amend certain elements of the project and extend the permit expiration date from 2009 to 2014. A significant portion of surveyed local governments (32 percent) reported use of facility master plans as a permitting practice.

A type of facility master planning is encouraged by CSLC for marine terminals. The terminals are undergoing MOTEMS audits to assess the safety and security of the facilities, identify improvements, and bring the facility into compliance with safety and security standards. After the audits, CSLC works with the facility operators to schedule the improvements around normal facility activities to minimize facility shutdowns and lessen the possibility that a facility will be decommissioned, due to the cost of carrying out the identified and necessary improvements.

Ensure Adequately Trained Staff

Recommendations to Regulators, Energy Commission and Applicants

- Regulatory agencies and project proponents should consider training staff if knowledge and experience levels warrant the additional education and information exchange.
- Energy Commission staff should consider facilitating workshops and training forums for agency and stakeholder participants, as appropriate.

Background

Structured training and the resultant information exchange would likely be valuable to the Commission and other agencies and for informing interested parties on the role of a robust and sound transportation energy infrastructure in the health of the California economy. Several local governments requested such training in responses to the aforementioned survey.

Several local governments and agencies stated in 2006 and 2007 that part of the reason for delaying review of projects by their respective organizations was staff inexperience and lack of knowledge of transportation fuel facility technology and regulatory issues. These challenges are

especially acute with local governments that do not routinely process permits for such facilities, agencies with constrained budgets and competing priorities, or entities that are experiencing a high turnover of staff.

Agency coordination or working groups can lead to cost-effective trainings by teaming up to take advantage of agency staff expertise. By pooling resources, often agencies can sponsor and provide curriculum, trainers, and appropriate venues for the trainees. In other cases staff members have attended conferences or trainings sponsored by private entities. With the right trainers and planners, the trainings can be focused to the intended audience, take advantage of the unique regulatory knowledge of experienced government regulators and private experts, and provide the trainees with valuable lessons that are directly relevant to their day-to-day responsibilities.

Energy Commission staff involvement as trainers can be beneficial. As pilot efforts, staff participated in two such training sessions: 1) a State Fire Marshal-sponsored public workshop on petroleum pipeline safety for agency and industry participants and 2) an invitation-only training session with CDFG for department biologists in regional offices that often review petroleum pipeline projects. The Commission staff role was to inform participants on the statewide importance of having a robust, environmentally sound, safe, and secure transportation fuel pipeline network in California, the regulatory framework for such projects, and how the regulatory agencies of interest fit into and work within that framework. Most importantly, the Commission staff-led modules included interactive discussion on permitting tools and processes that are particularly effective and others that need improvement. Staff will consider similar roles in the future, in light of its other responsibilities.

Seek Staff with Energy Facility Siting Experience During Hiring Process

Recommendation Regulators and Applicants

Consider requiring energy facility siting expertise as part of the job descriptions for certain positions within an organization.

Background

Contra Costa County, the cities of Bellflower and Stockton (11 percent of surveyed local governments), CCC, CSLC, and the Oil Spill Prevention and Response office of CDFG, as examples, have included these types of requirements in hiring processes for staff that regularly review energy facility permit applications.

For entities that process energy facility project applications very occasionally, requiring this type of expertise may not be prudent. In these cases, contracting with expert consultants, utilizing specialized staff trainings, or requiring coordination with other, more knowledgeable agencies and their staff may be effective options for efficient staff review and preparation of decision-making documents. Often the costs of hiring consultants are included in project environmental review budgets that are borne by the permit applicants.

In some cases, agencies share staff. Currently, Caltrans funds a CDFG/Caltrans liaison whose sole responsibility is to review Caltrans projects in the Fresno region. The Energy Commission

has been asked to provide grants or personnel to other agencies or local governments to assist in providing knowledgeable individuals for review of energy-related projects. The Commission may consider these types of requests, in the context of its overall responsibilities, as noted in see Chapter 5: Conclusions and Next Steps.

Clearly Identify "Chain of Command"

Recommendations to Regulators and Applications

- Identify responsible staff representatives, project managers and primary points of contact within agencies and project applicant teams before or at pre-application meetings, or as soon thereafter as possible to facilitate timely information exchange.
- Identify roles/responsibilities of staff and consultants and keep them up-to-date. Specify decision-making authorities of primary points of contact and know whom else to consult when issues or questions arise that specified individuals cannot address. Provide responses/information in a prudent, accurate, and timely manner.

Background

Several regulatory representatives and project proponents expressed frustration with a few agencies that do not clearly identify and make available the staff with authority to make decisions or provide appropriate information on the agency's regulatory requirements or policies. Such instances have led to inaccurate and inappropriate advice by lower level staff and delays in receiving critical permits.

Create and Use Clear Criteria for Regulatory Decisions

Recommendation to Regulators

Consider adopting criteria to guide decision-making on projects throughout an agency, address agency mandates and policies, and ensure consistent treatment of project proposals.

Background

Some project proponents stated that after an agency's decision they did not understand the rationale for that decision. Agency representatives also stated that due to a loss of "institutional memory" caused by staff turnover or limited communication or coordination within an agency critical background on a decision is unavailable. The tool can also help to ensure that agency actions follow legal requirements and would be less likely to lead to adverse lawsuits and other legal actions against the agency.

Publish Model Agency Decisions or Guidance Documents

Recommendation to Regulators

Agencies should consider posting on the Internet or otherwise distribute the decisions to known interested parties (including agency staff) that would serve as models for future actions on similar projects.

Background

The guidance documents would enhance interested parties' understanding of agency actions. Having this information at hand, rather than finding out about it through chance, can assist with project design and future environmental assessments.

Examples of properly crafted Lake and Streambed Alternation Agreements, CCC/BCDC decisions, air and water quality permits, Caltrans encroachment permits, and actions by other agencies would guide agencies, as well as project proponents and other interested parties.

Implement Governmental Relations and Public Outreach Efforts

Recommendation to Regulators and Applicants

Regulatory agencies and project proponents have found that robust governmental relations and public outreach programs for an organization, as a whole, and/or designed for a particular project help to identify and address community, environmental, and agency concerns.

Background

The Port of Los Angeles, city of Benicia, and the SCAQMD have established groups and outreach efforts designed to identify and address community concerns. The port established the Port Community Advisory Committee to assess impacts, review environmental documents, and provide a public forum to make recommendations to the Port Harbor Commissioners. For example, the Advisory Committee approved Wilmington's waterfront plan, which was adopted by the Harbor Commissioners Board.

SCAQMD relies on the Ethnic Community Advisory Group to identify opportunities and evaluate strategies for working with and educating ethnic businesses and communities. Under the auspices of the group, several efforts are underway to improve air quality for residents.

The city of Benicia has a MOU with the Valero refinery located within its boundaries. The MOU calls for coordination with a citizen advisory committee and commits the refinery to a number of "Good Neighbor" actions related to refinery safety, air quality monitoring, water supply and quality, and cooperation with city government.

Several project proponents reported having established strategic programs that establish and maintain communications with regulatory agency staff and reach out to the public to gauge reaction to projects or activities, address identified concerns in early project design stages, and keep interested parties informed on the progress of a project.

Continue and Expand the Energy Commission's Participation in Project Regulatory Processes

Recommendations to the Energy Commission

Consider expansion of the Energy Commission's efforts to inform regulatory agencies of transportation fuel demand, supply and infrastructure forecasts, and related statewide energy policies including sound environmental and security measures that meet regulatory agency mandates. Consider having Energy Commission staff available to work with ports, other local

governments, local permit appeal entities, and state and federal regulators to address the identified challenges and issues in a balanced manner.

Background

Often public and agency comments on projects focus solely on adverse environmental impacts and do not consider the implications of disallowing a project on California's economy or transportation fuel network. Several entities, including the State Fire l (Office of Pipeline Safety), CDFG, BAAQMD, Contra Costa County, cities of Benicia, Palm Springs, and Stockton have asked that the Energy Commission either provide them with information or conduct public outreach in their communities focusing on the statewide needs for transportation fuel infrastructure.

Energy Commission participation in an interagency working group on transportation fuel infrastructure (recommended above) and/or port, other local government, state and federal regulatory processes would inform the concerned entities of the importance of the transportation fuel infrastructure as they try to balance local and statewide interests and implementation of seemingly conflicting policies.

Chapter 5: Conclusions and Next Steps

Petroleum and other transportation fuel facility maintenance, upgrade, and expansion projects will continue to be required and proposed in California. New requirements to deal with climate change and other issues, rather than eliminating the need for processing, storage, and import facilities, are more likely to result in operators proposing improvements to (not decommissioning of) most facilities.

Facility improvements will prevent adverse impacts on the state's economy and respond to changes in transportation fuel technologies, environmental standards, continuing public demand for transportation fuels and population growth. The regulatory process for these types of projects involves many governmental entities and incorporates opportunities for public participation in project planning. Thus, the common themes in the recommended best permitting practices guidelines in Chapter 4 are:

- Project proponents and regulatory agencies share responsibility for carrying out best permitting practices for petroleum and other transportation fuel facility regulatory processes.
- Opportunities for streamlining are enhanced when project proponents take a pro-active role in ensuring projects meet California's stringent permitting requirements.
- Efficiency in and streamlining of such processes requires agency cooperation and coordination.

It is no surprise that many tools described in the recommended guidelines are encouraged by CEQA and the CEQA guidelines. In-depth knowledge of the law and its implementation are strongly advised before embarking on a project and the related regulatory review. Choosing the most appropriate tools and approaches for such an endeavor takes careful planning and will depend on the specifics of proposed projects and the agencies involved in authorizing the projects.

Proactive planning and participation in environmental review and regulatory processes is essential for anticipating issues and addressing them in an appropriate manner. In general, addressing the issues closer to the beginning of project design and permitting will lead to a more streamlined and efficient process.

The guidelines recommend that the Energy Commission be an active participant in petroleum and other transportation fuel infrastructure regulatory processes. The Energy Commission is considering the following proposed next steps for carrying out the recommendations:

- Establish an Energy Commission-led interagency working group for addressing major statewide petroleum and other transportation fuel infrastructure issues. The Energy Commission may serve as an effective facilitator and/or "clearinghouse" for information transfer among affected agencies as it does not have a regulatory role. In addition, the Commission's jurisdiction is statewide and personnel have expertise in petroleum and

other transportation fuel infrastructure technology, environmental, land use and economic issues.

- Assess the Energy Commission's resources for an expanded and continuous informational transfer role in petroleum and other transportation fuel project environmental and regulatory processes. The purpose would be to ensure that a particular facility's role in meeting the state's transportation fuel needs and overall energy policy is appropriately described in environmental documents and considered by decision-makers. Information on the importance of secure, environmentally safe, and technologically robust petroleum and other transportation fuel facilities and infrastructure would be provided. These potential Energy Commission staff activities could occur during review of environmental documents, local government hearings, and appeals of local government decisions to state agencies and other higher authorities.
- Consider local agency requests for financial assistance or training to enhance their regulatory staff capabilities. Local governments suggested use of grants or Energy Commission staff to assist their regulatory efforts.
- Assess the Energy Commission's role in promoting land use policies that address balancing approvals for transportation fuel facilities and potentially incompatible development and land uses. This assessment should be conducted along with the Energy Commission's efforts in studying opportunities and barriers to integrated energy and land use planning.

References, Contacts and Major Meeting Venues

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Key Report Contacts

Bay Area Air Quality Management District: Brian Bateman and Barry Young

Bay Conservation Development Commission: Linda Scourtis

Calfire: Bob Gorham, State Fire Marshal, Office of Pipeline Safety

California Coastal Commission: Al Padia, South Coast District Office

California Department of Fish and Game: Dave Blurton, Office of Oil Spill Prevention and Response; Marilyn Fluharty, South Coast Region; Kathleen Jennings, Office of Oil Spill Prevention and Response; and, Jennifer DeLeon, Headquarters

California Department of Housing and Community Development: Cathy Creswell and Linda Wheaton

California State Lands Commission: Gary Gregory, Martin Eskijian, and Kevin Mercier

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Key Report Contacts (Continued)

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Key Report Contacts (Continued)

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Port of Los Angeles: Mike Christensen, Tony Gioiello, Ping Lit, and Dave Mathewson

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San Diego County: Dag Bunnemeyer and Patricia Laybourne, AICP

Santa Clara County: Michael Lopez

South Coast Air Quality Management District: Mohan Balagopaian, Jay Chen, and Mohsen Nazemi

Town of Mammoth Lakes: William T. Taylor

Tuolomne County: Mike Laird

U.S. Department of Transportation: Michael J. Khayata, Pipeline and Hazardous Materials Safety Administration

Valero Wilmington Refinery: Stephen Faichney

Ventura County: Mike Laird

Major Meeting Venues

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Acronyms and Definition of Terms

APCD	Air Pollution Control District
AQMD	Air Quality Management District
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BCDC	Bay Conservation Development Commission
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CA	California
CAAP	San Pedro Bay Ports Clean Air Action Plan
Cal EPA	California Environmental Protection Agency
CalOSHA	California Occupational Safety and Health Administration
CalTRANS	California Department of Transportation
CCC	California Coastal Commission
CDFG	California Department of Fish and Game
CDPR	California Department of Parks and Recreation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
Coastal Act	California Coastal Act

Coastal Zone	California Coastal Zone
CPUC	California Public Utilities Commission
CSLC	California State Lands Commission
DHS	Department of Health Services
DPC	Delta Protection Commission
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
Energy Commission	California Energy Commission
FAA	Federal Aviation Administration
GHG	Greenhouse gases
IEPR	Integrated Energy Policy Report
ITP	Incidental Take Permit
LNG	Liquefied Natural Gas
LTMS	Long Term Management Strategy
MOTEMS	Marine Oil Terminal Engineering and Maintenance Standards
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NOAA	National Oceanographic Atmospheric Administration
NOAA Fisheries	National Marine Fisheries Service
NPS	National Park Service
OSHA	Occupational Safety and Health Administration

PREG	Pipeline Repair Environmental Guidance
PSA	Permit Streamlining Act
RCD	Resource Conservation District
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SHPO	State Historic Preservation Office
USACOE	United States Army Corps of Engineers
USCG	United States Coast Guard
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFS	United Stated States Forest Service
USFWS	United States Fish and Wildlife Service