A Guide to Obtaining Required Regulatory Approvals for New Industrial Facilities in California

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A Guide to Obtaining Required Regulatory Approvals for New Industrial Facilities in California

BRUCE A. BECKMAN*
MICHAEL W. PRAIRIE**

Complex regulatory programs combine to “protect” the environment by protracted and undependable administrative procedures followed by years of litigation. Only the most hardy and well-heeled can run so harsh a gauntlet. Burdened by land costs, loan interest, and architectural, engineering, and attorney fees, many entrepreneurs run out of money or heart or both long before the finish line.¹

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The proliferation of complex regulatory programs presents a formidable obstacle to constructing even the most environmentally compatible, energy efficient, and socially desirable new or expanded industrial facility in California, as elsewhere. In addition to California's restrictive land use policy, air quality requirements, and the lengthy environmental review often mandated by the Environmental Quality Act, recently adopted federal pro-
grams require new industrial facilities to use coal or some other alternative to natural gas or petroleum,⁵ and to incorporate into their design the latest developments in control technology to achieve federal standards for improving air⁶ and water⁷ quality. Other regulatory programs require noise abatement,⁸ solid waste management,⁹ and similar control actions. The cumulative effect of this myriad of regulatory programs has been to lengthen greatly the duration of the permit process for a new or expanded industrial facility, and to create risks and uncertainties with respect to the ultimate outcome until all required permits have been obtained and substantial construction has commenced.

Although the risks and uncertainties inherent in the permit process cannot be eliminated, industrial development can still be accomplished in California.¹⁰ It is essential, however, that a comprehensive and realistic approach to the permit process be developed at the conception of the project so that the facility can be located, designed, and engineered, to the greatest extent possible, to accommodate the regulatory requirements. Development of a successful program necessitates an interdisciplinary approach, involving close coordination among management, engineers, and attorneys.

This article is intended to guide the attorney advising a client who proposes to construct or expand an industrial facility in California. First, the article provides a digest of potentially applicable local, state, and federal regulatory programs and certain other non-regulatory considerations. Second, the article discusses in

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¹⁰. California is currently in violation of Clean Air §§ 110, 176, 42 U.S.C. §§ 7502, 7507 (Supp. III 1979), in that it has not submitted acceptable SIP revisions providing for, among other things, motor vehicle inspections. See text accompanying notes 60-67 infra. Therefore, since July 1, 1979, no major new source permits may be issued in California. The discussion in this article assumes that this situation will be remedied.
more detail the air and water quality requirements and the other regulatory schemes which impose the most serious constraints on industrial development in California. Third, the article considers the risks and uncertainties which will be encountered as a result of various aspects of the regulatory process and the relative ineffectiveness of judicial review. Finally, the article concludes by offering suggestions for formulating a strategy for successfully obtaining the required permits and approvals.

II. DIGEST OF GENERALLY APPLICABLE REGULATORY PROGRAMS

An important first step in advising a client who is proposing to construct or expand an industrial facility is to prepare a compendium of all local, state, and federal regulatory programs that conceivably could be applied to the project. Unlike commercial or residential developments, which are primarily restricted by zoning and other land use regulations, an industrial facility must, in addition, comply with the many regulatory programs imposing environmental and energy related requirements.

The following digest identifies the principal land use, environmental, and energy related regulatory programs that are generally applicable, and is intended to provide a quick and ready reference to assist the attorney in determining which statutes and regulations apply to a particular new or expanded industrial facility. The regulatory programs enumerated are by no means exhaustive, and the attorney should consult the statutes and regulations themselves in connection with each proposed project and should not overlook other programs which may impact the particular project. The digest also identifies non-regulatory requirements, such as the availability of local services, which must be considered by the attorney in advising a client proposing to construct or expand an industrial facility.
# DIGEST OF REGULATORY PROGRAMS AND NONREGULATORY CONSIDERATIONS FOR NEW OR EXPANDED INDUSTRIAL FACILITIES

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<tr>
<th>Regulated Activity or Required Services</th>
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<tr>
<td>1. Location or siting of industrial facilities</td>
<td>Section 65302(a) of the California Government Code\textsuperscript{11} requires cities and counties to adopt a land use element to the general plan, and Section 65360 of the California Government Code\textsuperscript{12} requires zoning ordinances to be consistent with the plan. The proposed site must be zoned for light, medium, or heavy industrial use, depending on type of industrial activity.</td>
<td>Zoning change, variance, or conditional use permit must be obtained from city or county when the site is not properly zoned for the proposed industrial use.</td>
<td>If a zoning change, variance, or conditional use permit is required, an environmental review under the California Environmental Quality Act must be conducted. Because of strong public opposition to many industrial facilities, it is usually preferable to select a site in an &quot;industrial park zone&quot; or another industrial zone rather than to seek a zone change.</td>
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<td>2. Siting of industrial facilities in &quot;special zone&quot;</td>
<td>Regional land use statutes, including the California Coastal Act of 1976\textsuperscript{13} and the Tahoe Regional Planning Compact,\textsuperscript{14} require compliance with significantly more restrictive land use and environmental requirements.</td>
<td>Development permit required from designated regional agency.</td>
<td>The restrictive environmental and land use requirements make it nearly impossible to locate new industrial facilities in areas subject to the jurisdiction of special regional agencies. Avoid proximity to areas which are designated as Class I for purposes of prevention of significant deterioration review.</td>
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\textsuperscript{11} (West 1966).  
\textsuperscript{13} CAL. PUB. RES. CODE §§ 30000-30990 (West 1977).  
\textsuperscript{14} CAL. GOV'T CODE §§ 66800-66801 (West Supp. 1966-1979).
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<td>3. Subdivision of Parcels</td>
<td>The Subdivision Map Act requires submission of tentative and final subdivision maps to local agency for all subdivisions creating five or more parcels. Unless waived by local ordinance, parcel maps are required to be submitted for subdivisions creating fewer than five parcels.</td>
<td>Approval of subdivision maps by cities and counties.</td>
<td>Although the Act's definition of &quot;subdivision&quot; refers to the division of unimproved land, the &quot;consolidation&quot; of two or more parcels, as is more often the case in industrial development, has been held to constitute a &quot;division&quot; for the purposes of the Act.</td>
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<td>4. Emission of air contaminants by industrial facilities</td>
<td>The Clean Air Act, as amended, and regulations adopted by the United States Environmental Protection Agency (&quot;EPA&quot;) require compliance with regulations designed to prevent significant deterioration of air quality (&quot;PSD&quot;) and compliance with new source performance standards (&quot;NSPS&quot;). In addition, the California County Air Pollution Control Law and regulations adopted by local air pollution control districts (collectively, &quot;AQMD&quot;) impose performance standards on new air pollutant-emitting equipment and new source review rules mandated by the Clean Air Act limit the aggregate emissions from a new facility or the aggregate increase of emissions from an expanded facility.</td>
<td>Permits under PSD and NSPS must be obtained from regional office of EPA. Permit to construct and operate must be obtained from AQMD under state equipment and new source review.</td>
<td>A more extensive discussion of the regulation of air quality and the impact of such regulation on site selection, plant design, and construction is provided in Section III, infra.</td>
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<tr>
<td>5. Discharge of Industrial Effluent</td>
<td>The Federal Water Pollution Control Act(^{23}) (&quot;FWPCA&quot;) and California's Porter-Cologne Water Quality Control Act,(^{24}) require compliance with water quality standards for discharge of industrial effluent to surface or ground waters under the National Pollution Discharge Elimination System (&quot;NPDES&quot;). Additional federal water pollution control statutes that could be applicable include the Safe Drinking Water Act,(^{25}) the Watershed Protection and Flood Protection Act,(^{26}) the Estuarine Areas Act,(^{27}) and the Marine Protection, Research and Sanctuaries Act of 1972.(^{28})</td>
<td>NPDES permits for projects in California are issued by the California Regional Water Quality Control Boards.</td>
<td>A more extensive discussion of the regulation of wastewater discharges and the impact of such regulation on site selection, plant design and construction is provided in Section III, infra.</td>
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<td>6. Use of natural gas or petroleum by industrial boiler as primary energy source</td>
<td>The Powerplant and Industrial Fuel Use Act of 1978(^{29}) (&quot;FUA&quot;) and regulations adopted by the Economic Regulatory Administration of the Department of Energy (&quot;ERA&quot;),(^{30}) prohibit use of petroleum or natural gas as a primary energy source for a new industrial boiler with a design capacity of 100 million Btu's per hour, or greater (or a combination of two or more boilers at the same site which in the aggregate have a capacity of 250 million Btu's per hour or greater) unless one of the statutory exemptions is available.</td>
<td>ERA authorized to issue temporary or permanent exemptions.</td>
<td>A more extensive discussion of FUA and its potential impact on plant design and construction is provided in Section III, infra.</td>
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<td>7. Use of natural gas by industrial facilities</td>
<td>The California Public Utilities Commission (&quot;PUC&quot;) is empowered to develop a curtailment plan to be implemented if supplies of natural gas are inadequate to meet demand.(^{21})</td>
<td>Curtailment priority will be assigned by the PUC.</td>
<td>If the proposed facility will utilize natural gas, the possibility of curtailment may require construction of onsite facility to store adequate supply of alternate fuel to be used during shortages of natural gas. Regulations primarily require use of building insulation and energy efficient lighting.</td>
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<td>8. Efficient use of energy</td>
<td>Section 25402.1(e) of the California Public Resources Code(^{32}) prohibits city or county from issuing a building permit to an industrial facility unless energy efficiency standards for new nonresidential buildings promulgated by the State Energy Resource Conservation and Development Commission(^{33}) have been satisfied.</td>
<td>Cities or counties insure compliance before issuing building permit.</td>
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<td>9. Discharge of solid wastes</td>
<td>The Resource Conservation and Recovery Act of 1976, the Z'berg-Kapiloff Solid Waste Control Act, and regulations of the Solid Waste Management Board, establish standards for solid waste handling and disposal.</td>
<td>Counties issue permits and perform inspections.</td>
<td>If the facility will produce hazardous or toxic waste products, the availability of a Class I waste disposal site within a reasonable distance having sufficient capacity must be considered.</td>
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<td>10. Noise emitted by industrial operations</td>
<td>Federal Noise Pollution and Abatement Law of 1970 and California Noise Control Act of 1973 (&quot;CNCA&quot;) establish noise emission standards. CNCA requires each city or county to have noise element in general plan to comply with guidelines of Office of Noise Control. Some zoning ordinances also specify maximum noise levels measured in decibels at the property line.</td>
<td>CNCA standards implemented by cities and counties by incorporation into general plan and zoning ordinances.</td>
<td>Both federal and state noise abatement programs are primarily advisory and cities and counties continue to have primary responsibility for noise abatement. However, guidelines prepared by the California Office of Planning and Research to implement CEQA require consideration of impact of the proposed project on ambient noise levels for adjoining areas. Industrial noise is also regulated by nuisance laws and requirements in building codes.</td>
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39. 14 CAL. ADMIN. CODE 15081(c) (1980).
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<tr>
<td>11. Design and construction of building</td>
<td>City and county building codes impose wide-ranging requirements, including mechanical, electrical, plumbing, excavation, grading, structural, fire safety, noise insulation, energy efficiency, and other standards.</td>
<td>Building and occupancy permits required from city or county.</td>
<td>Local building codes may impose requirements more stringent than the requirements of the uniform building code. The construction of a major industrial facility will usually require a substantial number of variances from building codes, and the attorney should work closely with the design engineer and construction company to insure that petitions for such variances are filed as early in the design process as is feasible.</td>
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<td>12. Industrial activity constituting a nuisance</td>
<td>Section 3494 of the California Civil Code authorizes any public body or officer to bring an action to abate a public nuisance. In addition, certain activities are specifically defined as nuisances, including discharge of any deleterious matter in any water supply, and the discharge of such quantities of air contaminants to constitute injury or annoyance.</td>
<td>City or county will obtain court order enjoining activity found to constitute a nuisance.</td>
<td>Enactment of more comprehensive environmental and land use regulations have significantly curtailed use of nuisance ordinances to abate discordant land use and environmental pollution.</td>
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<td>13. Operation of industrial facility</td>
<td>Local ordinances often require licenses or permits to conduct various types of businesses and impose an annual business license tax.</td>
<td>Appropriate tax forms and reports must be submitted to city or county agency.</td>
<td>In certain municipalities, such as the City of Los Angeles, the business license tax can be substantial.</td>
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42. See, *e.g.*, *Los Angeles Municipal Code* §§ 21.00-29.02.
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<td>14. Approval of project by public agency</td>
<td>The National Environmental Policy Act of 1969 (&quot;NEPA&quot;) requires preparation of an environmental impact statement (&quot;EIS&quot;) where substantial questions are raised as to whether a &quot;federal action,&quot; including the issuance of a permit by a federal agency, will have adverse environmental impact. Similarly, the California Environmental Quality Act, (&quot;CEQA&quot;) requires the preparation of an environmental impact report on any &quot;discretionary&quot; project, including the approval of a private project by a public agency, that may have significant adverse impact on the environment.</td>
<td>Federal agency taking action must prepare and circulate an EIS or negative declaration. Lead agency under CEQA must prepare EIS or negative declaration.</td>
<td>The environmental review process and its potential impact on siting, plant design and construction are discussed in Section III, infra.</td>
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<td>15. Availability of transportation facilities</td>
<td>Local ordinances or regulations may require the approval of city or county traffic department prior to issuance of building permit. CEQA may require consideration of the impact of the project on these areas as part of the environmental review process.</td>
<td>City or county transportation departments, California Department of Transportation, and private companies providing rail services should be contacted prior to site selection.</td>
<td>Consideration should be given to whether the proposed site will be adequately served by, or have adequate access to, freeways, highways, or railroad spur tracks.</td>
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<tr>
<td>16. Availability of electricity, water, and other services</td>
<td>Local ordinances or regulations may require the approval of the municipal department providing the service before the city or county will issue a building permit. CEQA may require consideration of the impact of the project on these areas as part of the environmental review process.</td>
<td>The appropriate municipal department, utility or water company should be consulted, and a firm contract for such services should be obtained if possible.</td>
<td>Consideration should be given to whether the municipal service departments and/or utilities are able to supply the electricity, water, and other services that will be required by the new or expanded industrial facility. It should also be determined whether the local sewage treatment plant can accept the effluent from the facility.</td>
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III. PLANT DESIGN, SITING, AND CONSTRUCTION CONSIDERATIONS

Each of the regulatory programs in the digest may impact the siting, design, or construction of a new or expanded industrial facility. The following discussion considers in more detail the major regulatory programs which are likely to impose the most serious constraints to industrial development in California.

A. Air Quality Regulation

Air quality regulation in the United States is provided by an interlocking federal-state system prescribed by the Clean Air Act, as amended, and by various state air quality laws and regulations. The Clean Air Act requires the EPA to divide the country into air quality control regions and to establish, among other standards, national primary and secondary ambient air quality standards ("NAAQS") for prevalent pollutants endangering public health. To date, standards have been established for nitrogen dioxide, sulfur dioxide, hydrocarbons, photochemical oxidant, particulate matter, and carbon monoxide ("criteria pollutants").

All states are required to adopt and receive EPA approval of a plant implementing the Clean Air Act (state implementation plans, referred to as "SIP's") that will achieve compliance with the primary NAAQS within three years and with the secondary NAAQS within a reasonable time.

The Clean Air Act requires that each SIP establish preconstruction review procedures which will insure (i) that no major new or modified source will be approved if such source will prevent expeditious attainment of the NAAQS in those areas where such standards have not been achieved (non-attainment areas, which are subject to new source review), and (ii) prevention of significant deterioration of the air quality in those areas currently in compliance with the NAAQS ("PSD" areas, which are subject to PSD

46. Id. § 107, 42 U.S.C. § 7407.
47. Id. § 109, 42 U.S.C. § 7409.
50. Id. § 172, 42 U.S.C. § 7502.
1. Air Quality Permits in California

To obtain the required permits for a new or expanded industrial facility, a company must comply with (i) the federal and state new source review regulations for non-attainment areas, (ii) the federal PSD regulations for attainment areas, and (iii) the federal and state equipment performance standards. As discussed below, the new source review and PSD rules provide facility-wide emission limitations which can be satisfied by reducing the air contaminant emissions at some other facility. Such reductions are commonly referred to as “emission offsets.” In contrast, the equipment performance standards impose emission limitations on individual units of equipment. Such limitations may not be exceeded or the unit will not be allowed to operate. These performance standards are prohibitory and cannot be avoided by acquiring emission offsets.

In California, the Air Resources Board (“ARB”) has statewide authority to control mobile sources, and has significant oversight authority for stationary sources. The regional air quality management districts and local air pollution control districts (collectively, “AQMD’s”) have the primary authority to control stationary sources. The AQMD’s adopt their own regulations and enforcement procedures which may be more restrictive than the standards established by the ARB, which in turn may be more restrictive than the federal standards. With ARB approval, these regulations become part of the California SIP.

Permit applications for new or expanded facilities must be made to the AQMD’s. For example, in the South Coast Air Basin, applications must be made to the South Coast Air Quality Management District (the “SCAQMD”). The SCAQMD, like most other air pollution control agencies, has a two-stage permit process. A permit to construct will be issued if it reasonably appears from the application and supporting performance data that the facility will comply with the new source review and equipment per-

52. Id. § 111(b), 42 U.S.C. § 7411(b). For an example of California New Source Performance Standards, see SCAQMD Regulations series IV and IX.
55. Id. § 39002.
57. CAL. HEALTH & SAFETY CODE §§ 41500, 41503 (West 1979).
formance standards.\textsuperscript{58} After construction, a permit to operate will be issued only if the source, when tested, in fact complies with such regulations and standards.\textsuperscript{59}

2. New Source Review

The 1977 amendments to the Clean Air Act require that as of July 1, 1979, all SIP's be revised to provide additional control in non-attainment areas.\textsuperscript{60} Different and more stringent requirements are imposed in states that are unable to demonstrate in their SIP's that compliance with NAAQS will be achieved by December 31, 1982, and in areas that require extensions for compliance to December 31, 1987.\textsuperscript{61} Generally, new source review permits will not be issued unless (i) the applicant demonstrates that all new and existing air contaminant-emitting equipment at the major new source will achieve the lowest achievable emission rate ("LAER"), and (ii) the permit agency finds that by the time the new facility is in operation there will be overall reductions in pollution levels in the area sufficient to constitute reasonable progress toward attaining the NAAQS.\textsuperscript{62} With respect to areas requiring extensions to December 31, 1987 for attaining compliance with NAAQS, the SIP's must additionally require, prior to the issuance of any permit for construction and modification of a major emitting facility, that an analysis be made of alternate sites, production processes, environmental controls, and similar matters; and that it be demonstrated that the benefits of the new or modified source significantly outweigh the environmental and social costs imposed by it.\textsuperscript{63} These additional requirements appear similar to an environmental impact statement and will make it more difficult to locate a major facility in a non-attainment area unable to demonstrate attainment with NAAQS by December 31, 1982.

To date, California has failed to submit satisfactory SIP revisions, and is in violation of the federal requirements. The sanctions imposed on a state for failure to have an approved new source review element in its SIP include a possible curtailment of

\textsuperscript{58} SCAQMD Rule 201 and "List and Criteria Identifying Information Required of Applicants Seeking a Permit to Construct from the South Coast Air Quality Management District" available from the SCAQMD.

\textsuperscript{59} SCAQMD Rule 203.

\textsuperscript{60} Clean Air Act § 172, 42 U.S.C. § 7502 (Supp. III 1979).

\textsuperscript{61} Id. § 172(a)(2)-(b)(11), 42 U.S.C. § 7502.

\textsuperscript{62} Id. § 173, 42 U.S.C. § 7503.

\textsuperscript{63} Id. § 172(b)(11)(A), 42 U.S.C. § 7502(b)(11).
grant funds, and, more importantly, a prohibition on the construction of new major facilities.\textsuperscript{64} Additionally, for non-attainment areas in California, the prohibition of new construction will continue until an appropriate vehicle inspection plan and transportation element are approved.\textsuperscript{65} Applications filed in California on or before June 30, 1979, under the new source rules may be reviewed, permits issued, and the facilities constructed. Applications filed after June 30, 1979 may be processed, but any permits issued must be made subject to SIP approval. No construction can be commenced until such approval is obtained.\textsuperscript{66}

Prior to July 1, 1979, a new stationary source was subject to review by both the EPA and the appropriate state agency, unless the state's review procedures had been approved by the EPA. However, the states are now given sole responsibility for new source review, and the duplicative review by the EPA has been eliminated.\textsuperscript{67}

3. PSD Review

Under the Clean Air Act Amendments of 1977, the SIP's must provide for the prevention of significant deterioration of air quality in attainment areas, that is, areas currently having better air quality than the primary NAAQS.\textsuperscript{68} The Clean Air Act divides the attainment areas of the country into Classes I, II, or III and establishes the permissible emission increases, or increments, for each class.\textsuperscript{69}

Neither California nor any other state has to date received EPA approval of a PSD review element. Accordingly, all PSD review is currently conducted by the EPA.\textsuperscript{70}

A company seeking to construct or expand an industrial facility in a PSD area must demonstrate either that there will be no net increase in the emissions in the area or, by appropriate air quality modeling data, demonstrate that the emissions from the new or

\textsuperscript{64} Id. §§ 113(a)(5), 176, 42 U.S.C. §§ 7413(a)(5), 7506; 40 C.F.R. § 52.24 (1980).
\textsuperscript{66} Telephone conversation between Bruce Beckman and James Hanson of the Region IX office of the EPA.
\textsuperscript{67} Formerly, until the new source review element of a state's SIP had been approved by the EPA, it was necessary to submit applications to the EPA for new source review permits. As of July 1, 1979, the EPA no longer does new source review.
\textsuperscript{68} Clean Air Act § 159, 42 U.S.C. §§ 7470-7491 (Supp. III 1979). The PSD program is included in the EPA's consolidated permit regulations. 40 C.F.R. §§ 122.1-.66, 123.1-.137, 124.1-.128, 125.1-.104 (1980).
\textsuperscript{70} Telephone conversation between Bruce Beckman and James Hanson of the Region IX office of the EPA.
expanded facility will not (i) exceed the allowable increment for a contaminant for which baseline and allowable increment has been established, and (ii) cause a violation of an NAAQS.71 If either of the above will occur, the facility cannot be constructed unless sufficient emission offsets are acquired.72 In addition, all new and expanded facilities that will emit a net increase of any of the criteria pollutants, are required to employ best available control technology ("BACT") on all air contaminant-emitting equipment.73 The EPA is currently allowing the available PSD increments to be used up on a first-come-first-served basis.74

A number of companies challenged the EPA's PSD regulations in Alabama Power Company v. Costle.75 Initially, a preliminary decision was issued by the court giving partial relief to the plaintiffs and remanding a number of the EPA's PSD review regulations for revision. Prior to rendition of the final decision, PSD review was conducted under the then existing rules. The EPA's Region IX office, with jurisdiction for California, included a statement in its PSD permits stating that the permit might be affected by a future court decision. The final decision merely gave expanded reasons for the positions taken by the court in the preliminary decision, except with respect to the application of PSD rules in non-attainment areas whose pollution would affect attainment areas.

4. Emission Offsets

As discussed above, emission offsets are emission reductions usually achieved by the installation of control devices at some other nearby facility. Such reductions are then credited to the applicant's proposed facility so that it can attain the emission levels mandated by applicable new source review or PSD regulations. Emission offsets may seem to offer a ready solution to a company

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71. Clean Air Act § 165(a)(3), 42 U.S.C. § 7475(a)(3) (Supp. III 1979). The Clean Air Act establishes increments only for particulate matter and sulfur dioxide. Section 166(a)-(b), 42 U.S.C. § 7476(a)-(b) (Supp. III 1979), requires the EPA to promulgate regulations to prevent significant deterioration of air quality by other criteria pollutants no later than August 7, 1979, to become effective one year after the date of promulgation.
that finds its plans for industrial development constrained by air quality regulations. However, offsets are not easily found and are often very expensive.

Emission offsets may be difficult to locate even in highly industrialized areas. Many industrial facilities are not useful offset candidates because the major portion of their emissions cannot be cleaned up by the application of available control technology. In addition, if potential emission reductions have been mandated by a proposed federal or state regulation, such reductions cannot be utilized as emission offsets. The availability of emission offset is further diminished by the prevalent attitude among companies that potential reduction capability should be saved for future industrial expansion and not be sold to other industries.

The costs of offsets can be substantial. They include the cost of (i) identifying the candidates, (ii) determining the current actual emissions of the candidates, (iii) determining whether control technology is available to achieve the necessary reductions, (iv) negotiating for permission to use the offsets, and (v) engineering and installing the control equipment. The cost of offsets for hydrocarbon emissions in the South Coast Air Basin was recently estimated to be in the area of $1000 per pound.

Careful consideration should be given to the tax consequences of offset arrangements, including who is to have the benefit of the expense deductions, what useful life must be established for the equipment, and the availability of investment tax credits.

5. The Permit Process

The siting, design, and construction of most industrial facilities will be constrained most seriously by federal and state air quality requirements. Accordingly, it is essential that the company's team conduct a thorough analysis of the project's emissions and air pollution control requirements at the inception of the project. In conducting such analysis, the following should be determined:

(i) The amount of "uncontrolled" emissions of the criteria pollutants from the proposed facility (or the increase in such emissions if an existing facility is being expanded). Because air quality regulations may preclude construction of the facility with the desired production capacity, it should also be determined

76. 40 C.F.R. § 51.18 (1980).
77. This figure was based on the authors' recent experience in supervising negotiations for the purchase of organic gas emission offsets for a new proposed facility in the South Coast Air Basin. Mr. Beckman found the price to be comparable in the San Francisco Bay area in negotiation for the sale of such emissions.
whether the projected emissions would be significantly affected by a marginal reduction in the design capacity of the facility.

(ii) Which emission control equipment is commercially available and demonstrated for the particular application, the cost of such equipment, the availability of performance guarantees from each manufacturer, and the amount of emission reductions which will be achieved by installation of each control device.

(iii) All potential sites for the proposed facility and, for each such site, the air quality region designated by the EPA and the air quality management district or air pollution control district designated under California law.

(iv) Whether, for each site, the area is an attainment or non-attainment area and for which of the criteria pollutants. For pollutants for which the area is non-attainment, the proposed facility will be reviewed under the new source review regulations promulgated by the applicable AQMD and made part of the state SIP. For pollutants for which the area is attainment, the proposed facility will be reviewed under the PSD regulations administered by the EPA.

(v) The allowable increment for each pollutant and whether, for criteria pollutants subject to PSD review, the facility is located in an area designated Class I, II, or III. The current situation is unsettled regarding whether state implementation plans will allow a permit to issue if the proposed facility's emissions will impact a Class I area in any significant way. Accordingly, it still appears to be a reasonable rule of thumb to have a twenty-five mile or greater buffer from any Class I area depending on meteorological conditions at the site. Also, determine whether the EPA will require air quality modeling and monitoring to determine the actual impact of the emissions. Next, for all air contaminant emitting equipment, determine which commercially available and demonstrated control equipment will be required to satisfy the requirement for "best available control technology." Finally, if after installation of such control equipment, the proposed facility will exceed the allowable increment, or if the increment has been exhausted, determine the amount of emission offsets which will be required.

(vi) Which commercially available control equipment will be mandated to achieve the required "lowest achievable emission rate" for criteria pollutants subject to new source review. Next,
determine whether emissions from the facility (or increase in emissions from an expanded facility) will exceed the emissions allowed under the applicable new source review regulations after installation of the required control equipment. If so, determine the amount of the emission offsets which will be required.

(vii) If emission offsets will be required under either PSD or new source review, identify nearby facilities that would be prospective offset candidates and determine whether control technology is available to achieve the necessary reductions.

(viii) The equipment performance standards promulgated by the applicable AQMD and the new source performance standards promulgated by the EPA that might affect any of the air contaminant-emitting equipment proposed for installation at the facility and the cost of complying with such standards.

(ix) Whether, for each of the proposed sites, the proposed facility could be constructed in conformance with applicable EPA and California regulations, and if so, the cost of required control equipment and emission offsets. The company can then select among the feasible sites based on marketing, transportation and other relevant factors.

B. Water Quality Regulation

Water quality control is provided by the Federal Water Pollution Control Act of 1972, as substantially amended by the Clean Water Act of 1977 ("FWPCA"). Among other requirements, FWPCA establishes (i) water quality and thermal pollution standards, (ii) effluent limitations, (iii) pretreatment standards for effluents prior to discharge into public treatment systems, (iv) ocean discharge standards, and (v) a permit system under the EPA-administered National Pollution Discharge Elimination System ("NPDES"). The FWPCA applies to any discharges to navigable surface waters that may carry pollutants.


83. 33 U.S.C. § 1342 (1976 & Supp. III 1979). See also Shell Oil Co. v. Train, 585 F.2d 408, 410 (9th Cir. 1978). Facilities discharging into a publicly owned treatment works are not required to obtain an NPDES permit. The municipality must obtain such permit for the discharge from the treatment works. The facility discharging to the treatment works must comply with the pretreatment regulations, if applicable.
The FWPCA also prescribes various time limits for the installation of control technology on discharges from point sources\textsuperscript{84} and requires new sources to achieve effluent limitations based upon the best available demonstrated technology.\textsuperscript{85}

1. Water Quality Control in California

The California water quality control system was established by the Porter-Cologne Water Quality Control Act.\textsuperscript{86} This legislation is very similar in concept to the FWPCA. Control is established by regional water quality control plans adopted by regional water control boards.\textsuperscript{87}

California is authorized to issue permits under the FWPCA.\textsuperscript{88} A company proposing to construct or expand an industrial facility in California that will discharge effluent directly to navigable water must apply to the appropriate regional water quality control board which will issue the NPDES permit. This permit will qualify the discharges under both federal and state law. Under EPA regulations, the regional board first issues a tentative permit which is sent to the EPA, which has thirty days to review it.\textsuperscript{89} The regional board then holds a public hearing and, if no objection is interposed by the EPA, adopts the permit. A copy is again sent to the EPA which has an additional ten day review period. If the EPA does not object, the final permit is issued.\textsuperscript{90}

As discussed above, the NPDES permit only covers direct discharges to navigable surface water. Any discharges to ground, such as the hauling of noxious liquid wastes to landfills or the disposition of liquid wastes in dry wells, are regulated solely by the state.\textsuperscript{91} Permits must be obtained in each of these instances. In most instances, the regional boards require all industrial wastes, other than those small amounts that must be disposed of in Class

\textsuperscript{86} CAL. WATER CODE §§ 13000-13998 (West 1971 & Supp. 1980).
\textsuperscript{87} CAL. WATER CODE § 13240 (West 1971).
\textsuperscript{89} 40 C.F.R. § 124.3(c) (1980).
1 hazardous material landfill sites, to be discharged into a treatment system.92

2. Practical Considerations

A company proposing to construct or expand an industrial facility can either plan to do a complete treatment of its effluent on site or arrange by contract to discharge its untreated or partially treated effluent to a municipal treatment system. If complete treatment is chosen, the municipal system can be totally bypassed only if there is some waterway into which the effluent from the facility can be directly discharged. In some areas, it will be necessary to discharge even completely treated effluent into the municipal system, because no access will exist to any other point of disposal.

If the company chooses to do a complete treatment of the facility's effluent, it must meet all NPDES requirements. These requirements, which can change from time to time, will regulate, among other things, the quality, temperature, PH, and biological oxygen demand ("BOD") and the total suspended solids, heavy metals, hydrocarbons, and pesticides content of the effluent.93

If the company chooses to discharge its effluent into a municipal system, certain other problems will likely be encountered. The municipality must be able and willing to accept and treat the effluent. Some pretreatment may be required under the FWPCA because some contaminants in the effluent would otherwise pass through or interfere with the municipal system. The municipality will be subject to NPDES permit requirements. The municipal treatment plants, particularly those operated by smaller cities, may not be operated by qualified personnel.94 As a result, it is not uncommon for the treatment facilities to malfunction—resulting in violations of the permit requirements. In such cases, if the state board or the municipality does not take sufficient action, the EPA can intervene and require the company to pretreat its efflu-

92. Discussions by the authors with the staff at the California Regional Water Quality Control Board, Los Angeles office.
93. 40 C.F.R. §§ 401.11-.16 (1980).
94. J. Brian Molloy, Director, Water Enforcement Division, EPA, reported on July 9, 1979, at a symposium on waste-water treatment in Neosko, Missouri, that (i) the EPA would bring court actions against cities and private industries violating pretreatment regulations, (ii) only about 6,000 out of 17,000 publicly owned treatment works were in compliance with the July 1, 1977, secondary treatment deadline, (iii) only 1,200 of 3,000 major facilities are in compliance, and the EPA knows of 175 of that 1,200 which are not complying with their permit for operations and maintenance reasons, and (iv) future cases could see appointment of special masters to run a facility, or a court order requiring the facility to tie in to a regional facility. 10 Env'l Rep. 649 (1979). Discussions of the authors with knowledgeable industrial wastewater personnel support the same proposition.
ent or forbid the municipality from accepting the effluent for treatment on the ground that its system is unable to treat the quantity involved. Therefore, even if the company has a contract with the municipal system, it may find itself unable to discharge into that system, and find its legal remedies, if any, against the municipality for breach of contract to be inadequate.

Pretreatment poses certain other problems. The facilities needed to accomplish the necessary pretreatment require a substantial investment of space and capital. The overall costs may be increased because the municipality will likely assess the company for discharging the pretreated effluent into the municipal system. Particularly in smaller communities, the municipality will have a considerable capital investment in its treatment system, creating substantial costs which will remain relatively constant regardless of whether the company's effluent is or is not pretreated. Therefore, even if the sewer discharge fees are based on the BOD and suspended solid content of the effluent, the municipality will simply be forced to increase the charges to maintain its revenue at the level required to cover these fixed costs.

If the project involves an expansion, the company may find that the municipal system into which it has been discharging will be unable to expand to accept the increased discharges. The company will then be faced with the choice of either helping to finance the expansion of the municipal system or installing pretreatment capacity for the expansion. In the latter case, it may be more economical to establish pretreatment capacity for the entire discharge of the facility and discharge the effluent directly to a waterway (if this is possible). The decision of whether or not to withdraw from the municipal treatment system, of which the company may be the principal user, can involve serious political considerations.

If possible, direct discharges to an ocean should be avoided. The EPA's ocean protection policy requires very expensive modeling, dilution studies, and environmental assessments, which are not applicable to discharges to streams or municipal systems.95

The decision of whether a company should treat its own efflu-

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ent or use a municipal system is complex and requires careful
evaluation of all of the above considerations. It will be necessary
for the attorney advising a client with respect to a proposed new
or expanded facility to (i) identify the pollutants that the new or
expanded facility will discharge to surface water or to ground, (ii)
identify the water quality standards that apply to such pollutants,
(iii) work with company personnel or consultants to identify the
control technology and the permits that would be required for
pretreatment, and the delays, if any, in obtaining and installing
such control technology, and (iv) work with company personnel
or consultants to determine if the municipal system is reliable
and has the capacity to accept the untreated effluent, or if unreli-
able or inadequate, determine the cost to the company of upgrad-
ing the municipal system. As with air quality permit
considerations, this information must be integrated into the de-
sign process at the earliest possible stage.

C. National and California Environmental Quality Acts

The National Environmental Policy Act ("NEPA")\textsuperscript{96} requires
preparation, circulation and approval of an environmental impact
statement ("EIS") whenever a major federal action affecting the
human environment is being taken.\textsuperscript{97} This may include issuing
permits or licenses, approving projects or grants, and other dis-
cretionary decisions.

Many states have adopted similar environmental review proce-
dures commonly referred to as "little NEPA's." In California, the
Environmental Quality Act\textsuperscript{98} requires preparation of an environ-
mental impact report (EIR) whenever a discretionary, as opposed
to a ministerial, permit is to be issued on a private project and
whenever a state project that would have significant environmen-
tal consequences is being undertaken.\textsuperscript{99}

The EIR or EIS process is time-consuming and exposes the cli-
ent to a whole new area of uncertainty and risk. For example, it
is not uncommon for an agency, such as the ARB, to make few or
no comments on a draft EIR when it is initially circulated, but
subsequently to object to the issuance of a permit by the local
AQMD based on grounds that could and should have been raised
at the draft EIR stage. This objection can occur after significant
time has elapsed and substantial additional engineering expense

\textsuperscript{97} Id. § 4332(c).
\textsuperscript{98} CAL. PUB. RES. CODE §§ 21000-21175 (West 1977 & Supp. 1980).
\textsuperscript{99} Id. §§ 21080(b)(1), 21100, 21151; Friends of Mammoth v. Board of Supervi-
sors, 8 Cal. 3d 247, 502 P.2d 1049, 104 Cal. Rptr. 78 (1972).
has been incurred. To avoid this uncertainty, the EIR process should be avoided, if at all possible, by designing the project either to avoid discretionary permits or to qualify for a negative declaration.

A comprehensive discussion of the types of agency permits and approvals that will trigger the requirement for an EIS or EIR is beyond the scope of this article. However, in general, unless a zone change, variance, or conditional use permit is required, it is quite possible that no EIR or EIS will be necessary for new or expanded industrial facilities because all permits ordinarily required will be ministerial in nature, rather than discretionary, and no major federal actions will be involved.100

There are at least two areas involving the application of NEPA and CEQA that are unresolved and to which attorneys should be alerted. The first is the potential problem raised by obtaining variances in an area otherwise considered ministerial. For example, issuance of a building permit is generally considered ministerial.101 That is, if the required showing of compliance with local code requirements is made, the permit must issue. Variances from code requirements, however, can be considered discretionary.102 If enough variances are sought so as to be considered of significant impact, it can be, and has been, argued that an EIR should be required. Accordingly, the attorney should consider the potential cumulative impact of needed variances before the petitions are filed.

The second problem area is the possibility that the granting of a permit, under new source or PSD review where the air pollution emission level is such that an air quality impact analysis is required, may be considered to be a major discretionary action requiring preparation of an EIS or EIR.103 It has not been finally resolved whether the preparation of an air quality impact analysis (and the issuance of a permit based thereon) by an AQMD is a discretionary action requiring preparation of an EIR. This possibility should be given serious attention and the requirement

100. "Major federal actions" is defined in 40 C.F.R. § 1502.4 (1979).
102. Whether or not to grant a variance is generally within the discretion of the agency. Most variances from building code requirements are not of a nature to be of significant impact, even if a large number of these are accumulated. This can, however, be an area of vulnerability to litigation delay for controversial projects. Variances from other regulations could be quite significant.
avoided if at all possible by design change, acquisition of emission offsets, or otherwise.

Depending on the size of the proposed facility, building permits, variances, and even air quality permits are sometimes obtained by the project engineers without the assistance of legal counsel. However, the attorney should be kept advised of these activities, so that the inadvertent triggering of an EIR or EIS, with its potential for delay and expense, can be avoided.

D. Powerplant and Industrial Fuel Use Act of 1978

The Powerplant and Industrial Fuel Use Act of 1978 ("FUA")104 was signed into law in November of 1978 and became effective on March 8, 1979.105 FUA prohibits new major fuel-burning installations (“MFBI’s”) from using petroleum or natural gas as a primary energy source unless an exemption is granted by the Economic Regulatory Administration of the Department of Energy ("ERA").106 MFBI’s are primarily industrial or utility boilers that have a design capacity exceeding 100 million Btu heat input (or several units at a single facility that in the aggregate exceed 250 million Btu heat input). “New” MFBI’s are units with respect to which construction or acquisition began (i) after November 9, 1978, (the date of enactment of FUA) or (ii) after April 20, 1977, (when the first bill, which ultimately was transformed into FUA, was introduced) unless the petitioner can demonstrate that the installation cannot be cancelled or modified to comply with FUA without a substantial financial penalty.107

Temporary and permanent exemptions are available if the applicant can make the factual showing required by FUA and the implementing regulations.108 In general, exemptions are available if coal or another alternate fuel cannot be used because (i) the cost would substantially exceed the cost of using imported petroleum,109 (ii) an adequate and reliable supply is not and will not be available,110 (iii) physical limitations of site preclude installation of the required equipment,111 or (iv) applicable environmental regulations would be violated.112

FUA and the implementing regulations present a number of serious practical and legal problems. For example, the ERA may deny a petition for a permanent exemption and grant instead a temporary exemption (authorizing a new MFBI to use petroleum or natural gas for a period of up to five years) on the grounds that the company failed to demonstrate, as required by FUA, that use of an alternate fuel would not be feasible at the expiration of the temporary exemption. However, the ERA has taken the position that further exemptions after the expiration of a maximum temporary exemption cannot be granted. As a result, if contrary to the ERA's projections, a viable alternate fuel does not materialize prior to the expiration of the temporary exemption, the facility might be forced to cease operating until an alternate fuel can be found.

Applications for an exemption must be supported by a petition demonstrating that the facts justify the exemptions sought. The preparation of a petition in support of an exemption can be complex, time-consuming, and very expensive or relatively simple and inexpensive depending on the exemption sought. Engineering consultants expert in the relative availability and characteristics of the various alternate fuels and state-of-the-art air pollution control technology are essential in preparing these petitions. The client would be well advised to employ consultants who are already familiar with the process.

114. See also text accompanying notes 118-23 infra.
115. 10 C.F.R. §§ 503.35 (1980).
116. Some exemptions require greater and more expensive evidentiary support in the petition than others. In general, the limited use and specific use exemptions, such as the fuel mixtures exemption, 10 C.F.R. § 503.38 (1980), are the easiest to obtain but may not be feasible depending on a particular company's circumstances. In contrast, the showing required to establish that environmental quality regulations cannot be complied with if an alternate fuel is used, 10 C.F.R. § 503.23 (1980), and the engineering and other work necessary to support a cost exemption, are all time-consuming and result in substantial cost. For example, to support a cost exemption, 10 C.F.R. § 503.21 (1980), sufficient design work must be done on a hypothetical facility for the use of coal or other alternate fuels to generate supportable cost data. This is expensive and obviously takes time. All of this work, of course, is wholly unproductive for the company.
117. The consultants who participated in the Fuels Decision Report on which
IV. RISK AND UNCERTAINTY CAUSED BY THE REGULATORY PROCESS

The permit process for a new or expanded industrial facility is fraught with risk and uncertainty. The following discussion is intended to alert the attorney to the various characteristics of the regulatory process that foster such risk and uncertainty in the hope that awareness will enable the attorney to avoid some of the more common and recurring problems.

A. Retroactive Application of New Statutes and Regulations

Much of the uncertainty and risk confronting a company proposing to construct or expand an industrial facility is that new statutes or regulations adopted during the lengthy permit process may impose new conditions that were not present when the proposed facility was initially conceived. As discussed below, a proposed industrial facility is probably not immune from the imposition of new conditions and requirements until all permits have been obtained and actual construction has commenced.118 The potential risks occasioned by the retroactive application of new requirements to industrial facilities in the advanced planning stages is effectively illustrated by the recently adopted federal fuel use act, discussed in the preceding section.119

As noted above, FUA was enacted on November 9, 1978, but its prohibition against new MFBI's using natural gas or petroleum was made retroactive to April 20, 1977, the date the original bill was introduced.120 A company initiating a major expansion subsequent to April 20, 1977, in an area with serious air pollution problems would be faced with two equally undesirable options. The company could install natural gas or petroleum-fired boilers guessing (or hoping) that FUA would not be enacted or, if enacted, would provide an exemption applicable to the facility. On the other hand, the company could incur the substantial additional cost and delay in an attempt to obtain permits from state and federal air pollution control agencies for installation of coal-fired boilers with state-of-the-art control technology. In certain air

the authors worked were Holmes & Narver, Inc. of Orange, California; KVB, Inc. of Tustin, California; and Williams Brothers Engineering Company of Tulsa, Oklahoma. Midwest Research Institute, of Kansas City, Missouri, was consulted on one aspect of refuse-derived fuel. Holmes & Narver, Inc. headed the engineering effort and, among other things, set up a computer program for the cost calculations required. KVB, Inc. was and is involved in state-of-the-art research on coal combustion.

118. See text accompanying notes 159-62 infra.
119. See text accompanying notes 104-17 supra.
basins such as Los Angeles and New York, restrictive air quality regulations making installation of coal-fired boilers technologically infeasible.\textsuperscript{121}

The appropriate course of action for the company would depend on whether the facility were entitled to an environmental or other exemption under FUA.\textsuperscript{122} However, FUA did not become effective until May 8, 1979, and the availability of an exemption could not be determined until the ERA developed proper procedures to process petitions for exemptions. If a company prudently decides to process a petition for an exemption before construction begins, a delay of from several months to several years can be expected, depending upon the exemptions sought. Few companies planning an industrial expansion can afford to wait an extended period to have questions concerning the availability of exemptions resolved. On the other hand, if the company gambles on the availability of an exemption and proceeds with construction, it runs the risk that the facility could not utilize petroleum or natural gas and substantial modifications would be required before the facility could commence operations.\textsuperscript{123}

The uncertainty and potential waste inherent in such a situation is obvious. No matter which option the company selects, it could potentially lose a staggering sum as a result of risks that do not advance the ultimate objectives of the regulatory schemes: to conserve natural gas and petroleum.

Because the enactment of new statutes and the promulgation of new regulations with retroactive application pose possibly the greatest risk to the company constructing or expanding an industrial facility, the attorney or company personnel must monitor federal, state, and municipal legislation and the development of new regulatory procedures to advise the company at the earliest possible moment of the possibility that additional, and possibly more stringent, conditions may be imposed on the proposed facility. Because the sums invested in land acquisition, planning, and engineering for a project increase daily during the permit process, the company must be kept abreast of potential changes and re-

\textsuperscript{121} Robert MacKnight, Chief Engineer for the South Coast Air Quality Management District, has advised the authors that no control technology is currently commercially available that, in his estimation, would permit coal-fired industrial boilers to be installed in the South Coast Air Basin in California.

\textsuperscript{122} 42 U.S.C. § 8322(a) (Supp. III 1979).

\textsuperscript{123} See text accompanying notes 123-28 infra.
quirements so that it can make ongoing decisions as to the continued economic and technical viability of the proposed facility.

B. The Danger of an Interagency Conflict Creating an Impasse

Despite attempts to coordinate better the function of various governmental agencies, the principal land use, environmental, and energy-related regulatory programs are administered by single purpose agencies.124 There is increasing danger today for a company constructing a new industrial facility to get caught in the middle, unable to satisfy the inconsistent requirements of two or more regulatory programs.

An example of this danger can be derived from the interaction of FUA and local air quality regulations mandated by the Clean Air Act Amendments of 1977.125 FUA contains an exemption from the requirement that a new industrial boiler use coal or another fuel as an alternative to petroleum or natural gas, if applicable state environmental requirements cannot be met.126 However, the burden of proof is placed on the applicant to demonstrate that the control technology needed to comply with such environmental requirements will not be available within five years after startup of the new or expanded facility.127 Vigorously pursuing its objective to maximize coal conversion, the ERA could well find that the applicant had not carried its burden of proof and deny the exemption based on a prediction that developing control technology would permit coal to be used without violating applicable air quality regulations within five years.

Notwithstanding the optimism of the ERA about the performance of developing control technology, the local air pollution control agency will likely be more skeptical. It is very possible that such agency will deny a permit for the use of coal based on its finding that the developing control technology will not permit such fuel to be used without violating applicable air quality regulations.128 As a result of the contradictory factual determinations

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125. See text accompanying notes 45-78, 104-17 supra.
127. 10 C.F.R. § 503.34 (1980) provides in relevant part as follows: "To qualify, you must demonstrate to the satisfaction of ERA that, despite good faith efforts: (1) You will be unable within 5 years after beginning operation to comply with the applicable prohibitions imposed by the Act without violating applicable Federal or state environmental requirements."
128. For example, the South Coast Air Quality Management District interprets its rules and regulations as requiring the applicant to demonstrate by actual performance data that the proposed air pollution control technology when installed
of the two agencies, the facility would have no legally permissible fuel supply and could not be constructed at all.

The ramifications of such an administrative impasse can be fatal to a new or expanded industrial facility. If the potential for such impasse is not anticipated, the position of the respective agencies may be difficult to reverse after formal administrative decisions have been rendered. Although a judicial remedy to resolve such an administrative impasse may be available, the cost in terms of delay may render the remedy of little or no value. It is important, therefore, in developing an approach to the regulatory process, that the potential for an administrative impasse be identified early and close coordination between the respective agencies be promoted.

C. Overly Complex or Ambiguous Regulations

Another source of uncertainty results from regulations which are overly complex, ambiguous, or construed contrary to the plain meaning of the language used. Although the problems of complexity and ambiguity are all too well understood, an example of "strained construction" of regulations may be helpful.

The interpretation given by the ARB to a regulation which it drafted and imposed upon the SCAQMD is illustrative. The regulation in question, the former new source review rule, defines "stationary source" as a "unit or aggregation of units of non-vehicular air contaminant-emitting equipment which is located on one property or on contiguous properties...." Under the rule, each new stationary source is limited to a specified increase in the emissions of regulated air contaminants.

will achieve the level of control that the manufacturer represents will be achieved. Telephone conversations between Mr. Prairie and Robert J. MacKnight, Director of Engineering, South Coast Air Quality Management District.

129. See text accompanying notes 145-49 infra.


131. SCAQMD Rule 213.

132. SCAQMD Rule 213 provided in part as follows:

The Air Pollution Control Officer shall deny a permit to construct for any unit or units constituting a new stationary source if such source will emit more than 25 pounds per hour or 250 pounds per day of nitrogen oxides, organic gases, or any air contaminant for which there is a state or national ambient air quality standard (except carbon monoxide, for which the limits are 250 pounds per hour or 2500 pounds per day), or which is a precursor of any such air contaminant, unless he determines that the emissions from the new source will not cause a violation of, or will not interfere with
In calculating the allowable increase in emissions from a proposed expanded facility, the ARB took the position that the existence of a pipeline connecting two facilities which were fifteen miles apart, made such facilities "contiguous" and that the projected emissions from increased non-vehicular traffic at one facility had to be included in calculating the total increase of emissions resulting from the expansion.133

Although a court reviewing the ARB's interpretation may well have found an abuse of discretion,134 the company involved, as is frequently the case, was not in a position to delay construction of the expansion project for the period required to seek adjudication of that issue. As a result, permit conditions that reduced the financial viability of the project were accepted. These costs were felt by the company to be less than the loss to be incurred by the probable delay.

In addition to strained interpretations of regulatory language, agencies all too often employ regulatory requirements contrary to their intended purpose. For example, it has been reported that the threat of a comprehensive review under NEPA or CEQA and the preparation of an EIS or EIR has been used by certain agencies as leverage to compel the applicant to agree to permit conditions or restrictions that would not and should not have otherwise been required.135

The best technique for minimizing the potential risks resulting from the ambiguity and construction of the regulations themselves is to work informally with the staff of the applicable agencies from the conception of the project to ascertain how the regulations will be applied to the project in question. Through this process, ambiguities or problems in the regulations will be discovered and the attorney can take an active role, at least at the

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133. Discussions between Mr. Beckman, representing the applicant, and representatives of the California Air Resources Board and South Coast Air Quality Management District.
134. See text accompanying notes 145-49 infra.
135. The level of review under both NEPA and CEQA is largely in the discretion of the administering agency. An agency decision that the project will not have significant adverse environmental impact often permits the environmental review process to be completed in a matter of months. In contrast, if the agency makes the decision that the EIS or EIR is required, the environmental review process should last for an indefinite period and involve public hearings which focus the attention of special interest groups on the project. Notwithstanding agency guidelines that seek to limit such discretion, the level of review decision remains highly discretionary and can be used to exact concessions from the applicant that bear little or no relationship to the purposes of NEPA or CEQA.
staff level, of resolving ambiguities in a manner consistent with the company's interest.

D. Agency Vacillations

The great latitude afforded to administrative agencies to impose new requirements on proposed industrial facilities that have nearly completed the permit process is illustrated by the case of Raley v. California Tahoe Regional Planning Agency.136 In that case Raley, the developer of a shopping center near Lake Tahoe, attempted to obtain the required permits from the Tahoe Regional Planning Agency ("TRPA"), a bi-state land use agency, and its state component, the California Tahoe Regional Planning Agency ("CTRPA"). In 1973 Raley received preliminary approval for the project from the county, conditioned upon the approval of the TRPA.137 Raley received the TRPA's conditional approval in June 1973, which included the consent of the member of the CTRPA who sat on both boards.138 In reliance on the conditional TRPA approval, Raley expended $150,000 in planning and engineering for the shopping center.139 In April 1974 the CTRPA, reorganized with an increased membership, reconsidered Raley's proposed development, seeking to impose additional requirements, including preparation of an environmental impact report which would delay or very possibly prohibit the construction of the project.140

Notwithstanding the court's finding that "Raley spent $150,000 in reliance upon a land use permit lawfully granted by a state instrumentality which was then repudiated by a related state instrumentality,"141 the court concluded that it could provide him no relief. This case illustrates the risks of relying too confidently on purported final decisions of an agency.

Even if a comprehensive strategy for approaching the regulatory process for a new industrial facility is developed, there is very little which can be done to anticipate or guard against administrative vacillations such as those illustrated by the Raley case. However, an attorney advising a company proposing to con-

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137. Id. at 972, 137 Cal. Rptr. at 703.
138. Id.
139. Id. at 984, 137 Cal. Rptr. at 711.
140. Id. at 973, 137 Cal. Rptr. at 704.
141. Id. at 984, 137 Cal. Rptr. at 711.
struct a major new industrial facility should remind the client that a decision of a regulatory agency cannot necessarily be relied upon until actual construction was commenced.

E. The Impracticality and Ineffectiveness of Judicial Remedies

In developing a strategy in the permit process, it is important to appreciate at the outset the great deference shown by California and federal courts to the decisions of regulatory agencies. Unless a constitutionally protected right has been infringed upon, challenges to agency actions denying a permit or imposing restrictive conditions will generally be limited to those instances in which the company can demonstrate that the agency abused its discretion or exceeded its statutory authority. ¹⁴² In addition, although equitable estoppel has been at least theoretically available to insure that regulatory agencies “honor their commitments,” recent California cases suggest that estoppel may not be invoked against agencies in permit cases unless the requirements of the “vested rights” doctrine have been met. ¹⁴³ Moreover, the vested rights doctrine provides only limited protection against the retroactive application of new requirements in those instances in which necessary permits have been obtained and substantial construction has commenced. ¹⁴⁴ The following discussion attempts to provide a brief, but realistic, appraisal of the practicality and effectiveness of judicial review.

1. Judicial Remedies for the Unreasonable Denial of a Permit or the Imposition of Unwarranted Conditions

As the foregoing discussion illustrates, it is not uncommon for a proposed new or expanded facility to be adversely affected by improper administrative action. However, in most cases judicial remedies are ineffective to correct administrative inequities. Moreover, judicial remedies are often impractical to the client because the cost of the delay involved will be greater than the cost of the administrative action. ¹⁴⁵

As a practical matter, most challenges to agency actions will be based on the argument that (i) the action was contrary to the agency's authorizing statute or implementing regulations or (ii) the agency abused its discretion in reaching the decision in-

¹⁴². See text accompanying notes 146-49 infra.
¹⁴³. See text accompanying notes 159-62 infra.
¹⁴⁴. See text accompanying notes 159-60 infra.
¹⁴⁵. See text accompanying notes 130-34 supra.
The chances of success are far greater if the "excess of authority" challenge can be asserted. As is illustrated by the recent case of Alabama Power Company v. Costle\textsuperscript{147}, which struck down certain EPA regulations, it is not uncommon for agencies to promulgate regulations that are arguably beyond their statutory mandate.\textsuperscript{148} Accordingly, an attorney considering a challenge to an agency action should determine initially whether the action taken conforms to the agency's regulations and whether the regulations conform to the authorizing statute and legislative history.

The burden of proof makes an abuse of discretion challenge in either California or federal courts very difficult. Under both California and federal law the reviewing court will overturn the agency's decision only if the applicant can show that the agency's findings were not supported by substantial evidence in the light of the whole record or were arbitrary, capricious, or entirely lacking in evidentiary support.\textsuperscript{149} This is a difficult burden to carry.

Thus, it is important to recognize in advising a company constructing or expanding an industrial facility that discretionary agency decisions, even those that appear to be quite arbitrary or unreasonable, are not likely to be upset by a reviewing court. Moreover, regulatory agencies, for the most part, are well aware of the lack of effective judicial recourse available to the company. Accordingly, the agency is placed in a potentially unconscionable bargaining position, which is all too often used as leverage to impose conditions that may be so restrictive as to threaten the eco-

\textsuperscript{146} For a comprehensive discussion of administrative mandamus proceedings in California, see W. Deering, California Administrative Mandamus (1967 & Supp. March 1979). For a discussion of the application of administrative and ordinary mandamus proceedings to zoning, environmental review, and other regulatory programs, see J. Longtin, supra note 2, at 319-43 (zoning), 403-11 (CEQA), 435-41 (NEPA), 460-62 (water pollution), 533-34 (solid waste), 656-60 (Subdivision Map Act). For an overview of judicial review of federal agency decisions, see B. Schwartz, Administrative Law 579-644 (1976); E. Gellhorn, Administrative Law and Process in a Nutshell 262-73 (1972).

\textsuperscript{147} 606 F.2d 1068 (D.C. Cir. 1979).

\textsuperscript{148} See text accompanying note 75 supra.

\textsuperscript{149} See 5 U.S.C. § 706 (1976 & Supp. III 1979); CAL. CIV. PRO. CODE §§ 1085, 1094.5 (West 1980). The rationale for the limited scope of review was stated by the court in Consolo v. Federal Maritime Comm'n, 383 U.S. 607, 620 (1966): "Congress was very deliberate in adopting this standard of review. It frees the reviewing courts of the time-consuming and difficult task of weighing the evidence, it gives proper respect to the expertise of the administrative tribunal and it helps promote the uniform application of the statute."
2. Estoppel Against Regulatory Agencies

The doctrine of equitable estoppel provides that a person may not deny the existence of a state of facts if he intentionally leads another to believe particular circumstances to be true and to rely upon such belief to his detriment. Both California and federal courts have held that estoppel may be invoked against a governmental agency. However, California courts restrict its use to cases where "in the considered view of a court of equity, the injustice which would result from a failure to uphold the estoppel is of sufficient dimension to justify any effect upon public interest or policy which would result from the raising of an estoppel." In contrast, federal courts appear to continue to limit the doctrine of estoppel to cases where the government is acting in its proprietary rather than sovereign capacity.

Even California courts, which recognize the doctrine's application in land use and permit cases, have more often than not denied its application based on the facts of specific cases. For example, in *Raley v. California Tahoe Regional Planning Agency*, discussed above, the developer was induced to expend $150,000 in planning and architectural expenses for a shopping center based on the express approval of a bi-state planning agency and the tacit approval of its California counterpart, which had overlapping membership with the bi-state agency. A trial court deci-

150. For example, the Economic Regulatory Agency of the Department of Energy at one point in time took the position that all permanent exemptions under the Powerplant and Industrial Fuel Use Act of 1978 would require an EIS to comply with NEPA. It is doubtful that Congress intended NEPA to apply to those permanent exemptions that are mandatory and must be granted if the required factual showing is made by the applicant. Since no discretionary decision is involved, the preparation of an EIS serves no useful purpose because the agency has no discretion to take any other action. However, the potential for delay resulting from the EIS requirement tends to coerce applicants to seek temporary exemptions in order to avoid the requirement even though, under the statute, they are entitled to a permanent exemption.


152. *See, e.g.*, *Strong v. County of Santa Cruz*, 15 Cal. 3d 720, 523 P.2d 264, 125 Cal. Rptr. 896 (1975); *City of Long Beach v. Mansell*, 3 Cal. 3d 462, 476 P.2d 423, 91 Cal. Rptr. 23 (1970). *See also Cunningham & Kremer, supra note 124, at 648-60.*

153. *See, e.g.*, *Union Oil Co. of Cal. v. Morton*, 512 F.2d 743, 749 (9th Cir. 1975); *United States v. Lazy FC Ranch*, 481 F.2d 985, 988 (9th Cir. 1973).


156. *See text accompanying notes 136-41 supra.*

sion estopping the California agency from imposing additional requirements was reversed by the court of appeal which held that the trial court did not properly consider whether the injustice to the developer was of "sufficient dimension" to justify his insulation from the public interest in environmental regulation.158

In addition to the reluctance of courts to invoke the doctrine, the availability of equitable estoppel against agencies has been eroded by recent cases holding that estoppel may not be invoked in permit cases absent the perfection of a vested right.159 Because important investment decisions are often based on the representations and assurances of agency officials, the erosion of the estoppel doctrine in land use and permit cases is of great significance. In advising the company seeking to construct or expand an industrial facility, the attorney must, therefore, keep the company's management on guard by reminding it that the promises and assurances of agency officials are, as a practical matter, unenforceable until a vested right has been perfected.

3. Implications of the Vested Rights Doctrine

It has long been the rule in California and in other states that if a property owner has performed substantial work and incurred substantial liabilities in good faith reliance upon a permit issued by the government, he acquires a vested right to complete construction in accordance with the terms of the permit.160 Once a company has secured a vested right, the government may not, by virtue of a change in the laws or regulations, prohibit construction

158. Id. at 979-83, 137 Cal. Rptr. at 707-11.
159. See, e.g., Avco Community Developers, Inc. v. South Coast Regional Commission, 17 Cal. 3d 785, 799-806, 553 P.2d 546, 555-56, 132 Cal. Rptr. 386, 395-96 (1976); Furey v. City of Sacramento, 146 Cal. Rptr. 485, 491 (1978) rev'd on other grounds, 24 Cal. 3d 862, 598 P.2d 844, 157 Cal. Rptr. 684 (1979). In Furey, the court stated as follows:

Under *Avco*, only est oppels which rise to the level of "vested rights" can be judicially recognized in zoning and permit cases. Although . . . "[s]everal decisions intimate that a building permit may no longer be the *sine qua non* of a vested right if preliminary public permits are sufficiently definitive and manifest all final discretionary approvals required for completion of specific buildings" . . . plaintiffs here obtained no permits or approvals whatsoever. Their claim based upon the sewer assessments and prior general planning documents is substantially short of the required showing.


authorized by the permit upon which the company has relied.\textsuperscript{161}

Therefore, notwithstanding the substantial amounts of capital which must be invested in land acquisition, design, and engineering prior to completing the permit process, California and federal law affords little or no protection to such investments. Thus, until a "vested right" is perfected by obtaining the necessary permits and commencing actual construction, the project can be delayed, rendered economically infeasible, or even prohibited by the application of new laws or regulations or by a regulatory agency merely changing its mind.\textsuperscript{162} In condemning the risks and uncertainties often imposed on companies by the rigid application of the vested rights doctrine, a recent California court noted that the rule "gives a green light to administrative vacillations virtually up to the moment the builder starts pouring concrete."\textsuperscript{163}

The multiplicity of environmental and energy-related permits often required for industrial facilities presents difficult problems with respect to the vesting of the company's rights. If the company prudently decides to avoid substantial construction until all major discretionary permits have been obtained, the vesting of its rights as to any particular permit would not occur until the last permit had been obtained and substantial construction had commenced. On the other hand, if the company proceeds with construction in order to vest a land use permit, the project may subsequently be disapproved by the AQMD or other agency, and the amount invested in construction might be lost. Because of the protracted period which may be necessary to obtain all required permits and approvals, a major new industrial facility can be mired seemingly forever in the regulatory process by the changing requirements imposed on the project.

The late vesting problem facing new industrial facilities can possibly be mitigated by the development of a strategy for the "sequential" vesting of the various major permits as they are obtained. Thus, for example, the award of a permit to construct by an AQMD could possibly be vested by execution of a binding contract for purchase of the boilers or other equipment, and construction of the foundations to install such equipment at the site.\textsuperscript{164} The vesting issue should be considered independently as

\begin{itemize}
\item \textsuperscript{161} Avco Community Developers, Inc. v. South Coast Regional Comm'n, 17 Cal. 3d 765, 791, 553 P.2d 546, 554-555, 132 Cal. Rptr. 386, 389-90 (1976).
\item \textsuperscript{162} See text accompanying notes 136-42 supra.
\item \textsuperscript{164} No California court has faced the specific issue of what constitutes "substantial construction" for a permit to install air pollution-emitting equipment issued by an air quality management district or air pollution control district. A
to each permit and, based on the likelihood that retroactive requirements will be imposed, the company can make a case-by-case decision as to whether the capital investment necessary to acquire a vested right as to a particular permit should be made.

V. DEVELOPING A STRATEGY FOR THE PERMIT PROCESS

Although the list of various regulatory programs, and the problems they create is formidable, industrial development in California can still be accomplished. The approach suggested by this article can greatly increase the chances of success, and minimize the delays caused by the proliferation of regulatory programs. This approach involves the careful preparation of an overall strategy to the permit process at the inception of the project by an interdisciplinary team of management, engineers, and attorneys. It is based on the assumption that new industrial facilities must be located, designed, and constructed with the regulatory requirements foremost in mind.

The role of the attorney in the interdisciplinary approach will, by necessity, vary with each project. In general, however, the attorney's role will include the following:

(i) After preliminary information about the project is obtained from the company, the attorney should compile a compendium of those regulatory programs that could be applicable to the new or expanded industrial facility. The digest at the beginning of this article could prove helpful in preparing the compendium. In most instances, it will be helpful to forward a copy of the compendium to the company, together with a request specifying in detail the information that will be required to determine the regulatory requirements that will be applicable to the facility.

(ii) The attorney should next obtain more detailed information regarding the project, including projections of the emissions of air and water contaminants; the quantity and type of solid waste and effluent which will be generated; the anticipated requirements for electricity, water, and other municipal services; and the requirements for access to freeways, highways, or railroad spur tracks. In addition, because the regulatory programs may preclude construction of the facility with the exact produc-
tion capacity desired by the company, it should be determined whether the projected emissions of air or water contaminants would be significantly affected by a marginal reduction in the designed capacity of the proposed facility. This information will be obtained from the company and its design engineers. The discussion in this article of the major regulatory programs that are likely to impose the most serious constraints on industrial development in California should prove helpful in determining which information will be required. After the above information is obtained, the attorney should analyze in detail the regulatory requirements and provide the company with a detailed analysis of the regulatory requirements that will pose the most significant problems for the proposed facility.

(iii) The attorney should next work with the company's design engineers, commercial real estate broker, marketing department, and other affected company officials to ascertain all potential sites for the proposed facility. At the outset, the attorney should advise company officials that the ability to satisfy the myriad of regulatory requirements may depend on flexibility in the selection of a site and that the attorney's involvement in the site selection process is crucial. For each proposed site, the company's team should conduct an air quality analysis and determine whether the proposed facility could be constructed in conformance with the applicable air quality regulations at that location. As discussed in the article, site selection will also be affected by the availability of municipal services, access to transportation facilities, and the ability of the municipal sewage system to accommodate effluent from the proposed facility.

(iv) Once the site is selected, the attorney and company officers should personally contact and inform the local political representatives of the project. These individuals should be supplied with all available information on the benefits of the project, such as jobs created and tax revenues to be received by the municipality, so that they will be in a position to promote the project and provide assistance in obtaining local permits and approvals.

(v) Personal contact should also be made with the appropriate personnel in all the municipal departments or public utilities that will be supplying utilities or services to the project, to establish good working relationships. Similar contact and working relations should be established at the various regulatory agencies from whom permits, licenses, or exemptions will be required. In ma-

165. See text accompanying notes 77-78 supra.
166. See Digest, supra note 2, items 15-16. See also text accompanying notes 92-95 supra.
ture agencies, the working staff is frequently very experienced and wields considerable influence on the agency's decision. In such instances, it may be counter-productive to involve higher levels in the agency. In contrast, applications processed by agencies administering new programs for which regulatory procedures have not become well-established may become mired at the staff level, and it may be necessary to seek the intervention of higher levels in the agency to obtain a timely decision.

(vi) The possibility of political intervention should neither be overlooked nor overrated. At the federal level, a senator or representative may be able to expedite the processing of an application that otherwise might become stalled. However, political intervention has been much less successful in substantively affecting an agency's decision.

(vii) Attention should be given to the degree to which reliance can be placed on the apparent approvals received. Consideration should be given to the sequential vesting suggestions made in the section of this article dealing with judicial remedies.167

While these suggestions may appear simple, implementing them requires much thought and care. A company setting out to install a major increase in capacity in California, and virtually everywhere else, will not be in for an easy ride. Comprehensive early planning by a skilled team can, however, smooth the way to the fullest extent possible.

167. See text accompanying notes 159-62 supra.