APPENDIX B

1. Federal Clean Water Act

2. California Water Quality Control Act

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Federal Clean Water Act

The first major law governing pollution of the nation's surface waters was the Federal Water Pollution Control Act of 1948. This was totally revised by amendments in 1972 and became the Federal Clean Water Act (CWA). The objective of the CWA is to restore and maintain the chemical, physical and biological integrity of the nation's waters. In 1972, two goals were established: zero discharge of pollutants by 1985 and, water quality that is both "fishable" and "swimmable" by mid-1983. To achieve its objectives, the Act embodies the concept that all discharges into the nation's waters are unlawful, unless specifically authorized by a permit, which is the Act's principal enforcement tool. Primary authority for implementation and enforcement rests with the U.S. EPA. Certain responsibilities are delegated to the states under a philosophy of federal-state partnership in which the federal government sets the agenda and standards for pollution abatement, while states carry out day-to-day activities of implementation and enforcement.

The CWA has been termed a technology-forcing statute because of the rigorous demands placed on those who are regulated by it to achieve higher and higher levels of pollution abatement under deadlines specified in the law. Early emphasis was on controlling discharges of conventional pollutants (e.g., suspended solids, biochemical oxygen demanding materials, fecal coliform bacteria, and pH), while control of toxic pollutant discharges are the focus of more recent water quality programs. Initially, programs focused on point source pollution, waste discharges from discrete sources such as pipes and outfalls. Industries were given until July 1, 1977 to install "best practicable control technology (BPT)" to clean up waste discharges while municipal waste water treatment plants were to meet the technically equivalent goal of "secondary treatment." The Act required even greater pollutant cleanup for toxic substances by March 31, 1989 using the "best available control technology (BAT)" that is economically achievable.

The Act uses both water quality standards and technology-based numerical effluent limitations in permits for specific pollutants from certain sources to protect water quality. Water quality "standards" consist of the designated beneficial use or uses (e.g., recreation, drinking water, industrial, other) of a water body, plus a numerical or narrative statement identifying maximum concentrations of various pollutants which would not interfere with the designated use. The Act requires each state to establish

water quality standards for all bodies of water in the state. These standards serve as the backup to federally-set technology-based requirements. Where water quality standards are not achieved using best available control technologies, and the waters are expected to remain polluted by toxic chemicals, states are required to implement control strategies and dischargers may be required to meet additional pollution control requirements.

The CWA established the National Pollutant Discharge Elimination System (NPDES) for industrial and municipal dischargers. Permits are the Act's principal tool for attaining water quality standards/objectives. Violators are subject to civil suit by U.S. EPA in U.S. District courts, administrative civil penalties, and criminal penalties for "knowing endangerment." Third party lawsuits are also allowed. Permits specify the control technology applicable to each pollutant (e.g., BAT for heavy metals, pesticides, and other organic chemicals), effluent limitations (mass and/or concentration), and a deadline for compliance. Sources are required to maintain records and conduct effluent monitoring. NPDES permits must be renewed every five years, a feature which allows updates based on better science and technology and/or new water quality standards.

Section 303(d) of the CWA requires the stated to establish a list of impaired water bodies or water segments. Impaired water bodies must be restored by limiting the aggregate discharges of individual pollutants such that the assimilative capacity (the "total maximum daily load [TMDL]") of the water body for each pollutant is not exceeded. Discharges are controlled through permit limitations.

The 1987 amendments directed states to develop and implement nonpoint source pollution management programs. Nonpoint source (NPS) pollution results from stormwater runoff from farm lands, forests, construction sites, and urban areas and is estimated as representing more than half of the water pollution problem. NPS is not subject to CWA permits or other regulatory requirements under federal law, this is delegated to the states.

This summary was developed from reviews posted at these Web sites:

http://www.ncseonline.org/NLE/CRSreports/water/h2o-32.cfm "Clean Water Act: A Summary of the Law" by Claudia Copeland, a Congressional Research Service Report distributed by the National Library for the Environment, dated January 20, 1999.

http://ipl.unm.edu/cwl/fedbook/fwpca.html "Federal Water Pollution Control Act (Clean Water Act)", Center for Wildlife Law, University of New Mexico School of Law, Institute of Public Law (no date specified, may be reproduced from an abstract in the Federal Register).

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California Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 is the principal law governing water quality in California. It establishes a comprehensive program to protect water quality and the *beneficial uses* of water. Unlike the Clean Water Act, P-C applies to both surface water and ground water. Porter-Cologne designated the State Water Resources Control Board (SWRCB) as the statewide water quality planning agency, and also gave planning and permitting authority to the nine semi-autonomous Regional Water Quality Control Boards (RWQCB). Porter-Cologne was amended (Sec. 13370) to authorize the State to implement the provisions of the federal CWA, including the provisions establishing the National Pollution Discharge Elimination System (NPDES).

The SWRCB is required to adopt State *policy* for water quality control. The SWRCB is responsible for developing *statewide water quality control plans* (e.g., the Ocean Plan, Thermal Plan, Bay Delta Plan, Enclosed Bays and Estuary Plan (Sec. 13391), and Inland Surface Water Plan) for surface waters for which water quality standards are required by federal law. RWQCBs are required to develop and adopt *regional water quality control plans* ("basin plans") that address all areas in a region and conform to State water quality policy. These *plans*, both statewide and basin, include (1) designation or establishment of *beneficial uses** to be protected, (2) establishment of *water quality objectives***, and (3) implementation plans that control non-point and point sources of pollution in order to achieve the water quality objectives protecting each designated beneficial use. Regional Boards have the primary responsibility for implementing the provisions of both statewide and their own basin plans.

Porter-Cologne requires that basin plans be periodically reviewed, currently done as part of the triennial review. Any amendments to a basin plan must be approved by the State Board, Office of Administrative Law, and for surface waters, approval by U.S. EPA.

Porter-Cologne (Sec. 13260) requires any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of waters of the state, to file a *report of waste discharge* with the applicable regional board. No discharge may take place until the regional board issues waste discharge requirements (WDRs), or a waiver of the WDRs. This a major statewide permitting activity along with implementation of the federal NPDES permitting program for certain point-source discharges.

P-C (Sec. 13369) requires the SWRCB to prepared a detailed program for implementation of the State's non-point source management plan.

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* "beneficial uses" include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation: aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Twenty-eight beneficial uses have been defined by the State and Regional Boards (see Table 2). Such uses may be past, present and probable future beneficial uses of water.

** *"water quality objectives" are the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specified area. WQOs have three parts: (a) a criteria or standard to be met (typically from the California Toxics Rule or Ocean Plan); (b) beneficial use (what use the WQO is intended to protect); and (c) meets the State's anti-degradation policy.*