APPENDIX D

Federal Groundwater Protection and Cleanup Programs

The EPA has the regulatory lead for the National Priorities List (NPL) Superfund sites as a result of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). They also oversee groundwater protection and cleanup programs via the Resource Conservation and Recovery Act (RCRA) and Safe Drinking Water Act, as described below.

D.1 Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is a federal law that was enacted in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA). CERCLA was established for the purpose of remediating hazardous waste sites. CERCLA established a "Superfund" to be used by the Environmental Protection Agency (EPA) to respond to releases of hazardous substances at certain sites, including primarily sites on the National Priorities List (NPL). Sites listed on the NPL are considered the worst sites in the country and are compiled with input from the states. CERCLA also authorizes the EPA to take enforcement actions to require responsible parties to remediate sites. SARA, which amended CERCLA, included the Defense Environmental Restoration Program (DERP), 10 U.S.C. §§2701 et seq. Section 120 of CERCLA specified that all federal agencies must comply with CERCLA to the same extent as any private party. DERP established specific requirements for the Department of Defense, including environmental restoration requirements, authority to pay for state support services, and a requirement to pay for state permit fees and charges.

CERCLA authorized the president of the United States to carry out its mandates. The president has delegated this authority primarily to EPA, but also to other federal agencies for property under their control.

Under CERCLA, remedial actions selected by the EPA or other delegated federal agency for sites listed on the NPL, other fund-financed sites, and federal facilities must be protective of human health and the environment. If CERCLA hazardous substances are to remain onsite, the remedial action must attain "legally applicable or relevant and appropriate" requirements.

CERCLA applies to the cleanup of "hazardous substances" and "pollutants or contaminants" as defined in CERCLA. If the substance is not a CERCLA hazardous substance, CERCLA requirements may not apply. The terms "hazardous substance" and "pollutants or contaminants" are defined in CERCLA Section 101 and specifically exclude petroleum. Because petroleum is excluded from CERCLA, the cleanup of petroleum that has, for example, leaked from an underground tank would not be subject to CERCLA unless the petroleum has commingled with a CERCLA hazardous substance.

Furthermore, a number of pesticides are not listed as CERCLA hazardous substances.

Instead, even if a site is on the NPL, the Regional Water Board may take separate enforcement action to require cleanup of wastes that are not subject to CERCLA, such as tank cleanups. In such situations, the Regional Board could issue a cleanup and abatement order, or other appropriate enforcement order, in the same way it does for any other site.

D.2 Resource Conservation and Recovery Act

In 1965, the Solid Waste Disposal Act was enacted by the federal government to improve solid waste disposal methods. The Solid Waste Disposal Act established economic incentives for states to develop planning, training, and research and demonstration projects for the management of solid waste. It was amended in 1970 by the Resource Recovery Act, which provided the Environmental Protection Agency with funding for resource recovery programs. Given that the Solid Waste Disposal Act has little impact on the management and ultimate disposal of hazardous waste, in 1976 Congress enacted the Resource Conservation and Recovery Act (RCRA), which established a system for managing non-hazardous and hazardous wastes from the point of origin to the point of final disposition (i.e., cradle to grave).

The goals set by RCRA are:

- To protect human health and the environment from the hazards posed by waste disposal
- To conserve energy and natural resources through waste recycling and recovery
- To reduce or eliminate, as expeditiously as possible, the amount of waste generated, including hazardous waste
- To ensure that wastes are managed in a manner that is protective of human health and the environment.

To achieve these goals, RCRA establishes three distinct yet interrelated programs. These programs include the Subtitle D Solid Waste Program, the Subtitle C Hazardous Waste Program, and the Subtitle I Underground Storage Tank Program. The Solid Waste Program, under RCRA Subtitle D, encourages states to develop comprehensive plans to manage non-hazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste, sets criteria for municipal solid-waste landfills and other solid-waste disposal facilities, and prohibits the open dumping of solid waste. The Hazardous Waste Program, under RCRA Subtitle C, establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal – in effect, from "cradle to grave." Finally, the Underground Storage Tank Program, under RCRA Subtitle I, regulates underground tanks storing hazardous substances and petroleum products.

Although RCRA creates the framework for the proper management of hazardous and non-hazardous solid waste, it does not address the problems of hazardous waste found at inactive or abandoned sites or those resulting from spills that require emergency response. These problems are addressed by a different act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly called Superfund, which was enacted in 1980.

D.3 Safe Drinking Water Act

The Environmental Protection Agency (EPA) is the primary agency coordinating groundwater protection at the federal level. Congress passed the Safe Drinking Water Act in 1974 to protect public health by regulating the nation's public drinking-water supply. The 1986 amendments to the Act established the Wellhead Protection Program, which required the EPA to approve the state's wellhead protection programs. The 1996 amendments expanded the law by requiring states to complete source water assessments for all public water systems serving more than 15 service connections or for non-community water systems serving more than 25 people.

The California Department of Health Services (DHS), Division of Drinking Water and Environmental Management is the lead agency for developing and implementing the Source Water Assessment Program (SWAP), which in California is referred to as the Drinking Water Source Assessment and Protection (DWSAP) program. The DWSAP program will satisfy the mandates of both the 1986 and 1996 Safe Drinking Water Act amendments.

The Safe Drinking Water Act also includes the Sole Source Aquifer Program and the Underground Injection Control Program. The Sole Source Aquifer Program protects an area's groundwater resource by requiring EPA review of any proposed projects within the designated area that are receiving federal financial assistance. All proposed projects receiving federal funds are subject to review to ensure they do not endanger the water source. There are no such designations in the South Bay basins. The Underground Injection Control Program works with state and local governments to oversee underground injection of waste in order to prevent contamination of drinking-water resources.