

**Table 1. Potential Applicable or Relevant and Appropriate Requirements (ARARs)  
Feasibility Study, OUCTP RI/FS, Former Fort Ord, California**

Source or Authority	Requirement, Standard, or Criterion	Applicable or Relevant and Appropriate	Description	Remarks
<i>Chemical-Specific Requirements</i>				
State Water Quality Control Plan, Central Coast Regional Water Quality Control Board (RWQCB)	Resolution No. 89-04; Portions of Central Coast Region Basin Water Quality Control Plan	Applicable	Establishes criteria for groundwater to be considered a drinking water source and contains requirements for implementation plans or action plans for attaining compliance with these standards. The Plans establish water quality standards (including beneficial use designations, water quality objectives to protect these uses, and implementation programs to meet the objectives) that apply statewide or to specific water basins.	Groundwater at OUCTP is considered a potential drinking water, industrial water, and agricultural water source under the Basin Plan; applicable State Water Resources Control Board Resolutions are described under Action-Specific Requirements. Through these resolutions, the consideration of maximum benefit is limited to the range between Maximum Contaminant Levels (MCLs) and 'non-detectable' for most groundwater basins in the State. The groundwater cleanup standards for OUCTP are based on applicable water quality objectives and are the more stringent of federal and State MCLs. The goal of the remedial actions evaluated herein is to restore the beneficial uses of groundwater underlying and adjacent to OUCTP. Results from other sites suggest that full restoration of beneficial uses of groundwater as a result of active remediation at OUCTP may not be possible. If full restoration of beneficial uses is not technologically nor economically achievable within a reasonable period of time, then the Army may request modification to the cleanup standards or establishment of a non-containment (or non-attainment) zone, a limited groundwater pollution zone where water quality objectives are exceeded. Conversely, if new technical information indicates that cleanup standards can be surpassed, the Board may decide if further cleanup actions should be taken.
National Primary Drinking Water Standards (promulgated under the Safe Drinking Water Act and amendments to the Act)	40 Code of Federal Regulations (CFR) Part 141, §300.430 [e][2][i][B]/[C].	Relevant and Appropriate	Establishes MCLs permissible for a public water system; the highest levels of contaminants allowed in drinking water, and are enforceable standards. MCL Goals (MCLGs) are (1) levels of contaminants in drinking water below which there is no known or expected risk to health, (2) allow for a margin of safety, and (3) are non-enforceable public health goals.	MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. Those federal MCLs that are more stringent than State MCLs are used as Aquifer Cleanup Levels for OUCTP.
State Primary and Secondary Drinking Water Standards	California Safe Drinking Water Act of 1976 (Health and Safety Code [H&SC] §§ 4010.1 and 4026(c)); California Code of Regulations (CCR) Title 22, Chapter 15	Relevant and Appropriate	Establishes enforceable limits for chemicals that may affect public health or the aesthetic qualities of drinking water.	State MCLs that are more stringent than federal MCLs are used as Aquifer Cleanup Levels at OUCTP. For chemicals that lack a federal MCL, where State MCLs exist, they are used as Aquifer Cleanup Levels at OUCTP.

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Identification and Listing of Hazardous Waste	CCR Title 22, Division 4.5, Chapter 11	Relevant and Appropriate	Establishes/defines procedures and criteria for identification and listing of Resource Conservation Recovery Act (RCRA) and non-RCRA hazardous wastes. Chemicals regulated as hazardous waste, and the levels at which they are hazardous, are identified in these regulations.	If any drill cuttings, decontamination water, or groundwater treatment residues subsequently characterized as hazardous are generated, any such wastes will be managed according to the substantive requirements of these regulations.
National Primary and Secondary Ambient Air Quality Standards (NAAQS)	40 CFR 150, federal Clean Air Act, §109, 42 USCA 7401-7642	Relevant and Appropriate; Also an Action-Specific Requirement	Establishes enforceable limits for chemicals that may affect air quality. For the region of California in which the former Fort Ord is located, the Monterey Bay Unified Air Pollution Control District (MBUAPCD) requirements are applicable instead because they incorporate NAAQs and in some cases more stringent requirements specific to the Monterey Bay Area.	If groundwater from OUCTP is extracted for aboveground treatment and the contaminant treatment system is vented to the atmosphere (e.g., using an air stripper), depending on the concentrations of contaminants present, the offgas effluent will be managed (e.g., further treated using vapor phase activated carbon adsorption polishing) to remove concentrations of any contaminants above MBUAPCD standards.
Monterey Bay Unified Air Pollution Control District (MBUAPCD)	Regulation II (New Sources) and Regulation X, Rule 207 (Toxic Air Contaminants)	Relevant and Appropriate; Also an Action-Specific Requirement	Regulates new sources and toxic air contaminants, and restricts specific discharges of organic compounds to the atmosphere through remedial actions (e.g., removal of organic compounds from groundwater using air stripping). MBUAPCD requirements may limit emissions of total and individual organic compounds on a site-specific basis and/or may require emission controls using the Best Available Control Technology (BACT). MBUAPCD regulates releases of certain identified or potential air toxics at levels determined to be "appropriate for review." In some cases, a risk assessment may be required.	If groundwater from OUCTP is extracted for aboveground treatment and the contaminant treatment system is vented to the atmosphere (e.g., using an air stripper), depending on the concentrations of contaminants present, the offgas effluent will be managed (e.g., further treated using vapor phase activated carbon adsorption polishing) in compliance with the substantive requirements of these regulations to remove concentrations of any contaminants above MBUAPCD standards.
<b>Location-Specific Requirements</b>				
Endangered Species Act (ESA)	16 U.S.C. §1531 et seq.	Relevant and Appropriate	Federal agencies are required under the ESA to ensure that their actions do not jeopardize the continued existence of a listed species or result in destruction of or adverse modification of its critical habitat. If the proposed action may affect the listed species or its critical habitat, consultation with the US Fish and Wildlife Service (USFWS) and/or California Department of Fish and Game may be required. Additionally, the ESA prohibits the illegal taking of a listed species.	The Army has completed an endangered species, Section 7 consultation, and the USFWS has issued a Biological Opinion for the Army disposal and reuse actions at Fort Ord. Endangered plant and animal species and critical habitats occur at Fort Ord. Each reuse area will be screened for potential impacts to any endangered species identified in the April 1997 Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California (HMP). The provisions of the HMP satisfy the requirements of the ESA. OUCTP contains areas that have specific resources of concern. Potential locations for siting of OUCTP groundwater extraction and/or treatment systems will be screened for potential environmental impacts to any endangered species identified in the HMP. The HMP report recommends measures, as necessary, to ensure compliance with the ESA for any remedial actions implemented at the former Fort Ord.

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California Endangered Species Act	Fish and Game Code §2050 et seq.	Relevant and Appropriate	Provides for the recognition and protection of rare, threatened and endangered species of plant and animals (in conjunction with State authorized or funded actions).	OUCTP contains areas that have specific resources of concern. Potential locations for siting of OUCTP groundwater extraction and/or treatment systems will be screened for potential environmental impacts to any endangered species identified in the HMP, which recommends measures, as necessary, to ensure compliance with this Act for any remedial actions implemented at the former Fort Ord.
Fish and Wildlife Coordination Act	16 U.S.C. §661 et seq.	Relevant and Appropriate	Requires fish and wildlife to be protected if remedial actions modify the drainage channel or other features of surface waters such as streams and rivers.	No foreseeable remedial action at OUCTP would modify a drainage or other surface water feature. However, potential locations for siting of OUCTP groundwater extraction and/or treatment systems will be screened for potential environmental impacts to fish or wildlife to ensure compliance with this Act for any remedial actions implemented.
Migratory Bird Treaty Act	16 U.S.C. §§703-712	Relevant and Appropriate	The statute sections prohibit the taking, possession of, buying, selling, purchasing, or bartering of any migratory bird, including feathers or other parts, nest eggs, or products, except as allowed by regulations.	Migratory birds may be present within the OUCTP area. Potential locations for siting of OUCTP groundwater extraction and/or treatment systems will be screened for potential environmental impacts to migratory birds to ensure compliance with this Act for any remedial actions implemented.
Coastal Zone Management Act and California Coastal Act of 1976	16 U.S.C. §1456 et seq./ Public Resources Code §3000 et seq.	To-Be-Considered	Requires activities conducted within the coastal zone to be conducted in a manner consistent with the State-approved management program.	Former Fort Ord is located in a coastal area, but groundwater within OUCTP is not directly adjacent to the coast; therefore, these standards do not apply to remedial activities within OUCTP.
Waste Management Unit Classification and Siting	40 CFR 264.18a,b	To-Be-Considered	New hazardous waste treatment, storage, or disposal (TSD) units are prohibited from being located within 200 feet of a geologic fault displaced in Holocene time, and should not be located within a 100-year floodplain unless it is designed to prevent washout of any waste by a 100-year flood.	OUCTP is located within a seismically active region, but not near such a fault, and not within a known floodplain. Therefore, these prohibitions do not apply to the potential siting of groundwater extraction and/or treatment systems that may potentially contain concentrations of chemicals considered as hazardous waste.
Standards for the Management of Wastes Discharged to Land	Title 23 CCR, Division 3, Chapter 15, Article 2 (Waste Classification and Management), §2511(d)	Relevant and Appropriate	Establishes standards for the management of waste discharged to land and provides exemptions to these requirements for cleanups taken at the direction of public agencies, as long as requirements of Article 2 are met for waste that is removed from the point of release under any remedial alternatives and disposed untreated.	If any drill cuttings, decontamination water, or groundwater treatment residues subsequently characterized as hazardous are generated, any such wastes will be managed according to the substantive requirements of these regulations.
<b>Action-Specific Requirements</b>				
Porter-Cologne Water Quality Control Act	Chapter 1 §13000, et seq., Division 7, of the California Water Code; California State Water Resources Control Board (SWRCB) Resolution Numbers 88-63, 68-16, and 92-49	Applicable	Resolution No. 88-63: "Sources of Drinking Water" specifies that all ground and surface water is an existing or potential source of drinking water unless: (1) total dissolve solids (TDS) are greater than 3,000 parts per million (ppm or milligrams per liter [mg/L]), (2) the well yield is less than 200 gallons per day (gpd) from a single well, or (3) the groundwater is unreasonable to treat using best management practices or best economically achievable treatment practices.  Resolution No. 68-16: "Statement of Policy with Respect	Groundwater in all three aquifers of concern in OUCTP (A-Aquifer; Upper 180-Foot Aquifer; Lower 180-Foot Aquifer) meet the first two criteria (i.e., TDS levels are below 3,000 ppm; well yield is above 200 gpd). It is assumed to potentially meet the third criteria (i.e., that it is reasonable to treat using best management practices or best economically achievable treatment practices). The goal of the remedial actions evaluated herein is to restore the beneficial uses of groundwater underlying and adjacent to OUCTP. Results from other sites suggest that full restoration of beneficial uses of groundwater as a result of active remediation at OUCTP may not be possible. If full restoration of beneficial uses is not technologically nor economically achievable within a reasonable period of time, then the Army may request modification to the cleanup standards or establishment of a non-containment or (non-attainment) zone, a limited groundwater pollution zone where water quality objectives are exceeded. Conversely, if new technical information indicates

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			<p><u>to Maintaining High Quality of Waters in California</u>" requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. This resolution establishes goals for the maintenance of existing groundwater quality and requires that waters that are of higher quality than the water quality objectives within a basin plan must be maintained at the higher quality. It also requires best practical control technology for discharges to high quality water, excluding reinjection of water into a contaminated groundwater plume.</p> <p><u>Resolution No. 92-49: "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304"</u> establishes policies and procedures for the investigation, cleanup, and abatement of waste. Under this resolution, dischargers are required to cleanup and abate the effects of discharges in a manner that promotes attainment of either background water quality, or the best water quality which is reasonable if background levels of water quality cannot be restored, considering all the demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible. This resolution requires the application of Title 23 CCR, Division 3, Chapter 15, Section 2550.4 (Chapter 15) requirements to cleanups. In Chapter 15, cleanup levels must be set at background levels, or if background levels are not technologically or economically feasible, then at the lowest levels that are technologically or economically achievable.</p>	<p>that cleanup standards can be surpassed, the Board may decide if further cleanup actions should be taken.</p>
Federal Safe Drinking Water Act	40 CFR 122 / Part 403-5; National Pollutant Discharge Elimination System (NPDES) / Publicly Owned Treatment Work (POTW)	Applicable	This act establishes NPDES permitting standards for discharge of pollutants from any point source into waters of the United States and allows municipalities to determine pretreatment standards for POTWs within its jurisdiction.	Treated groundwater from OUCTP may be discharged to waters of the State of California or the POTW. The substantive requirements of meeting effluent limitations and monitoring under an NPDES permit or discharge requirements to the POTW would be followed if such a discharge is implemented as a component of a selected remedial alternative.

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California Health and Safety Code	California Toxic Injection Well Act §25159.24[a]	Applicable	Prohibits injection of contaminated water into or above a drinking water formation, but exempts injection of treated groundwater for the purpose of improving groundwater quality.	Treated groundwater from OUCTP may be injected to the aquifer to aid/accelerate the remediation process and/or dispose of extracted and treated groundwater. Injected groundwater would not contain chemical concentrations above MCLs, which are Aquifer Discharge Levels.
California Department of Water Resources	Water Well Standards (Bulletin 74-81)	To-Be-Considered	Proposes standards for construction or destruction of water wells in the State.	Wells may be constructed and/or destroyed within the OUCTP aquifers to aid/accelerate/monitor the remediation process and/or dispose of extracted and treated groundwater. These standards will be considered for new well construction and/or destruction of wells.
Criteria for All Waste Management Units, Facilities, and Disposal Sites	Title 27 California Code of Regulations, Division 3, Chapters 1—6; Subchapter 3. Water Monitoring, Article 1	To-Be-Considered	SWRCB criteria for Water Quality Monitoring and Response Programs for Solid Waste Management Units establish a “point of compliance” evaluation monitoring program where there has been a “measurably significant” evidence of a release from an unknown source.	A waste management unit (WMU) has not been established at OUCTP related to the source of contamination to groundwater. However, these regulations would be considered in establishing a “point of compliance” evaluation monitoring program for management of the residual groundwater contamination within OUCTP as part of the selected remedial actions for OUCTP.
Hazardous Materials & Transportation Act	49 CFR Part 172.101	Relevant and Appropriate	These regulations impose procedures and controls on the transportation of hazardous materials.	If any drill cuttings, decontamination water, or groundwater treatment residues subsequently characterized as hazardous are generated, any such wastes will be transported according to the substantive requirements of these regulations.
California Health and Safety Code	Title 22, CCR Division 4.5	Relevant and Appropriate	The statute and regulations provide for identification of hazardous waste in §§66261. If a material is a hazardous waste, Division 4.5 provisions further regulate hazardous waste generators, transporters, and treatment, storage, and disposal facilities.	If any drill cuttings, decontamination water, or groundwater treatment residues subsequently characterized as hazardous are generated, any such wastes will be managed according to the substantive requirements of these regulations.
California Health and Safety Code	Title 22, CCR §66264.601-603	Relevant and Appropriate	These regulations apply to hazardous waste treatment which is conducted in a device that does not meet the definition of a “container” in 22 CCR 66260.10 is characterized as a “Miscellaneous Unit” subject to the provisions of 22 CCR 66264.601-603. For activities where remedial actions are not conducted using a device that meets the 22 CCR 66260.10 definition of a container, the requirements for “temporary units,” as set forth in 22 CCR 66264.553 would apply.	If any drill cuttings, decontamination water, or groundwater treatment residues subsequently characterized as hazardous are generated, any such wastes will be managed according to the substantive requirements of these regulations.
Land Disposal Restrictions	Title 22 CCR, Chapter 18	Relevant and Appropriate	Prohibits land disposal of specified untreated hazardous wastes and provides special requirements for handling such wastes. Requires laboratory analysis of wastes intended for landfill disposal to establish that the waste is not restricted from landfill disposal.	If any drill cuttings, decontamination water, or groundwater treatment residues subsequently characterized as hazardous are generated, any such wastes will be disposed offsite according to the substantive requirements of these regulations.

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